29th EUROPEAN SYSTEMIC FUNCTIONAL LINGUISTICS CONFERENCE

ESFLC

29.ª Conferência Europeia de Linguística Sistémico-Funcional

2019

ARTIGOS SELECIONADOS

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Fausto Caels

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No presente volume, publica-se um conjunto de artigos científicos que fixam pela escrita trabalhos apresentados na 29.ª edição da Conferência Europeia de Linguística Sistémico-Funcional, que teve lugar em julho de 2019, na cidade de Leiria.

Esta conferência, um evento promovido anualmente pela Associação Europeia de Linguística Sistémico-Funcional, foi organizada por dez colegas portugueses afiliados a três instituições: Escola Superior de Educação e Ciências Sociais e Escola Superior de Tecnologia e Gestão, ambas do Politécnico de Leiria, e CELGA-ILTEC da Universidade de Coimbra.

A publicação surge em 2021, num contexto de pandemia que veio suspender as nossas vidas em vários domínios, no plano pessoal e institucional, com efeitos na duração do processo de revisão científica e de edição desta publicação. Apesar das adversidades, julgamos que não poderíamos deixar de corresponder às expetativas dos colegas que quiseram contribuir para mais uma publicação da Conferência Europeia de Linguística Sistémico-Funcional.

Aqui chegados, sentimos que devemos a todos, autores e revisores, um profundo agradecimento pela confiança em nós depositada e também pelo cuidado, pela paciência e pela diligência com que sempre responderam às nossas solicitações.

Os textos que compõem a obra foram submetidos para avaliação da comissão científica do volume e foram objeto de revisão por pares. A sua publicação assinala a vitalidade e produtividade da comunidade científica reunida na 29.ª edição da Conferência Europeia de Linguística Sistémico-Funcional.

The present volume contains a selection of scientific papers, originally presented at the 29th edition of the European Systemic Functional Linguistics Conference, which took place in July 2019, in the city of Leiria, in Portugal.

This conference, an annual event promoted by the European Association for Systemic Functional Linguistics, was organized, in 2019, by ten Portuguese scholars affiliated to three institutions: ESECS – School of Education and Social Sciences, ESTG – School of Technology and Management, both from the Polytechnic of Leiria, and CELGA-ILTEC from the University of Coimbra.

The volume is published in 2021, amidst the pandemics that has put our lives on hold in many dimensions, both personal and professional, with real effects on the duration of the peer review and editorial processes. Despite these adversities, however, we felt it was our duty to meet the expectations of all the colleagues who submitted their papers, thereby enabling another publication in the ever-growing SFL list.

Now that the volume is (finally) ready, we feel we owe everyone – authors and reviewers – a big thank you for the trust placed in us and for the care, patience, and diligence with which you consistently responded to our requests.

The papers showcase a wide variety of original research, whose scientific quality was certified by a double-blind peer review. They are also a testimony to the vitality and productivity of the SFL community gathered at the 29th European Systemic Functional Linguistics Conference.

Comissão Científica do Volume
Scientific Committee of the Publication

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RECENT CHANGES IN THE USE OF PASSIVES AND FIRST PERSON PRONOUNS IN SCIENTIFIC WRITING

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ABSTRACT

From the beginnings of the scientific research article in 1665 the physical sciences were experimental and used considerable numbers of material processes. From the later 19^{th} century onwards the increasing use of mathematics led to considerable numbers of mental processes. Extensive use of the passive voice and avoidance of first person pronoun subjects have long been considered defining features of the scientific research article. Recent study, however, suggests that use of the passive is decreasing and that of first person pronoun subjects increasing. This paper looks at six sample texts published in 2018. The suggested changes are apparent in some of the texts but not all. From the results it is possible to hypothesize that there are now two models available: a "traditional" model using the passive voice extensively and avoiding first person pronoun subjects, and a "progressive" model with fewer passives and using first person pronoun subjects readily. Two of the texts studied follow the traditional model, two the progressive model, and two are hybrids. Only the future will show how this situation will develop.

KEYWORDS

First person pronoun, mathematical verbs, passive voice, process type, scientific research article

1 – Background

This paper has some of the characteristics of a story. The story begins in 1665 since that was the date when the first two academic periodicals appeared, the *Journal des Sçavans* in Paris, in January of that year, and the *Philosophical Transactions* in London two months later (Banks, 2017; Morgan, 1928; Lyons, 1944). From the very beginning the physical sciences (though not the biological sciences) were experimental, which led to the extensive use of material process verbs, as in this example from a 1665 article:

> (1) That if *Dew* **were put** into a long narrow Vessel of Glass, such as formerly **were used** for Receivers in distilling of *Aqua Fortis*, the slime **would rise** to the height, that He **could take** it off with a Spoon; and when he **had put** a pretty quantity of it into a drinking Glass, and that it **had stood** all night, and the water **dreined** from it, if He **had turned** it out of his hand, it **would stand** upright in figure of the Glass, in substance like boyled white Starch, though something more transparent, if his memory (saith he) fail him not.
>
> (Henshaw, *Philosophical Transactions*, 1665)[1]

This situation lasted until the second half of the nineteenth century, when material process verbs were still common in the physical sciences, as in this example from an 1860 paper:

> (2) The hydrogen **is washed** with potash, nitrate of silver, and concentrated sulphuric acid, and the carbonic acid gas with bicarbonate of potash and strong sulphuric acid. The metal (about 8 grms. **were taken** for each experiment) **was placed** in the bowl of the pipe, and so **fused** in a current of hydrogen; when fused, the hydrogen **bubbled up** through the melted metal; thus by offering a fresh surface to the hydrogen, any suboxide that might be present **was reduced**; and when making the copper alloys complete mixture **was effected**.
>
> (Matthissen & Holzmann, *Philosophical Transactions*, 1860)

[1] Relevant parts of examples are printed in **bold**. Other typographical features are as in the original.

However, from this date onwards the use of mathematics, and ultimately of mathematical modelling, begins to play an important part in the physical sciences, with the introduction of verbs of a mathematical nature (Banks, 2008). The following three extracts are from an 1880 article:

(3) From this and the known direction of the incident light we **can calculate** the angle of incidence.
But since we know the position of the face of the prism with reference to the optic axis, we **can find** the angle between the wave normal and the optic axis ...
We **take** $\mu_1 = 1.66779$.

(Glazebrook, *Philosophical Transactions*, 1880)

In terms of a transitivity analysis, in the sense as used in Systemic Functional Linguistics (Halliday, 2014; Banks, 2019), the question arises as to what type of process is encoded by these mathematical verbs. The type of process involved appears to be one of some sort of cerebral activity, and this fits into the usual scope of mental process. Mental processes can be subdivided into cognitive, perception and affective types, to which some would add a desiderative type. It would now seem that to these, at least for this type of genre, we need to add a mathematical type.

In the course of the twentieth century mathematical calculation became increasingly computerized. The following 1980 example occurs in the context of numerical simulation:

(4) The thermal conduction equation necessary for the experiment **was solved** for a composite circular cylinder of infinite axial extent.

(Horai et al., *Philosophical Transactions A*, 1980)

The following example from the same article states specifically that computing techniques are being used:

(5) The standard values of thermal conductivity **were determined** at the Marshall Space Flight Center, N.A.S.A. (Fountain & West, 1975) by means of a differential line heat source technique developed by Scott *et al.* (1973).

(Horai et al., *Philosophical Transactions A*, 1980)

This phenomenon continues in the twenty-first century as these examples from a 2018 article show:

(6) We **quantify** the statistics of the resilience to uprooting by first computing the scouring energy for a given erosion event, here defined as the energy required for scouring a volume of sediment that exposes the root system at the end of the erosion event, i.e. for $t = t_e$.

(Perona & Crouzy, *Proceedings of the Royal Society A*, 2018)

(7) When P(t) **cannot be accessed** analytically, though numerically, then p_τ(T) **can be obtained** by using Laplace transforms as described by Daly & Porporato [30].

(Perona & Crouzy, *Proceedings of the Royal Society A*, 2018)

There are some mathematical verbs which cannot be attributed to a human agent, and so cannot be considered cerebral. These do not enter into the mental mathematical category. I will say something about these later in this paper.

2 – Recent changes

2.1 – Passive voice

Ever since Barber's seminal article in the early 1960s, use of the passive voice has been considered one of the defining features of the scientific research article (Barber, 1962; Cooray, 1967; Ding, 2002). The following example, taken from one of the 2018 papers which I shall consider later in this paper might be considered a typical example:

(8) In this study, the limiting material stress **has** thus far **been assumed** to be the same in tension and compression. However, it **can be argued** that a higher limiting stress **should be adopted** for tension elements, to account for the likelihood that higher strength steel **will be used** for the cables, and to account for a reduction in the stress sustainable by compression elements due to buckling effects.

(Fairclough et al., *Proceedings of the Royal Society A*, 2018)

However, Seoane (and various colleagues) have fairly recently claimed to have detected a significant reduction in the rate of passive use (Seoane, 2006; Seoane & Loureiro-Porto, 2005; Seoane & Williams, 2006). If this is true, then it might be expected that the use of first person pronoun subjects would increase, since a considerable number of the potential passive forms would have the authors as putative agent, and transferred into an active form would hence have a first person pronoun as subject. This has indeed been found to be the case by Hyland (and collaborators) in a number of papers over a fairly extensive period (Hyland, 2002, 2010; Hyland & Jiang, 2016, 2017, 2018).

In an attempt to see to what extent this is true for the physical sciences, I took six articles published in the *Proceedings of the Royal Society A* in 2018. Details are given in Appendix A, and in the course of this paper the individual articles will be referred to by their first named author (Banks, published). This paper goes over the main findings of Banks submitted and places them in a historical context. Since this is a very small sample, it should be considered not so much a corpus, or even a mini-corpus (Banks, 2005), as a set of six case studies. It is evident that no firm findings can be made on the basis of such a small sample. However, it can give rise to working hypotheses and suggest future lines of enquiry.

The rate of passive use in the scientific research article has usually been taken to be of the order of 30% of finite verbs (Banks, 1994). The overall rate of passive use in the six sample texts is 29%, which corresponds to the norm, and at first sight would seem to contradict the claims of Seoane. However, this overall rate masks a good deal of diversity between individual articles. This is shown in Table 1.

Table 1 – **Passive rate**

Article	**% passives[2]**	**N**
Cooper	27%	146
Fairclough	41%	159
Gower	11%	53
Perona	17%	57
Wacks	27%	151
Zhao	53%	259
Overall	29%	825

2 Percentages are given to the nearest integer. Any discrepancies are due to rounding.

As can be seen, two of the papers have very high rates of passive use (Zhao 53% and Fairclough 41%), two are fairly close to the norm (Cooper and Wacks, both with 27%, and two have relatively low rates of passive use (Perona 17% and Gower 11%).

2.2 – First person pronoun subjects

The claim that use of the passive voice has been the standard in scientific writing goes hand in hand with the belief that first person pronoun subjects have traditionally been avoided. The overall rate of first person pronoun subjects is relatively low for this sample. Only 11% of the finite verbs have a first person pronoun subject, but once again there is wide diversity between the individual articles. This is shown in Table 2.

Table 2 – **First person pronouns**

Article	1st person pronouns	N
Cooper	17%	93
Fairclough	-	-
Gower	33%	166
Perona	12%	39
Wacks	*[3]	1
Zhao	*	2
Overall	11%	301

Gower has a high rate of first person pronoun subjects: 33%. Cooper (17%) and Perona (12%) use them more sparingly. Fairclough, on the other hand never uses them and Zhao and Wacks hardly ever.

The rates of passive and first person pronoun subject use are compared in Table 3.

[3] An asterisk in a Table indicates that there were some examples but that they accounted for less then 0.5%.

Table 3 – **Passives and 1st person pronouns**

Article	Passives	1st person pronouns
Cooper	27%	17%
Fairclough	41%	-
Gower	11%	33%
Perona	17%	12%
Wacks	27%	*
Zhao	53%	*
Overall	29%	11%

One might expect high passive use to be accompanied by low use of first person pronoun subjects. This is the case of Zhao and Fairclough. The inverse of this is low passive use accompanied by high use of first person pronoun subjects; This is the case in Gower. Cooper falls between these with middling use of both passives and first person pronoun subjects. This leaves us with two slightly anomalous cases: Wacks which has middling passive use, but avoids use of first person pronoun subjects, and Perona, which has fairly low passive use, and high use of first person pronoun subjects. This suggests that there are now two acceptable models. One might be called the "traditional" model and this uses passives extensively and avoids first person pronoun subjects. The other might be called the "progressive" model, and this has a low rate of passive use but uses first person pronoun subjects extensively. It should be pointed out that no value judgement is intended by the use of the terms "traditional" and "progressive". In addition, between these two we find a number of hybrids.

3 – Process types

3.1 – Process types and passive voice

I would like to put forward the conjecture that changes in the use of passive voice and first person pronoun subjects is related to the distribution of process types, and the increasing use of mathematical process verbs. Table 4 gives the process type distribution for the six sample articles.

Table 4 – **Process types**

Article	Material	Mental	Relational	Verbal	Existential
Zhao	22%	34%	32%	11%	1%
Cooper	14%	40%	37%	9%	-
Fairclough	18%	29%	45%	7%	1%
Gower	12%	38%	40%	10%	*
Perona	35%	23%	35%	6%	*
Wacks	30%	18%	43%	9%	*
Overall	21%	31%	39%	9%	*

It can be seen that relational process is the most common process type overall, and in four of the six individual articles, including Perona where the rate of relational processes is the same as the rate of material processes. The exceptions are Cooper and Zhao. Mental process is the second most common process type overall. It is the most common in Cooper and Zhao, second most common in Gower and Fairclough, and third most common in Perona and Wacks. Significantly mental processes are, overall, considerably more common than material processes. It is therefore of interest to look at the distribution of mental process subtypes in more detail. This is done in Table 5.

Table 5 – **Mental process types as percentage of finite verbs**

Article	Cognitive	Perception	Affective	Mathematical
Cooper	13%	2%	-	25%
Fairclough	11%	1%	*	17%
Gower	12%	2%	-	24%
Perona	10%	2%	-	11%
Wacks	10%	1%	-	8%
Zhao	10%	1%	-	23%
Overall	11%	1%	*	18%

Here, it is clear that the most common mental process type is mathematical. It is the most common type overall and in five of the individual articles, Wacks being the exception. Moreover, mental mathematical processes account for 18% of finite verbs, which is only a little less than the whole of the material process category which accounts for 21%.

Table 6 gives the chances of any category being passive, or the percentage of passives in each category.

Table 6 – **Chances of being passive**

Article	Material	Mental	Relational	Verbal
Cooper	20%	51%	3%	22%
Fairclough	53%	81%	4%	79%
Gower	6%	23%	1%	8%
Perona	16%	35%	4%	29%
Wacks	19%	92%	1%	60%
Zhao	62%	88%	5%	78%
Overall	29%	59%	3%	46%

This means that, for example, 20% of the material process verbs in Cooper are in the passive voice. When they are used, mental process verbs, and verbal process verbs have a greater chance of being passive than material process verbs do. This is true overall, and for each individual article. The chances of a material process verb being passive are fairly high in Fairclough and Zhao, though still less than mental and verbal process verbs, but in the other four articles the chances are fairly low.

3.2 – Process types and first person pronoun subjects

The distribution of first person pronoun subjects is given in Table 7.

Table 7 – **Process types and first person pronouns**

Article	Material		Mental		Relational		Verbal	
	N	%	N	%	N	%	N	%
Cooper	-	-	68	73%	7	8%	18	19%
Fairclough	-	-	-	-	-	-	-	-
Gower	4	2%	124	75%	5	3%	33	20%
Perona	-	-	33	85%	1	3%	5	13%
Wacks	-	-	1	100%	-	-	-	-
Zhao	-	-	2	100%	-	-	-	-
Overall	4	1%	228	76%	13	4%	56	19%

Only three of the articles use first person pronoun subjects to any extent. They are absent in Fairclough, and virtually absent in Wacks and Zhao. In the other three articles they are used fairly freely, but, where they occur this is almost exclusively with mental and verbal process verbs. In fact, 95% of the first person pronoun subjects occur with mental or verbal processes. The first of the following is an example of mental process, the second of verbal process:

(9) In this case, we also **assume** p_0 is constant and the effects of gravity can be neglected.

(Cooper et al., *Proceedings of the Royal Society A*, 2018)

(10) In §2, we **describe** the exact theory of multiple scattering for *N* cylinders of any radius, density and sound speed.

(Gower et al., *Proceedings of the Royal Society A*, 2018)

At this stage one can only conjecture as to why first person pronoun subjects should be virtually restricted to mental and verbal processes. I would suggest that while my material actions can potentially be repeated by others, my mental processes (thoughts perceptions feelings) are distinctly mine. Only I can have my thoughts, feelings etc. Someone else may have similar thoughts, but they cannot be the same. A similar point could be made about my verbal processes. What I say is specifically my pronouncement. Others may repeat my words, but that is not the same thing. Hence, mental and verbal processes would seem to lend themselves much more easily than material processes to use with first person pronoun subjects.

That mental and verbal processes should function in a similar way should be no surprise. In the early days of the development of Systemic Functional Linguistics, only three types of process were cited: material, mental and relational. Berry, in her 1975 introduction, subdivides mental processes into two subtypes: internalized and externalized; and mental externalized processes are what we now call verbal process. So verbal process was there presented as a subtype of mental process.

If we consider in detail the mental processes with first person pronoun subjects, for the three articles which use them, the results given in Table 8 appear.

Table 8 – **Mental process types and first person pronouns**

Article	Cognitive		Perception		Mathematical	
	N	%	N	%	N	%
Cooper	30	44%	-	-	38	56%
Gower	34	27%	4	3%	86	69%
Perona	9	27%	-	-	24	73%

As can be seen, well over half of the first person pronoun subjects occur with mathematical process verbs in each of these three articles, ranging from 56% to 73%. Overall, they account for 65% of the first person pronoun subjects occurring with mental process verbs in these three papers. They even account for 51% of the first person pronoun subjects occurring with mental and verbal processes taken together. The following is a typical example:

(11) To do this, we **have extended** the derivation of Daly & Roose [8] by developing a pore scale description of exudates diffusion, which we **have coupled** to a two fluid model for water movement.

(Cooper et al., *Proceedings of the Royal Society A*, 2018)

Hence, we can say that the vast majority of first person pronouns occur with mental or verbal processes, and that over half occur with mathematical processes.

It might also be noted that, in these same three articles, material processes have a low chance of being passive, and they do not use first person pronouns. Wacks shares these characteristics. Hence, it can be said that material processes tend to be used for events rather than actions:

(12) Measuring plant uprooting by flow both at field and laboratory scales requires monitoring of the riverbed evolution while erosion **proceeds**, and the recovery of the uprooted plants.

(Perona & Crouzy, *Proceedings of the Royal Society A*, 2018)

There are nevertheless a number of mathematical processes that cannot be attributed to humans, such as the following example:

(13) For the full model with assumed viscosity, equation (2.15), units 1 and 2 **converge** to a saturation of approximately 0.4, unit 3 **converges** to approximately 0.46, whereas the other units **converge** to approximately 0.51.
(Cooper et al., *Proceedings of the Royal Society A*, 2018)

The lack of possible attribution to a human means that these processes have to be considered as mathematical events, and as such have been classified as material processes.

4 – The story so far

From the late seventeenth to the mid-nineteenth century, the physical sciences, as represented in the physical sciences research article, were basically experimental. The following two examples are from 1780 and 1840 respectively:

(14) In order to try the reality of my supposition by experiments, I **insulated** a brass plate upon a glass stand, and **connected** a very sensible electrometer with it; and then **began** shaking the powder of rosin upon it, in the same manner as I **had done** upon the electrophorus, and in a few seconds of time had the pleasure to see the electrometer **diverge** with a very manifest degree of negative electricity, answering my expectations exactly.
(Cavallo, *Philosophical Transactions*, 1780)

(15) A voltameter filled with water slightly acidulated with sulphuric acid, **was introduced** in the secondary circuit, and the gasses **were evolved** in minute bubbles as the bar **rotated**; and when charcoal points **were attached** to the terminations of the secondary coil, and these **were approximated** by means of the micrometer electrometer (12.) to within 1/500th of an inch, the sparks **appeared** in such quick succession while the armature **rotated**, as to have the appearance of a continued but glimmering flame.
(Gassiot, *Philosophical Transactions*, 1840)

From that point on we see the rapid and fairly massive introduction of mathematics. Initially this was used to express calculations resulting from the experiment. The following three examples are from 1880, 1920 and 1940:

(16) I therefore **completed** the calculations for only about a third of the observations, giving a series of values of μ in directions inclined at angles of about 4° to each other extending in an almost continuous arc from the optic axis to directions perpendicular to it.

(Glazebrook, *Philosophical Transactions*, 1880)

(17) We have already set forth in Table X. the values of *p* for a similar arc employed in this series of experiments, and, by substitution in the above formulae, we **derive** the values of *e/m* and of *v*, which are recorded in the final column of the same table; for the cathode the mean value of *e/m* is 6˙4 x 10^7 E.M.U.

(Duffield et al., *Philosophical Transactions A*, 1920)

(18) The energy values in columns (*a*) and (*b*) **have been calculated** from the wave functions obtained by the solution of Fock's equations with exchange but without the superposition of configurations, which **has** also **been omitted** in the energy formula in obtaining the results in column (a), but **included**, in the energy formula *only*, in obtaining the results in column (b).

(Hartree et al., *Philosophical Transactions A*, 1940)

This ultimately led to the use of mathematical modelling, and, particularly from about 1960 onwards, computers came to be used for the purposes of calculation and modelling, as in these examples from 1960, 2005 and 2015:

(19) Flows for which shocks occur in the H II region **are represented** by breaking off from the integral curve *H*, and moving to the curve *G* by means of an isothermal shock (ψ being constant in this transition); the remainder of the motion in the H II region **is** then **represented** by an integral curve starting at the appropriate point of *G*, some typical example of such curves being labelled *J* in the diagram.

(Axford, *Philosophical Transactions A*, 1960)

(20) We **did** numerical simulations of (1.2) for $x \in [0, L]$, where L varied in different numerical experiments. We **used** no-flux boundary conditions for both variables. When we wanted to study the behaviour of waves in an infinite space, we **moved** the calculation interval as the wave progressed, ensuring that it never approached closer than 60 to the boundaries, to avoid their influence.

(Biktashev & Tsyganov, *Proceedings of the Royal Society A*, 2005)

(21) We **do** this by solving an inverse locomotion problem: we **prescribe** the motion of the rod and then deduce two histories of spontaneous curvatures that produce it.

(Cicconofri & DeSimone, *Proceedings of the Royal Society A*, 2015)

5 – The situation today

So, writers of physical research articles today have at their disposal two basic models. One is the "progressive" model, which has reduced use of the passive, and uses a significant number of first person pronoun subjects, though this is virtually restricted to mental and verbal processes. Gower, with passives accounting for 11% of finite verbs, and with 33% of finite verbs having a first person pronoun subject, would be typical of this model. This model will also tend to have less material process verbs, more mental process verbs, particularly mathematical processes, and passives tend to occur less frequently in material process, and more frequently in mental, though not mathematical, process.

The other model is the "traditional" model and it has the opposite of these features, notably high use of passives and avoidance of first person pronoun subjects. Fairclough, where 41% of finite verbs are passives, and there are no first person pronoun subjects, would be typical of this model.

In between these two models, writers are free to produce various types of hybrids by combining features from both models. Thus, today we have an unstable situation which is in flux. Detailed study of the language being produced in this subgenre can reveal the linguistic change at present taking place. Thus our story turns out to be a serial, and only future instalments can tell us how the plot will develop.

REFERENCES

Banks, D. (1994). *Writ in water, aspects of the scientific journal article.* Brest. ERLA, Université de Bretagne Occidentale.

Banks, D. (2005). The case of Perrin and Thomson: An example of the use of a mini-corpus, *English for Specific Purposes, 24*(2), 201–211.

Banks, D. (2008). *The development of scientific writing, linguistic features and historical context*. London. Equinox.

Banks, D. (2017). *The birth of the academic article.* Le Journal des Sçavans *and the* Philosophical Transactions *1665-1700*. Sheffield: Equinox.

Banks, D. (2019). *A systemic functional grammar of English. A simple introduction*. New York: Routledge.

Banks, D. (2021). Passive voice, first person pronouns and mental process verbs in the physical sciences research article, *Revista de Lingüística y Lenguas Aplicadas*, 16, 37-48. https://doi.org/10.4995/rlyla.2021.14434

Barber, C. L. (1962). Some measurable characteristics of modern scientific prose. In F. Behre. (Ed.), *Contributions to English syntax and philology* (pp. 21–43). Stockholm: Almqvist & Wiksell.

Berry, M. (1975). *Introduction to systemic linguistics. Vol. 1. Structure and systems.* London. Batsford.

Cooray, M. (1967). The English passive voice. *English Language Teaching, 21*(3), 203–210.

Ding, D. D. (2002). The passive voice and social values in science. *Journal of Technical Writing and Communication, 32*(2), 137–154.

Halliday, M. A. K. (revised by Christian M. I. M. Matthiessen) (2014). *Halliday's introduction to functional grammar* (4th ed.). Abingdon: Routledge.

Hyland, K. (2001). Humble servants of the discipline? Self-mention in research articles. *English for Specific Purposes, 20*(3), 207–226.

Hyland, K. (2002). Options of identity in academic writing? *ELT Journal, 56*(4), 351–358.

Hyland, K. (2010). Constructing proximity: relating to readers in popular and professional science. *Journal of English for Academic Purposes, 9*, 116–127.

Hyland, K., & Jiang, F. (2016). Change of attitude? A diachronic study of stance. *Written Communication, 33*(3), 251–274.

Hyland, K., & Jiang, F. (2017). Is academic writing becoming more informal? *English for Specific Purposes, 45*, 40–51.

Hyland, K., & Jiang, F. (2018). "In this paper we suggest": Changing patterns of disciplinary metadiscourse. *English for Specific Purposes, 51*, 18–30.

Lyons, H. (1944). *The Royal Society 1660-1940, A history of its administration under its charters*. Cambridge: Cambridge University Press.

Morgan, B. T. (1928). *Histoire du Journal des Sçavans depuis 1665 jusqu'en 1701*. Paris: Presses Universitaires de France.

Seoane, E. (2006). Changing styles: On the recent evolution of scientific British and American English. In C. Dalton-Puffer, D. Kastorsky, N. Ritt, & H. Schendl (Eds.), *Syntax, style and grammatical norms: English from 1500-2000* (pp. 191–209). Bern: Peter Lang.

Seoane, E., & Loureiro-Porto, L. (2005). On the colloquialization of scientific British and American English. *ESP Across Cultures, 2*, 106–116.

Seoane, E., & Williams, C. (2006). Changing the rules: a comparison of recent trends in English in academic scientific discourse and prescriptive legal discourse. In M. Dossena, & I. Taavitainen (Eds.), *Diachronic perspectives on domain-specific English* (pp. 255–276). Bern: Peter Lang.

APPENDIX A

Cooper, L. J., K. R. Daly, P. D. Hallett, N. Koebernick, T. S. George, & T. Roose. The effect of root exudates on rhizosphere water dynamics, *Proceedings A*, 474: 20180149.

Fairclough, Helen E., Matthew Gilbert, Aleksey V. Pichugin, Andy Tyas, & Ian Firth. Theoretically optimal forms for very long-span bridges under gravity loading, *Proceedings A*, 474:20170726.

Gower, Arthur L., Michael J. A. Smith, William J. Parnell, & I. David Abrahams. Reflection from a multi-species material and its transmitted effective wavenumber. *Proceedings A*, 474:20170864.

Perona, P., & B. Crouzy. Resilience of riverbed vegetation to uprooting by flow. *Proceedings A*, 474: 20170547.

Wacks, Daniel, Ilias Konstantinou, & Nilanjan Chakraborty. Effects of Lewis number on the statistics of the invariants of the velocity gradient tensor and local flow topologies in turbulent premixed flames. *Proceedings A*, 474: 20170706.

Zhao, Wanqing, Thomas H. Beach, & Yachine Rezgui. A systematic mixed-integer differential evolution approach for water network operational optimization. *Proceedings A*, 474: 20170879.

2

LEITORES CHINESES CONTEMPORÂNEOS DA PORTUGUESA LITERATURA PARA A INFÂNCIA

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RESUMO

Como é que os estudantes chineses da licenciatura de Tradução e Interpretação Português-Chinês/Chinês-Português compreendem e interpretam textos de uma língua e cultura estrangeiras, destinados a crianças portuguesas e alcançando públicos tão diferentes (Barreto, 2002; Blockeel, 2001)? A comparação e o equilíbrio de textos escritos e visuais (Hunt, 2004; Kress & van Leeuwen, 2006) foram os meios que ajudaram os estudantes a ultrapassar a menor proficiência numa língua estrangeira. A partir das seleções dos estudantes, que trabalharam em equipa, cada livro (história e ilustração) foi submetido a interpretações multimodais e discutido como um objeto significante. A gramática visual foi o principal instrumento para chegar a conclusões. As ilustrações foram o recurso fundamental que permitiu aos estudantes comparar e moverem-se gradualmente duma escala oriental de valores para uma ocidental, incluindo-se em ambas. A multimodalidade revelou-se como o instrumento nuclear para os estudantes compreenderem as similitudes entre dois mundos semióticos diferentes e alcançarem a literacia dos livros portugueses para crianças.

PALAVRAS-CHAVE

Literatura para a infância portuguesa, ilustração de livros, valores multimodais

1 – Breve enquadramento teórico

> All stories imply subject positions for readers to occupy. Because picture books do so with pictures as well as words, their subject positions have much in common with what Christian Metz (1982) outlines as the one films offer their viewers. The pictures in both offer viewers a position of power. They exist only so that we can look at them: they invite us to observe – and to observe what, in its very nature as a representation, cannot observe us back.
>
> […]
>
> But meanwhile, of course, the power such pictures offer is illusory. In allowing us to observe and to interpret, they encourage us to absorb all the codes and conventions, the signs that make them meaningful; they give us the freedom of uninvolved, egocentric observation only in order to enmesh us in a net of cultural constraints that work to control egocentricity. For that reason, they encourage a form of subjectivity that is inherently paradoxical. They demand that their implied viewers see themselves as both free and with their freedom constrained, and both enjoy their illusory egocentric separation from others and yet, in the process, learn to feel guilty about it.
>
> (Nodelman, 2004, p. 160)

A leitura de textos é considerada estratégia fundamental (axioma de base) no ensino e na aprendizagem de uma língua materna; idêntica metodologia é aplicada no processo educativo das línguas não-maternas. Nesse caso específico a metodologia centra-se, tradicionalmente, na aprendizagem da gramática da língua segunda, fazendo-o através de textos, muitas vezes acompanhados por imagens/ilustrações.

A epígrafe escolhida refere-se à aparente utilização de uma metodologia facilitadora, quando os consensos e a representação dos grupos sociais tanto estão presentes no texto como nas imagens. Nesta área, Kress e van Leeuwen distinguiram-se com *Reading Images, the Grammar of Visual Design*, onde explicitam:

> We might now ask, 'What is our "visual grammar" a grammar of?' First of all we would say that it describes a social resource of a particular group,

> its explicit and implicit knowledge about this resource, and its uses in the practices of that group. Then, second, we would say that it is a quite general grammar, because we need a term that can encompass oil painting as well as magazine layout, the comic strip as well as the scientific diagram. Drawing these two points together, and bearing in mind our social definition of grammar, we would say that 'our' grammar is a quite general grammar of contemporary visual design in 'Western' cultures, an account of the explicit and implicit knowledge and practices around a resource, consisting of the elements and rules underlying a culture-specific form of visual communication.
>
> (Kress & van Leeuwen, 2006, p. 3)

Assim, pretendeu-se experienciar se a aplicação da 'gramática visual' como facilitadora da receção interpretativa dos aprendizes de uma língua não-materna em textos de literatura para a infância se revela de alguma utilidade ou não, partindo do pressuposto de que a sociedade dos nossos dias é uma sociedade da imagem. A leitura multimodal de textos escritos e visuais implica a aplicação conjunta da objetiva gramática da língua e da subjetiva gramática visual: com este estudo experimental pretendeu-se refletir sobre as prioridades de utilização de cada um dos códigos multimodais e como podem servir de ponte entre culturas situadas em polos afastados, e não apenas de línguas muito diferentes.

A questão do autor desses textos não foi considerada neste estudo como fator a ter em consideração. Seguiram-se as conclusões de Peter Hunt (2004) em "What the Authors Tell Us", por se considerar que mais importante do que o sistema de valores do autor ou da tradição/cânone por ele representada, é a receção do leitor que importa e que dá vida ao texto escrito produzido:

> […] children's authors have continually to confront questions of quite who their audiences are and how they can entertain and influence them; they have to make decisions in terms of language and content, and this in the context of pressure from publishers, parents, the educational establishment […]. What, then, should be changed? Of form and content, the simplification of language might seem to be the less problematic, but here again, authors express great faith in their audience, and a reluctance to bow to simplistic arguments.

Assumindo que a gramática da língua usada será sempre o mais próximo da competência que o autor do texto escrito acredita que os seus leitores possuem, a 'gramática visual' (e repare-se que raramente as ilustrações são do próprio autor do texto) terá o papel de preencher lacunas e fazer passar o significado dos textos aos seus recetores, sejam eles crianças ou estudantes de uma língua não-materna.

2 – Leitura extensiva de textos portugueses de literatura para a infância por estudantes chineses de TIPC/CP

Na licenciatura de Tradução e Interpretação Português-Chinês/Chinês-Português, ministrada na ESECS-IPL [Escola Superior de Educação e Ciências Sociais do Politécnico de Leiria], com protocolo com o Instituto Politécnico de Macau [IPM], os estudantes portugueses frequentam o 1.º e 4.º ano na ESECS, com mobilidade no 2.º ano na Beijing Language and Culture University e o 3.º ano na Escola Superior de Línguas e Tradução do IPM; e os estudantes chineses frequentam o 1.º, 3.º e 4.º ano no IPM, sendo discentes em mobilidade da ESECS no 2.º ano. Neste 2.º ano, vamos considerar a Unidade Curricular de Leitura Extensiva em Português e procurar perceber como os estudantes chineses compreendem e interpretam textos pertencentes a uma língua e cultura estrangeiras, de Literatura para a Infância, escritos a pensar nas crianças portuguesas, mas alcançando públicos muito diversificados. O foco do trabalho coloca-se na particularidade dos estudantes e na dos textos usados enquanto leitura extensiva.

Se estes estudantes nos chegam com uma proficiência baixa no Português como língua segunda, como ajudá-los a superar essa dificuldade? No caso da Leitura Extensiva em Português desenvolveu-se um trabalho de equipa entre os estudantes que implicava: 1. A seleção individual de um livro infantil português; 2. A explicitação das interpretações feitas pelos estudantes, quer: 2.1. através do texto escrito, quer 2.2. através das ilustrações que o acompanham. Utilizou-se, assim, o método da comparação e equilíbrio entre multimodalidades – coexistência de duas ou mais modalidades de comunicação, no caso em estudo o texto e o processamento da imagem, ou seja, uma aplicação pedagógica dos conceitos da Teoria da Semiótica: o que o texto diz e de que outras estratégias discursivas ou imagéticas se serve para dizer o que diz e chegar aos leitores. Na leitura extensiva dos livros selecionados o texto escrito e o visual (da ilustração/das imagens) são duas faces complementares e abertas para a receção plurissignificativa e alargada – o livro infantil traz em si vários significados, rececionados por públicos diferentes dos seus destinatários primeiros –, no caso em estudo dos estudantes chineses, público situado em contextos culturais muito diferentes.

Ana Jesus, numa recensão crítica ao conceituado teórico da Literatura Infantil, Peter Hunt, sintetiza assim a opinião dele sobre os textos que recaem sob esta designação:

> [Hunt] Intenta discutir principalmente a relação do leitor com o livro. Como é o livro e que impressão ele proporciona? Como se sente o leitor? Que habilidades o livro exige? Que habilidades o leitor deve possuir? Qual a circunstância da leitura?
>
> Enfim, é de seu interesse discutir a relação da criança com o livro a qual pode ser diferente da do adulto.
>
> (Jesus, 2011, p. 3)

3 – Seleção de textos multimodais pelos estudantes – A plurissignificação

Na verdade, a minha intenção não foi levar os estudantes a encontrarem diferentes níveis etários possíveis de receção leitora, mas de lhes permitir o usufruto da plurissignificação através de textos multimodais. Porém, o leitor-criança-oriental dentro deles emergiu nalgumas das leituras propostas. O ponto fulcral foi a descoberta da identidade e alteridade enquanto leitores, tal como Francesca Blockeel o expôs:

> […] articulei a minha investigação em redor de duas questões fundamentais: a primeira focada no «Eu» português, a segunda no «Outro». Porquê esses dois aspectos? Pela simples razão, e passo a citar aqui as palavras do vosso prémio Nobel de literatura aquando do seu discurso no Euro-parlamento (Bruxelas 23-3-1999): «A busca do Outro é o caminho pelo qual cada um de nós consegue chegar a si próprio. Para aproximar-nos àquilo que somos temos que passar pelo Outro.» É efectivamente da interacção

> entre o Eu e o Outro que se consegue uma autodefinição. Por isso o estudo da representação do Outro, da Alteridade, da qualidade do que é distinto, se toma inseparável do estudo da Identidade. O *Eu* nunca existe sem o *Outro,* identidade e alteridade andam a par.
>
> (Blockeel, 2002, p. 5)

Na sequência de uma visita guiada à biblioteca da instituição acolhedora, mais especificamente à secção de livros infantis e juvenis em língua portuguesa, durante a qual os estudantes fizeram a sua iniciação às normas de catalogação europeias, bem como ao local físico onde os livros se encontram e são de livre acesso, estavam criadas as condições para um alargado *corpus* de escolha a que apenas a subjetividade de cada um reagiria. Propositadamente, não foram dados critérios temáticos para a seleção se fazer, uma vez que o objetivo era a leitura extensiva de um texto infantil, independentemente do tópico.

As escolhas feitas pelos estudantes falam por si: desde Sophia de M. B. Andresen, com *Os Três Reis do Oriente*, até José Saramago, com *A Maior Flor do Mundo*, passando por Alice Vieira, com *Um Ladrão Debaixo da Cama* ou Mário Cláudio, com *A Bruxa, O Poeta e O Anjo*, duas dezenas de escritores portugueses para a infância e juventude foram passados em revisão por olhos perspicazes e sensíveis às diferenças culturais encontradas.

O caso específico dos livros irónicos, trabalhando por contrastes e oposições, no estilo muito próprio de Luísa Ducla Soares constituíram estatisticamente a curva mais elevada.

Veja-se a tabela dos livros selecionados pelos estudantes:

Luísa Ducla Soares	A Menina Boa | O Rapaz do Nariz Comprido | O Senhor Pouca Sorte | O Homem das Barbas | O Senhor Forte | O Coelhinho Afonso e Outras Histórias | Maria Papoila | Três Histórias do Futuro | João Pestana
Alice Vieira	O Filho do Demónio | O Rato do Campo e o Rato da Cidade | Um Ladrão Debaixo da Cama | A Bela Moura | A Adivinha do Rei | Fita, Pente e Espelho | Os Anéis do Diabo | Duas Histórias de Natal
António Torrado	As três Fortunas do Lobo Feroz | O Menino Grão de Milho | A Raposa das Botas Altas | O Veado Florido | Como se Faz Cor de Laranja | O Rei Menino
Sophia Andresen	A Menina do Mar | Saga | A Noite de Natal | O Cavaleiro da Dinamarca | A Árvore
João Pedro Messeder	Tudo é Sempre Outra Coisa | Romance do 25 de Abril
Ana Mª Magalhães e Isabel Alçada	A Bandeira e o Hino. Símbolos de Portugal | Rãs, Príncipes e Feiticeiros
Natércia Rocha	Contos e Lendas de Portugal | No Quarto da Rita
Maria Isabel Mendonça Soares	Lenda de Geraldo Geraldes, o Sem Pavor | Lenda do Castelo de Bragança
Ana Saldanha	Ninguém Dá Prendas ao Pai Natal
José Saramago	A Maior Flor do Mundo
Agustina Bessa-Luís	Dentes de Rato
Maria Rosa Colaço	O Coração e o Livro
Clara Pinto Correia	A História Horrorosa dos Peixes Amarelos
Matilde Rosa Araújo	História de Uma Flor
Carlos Correia	O Búzio de Nácar
António Mota	Pedro Alecrim
Luís Mourão	O Homem Que Via Passar as Estrelas
Mário Cláudio	A Bruxa, O Poeta e O Anjo
João Ricardo	Queres Namorar Comigo?
Afonso Lopes Vieira	Animais Nossos Amigos

O facto de o texto, em muitos deles, (a)parecer sintetizado num resumo legendado da ilustração (também ela irónica…), aponta para a necessidade de uma multimodalidade que permita ultrapassar a menor proficiência linguística. No entanto, há que não esquecer os riscos de multiplicidade de sentidos que a ilustração pode acrescentar ao texto – o que acaba por metamorfosear o leitor num semioticista:

> If we look carefully, in fact, the words in picture books always tell us that things are not merely as they appear in the pictures, and the pictures always show us that events are not exactly as the words describe them. Picture books are inherently ironic, therefore: a key pleasure they offer is a perception of the differences in the information offered by pictures and texts. Such differences both make the information richer and cast doubt on the truthfulness of each of the means which convey it. The latter is particular significant: in their very nature, picture books work to make their audiences aware of the limitations and distortions in their representations of the world. Close attention to picture books automatically turns readers into semioticians.
>
> (Nodelman, 2004, p. 163)

Mesmo os casos de escolha de livros de Alice Vieira, Maria Isabel Mendonça Soares e António Torrado, com poucas ilustrações (porque mais pensados para públicos jovens) recaiu quase sempre sobre narrativas breves, pequenos contos ou lendas (explicativas sobre certas circunstâncias temporais e geográficas), com finalizações – explícitas ou implícitas – em que a lição ou moral da história parecia ajudar os estudantes a compreender e sustentar as suas interpretações de realidades culturais diferentes, utilizando estruturas de alicerce com as quais estão tradicionalmente habituados a ler (na sua formação de língua materna).

4 – O texto imagético/'gramática visual' na ponte de culturas diversas

Gostaria, por isso, de destacar as surpresas encontradas pelos estudantes e que – ainda que com um nível baixo de proficiência linguística – lhes permitiram refletir e interpretar duas culturas e dois sistemas de valores, aceitando o seu papel-charneira entre as duas fronteiras. Efetivamente, a questão já não é apenas a do domínio da estrutura gramatical da língua, mas a interpretação possível de uma gramática visual, tal como refere Moerdisuroso:

> In visual grammar, structure of visual language is equated with linguistics almost similarly. Grammar in linguistics describes the combining of words into clauses, sentences and texts. Likewise, visual grammar explains the procedure to combine visual elements - people, places, and objects - in visual statement in a certain complexity and extension. Just as the structure of linguistic, visual structure refers to the specific interpretation of the experience of form and social interaction.
>
> (Moerdisuroso, 2014, p. 87)

Os estudantes eram convidados a reformular a história do livro, utilizando as suas próprias capacidades expressivas em língua portuguesa, refletirem sobre o sistema de valores veiculado e o modo como as imagens/ilustrações do livro os tinham auxiliado nesse encontro interpretativo.

4.1 – *Queres Namorar Comigo?* – Imagens e tabus culturais

No caso do livro *Queres Namorar Comigo?*, de João Ricardo, a estudante W.S. | Susana (nome fictício), revelou-se encantada com a beleza das ilustrações e com a imaginação das personagens e da intriga – a paixão de uma girafa e de um caracol – para concluir sobre a diferença cultural representada por semelhante texto, já que nunca a família ou o sistema educacional chinês endereçaria a crianças um livro cuja mensagem principal é a possibilidade de ultrapassar todas as barreiras através do amor. Oralmente, e questionada sobre o assunto, W. S. especificou, aprofundando, que o tema do namoro explicitamente tratado com crianças é considerado, na China, um tabu e, por isso, silenciado. Interessante é a frase destacada pela estudante – *O amor é ter as mãos quentinhas, contar pedrinhas a fazer de conta que são estrelinhas* – revelando a sensibilidade linguística apurada, que se sobrepõe a qualquer fronteira cultural. A novidade/estranheza/beleza das ilustrações foi sempre referida como motivação primeira na escolha do livro.

No entanto, é pertinente concluir da interação entre diferentes conceitos de família ocidental e oriental e ver como o texto infantil é tão eficaz na definição de uma identidade. Sobre isso, Fernando Azevedo (2015) fez algumas reflexões importantes:

> As suas [da família] representações na literatura têm-na mostrado como uma construção social simultaneamente problemática e ideal: problemática, no sentido em que jamais é apresentada como uma entidade única e definitivamente determinada; e ideal, na aceção em que as famílias comportam o essencial das promessas utópicas de um melhor futuro (Bradford, Mallan, Stephens & McCallum, 2008: 130). De facto, numa obra consagrada ao estudo da família na literatura infantil inglesa, Ann Alston (2008: 1) assinala que ela é comummente associada a uma retórica segundo a qual a verdadeira felicidade parece ser impossível de alcançar sem o amor e o apoio de um núcleo ou grupo familiar dedicado. A família é, no fundo, apresentada como o reduto da proteção e do cuidado, o calor que garante a continuidade e a segurança, em oposição aos lugares inóspitos do mundo onde reina a insegurança e o sofrimento. Porém, o retrato que a literatura infantil faz dela continua a ser, apesar das alterações nos contextos sociais, culturais, políticos e religiosos que temos vindo a experimentar no mundo contemporâneo, predominantemente conservador. Inclusivamente, como pertinentemente sublinha a autora (Alston, 2008: 2), «children's literature rarely asks the fundamental question of what constitutes family, and what, if anything is ideal».
>
> (Azevedo, 2015, pp. 14–15)

4.2 – *A Bruxa, o Poeta e o Anjo* – Imagens em movimento e fronteiras culturais

Em relação a *A Bruxa, o Poeta e o Anjo*, de Mário Cláudio, a estudante H. X. | Ana (nome fictício), detentora de uma proficiência linguística mais apurada, foi especialmente sensível ao registo poético de grande parte do texto narrativo, e chegou a uma ligação por contiguidade com idêntica história da recente tradição chinesa – o pastor Wang Er Xiao – com base na qual foi realizado um filme, dubitativamente qualificado para jovens e adultos (*vide* filme animado de 2013, por Xi Bai Po: https://www.youtube.com/watch?v=DlMXRY26lHc). Em causa estão interpretações dos valores fundacionais e maniqueístas de maldade/bondade que, no caso ocidental, aparecem resolvidos equilibradamente pelo pastor/anjo e, no caso oriental, pelo pastor. Ambos prestam serviço de altruísmo em função da sua comunidade. Arriscamos a reflexão sobre o modo desinibido como uma maior proficiência linguística consegue encontrar e estabelecer pontes entre tradições literárias diferentes, já que o entendimento e valorização da ambiguidade poética permite estabelecer relações de similitude e analogia com textos ancestrais, cuja ética de valores permanece universal.

De notar que, neste caso específico, as analogias de multimodalidade entre o texto escrito português e o filme chinês parecem estar invertidas. O texto tem a figura do narrador (o Poeta), que acompanha duas crianças contemporâneas (a 1.ª ed. é de 1996), e lhes vai contando (ao mesmo tempo que visita e descreve os locais onde as intrigas relatadas, há muito tempo atrás, aconteceram realisticamente como factos) sobre a Bruxa e o Anjo. O Anjo é apresentado como o pastor Custódio, refugiado numa gruta para fazer cumprir os seus votos de não pertencer a nenhum batalhão de guerra, convocado em tempos de El-Rei. Morre congelado na travessia do inverno, e, a partir daí, é visto como guardião dos sonos tranquilos de todas as crianças; a gruta fica conhecida como *toca do Anjo*. O final aberto do texto faz com que sejam as crianças/os leitores encarregues de continuar as versões das histórias sobre a Bruxa e o Anjo, que "se hospedam, enfim, no fundo mais fundo do nosso coração? " (*opus cit.*, p. 23).

O filme de animação chinês, de 2013, situa-se durante a segunda guerra entre a China e o Japão (de 1937 a 1945), e conta a história de um pastor jovem, de treze anos, que vai tentar enganar um grupo de atacantes japoneses perdidos, procurando assim salvar a sua aldeia, os seus familiares e comunidade. Depois de muita violência, atravessada por singelos momentos de calma e paz da natureza povoada pelo grupo de jovens amigos, o pastor Wang Er Xiao acaba por ser morto, mas alcança o seu objetivo de velar e proteger os seus. No final, as últimas imagens do filme são percorridas pela água e pela cascata onde o herói cai já morto, podendo funcionar como a possibilidade de vida eterna na natureza apaziguadora.

Embora com um final fechado, que envolve um tempo cronológico específico, este filme chinês foi a imagem visual e plurissignificativa geradora de analogias com o texto português, de final aberto, e envolvendo uma a-temporalidade que estamos mais habituados a encontrar nos textos orientais. O mesmo poderia ser explorado quanto às animações modernas e atuais do filme em relação com as ilustrações mais clássicas do livro, de Alfredo Martins. No entanto, não foi este o caminho seguido pela estudante, o que pode ser uma chamada de atenção para a ineficácia – pelo menos insuficiência – dos instrumentos de leitura extensiva propostos pelo ensino. Ainda que sem serem fornecidos, a verdade é que os leitores os utilizam intuitivamente, quase como se fizessem parte de um gene da leitura, um *gene egoísta*, que consegue sempre ir buscar sinapses associativas à cultura materna ou à cultura dos tempos da infância.

4.3 – *A Maior Flor do Mundo* – O filme e os valores atemporais

Com o livro *A Maior Flor do Mundo*, de José Saramago, a estudante W. K. | Berta (nome fictício) encontrou, além das ilustrações, o vídeo galego de Pancho Casal, de 2007 (https://youtu.be/YUJ7cDSuS1U OU https://vimeo.com/3691184), que lhe permitiu usufruir da imagem em movimento, acompanhada do texto original, para melhor autoavaliar a sua compreensão do livro. De novo, uma maior proficiência linguística conduz a uma capacidade de relacionar cânones e de perceber que o tempo pode abolir essas distâncias. Neste caso particular, o reencontro foi entre uma narrativa do início do século XXI e uma milenar história tradicional chinesa em que uma tartaruga branca agradece a bondade de um guerreiro, salvando-o de um afogamento, tal como a flor, agradecida ao menino por a ter salvo de morrer à sede, o protege do frio da noite com uma das suas pétalas. Também aqui a questão da relação da humanidade com a natureza (seja a vegetal, seja a animal) parece estar em consonância, embora a distância estética e técnica entre o filme e/ou as imagens do texto de Saramago e a milenar história chinesa, arreigada à belíssima simplicidade figurativa oriental, seja notória. O que quer dizer: poder compreender e interpretar um texto de uma cultura diferente da nossa é poder assimilá-lo à nossa própria cultura, independentemente do fosso temporal ou geográfico ou da gramática visual que o acompanha.

5 – Avaliação da 'gramática do visual' – Modalidade de revelação veridictórica?

É um facto que as ilustrações – e o aspeto visual de um livro – têm mudado imenso nos nossos dias:

> In recent times, dramatic influences such as changes in technology, globalisation and mass marketing have not only changed the way we conduct our business but have also impinged upon traditional forms of communication and sociocultural icons such as picture books. As the place of picture books in society is rethought, so they are constructed in different ways and this has impacted on the way we read and write them.
>
> (Anstey & Bull, 2004, p. 328)

A questão da modalidade também se coloca de forma permanente já que o valor de verdade ou credibilidade das afirmações atribuídas aos factos desempenha um papel tão importante na cultura ocidental como na oriental. É esta fonte que nos permite criar a verdade em conjunto, formar grupos que acreditam nas mesmas coisas, daí que possa fechar/selar um mundo integral e efetivamente. Porém, ao mesmo tempo, permite que certos leitores neguem a verdade de outros leitores, com as consequências hipotéticas, desde a exclusão do grupo até às guerras da religião e ideologia. No entanto, deve notar-se que algo considerado verdadeiro na 'gramática visual' não está associado à verdade absoluta. A verdade na modalidade é sempre uma área reservada na resposta à pergunta 'até que ponto algo é revelado com verdade?'.

A modalidade visual pode deslocar pessoas, lugares e outros objetos com aparência real, ou tratá-los como imaginação, fantasia, caricatura. Os níveis da modalidade dependem daquilo em que cada grupo atingido pela representação acredita. Uma modalidade mais alta significa mais perto da realidade e, portanto, dificilmente não é tida em consideração pelo leitor (Moerdisuroso, 2014, p. 88).

A nossa avaliação teve sobretudo a ver com a pedagogia e a didática: como usufruem os estudantes chineses das ilustrações para uma compreensão e entendimento mais harmonioso do texto em língua segunda, lido com esforço. Porém, a interação entre o texto escrito e o visual produz uma multiplicação dos sentidos que pode fazer proliferar o diálogo com as significações. Concluímos que esta abertura é uma mais valia no processo, deixando espaço aos estudantes para inscreverem as suas diferenças de interpretação, alcançando igualmente o universo linguístico e cultural que lhes é estrangeiro.

Veja-se o que, sobre o tema, escreveram Ansley e Bull (2004, p. 353):

> Since the illustrative text has a role in the creation of the narrative, it produces a continuous interplay and has the potential to construct multiple narratives. Conceivably a picture book can contain more meanings and be able to be read in more ways than the novel, by virtue of the presence of both the illustrative and written texts. Therefore in Bakhtin's (1981) view a picture book can be polyphonic or have many voices that can work contrapuntally combining to produce a dialogic whole, consisting of many different genres that continually 'reshape' to produce different meanings.

Da interação entre o significado atribuído por cada uma das diferentes culturas à ilustração e suas respetivas convenções, podem até nascer entendimentos mais complexos da mensagem do livro infantil, que se torna capaz, por exemplo, de saltar barreiras cronológicas, como refere Nodelman:

> The pictures 'illustrate' the texts – that is, they purport to show us what is meant by the words, so that we come to understand the objects and actions the words refer to in terms of the qualities of the images that accompany them – the world outside the book in terms of the images within it. And the world as they show it is not necessarily the world all viewers would agree to seeing. Speaking of what he identifies as 'visual culture,' Nicholas Mirzoeff sets all visual information firmly in the context of the specific culture that produces and receives it, and describes it as 'a constantly challenging place of social interaction and definition in terms of class, gender, sexual and racial identities' (1999: 4). Picture books, with their intended purpose of showing viewers what the world implied by the words looks like, and thus means, are particularly powerful milieus for these sorts of interactions.
>
> (Nodelman, 2004, p. 157)

É por ser detentora de caraterísticas tão alargadas que a ilustração de textos demonstra ser tão enriquecedora no ensino/aprendizagem das línguas não-maternas:

> Visual objects can have other kinds of meanings also: for a knowledgeable viewer, for instance, an object shaped like a cross can evoke Christian sentiments. Because picture books have the purpose of conveying complex information by visual means, they tend to refer to a wide range of visual symbolisms, and can sometimes be illuminated by knowledge of everything from the iconography of classical art to the semiotics of contemporary advertising.
>
> (Nodelman, 2004, p. 162)

Neste caso específico, a multimodalidade revelou-se como um instrumento fundamental para que os estudantes chineses pudessem compreender e interpretar as semelhanças (e diferenças) entre dois mundos semióticos díspares, tocando, de forma inclusiva, a literacia indispensável à leitura de textos portugueses contemporâneos de literatura para a infância. A literatura para a infância, com a coexistência do texto escrito e o processamento das imagens, desempenha um papel de relevo na evolução da aquisição de competências numa língua segunda e não-materna. Veja-se a conclusão de duas estudiosas do mesmo assunto:

> The success in the acquisition of a language is often determined by the students' interest and enthusiasm for the material used in the language classroom, the level of their persistence with the learning task, and the level of their concentration and enjoyment (Crookes and Schmidt, 1991). This type of students' personal involvement might come from the material and lessons used in the classroom. […] literature, when used properly, can be an effective tool for developing foreign language skills. We have also tried to demonstrate that current research is being active in terms of showing the multiple benefits of using literature in the language classroom. This leads us to more easily refute the arguments of those scholars who are against the use of literature as a tool for language teaching (such as Edmondson, 1997).
>
> (Bobkina & Dominguez, 2014, p. 258)

6 – Necessidades didático-pedagógicas para o ensino/aprendizagem da leitura extensiva em português a estudantes de português língua não-materna

Conclui-se que muito falta fazer sobretudo quanto aos instrumentos pedagógicos utilizados como material didático: a ilustração nem sempre é alargada à linguagem cinematográfica, quando os estudantes dos nossos dias são, primeiramente, leitores de imagens/textos visuais e fílmicos e – só depois – leitores de textos escritos. O ensino do Português como língua segunda ganhará com a inclusão dos livros ilustrados de literatura para a infância e das películas cinematográficas realizadas sobre os textos originais.

Assim, a Leitura Extensiva em Português deve alargar o conceito de texto não apenas aos textos literários escritos e ilustrados, mas inclusivamente aos textos visuais e com movimento cinematográfico. A experiência aqui referida partiu de textos literários para a infância, um todo multimodal de linguagem escrita e linguagem visual, para se deparar com a linguagem cinematográfica como resposta de leitura dos estudantes.

Esta é a resposta multimodal que o ensino se encontra a tempo de alcançar e introduzir como instrumento pedagógico necessário: para que o encontro dos mundos geracionais ainda se faça em tempo útil e a(s) leitura(s) se torne(m), efetivamente, extensiva(s).

REFERÊNCIAS

Anstey, M., & Bull, G. (2004). The picture book: modern and postmodern. In P. Hunt (Ed.), *International companion encyclopaedia of children's literature* (pp. 328–339). London & New York: Routledge.

Azevedo, F. (2015). Apontamentos sobre a construção cultural das representações da família na literatura infantil portuguesa contemporânea. *Tropelías. Revista de Teoría de la Literatura y Literatura Comparada, 23*, 14–21. Consultado em 20 junho 2019. http://hdl.handle.net/1822/33700

Azevedo, F., et al. (2014). *Formação, memória e alteridade. Cruzando a literatura e a educação*. Estudos em Literatura Infantil e Juvenil: Braga.

Barreto, G. (2002). *Dicionário de literatura infantil portuguesa*. Campo das Letras: Porto.

Blockeel, F. (2001). *Literatura juvenil portuguesa contemporânea: Identidade e alteridade*. Lisboa: Caminho.

Blockeel, F. (2002). Sobre literatura juvenil portuguesa contemporânea: Identidade e alteridade. In *No branco do sul as cores dos livros* (pp. 125–147). Consultado em 22 junho 2019. https://repositorio.ipbeja.pt/bitstream/20.500.12207/4403/2/BLOCKEEL_02.pdf

Bobkina, J., & Dominguez, E. (2014). The use of literature and literary texts in the EFL classroom: Between consensus and controversy. *International Journal of Applied Linguistics & English Literature, 3(2), March 2014*. Australia.

Goodman, K., Fries, P. H., & Strauss, S. L. (2016). *Reading- The grand illusion: How and why people make sense of print*. London: Routledge.

Huisman, R. (2019). The discipline of English literature from the perspective of SFL register. *Language, Context and Text 1:1*, 102–120.

Hunt, P. (Ed.) (2004). 57. What the authors tell us. In *International companion encyclopaedia of children's literature* (pp. 731–748). London & New York: Routledge.

Jesus, A. P. C. C. (2011). Histórias e crianças: Palavras simples? *Revista Fronteira Z. São Paulo, 6, abril de 2011*, 1–11.

Kress, G., & van Leeuwen, T. (2006). *Reading images, the grammar of visual design* (p. 15). Taylor & Francis e-library. First edition published in 1996. Consultado em 15 junho 2019. http://www.tandefbooks.com

Moerdisuroso, I. (2014). Social semiotics and visual grammar: A contemporary approach to visual text research. *International Journal of Creative and Arts Studio, 1(1), 1 June 2014,* 80–91.

Moya Guijarro, A. J. (2014). *A multimodal analysis of picture books for children: A systemic functional approach* (Discussions on functional approaches to language). London: Equinox.

Nodelman, P. (2004). 11. Picture books and illustration. In P. Hunt (Ed.), *International companion encyclopaedia of children's literature* (pp. 154–165). London & New York: Routledge.

Starc, S., Jones, C., & Arianna, M. (Eds.). (2015). *Meaning making in text: Multimodal and multilingual functional perspectives*. Basingstoke and New York: Palgrave Macmillan.

Whalley, J. I. (2004). 24. The development of illustrated texts and picture books. In P. Hunt (Ed.), *International companion encyclopaedia of children's literature* (pp. 318–327). London & New York: Routledge.

Williams, G. (2000). Children's literature, children and uses of language description. In L. Unsworth (Ed.), *Researching language in schools and communities*. London: Cassell.

3

A STUDY OF MATERIAL CLAUSES IN THE KORING LANGUAGE

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ABSTRACT

This paper studies material clauses as one of the aspects of transitivity in the Koring language based on the theoretical framework of Systemic Functional Grammar (SFG). Koring is one of the Nigerian languages spoken by some minority groups in Nigeria. The study is motivated by a desire to enquire into the methodological implication(s) of the application of the Systemic Functional Grammar concept of transitivity in the Koring language. Data were generated from 610 utterances made by 122 native speakers of the language (5 utterances from each of the native speakers). The theoretical framework used for the analysis of data is Halliday's Systemic Functional Grammar as revised by Halliday and Matthiessen (2014). The analysis involved investigation of the participant roles of the Actor, Goal, Recipient and Client of a given material clause in Koring. In addition to the participant roles, the analysis examined the roles of the Process in terms of transfer of action or otherwise in a given material clause. The analysis also examined how a typical material clause in the language is probed. Generally, it is observed that, like many languages of the world, transitivity as a theoretical concept of SFG theory applies to the Koring language. However, the behaviour of material processes in the language has some interesting peculiarities. For instance, the study observes that material processes of 'doing' in material clauses do not accommodate more than two participants in some instances. It is also observed that not all 'happening' material processes accommodate Goal among their participant(s). The study reveals that, unlike what is available in the English language, the lexicogrammar of the Koring language does not allow for the prepositional realization of Recipient or Client and that the difference between the two roles appears to be neutralized in Koring. I, therefore, use the single label Beneficiary for this role, borrowing the term from the ergative perspective; hence, my use of Client and Beneficiary interchangeably. The study contributes to the study and development of the language. It also contributes to the application of SFG theory in the study of Nigerian languages and African linguistics. It recommends further studies on other process types in the Koring language.

KEYWORDS

Material clauses in Koring, Koring transitivity, SFG transitivity in Koring, transitivity processes in Koring, application of SFG in Koring

1 – Introduction

Koring is one of the developing languages (a virgin language that has rarely been committed to writing or studied) spoken by some minority groups in the Southeast and South-South Nigeria. It is an endangered language (Anagbogu, 2005, p. 132). It is spoken in some parts of Ebonyi State, Southeast Nigeria and Benue State, North-Central Nigeria. There are four Koring speaking communities in Ebonyi State. These communities are made up of Okpoto, Effium and Ntezi in Ishielu Local Government Area, and Amuda in Ohaukwu Local Government Area of the state. In Benue State, Koring is spoken in Offia and Utonkon which are in Okpokwu Local Government Area. It is estimated that the number of Koring native speakers is more than 224,000 people. Williamson and Blench (2000, p. 3) place Koring in the Upper-Cross group of the Delta-Cross sub-branch of the Cross-River language family. Ejiofor (2006) traced the genetic relationship between Koring and the Kukelle language, a language spoken in Cross-River State, South-South Nigeria.

This study is limited to the analysis of the material clauses in Koring as a step in the study of transitivity in the language from a Systemic Functional Grammar (SFG) perspective. The material clause is one aspect of transitivity from a Systemic Functional Grammar (SFG) perspective, which involves actions and happenings. While SFG has focused largely on English, it is hypothesised that material clauses are common across languages. The SFG framework is adopted for this study because of the position of Halliday and Matthiessen (2014, p. 20) that "languages evolve – they are not designed, and evolved systems cannot be explained simply as the sum of their parts. Our traditional compositional thinking about language needs to be, if not replaced by, at least complemented by a 'systems' thinking whereby we seek to understand the nature and the dynamic of a semiotic system as a whole". This model of grammar perceives language as a functional system. According to Butt, Fahey, Feez, Spinks, and Yallop (2000), "Systemic Functional Grammar is a way of describing lexical and grammatical choices from the system of wording so that we are always aware of how language is being used to realize the meaning". Lamidi (2008, p. 17) states that "Halliday considers grammar to be a network of systems of interrelated contrast. Here particular attention is paid to semantics and pragmatics in the expression of meaning such that the theory cannot be separated from daily experience". Systemic Functional Grammar is a viable framework for describing and modelling language, and also a potent resource for making meaning and choices. This theoretical model treats language beyond its formal structures and incorporates the context of culture and the context of a situation in language use (Halliday, 1985, 1994; Matthiessen, 1995; Martin & Rose, 2003). Systemic Functional Grammar is a form of grammatical and meaning description, and is a part of systemic functional linguistics which is a social semiotic approach. Systemic Functional Grammar is a theory of grammar based on the view that language is a system for making meaning. According to Halliday and Matthiessen (2014, p. 23), "Systemic theory gets its name from the fact that the grammar of a language is represented in the form of system networks, not as an inventory of structures". The term **systemic** refers to the fact that every grammatical structure of a language involves a choice from available sets of options, against the earlier notion that grammar is a composite of rules. **Functional** stands for the fact that every time we choose from the available options, we are doing so to fulfil a communicative purpose; while **grammar** refers to the fact that there is an overall organisation of the possible options. The adoption of SFG, no doubt, increases and diversifies the number of grammatical theories that have been applied to the study of the Koring language.

The theoretical model adopted for this study is that of (Halliday, 1985, 1994; Matthiessen, 1995; Martin & Rose, 2003). The adoption is in recognition of the model's position that language should be treated beyond its formal structures, and its consideration of the context of culture and the context of a situation in language use. Hence, this model makes it possible for the exploration of every experience communicated by the Koring clauses investigated.

2 – Process types

Transitivity in Systemic Functional Grammar (SFG) is a configuration of a process and its participants and, if there are any, circumstances. Process, which forms the nucleus of the clause, is realised by the verbal group. Halliday (1994, 2014), Thompson (2013), Eggins (2004) and Martin et al.

(1997) have identified three major processes in the English language, material process, mental process and relational process, and three other process types, verbal process, behavioural process and existential process. The six process types are summarized in Figure 1 below.

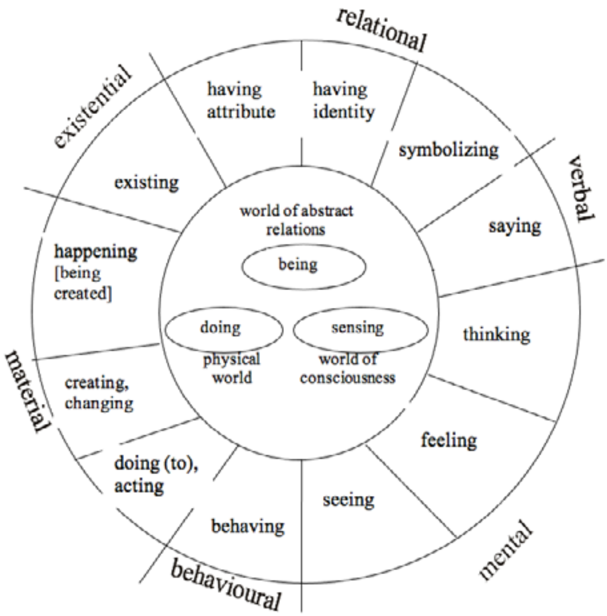

Figure 1 – **Process types in English** (Halliday & Matthiessen, 2014, p. 216)

In Figure 1, the outer ring displays the six types of process – relational, verbal, mental, behavioural, material and existential – while the inner ring shows the descriptions of the processes: the relational process is realized by verbs of having and symbolizing; the verbal process is realized by verbs of saying; mental is realized by verbs of thinking, feeling and seeing; behavioural is realized by a verb of behaving; the material is realized by verbs of happening, creating and doing; while the existential process is realized by a verb of existing. The centre indicates the core areas of processes which are those of "being" (world of abstract relations), "doing" (physical world) and "sensing" (world of consciousness). Similarly, Halliday and Matthiessen (2004, p. 260) summarized the six process types and their participants in Table 1.

Table 1 – **Process types and their participants** (Halliday & Matthiessen, 2004, p. 260)

Process type	Category meaning	Participants, directly involved	Participants, obliquely involved
Material:	'doing'	Actor, Goal	Recipient, Client; Scope;
action	'doing'		Initiator; Attribute
event	'happening'		
Behavioural:	'behaving'	Behaver	Behaviour
Mental:	'sensing'	Senser, Phenomenon	
perception	'seeing'		
cognition	'thinking'		
desideration	'wanting'		
emotion	'feeling'		
Verbal:	'saying'	Sayer, Target	Receiver, Verbiage
Relational:	'being'		
attribution	'attributing'	Carrier, Attribute	Attributor, Beneficiary
identification	'identifying'	Identified, Identifier, Token, Value	Assigner
Existential:	'existing'	Existent	

In Table 1, the subdivisions of the process types which appear to have no participants attributed to them indicate that the involved subdivisions do not have different set of participants from the participants attributed to the major process type. For instance, the non-attribution of participants to perception, cognition, desideration and emotion, which are subdivisions of mental process, means that all the subdivisions of mental process respectively have Senser and Phenomenon as their participants. Since this model of grammar has never been applied into the Koring language, it is not possible to ascertain at this juncture if the six process-types as found in the English language also apply in the Koring language. Similarly, it is also not possible to ascertain at this juncture, in the Koring language, if there are additional process-types to the six identified in the English language. Hence, the researcher adopted Material Process as established in the English language and subjected its role to the Koring language clauses to ascertain its applicability or otherwise in the language. The mindset of the researcher is to identify the areas the Koring language clause forms that conform or differ from the English language clause forms. The level of conformity of the Koring language clauses, modifications or complete differentiation from the roles of Material clauses in the English language would be used in the classification of the Koring clauses.

Halliday (1967, p. 199) gives the meaning of transitivity as "the set of options relating to cognitive content, the linguistic representation of extra linguistic experience, whether of the phenomena of the external world or feelings, thoughts and perceptions". Transitivity analysis is the realisation of the experiential strand of ideational metafunction (Martin et al., 1997). By experiential strand, a clause is construed as a representation of experience. It is used to explore the content or the experiential meaning in a clause. The role of transitivity in a clause is summarised by Halliday and Matthiessen (2014) who argue that the system of TRANSITIVITY provides the lexicogrammatical resources for construing a quantum of change in the flow of events as a figure – as a configuration of elements centred on a process. It also accounts for "who or what does what to whom or what?" (Iwamoto, 2008). Thompson (2013, p. 95) describes transitivity as "a system for describing the whole clause, rather than just the verb and its objects" and compares transitivity in SFG and transitivity in Transformational Generative Grammar (TGG) by stating thus "it does, though, share with the traditional use of focus on the verbal group, since it is the type of process which determines how the participants are labelled" (Thompson, 2013, p. 95). The transitivity system takes care of the doing, happening, saying, sensing, being and existence in a clause. Transitivity analysis helps reveal the participants involved in an action, how they relate to others and if they take an active or passive roles in a clause (Nguyen, 2012). Transitivity covers all phenomena and anything that can be expressed by a verb: event, whether physical or not, state, or relations (Halliday, 1985, 1976, p. 159). Transitivity is represented as a configuration of a ***process***, ***participants*** involved in the process, and ways in which the participants may unfold called ***Circumstances***.

This is to say that transitivity can account for physical and mental expressions. The process, which is realised as a verbal group, accounts for the expressions of happenings and doings in the communication of experience. the participant, which is realised as a nominal group, accounts for physical and abstract entities that are involved in the expression of experience. Then the Circumstance, which is generally realised as an adverbial group, accounts for modifications of experiential expressions. In the analysis, the Koring language clauses are broken into participants, processes and Circumstances based on their various roles in the overall communication of experience. The role is also used to account for the classification of participants and processes into different kinds.

A material clause accounts for the outer world of actions and events. Material process represents "doing or happening". It involves physical actions which make it correspond with the traditional definition of a verb as a 'doing word' (Thomson, 2004, p. 90). Examples of material processes in the English language include the verbs to run, to eat, to dance, to walk, to kill, etc. A material clause is usually made up of an **Actor** (the participant who does or performs the action of the process), a **Material** Process (a word or group of words that transmit action or happening), and a **Goal** (the participant that is impacted by the action) A material clause can be probed with the questions "What did ***x*** do?" and "What happened to ***x***?" in which case ***x*** is a participant.

1.	The man	flogged	the boy.	
	Actor	M.pr	Goal	
2.	The boy	was flogged	by the man.	
	Goal	M.pr	Actor	
3.	Franklin	gave	Paul	a pen
	Actor	M.pr	Recipient	Goal
4.	The President	celebrated	his homecoming.	
	Actor	M.pr	Scope	

Examples (1), (2), (3) and (4) are material clauses. Example (1) can be probed with the question "What did the man do?"; (2) can be probed with "What happened to the boy?"; (3) can be probed with the question "What did Franklin do"; while example (4) can be probed with "What did the President do?" but not "What happened to the homecoming?". "The man", "Franklin" and "the president" are **Actors** because they are participants which respectively perform actions in those clauses, as revealed by the 'probe "What did X do?"; "the boy" and "a pen" are **Goals** as a result of being the participants which are affected by the action of the **Actors, as revealed by the probe "what happened to X?"**; "his homecoming" is **Scope** because it limits the celebration of the President to a particular event; “Paul” is **Recipient** because the pen is transferred into his possession through the actions of Franklin in (3); while “(was) flogged”, “gave” and “celebrated” are Material processes because they indicate actions performed by “the man”, “Franklin” and “the President”, respectively.

3 – Analysis of material processes in Koring

Material processes are processes that express the fact that an entity does something. Material processes indicate physical actions or happenings. The actions may or may not be directed from one entity to another entity. The processes are analysed based on the following areas:

- Verbs classified as material processes in Koring
- Participants that are used with material processes in Koring
- Differentiating doing material processes from happening material processes
- How material processes in Koring can be probed

3.1 – Verbs classified as material processes in Koring

Material processes are verbs of actions and happenings. They include such verbs as in Table 2.

Table 2 – **Examples of material processes in Koring**

S/N	Verb	Gloss
1.	ùkwuelè	open
2.	ugbirì	stop
3.	ọlùrà	pour
4.	wùjì	eat
5.	ùre	buy
6.	ùtàñ	sell
7.	ìnàñ	make
8.	ònyien	give

The verbs in Table 2 are classified as Material processes because in their infinitival forms, they communicate 'doing' or 'happening'. What remains is for them to have or be structured with the required participants in line with the lexicogrammar of the Koring language for them to provide specific transmission of experiences. And if we see a patterning of related grammatical structures we can tentatively conclude that the different processes are all of the same transitivity type.

3.2 – Participants involved in material processes in the Koring language

Material processes may involve only a core participant ***Actor*** (the doer entity in the material clause) as in examples (5) and (6). "Agbo" and "Anọ" are the Actors. They consciously perform or unconsciously initiate the action of a material process. "Ugbirì" and "asee" are material processes which communicate the activities of the Actors in examples (5) and (6), respectively.

5.	Agbo	ugbirì.
	Agbo	past + stop
	"Agbo stopped."	
6.	Anọ	asee.
	2SG	go/walk+ing
	Actor	Material Process
	"You are going."	

Examples (5) and (6) are classified as Material clauses based on the fact that they both apparently communicate action experience. In example (5), there is an action whereby Agbo, who apparently was walking, stopped walking and stood still. Similarly, in example (6), there is an action whereby someone, a person being talked to, is walking.

Material processes in Koring may involve two participants – obligatory ***Actor*** and ***Goal*** (an entity that suffers or bears the action of the Actor) as in examples (7) and (8). "Kpesùme" and "Ànyìọ" (the Actors) perform the actions which affect "gbanyì" and "tèree" (the Goals) through "ọlùrà" and "ònuarè" (the Processes) in examples (7) and (8), respectively. Hence, the justifications of their classifications as Material clauses.

7.	Kpesùme	ọlùrà	gbanyì.
	Kpesùme	pour + past	water
	Actor	Material Process	Goal
	"Kpesùme poured some water."		

8.	Ànyìọ	ònuarè	tèree.
	We	break + past	stick
	Actor	Material Process	Goal
	"We broke a stick."		

In some instances, material processes in Koring may involve three participants – obligatory ***Actor***, optional ***Goal*** and an optional third participant corresponding either to the English ***Client*** (the entity which benefits from the material process or the entity for whom or to whom the material process is said to take place) as in example (9) or Recipient (the participant into whose possession the Goal is transferred) as in example (10). As there seems to be no grammatical distinction between Client and Recipient in Koring, we can label both as Beneficiary (to borrow the label from ergativity analysis). By this analysis, Àgasụ is the Beneficiary of the actions of "Ọgba" and "Ovie" (the Actors) through "ùre" and "ùtàñ" (the Material Processes) which affect "ùkwùre" and "agbọ" in examples (9) and (10), respectively.

9.	Ọgba	ùre	Àgasụ	ùkwùre.
	Ọgba	past+buy	Àgasụ	bag
	Actor	Material Process	Beneficiary	Goal
	"Ọgba bought a bag for Àgasụ."			

10.	Ovie	ùtàñ	Àgasụ	agbọ.
	Ovie	past+sell	Àgasụ	banana
	Actor	Material Process	Beneficiary	Goal
	"Ovie sold bana to Àgasụ."			

Unlike the situation in the English language, where the ***Beneficiary*** has an alternative realisation as the Complement in a prepositional phrase (with *to* for the Recipient and *for* for the Client), the Koring language does not allow any structural movement of ***Beneficiary***. This is demonstrated in Table 3, where the movement of Beneficiary renders the structures in the Koring language meaningless.

Table 3 – **Illustration of non-movement of beneficiaries in Koring**

S/N	The Koring language				The English language			
1a.	Ọgba	ùre	Àgasụ	ùkwùre.	Ọgba	bought	a bag	for Àgasụ
	Ọgba	past+buy	Àgasụ	bag	Actor	M.Process	Goal	Beneficiary
	Actor	M.Process	Beneficiary	Goal				
	“Ọgba bought a bag for Àgasụ.”							
1b.	* Ọgba ùre		ùkwùre	Àgasụ	Ọgba	bought	Àgasụ	a bag
	Ọgba	past+buy	bag	Àgasụ	Actor	M.process	Beneficiary	Goal
	Actor	M.Process	Goal	Beneficiary				
	“Ọgba bought a bag for Àgasụ”							
2a.	Ovie	**ùtàñ**	Kpesùme	agbọ.	Ovie	sold	banana	**to** Kpesùme
	Ovie	past+sell	Kpesùme	banana	Actor	M.Process	Goal	Beneficiary
	Actor	M.Process	Beneficiary	Goal				
	“Ovie sold banana **to** Kpesùme”							
2b.	*Ovie **ùtàñ**		agbo	Kpesùme.	Ovie	sold	Kpesùme	banana
	Ovie past+sell		banana	Kpesùme	Actor	M.Proces	Beneficiary	Goal
	Actor M.Process		Goal	Beneficiary				
	“Ovie sold banana Kpesùme”							

In Table 3, while the movements of ***Beneficiary*** in (1a, b) and (2a, b) of the English language do not affect or change the experiential meanings of the material clauses, the case is not the same in the Koring language. The only differences between (1a) versus (1b) and (2a) versus (2b) of the English language are the respective presence of prepositions in between ***Beneficiary*** and ***Goal*** as required by the lexicogrammar of the English language. The movements of ***Beneficiary*** in (1a, b) and (2a, b) of the Koring language resulted in unacceptable structures in (1b) and (2b). This is attributable to the fact that the lexicogrammar of the Koring language does not accommodate any preposition in between ***Beneficiary*** and ***Goal***. Consequently, no preposition could create the environment for a ***Beneficiary*** to be prepositional in the lexicogrammar of the Koring language.

3.3 – Differentiating doing material clauses from happening material clauses in Koring

In Koring, a ***doing*** material clause involves the extension of the process from one participant (the Actor) to another participant (the Goal) and impacts it in some way. Such a material clause represents a doing (or an action). On the other hand, a happening material clause is a material clause where the outcome of the process does not extend to a Goal but is confined to the Actor. Examples (11) to (16) below demonstrate doing and happening material clauses respectively:

11.	Kpesùme	ọlùrà	gbanyì.	('doing' Material clause)
	Kpesùme	pour+past	water	
	Actor	M. Process	Goal	
	"Kpesùme poured some water."			
12.	Ànyìọ	ònuarè	tèree.	('doing' Material clause)
	We	break+past	stick	
	Actor	M. Process	Goal	
	"We broke a stick."			
13.	Gbanyì	ọlùrà.		('happening' Material clause)
	Water	pour+past		
	Actor			
	"Some water poured."			
14.	Tèree	ònuarè.		('happening' Material clause)
	Stick	break+past		
	Actor	M. Process		
	"A stick broke."			

The Actors in examples (11) and (12) bring about the unfolding of the process. We can logically conclude that Actors are derived from doing material clauses, as they input the required energy for the realisations of the processes and impact on the Goal participants. Though this development is not language specific to the Koring language, it goes a long way in demonstrating and contributing to the fact that the theory of Systemic Functional Grammar is not Anglo-centric but language universal. In the examples, the Actor + Process configuration goes through to impact on the Goals – gbanyì and tèree. However, the roles of the Actors in examples (13) and (14) do not fall into the above definition and configuration. The Actor + Process configuration in examples (13) and (14) does not pass through. The Actors behave differently as the processes simply impact on the Actors. As demonstrated in examples (13) and (14), the processes are represented as happenings and the Actors serve as the media through which the happenings are actualized. For instance, the Actors – Gbanyì and Tèree – in examples (13) and (14) represent entities which logically cannot bring about the unfolding of the processes. It is worthy of mention that examples (13) and (14) are understood in the context of natural occurrences. For instance, some water in a bucket could naturally pour as a result of the way the bucket was kept. A horizontally standing or a vertically hanging stick could break as a result of its reaction to changes in weather conditions over a long period. A part of the stick could be more dried or decayed than the rest of the stick. The imbalance in the weights of either side of the dried area or the weights of either side of the decayed area could force the stick to break naturally. The difference between a doing material clause and a happening material clause in Koring is made clearer in examples (15 a, b) and (16 a, b) below:

15a.	Ànyìọ	ùzaa	ìtam.
	We	past+wash	pot
	Actor	M. Process	Goal
	"We washed a pot"		

15b.	* Ìtam ùzaa.	
	Pot	past+wash
	Actor	M. Process
	"Pot washed"	

16a.	Kpesùme	ùcham	ìmareè.
	Kpesùme	past+sweep	house
	Actor	M. Process	Goal
	"Kpesùme swept the house."		

16b.	* Ìmareè	ùcham.
	House	past+sweep
	Actor	M. Process
	"House swept"	

Examples (15a) and (16a) are doing material clauses which communicate experience. Examples (15b) and (16b) are designed to be happening material clauses. However, the clauses in (15b) and (16b) do not communicate experience. Hence, they do not exist in the lexicogrammar of the Koring language. Comparatively, (15a, b) and (16a, b) demonstrate that not all material processes can be used as both 'doing' and 'happening' processes. That is, while some material processes like the material processes in examples (11) and (12) can be used to construct both 'doing' material clauses (see examples 11, 12, 17i and 18i) and 'happening' material clauses (see examples 13, 14, 17ii and 18ii), other material processes can only be used in the construction of 'doing' material clauses (see examples 15a,b, 16a,b, 19i,ii and 20i,ii).

In other words, in line with the lexicogrammar of the Koring language, not all Material processes can accommodate both a single participant in a clause and more than one participant in another clause. While some Material processes like ugbirì (stop), ùkwuelè (open), ọlùrà (pour), and ònuarè (break) can accommodate only one participant in a clause and as well accommodate more than one participant in another clause (see examples 11, 12, 13, 14, 17 i, ii and 18 i, ii), other material processes like ùre (buy), ùtàñ (sell), ùzaa (wash), and ùcham (sweep) accommodate not less than two participants in a clause see examples (15a,b, 16a,b, 19 i, ii and 20 i, ii).

17i.	Kèmèmà	ugbirì.
	Car	past+stop
	Actor	M. Process
	"A car stopped"	

17ii.	Àgasụ	ugbirì	kèmèmà.
	Àgasụ	past+stop	car
	Actor	M. Process	Goal
	"Àgasụ stopped a car."		

18i.	Le mma	ùkwuelè.
	The door	past+open
	Actor	M. Process
	"The door opened"	

18ii.	Ovie	ùkwuelè	le mma.	
	Ovie	past+open	the door	
	Actor	M. Process	Goal	
	"Ovie opened the door."			
19i.	Ọgba	ùre	Àgasụ	ùkwùre.
	Ọgba	past+buy	Àgasụ	bag
	Actor	M. Process	Beneficiary	Goal
	"Ọgba bought a bag for Àgasụ."			
19ii.	*Àgasụ ure.			
	Àgasụ	Past+buy		
	"Àgasụ bought"			
20i.	Ovie	ùtàñ	Àgasụ	agbọ.
	Ovie	past+sell	Àgasụ	banana
	Actor	M. Process	Beneficiary	Goal
	"Ovie sold banana to Àgasụ."			
20ii.	* Àgasụ ùtàñ.			
	Àgasụ past+sell			
	"Àgasụ sold"			

In examples (17) and (18), the involved material processes have only the core participant in examples (17i) and (18i) respectively. The processes also accommodate two participants in examples (17ii) and (18ii). However, the case is different in examples (19) and (20). The involved material processes accommodate two participants in examples (19i) and (20i) respectively. However, the accommodation of only the core participant – Actor – in examples (19ii) and (20ii) makes the clauses inapplicable and meaningless in the Koring language. This is possibly because the lexicogrammar of the language does not position the involved material processes and their likes in a way that they can accommodate a single participant.

3.4 – Probing material processes in Koring

Probing of Material processes in Koring stands for the questions that can lead to the actualization of Material clauses in the Koring language. The questions could appear in in-situ or derived form, provided they are accommodated by the lexicogrammar of the language. Material processes are probed with 'nadi (what)' and 'nyiledi (who)' questions. These questions are popularly called wh-questions in the English language. However, not all wh-questions in the Koring language like 'kedi question' as found in Ejiofor (2010) are involved in the elicitation of Material clauses in the language. What is common in 'nadi (what)' and 'nyiledi (who)' questions is that they are pronominals. The questions may appear in their *insitu* positions as in example (21b) or in their transformed structures as in (21c). For instance, the material processes in examples (21a) and (22a) can be probed with 'nadi' and 'nyiledi' questions in examples (21b, c) and (22b), respectively.

21a.	Ànyìọ	uzaa	Kèmèmà		
	We	wash+pst	car		
	Actor	Material Process	Goal		
	"We washed a car."				
21b.	Ànyìọ	uzaa	nadi.		(Ejiofor, 2010, p. 30)
	We	wash+pst	prn+Q		
	"We washed what?"				
21c.	Nadi	oghene	Ànyìọ	uzaa?	(Ejiofor, 2010, p. 30)
	prn+Q	that	we	wash+pst	
	"What did we wash."				
22a.	Ovie	ure	Kpesume	agbọ.	
	Ovie	buy+pst	Kpesume	banana	
	Actor	M. Process	Client	Goal	
	"Ovie bought a banana for Kpeume."				
22b.	Nyiledi	ure	Kpesume	agbọ?	(Ejiofor, 2010, p. 41)
	Wh-prn+Q	buy+pst	Kpesume	banana	
	"Who bought a banana for Kpesume?"				

The two forms of 'nadi' questions in (21b, c) can activate the material clause in (21a). Similarly, the 'nyiledi' question in (22b) can lead to the realization of the material clause in (22a). It is worthy of mention that the questions are not used to realize any single participant like Actor or Goal. They are rather used to realize the entire experience communicated by a Material clause. Similarly, no word or group of words like 'nadi' and 'nyiledi' in isolation from the questions in (21b, c) and (22b) can lead to the realization of the Material clauses in (21a) and (22a). Rather the questions in (21b, c) and (22b), as complete units of meaning, are the ones that respectively generate the Material clauses in (21a) and (22b).

4 – Summary and conclusion

Material Processes are verbs of doing and happening. Participants in material clauses are Actor, Goal and Beneficiary. Participants are nominal group, just as Processes are verbal groups. Among the three participants, Actor is the core participant which can as well be a sole participant in some material clauses. A *Beneficiary* cannot be prepositional in the Koring language. This is conditioned by the lexicogrammar of the Koring language, which does not allow the presence of a preposition in between Beneficiary and Goal. It is also discovered that not every material process in the Koring language accommodates an equal number of participants. While some of the material processes can accommodate only two participants in a clause, others can accommodate both a single participant in a clause, on one hand, and two or more participants in a clause, on the other hand. Processes with three participants do not allow for the use of prepositions that are usually required in the English language. They make the use of prepositions unnecessary. As demonstrated with examples (15a,b) and (16a,b), not every 'doing' process could be used to construct a 'happening' material clause. The following is a proposed system network of a material clause in the Koring language:

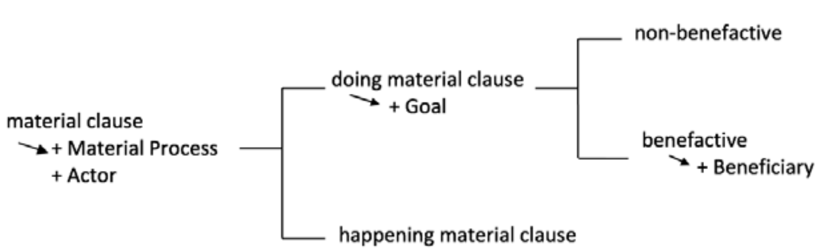

Figure 2 – **System network of a material clause in the Koring language**

The system network in Figure 2 demonstrates that a Material clause in the Koring language is either a 'doing' material clause or a 'happening' material clause. Both 'doing' and 'happening' material clauses have ***processes*** and ***participants***. If a clause is a 'doing' material clause, its ***process*** may accommodate one or more participants or may accommodate at least two participants (in terms of Actor and Goal). However, any 'doing' material clause may or may not possess non-movable beneficiary, regardless of the number of participants its ***process*** accommodates. On the other hand, if a material clause is a 'happening' material clause, it can only possess Actor, with or without a non-movable beneficiary as its participant.

This paper contributes to bringing the Koring language to the limelight by widening its areas of study. To fully appreciate the application of transitivity in the Koring language (the experiential mode of the language) on the perspective of Systemic Functional Grammar, further studies on Verbal Processes, Mental Processes, Relational Processes, Behavioural and Existential Processes should be made in subsequent papers on SFG transitivity in Koring.

REFERENCES

Anagbogu, P. (2005). Pluralization in Koring. In P. Anagbogu (Ed.), *Awka journal of linguistics and languages* (Vol 1, pp. 34–55) Awka: Mercury Bright Press.

Butt, D., Fahey, R., Feez, S., Spinks, S., & Yallop, C. (2000). *Using functional grammar: An explorer's guide* (2nd ed.). Sydney: Macquarie University, National Centre for English Language Teaching and Research.

Eggins, S. (2004). *An introduction to systemic functional linguistics* (2nd ed.). London: Continuum International.

Ejiofor, E. U. (2010). *Wh-questions in Koring: The movement of wh-elements in question formation in Koring*. A Master of Arts degree thesis submitted to the Department of Linguistics, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.

Ejiofor, E. U. (2006). *Genetic relation of the Kukelle language and the Koring language: A case study of Wanikade, Okpoto, Amuda and Effium*. A Bachelor of Arts degree project submitted to the Department of Linguistics, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.

Halliday, M. A. K. (1967). Notes on transitivity and theme in English. Part 2. *Journal of Linguistics, 3/2*, 199–244.

Halliday, M. A. K. (1976). A brief sketch of systemic grammar. In G. Kress (Ed.), *System and function in language* (pp. 3–6). London: Oxford University Press.

Halliday, M. A. K. (1985). *An introduction to functional grammar*. London: Edward Arnold.

Halliday, M. A. K. (1994). *Introduction to functional grammar* (2nd ed.). London: Edward Arnold.

Halliday, M. A. K., & Matthiessen, C. M. I. M. (2004). *An introduction to functional grammar* (3rd ed.). London: Hodder Arnold.

Halliday, M. A. K., & Matthiessen, C. M. I. M. (2014). *Halliday's introduction to functional grammar* (4th ed.). London and New York: Routledge.

Iwamoto, N. (2008). *Stylistic and linguistic analysis of a literary text using systemic functional*

grammar. http://human.kanagawa-u.ac.jp/gakkai/publ/pdf/no162/16209.pdf

Lamidi, M. T. (2008). *Aspects of chomskyan grammar*. Ibadan Nigeria: University Press PLC.

Martin, J. R., Matthiessen, C. M. I. M., & Painter, C. (1997). *Working with functional grammar*. London: Edward Arnold.

Martin, J. R., & Rose, D. (2003). *Working with discourse: meaning beyond the clause*. London & New York: Continuum.

Matthiessen, C. M. I. M. (1995). *Lexicogrammatical cartography*. Tokyo, Tapei and Dallas: International Language Sciences Publishers.

Nguyen, Hanh Thu. (2012). Transitivity analysis of heroic mother by Hoa Pham. *International Journal of English Linguistics, 2*(4), 85–100. Canada: Canadian Center of Science and Education.

Thompson, G. (1996). *Introducing functional grammar*. London: Arnold.

Thompson, G. (2004). *Introducing functional grammar* (2nd ed.). London: Hodder Education.

Williams, K., & Blench, R. (2000). Niger-Congo. In B. Hein, & D. Nurse (Ed). *African language: An introduction*. UK: Cambridge University Press.

4

QUOTING AND REPORTING STRATEGICALLY ACROSS CONTEXTS: A SYSTEMIC FUNCTIONAL PERSPECTIVE

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ABSTRACT

This paper examines the systematic variations and functions of the language of quoting and reporting in two contexts. From a register typology perspective, it recasts the issues of quoting and reporting others under the scope of projection as schematized in Systemic Functional Linguistics (SFL). It is found that the linguistic resources realizing projection vary systemically in accordance with the nature of their respective registers. The different experiential worlds and the institutional relationships motivate, constrain and in return are construed by the variations of projection across registers. In this case, projection can be seen as a semantic strategy to strategically quote or report others in producing one's own discourse.

KEYWORDS

Projection, quoting and reporting, registerial variation

1 – Introduction

Quoting and reporting have been a popular subject in language studies (Banfield, 1973; Charles, 2006, 2007; Candlin & Maley, 1997; Fairclough, 1992; Holt, 1996; Hyland, 1999; Hyland & Tse, 2005; Koskela, 2013; Kristeva, 1980; Petric et al., 2013; Quirk et al., 1985; Searle, 1975; Thompson & Tribble, 2001; Thompson & Ye, 1991; Scollon, 2004). By embedding one text within another, they bring into play others' words, ideas, theories, diagrams, charts and even images in constructing one's own. By so doing, they realize particular discourse functions required by different contexts.

Due to their wide application, quoting and reporting have been examined within different registers, such as news report, academic writing, public speech and advertisement. However, despite the wide coverage, previous studies are focused mostly on the quoting and reporting behaviors in single registers. The findings are instructive but inadequate to reveal the whole "picture", as registers seen independently only displays the properties of language use in local contexts. In this case, a more general perspective is needed to bring forth cross-registerial differences. Informed by register typology (Matthiessen, 2015; Matthiessen & Kashyap, 2014), this study investigates the variations and functions of quoting and reporting in two registers: news report and academic article. The focus is the projecting structure as schematized in the Systemic Functional approach to language. The purpose is to identify the patterns of projection in quoting and reporting others in different contexts. Moreover, these patterns will be interpreted in accordance with their respective socio-cultural motivations.

2 – Quoting and reporting in single contexts

As quoting and reporting constitute a salient feature in some discourses, they have been widely investigated for the context-specific functions. In this respect, much research has been conducted in the field of academic discourse (Charles, 2006, 2007; Hyland, 1999; Hyland & Tse, 2005). The major purpose of these studies is to identify how different reporting forms function when one makes reference to the ideas or words of others. Findings of these studies show that the reporting forms not only constitute a salient feature of the wording of academic writing, writers of different academic disciplines also vary significantly in their choices of the types of reporting verbs. This, according to some scholars, is associated with the different perspectives in constructing the varied disciplinary knowledge. For instance, Hyland (1999) compared two broad types of academic papers: natural sciences and social sciences. He found that researchers of the two fields differ in their references to others in terms of their discoursal decisions such as the average frequencies of the reporting forms and the linguistic resources employed in incorporating others' texts into one's own. According to Hyland, this is associated with the cognitive and epistemological conventions of the different disciplinary communities. Another aspect that has been widely discussed on the academic use of reporting verbs is the representation of the cited authors and how their voices are integrated into the overall contents of the present discourse. Research suggests that different academic disciplines give varied degrees of salience to the cited authors. For instance, Hyland (2004, pp. 20–40) notes that soft sciences make the cited voice more visible than hard sciences: while the former commonly includes the authors' names in the subject position, the later often uses a general noun like "research" or "study" and leaves the names absent. Hyland argues that this can be attributed to the rhetorical conventions of the different academic disciplines which require different contextualization of others when one is positioning his/her own subject of research.

In addition to academic discourse, the reporting structure has also been examined in news reports (e.g., Entman, 2004; Floyd Moore, 2000; White, 2012). These studies are usually focused on the different voices blended in the representation of news stories, that is, the particular value positions that the news report texts try to advance, favor or disfavor through quoting and reporting. Different from academic writing, what makes news reporting special in this respect is the stance alignment of the reporters' voices with those of the reported. For instance, White (2012) notes how value positions are buried in news stories through a relatively impersonal language style in which attitudinal evaluations and other potentially contentious meanings are attributed to quoted sources through reporting verbs; Jullian (2011) examined the evaluative power of quoting others' words in news reports, showing that attributions are not only evaluation outlets for sources, they are also indirect means of appraisal for the journalists, who support and reinforce the points they want to make through these voices.

Apart from academic writing and news report, other areas have also been studied, e.g., history discourse (Coffin, 2002), legal discourse (D'hondt & van der Houwen, 2014). Seen from the SFL perspective, these studies are concerned with particular registers, treating each as a separate and independent functional variety of language use. So far, little research has been done on the cross-registerial differences of quoting and reporting. This is necessary since the features revealed at a higher vantage point, where different registers systematically differ, cannot be seen when researchers' view is confined to single registers. Moreover, it seems that previous studies are mainly focused on the lexical aspects, especially the reporting verbs. Much as the reporting verbs can reveal about the structure, they say little about the functions of other elements that are co-selected in quoting and reporting. This is what Halliday and Matthiessen (1999, p. 466) refer to as the "syndrome" of grammar, a range of elements that concur within a grammatical unit. In this case, we need to take a more in-depth look into the behaviors of the other concurring "symptoms" and their relations within the syndrome. The following two texts clearly demonstrate this crucial point:

> "We were very surprised. We were scared and we immediately went outside," said 38-year-old Teddy Dijoux, who was holidaying with his family at a resort. "That lasted a long time. I quickly gathered up my children to leave the hotel," said holidaymaker Sylvie Jannot.

> Winke (2011) demonstrated that collecting qualitative data from stakeholders provides important validity information, but noted that the study was limited in scope because only the teachers were surveyed.

The above two examples both use the reporting structure to bring part of someone else's text into the present one. However, this shared structure is realized differently between the two texts. Besides the lexicalizations of the reporting verbs, the contents that are reported and the agents that carry out the process of reporting are also realized differently. It is possible that these features form a cluster and therefore should be dealt with as concurring meaning choices rather than isolated ones.

Motivated by the above reasons, we place the issues of quoting and reporting under the scope of register typology. Specifically, first we reconceptualize the language of quoting and reporting within the grammar of projection as schematized in the SFL approach to language. Then, we compare and contrast the projection types and their corresponding lexicogrammatical patterns in quoting and reporting others in different registers. Finally, we provide socio-semiotic interpretations for the variations and explain how quoting and reporting can be used strategically to serve particular discourse purposes.

3 – Methodology

3.1 – Theoretical framework

This research is informed by register typology (Matthiessen, 2009, 2015; Matthiessen & Kashyap, 2014). Based on Halliday's notion of the three-dimensional schematization of context (Halliday, 1985/1994, p. 12), Matthiessen proposed a finer streamlining of each of the original dimensions. According to the nature of the socio-semiotic activities that language is involved in, field is first subcategorized into eight primary types: expounding, reporting, recreating, sharing, doing, enabling, exploring and recommending. Each of them is further categorized into their own secondary types: expounding (categorizing and explaining), reporting (chronicling, surveying and inventorying), recreating (narration and dramatization), sharing (sharing experiences and sharing values), doing (collaborating and directing), enabling (instructing and regulating), recommending (advertising and inducing), exploring (reviewing and arguing). By so doing, the general notion of field is specified as more delicate activity types with their respective values (Matthiessen, 2015). In view of the two registers compared in this study, expounding (both categorizing and explaining) and reporting (chronicling) are of interest. Apart from field, tenor and mode are also described with higher delicacy with more specific values: tenor is further categorized according to the nature of the social relationships and institutional roles; mode is further described in terms of the nature of the role language plays in communication.

The more delicate description of contextual values brings forth the dynamic nature of a context: the configurations of different values of field, tenor and mode create different contexts. In return, people's ways of meaning making can be better decoded by a comprehensive study of the values and their interactions. Matthiessen has termed this method registerial cartography (Matthiessen, 2015), which is one way of dividing context on a finer scale of delicacy. Limited by the space, the present research will focus on the field dimension, while making references to the other two when necessary.

3.2 – The data

The linguistic features measured in this study include first the projection types that realize quoting and reporting others. In the SFL framework, projection is one of the two logico-semantic relations that hold between two figures, the other one being expansion. As a way of modeling the orders of reality, projection describes the sequential relation of two figures: the event from the second-order reality is projected onto the plane of first-older reality (Halliday & Matthiessen, 1999, p. 106, 2004, p. 377). In grammar, there is a variety of projection types to realize this function. In this study, the two major ones, verbal and mental, will be examined.

Besides the projection types, we will also measure the elements making up the projecting clause: the structures of the groups and phrases that serve particular functions in the configuration of the projecting structure. These include: participants as nominal groups, processes as verbal groups and circumstances as adverbial groups. The grammatical features of these groups/phrases will be studied to reveal their varied contributions to the overall effects of projection.

The texts constituting the corpus for the study are easily available on the internet. For news report, we selected the "hard news" (Reinemann et al., 2012). This is the kind of news stories that cover breaking events involving top leaders, major issues, or significant disruptions in the routines of daily life, such as an earthquake or airline disaster (Patterson, 2000, pp. 3–4). For academic discourse, we chose the popular mode of communication in the academic world: journal articles.

The size of the corpus is based on two criteria: 1) the number of reports or articles; 2) the number of projecting structures in each set of texts. The reason is that besides the representativeness of the articles for each register, we also need to consider the representativeness of the data sets. Our solution is to collect both a quantum of texts and a quantum of projection structures. To make the comparison convenient, a relatively equal number of structures is necessary. Since academic articles are normally longer than news reports, we chose academic discourse as the benchmark to set the number of structures for comparison. Based on the above considerations, we sourced the data in the following way:

For academic articles, we followed Hyland's (2004) grouping method of different disciplines and the representative journals. From each journal, we selected two academic papers. The result is a 554555-word corpus representing the academic discourse. The total number of cases of projection is 758. To obtain the same number of cases of projection in news report, we chose six typical English newspapers: *The Times (TT)*, *Daily Mail (DM)*, *New York Times (NYT)*, *Washington Post (WP)*, *The Guardian* and *USA Today*. From each of these, we selected hard news reports of 3–4000 words. The result is a 45690-word corpus representing the register of news report.

After this, the next step is data coding. Since our focus is the grammatical structure instead of the lexical items, using a corpus tool to search for the projecting structures is not practicable. So, we examined the two subcorpora manually and extracted the verbal and mental projecting clauses. The general statistics of the data is displayed in Table 1.

Table 1 – **General statistics of data of the two registers**

<table>
<tr><th></th><th>Number of words</th><th>Number of projection</th><th>Projection cases/1000 Words</th><th>Verbal/Mental in total</th><th>Proportion of verbal/mental</th></tr>
<tr><td rowspan="2">Academic article</td><td rowspan="2">554555</td><td rowspan="2">758</td><td rowspan="2">1.37</td><td>Verbal: 519</td><td>68.5%</td></tr>
<tr><td>Mental: 239</td><td>31.5%</td></tr>
<tr><td rowspan="2">News report</td><td rowspan="2">45690</td><td rowspan="2">758</td><td rowspan="2">16.6</td><td>Verbal: 703</td><td>92.8%</td></tr>
<tr><td>Mental: 55</td><td>7.2%</td></tr>
</table>

4 – Results and discussion

4.1 – Variation in clause grammar: The clause types

Our data shows that both news reports and academic articles make frequent use of verbal and mental projections when quoting and reporting others. As Table 1 indicates, the proportion is 1.37/1000 words for academic article and 16.6/1000 words for news report. The higher frequencies in news report indicate that news reporters involve others' realities and voices much more than academic writers. Moreover, in both registers, verbal projection outnumbers mental projection. This trend echoes Halliday and Matthiessen's (2014, p. 446) description of the general distribution of the projecting types. They noted that verbal projection seems to be more favored in English than other types in general. However, although both registers employ more verbal projections than mental ones, this tendency is more favored by news writers than by academics, with a difference of 184 less instances by the latter. The proportion is just the opposite in terms of mental projection: academic writers use 184 more instances of mental projections than news writers.

The difference between mental and verbal projections across the two registers can be explained by the degree of the second-order reality constructed by the act of projection. According to Halliday and Matthiessen (2014, pp. 509–519), one major difference between a verbal projection and a mental one lies in the "level of projection": while a mental projection projects a meaning, a verbal projection projects a wording. As a result, they construe the experience in the meta-phenomena in different ways: the first-order experience projected by a mental clause will be less realistic than the experience projected by a verbal clause. When we say someone has "said" such and such, we know what he has said; but when we say someone has "thought" such and such, we are actually speaking for him with our own words, disguised in their sensing. Therefore, the original experience construed verbally by the Sayer is re-construed in the projecting structure with a higher degree of the original experience and reality than that of the Senser in a mental projection. This is particularly true when the projecting structure is realized by verbal quoting, which brings the exact wording of the prior text into the present one. This leads us to another dimension involved in creating a typical projection structure: the tactic relationship.

Halliday and Matthiessen (2004, pp. 452–453) noted that hypotactic projection, in which the two clauses are unequal, preserves the deictic orientation of the projecting clause, which is that of the immediate speaker, whereas in paratactic projection, in which the two clauses are equal, the deixis shifts and takes on the orientation of the second-order speaker. In other words, a different degree of the second-order reality and voice is created through different tactic relations of projection: it is more realistic when it is quoted into the present context than when it is reported into it.

With this in mind, we compared the ratio of the tactic relations between the two registers. Table 2 is a summary of the distribution.

Table 2 – **Distributions of tactic relations in news report and academic article**

Tactic relation	News report		Academic article	
Paratactic	347	45.80%	26	3.40%
Hypotactic	411	54.20%	732	96.60%
Total	758	100%	758	100%

As Table 2 shows, in terms of the overall tactic features, news report features much more paratactic structures than academic article, while academic article is the opposite, with 96.6% of the projections using a reporting structure. In view of the two orders of reality represented by projection, this means that news reporters semiotically reconstrue more of the second-order reality than academic writers, since more deictic features from the previous context bring more references for the readers to interpret the events. In terms of voice, by keeping the cited contents relatively independent through the paratactic structure, news reporters interfere themselves less with the cited voices while academic writers blend more of their voices with those of the cited sources. In other words, projection in news tends to create realisticity while that in academics tries to achieve logicality. This can be further supported by a particular structure used in nominalized projection.

Nominalization is a structural feature, through which any element or group of elements is made to function as a nominal group in the clause (Halliday & Matthiessen, 2004, p. 637). Nominalization often involves grammatical metaphor which changes the meaning-making potential of the language system (Halliday & Matthiessen, 2014, pp. 534–535). In the case of projection, a projecting process can be nominalized in which case it plays the role of a participant, thus opening up some potential while restricting others. For instance, unlike the projecting verb, the projecting noun has lost grammatical control over the projected clause, but it has acquired the potential of being modified by an adjective group. This creates great differences in terms of the discursive function of projection. In terms of the second-order reality, nominalized projection has more semantic space to be manipulated by a speaker/writer; in terms of voice interference, nominalized projection allows the speaker/writer more freedom to involve himself/herself with the cited voice.

Our data shows a big difference in the employment of nominalized projection: 7 in news report and 45 in academic article. This difference indicates that academic writers have a stronger tendency than news reporters to manipulate the second-order reality and blend their own voices into the present discourse. This resonates with the behavior of the verbal and mental projections in general as well as that of the tactic relations.

So far, we have only touched upon the macro level of the grammar, the clause. However, a clause itself is composed of its own constituents, the "elements", which differ significantly from clauses in terms of the nature of the internal organization and function (Halliday & Matthiessen, 1999, p. 178). These differences in turn contribute to the overall meaning making of the structure. Next, we move down onto the lexical end of the lexicogrammatical continuum cline and examine the more local elements of the projecting structure.

4.1 – Variation in the lexical grammar

4.1.1 – Lexical realizations of the process

In ideational terms, the process is the central element that forms the nucleus around which participants and circumstantial elements are organized into a meaningful pattern: it is the construal of "eventing" – a phenomenon perceived as having extension in time (Halliday & Matthiessen, 1999, p. 213). In this sense, different realizations of the process construe different ways of eventing. In this section, we analyze the lexical realizations of verbal and mental projections in the two registers.

In our data, the two registers vary significantly in their lexical realizations of the verbal and mental processes. Table 3 and Table 4 display the lexical items with over 5 frequencies in each register. In the following, we will make a cross-registerial comparison between the projecting items.

Table 3 – **Lexical realizations of verbal process in two registers**

News report		Academic article	
say	427	note	57
tell	61	show	57
add	30	argue	56
write	19	suggest	38
ask	12	report	33
report	11	claim	29
suggest	9	say	27
claim	8	describe	23
tweet	8	point out	20
confirm	6	propose	16
reveal	6	demonstrate	15
allege	5	conclude	11
insist	5	state	10
reply	5	hold	10
warn	5	maintain	9
argue	5	explain	8
note	5	discuss	5
post	5		

Table 4 – **Mental projecting items in two registers**

Academic Article			News report		
Projecting item	**Count type**	**Mental**	**Projecting item**	**Count type**	**Mental**
find	104	Cognitive	find	10	Cognitive
observe	24	Cognitive	believe	9	Cognitive
think	23	Cognitive	hear	5	*Perceptive*
know	12	Cognitive	hope	5	*Desiderative*
assume	10	Cognitive	know	5	Cognitive
consider	5	Cognitive	understand	5	Cognitive
determine	5	Cognitive			
examine	5	Cognitive			
view	5	Cognitive			

Lexical items realizing verbal process

First, in terms of the number of the lexical items, 90 and 78 verbal projecting forms are found respectively in news report and academic article, indicating that news reporters have a greater lexical potential to project others than academic writers. This is in accordance with the distribution of verbal and mental projections in the two registers. The difference shows that news writers have more choices to specifically define the saying process than academic writers. In many cases, additional meaning besides that of "say" is integrated into the projecting process: scream (say in a loud and sharp voice), retort (say in an opposing manner), boast (say in an over-exaggerating manner), etc. On some occasions, items that do not typically function as projecting verbs are pressed into the service of projection. Note "joke" in the following example:

On April Fools' Day, amid growing concerns about the company's cash stockpile, Musk joked via tweets that Tesla had gone "so bankrupt you can't believe it."

The word "joke" does not normally project, but in the above case it does. Here, apart from denoting the act of saying, it provides some more details of the saying process. This feature is not found in academic articles. The greatest degree of specification of saying by academic writers may be "discuss" (taking turns to say and argue) and "ask" (saying by raising a question).

The more delicate specifications of "say" in news report are supportive of the conclusions reached earlier: enabling news reporters to more realistically construe the second-order reality and the cited voices. In contrast, academic writers dealing with the more abstract mental world of knowledge tend to be more general and abstract in their choices of verbal processes.

Second, as Table 3 indicates, the two registers vary tremendously in the frequencies of particular items. Those in academic articles are fairly dispersed among the members, while those of news reports are rather centralized, with the word "say" appearing 427 times. This again suggests that the basic requirement of news-making is pursuing neutrality and objectivity (Mindich, 1998), because "say" is the ideal choice as the most common and neutral projecting verb since it does not imply any purposes or attitudes of the speaker/writer (Thompson, 1994). In contrast, academic articles have "note", "show" and "argue" as the most frequent verbal projecting items. "Note" is a natural echo to the mental abstract world of doing academics, since we can literally hear or even see what the speaker "says" but not what he "notes". "Show", as the second most frequent item in academic articles, means "to indicate; point out; prove; demonstrate", which defines an act of not only clarifying a point but also of providing evidence for the clarification. Thus, it implies a sense of logical link between different voices, an essential step for conducting reasonable academic analyses. The item "argue", the third most frequent, may be explained by its connotative implication of taking a stance to prove or disprove a certain viewpoint, which is natural in academic writing, since a scientist needs to align himself with or stand against others' opinions.

The third difference in the lexical choices for verbal process is concerned particularly with the word "tell". While it has appeared 61 times and ranks the second in news reports, it is totally absent in academic articles. The specialty of this word is that it normally involves a secondary participant in verbal projection: the Receiver, the participant in the verbal clause to whom the saying is directed (Halliday & Matthiessen, 2014, p. 306). This seems to suggest the importance of the links among the different parties involved in the flow of the cited information. Take for example the following projection in a news report:

> In a recent conversation, Sessions's chief of staff, Jody Hunt, told White House Chief of Staff Reince Priebus that the attorney general had no intention of stepping down.

In the above example, the cited information (the projected clause) starts from the Sayer (Sessions's chief of staff, Jody Hunt), but is not directly recontextualized like what verbal projections normally do. Instead, it first goes through the Receiver, and then is projected into the news writer's text. The reason seems to be the importance of presenting the precise sourcing links of the cited contents in news report, so much so that news readers will know who is responsible for saying what and how it comes to the knowledge of the news writer. In contrast, this is seldom required in the academic world when scholars make reference to others. For academics, whether the cited content goes through intermediate links before it reaches the academic writer is not a big deal, and even if there are any intermediate links in reality, it is often backgrounded. Consequently, much of the background information is left out from the projection. This variation is also reflected by the other two elements in the projecting structure: the participant (Sayer/Senser) and the circumstances. These will be discussed in detail later.

Lexical items realizing mental process

Different from the verbal case, academic article exceeds news report in the total number of the mental projecting items: 38 for academic article and 33 for news report. This indicates that a bigger repertoire of lexical resources is available for academic writers than for news reporters in realizing mental processes. As a result of this richer lexical resource, the process of mental projection is more finely scaled in academic writing. This result can be explained by the nature of the fields of activity carried out in each register. While academic writers try to construe an abstract world of knowledge, the world in news is more concrete and realistic. So, not only do academic writers make more use of mental projection than news reporters, they also make more finely tuned uses of mental processes so as to fit the more varied and abstract categories and their relationships in the academic world.

Besides the variation in lexical flexibility, the two registers also differ in their semantic meanings of the projecting items, each making use of particular mental verbs with different connotations. Since "mental" clauses construe a quantum of change in the flow of events taking place in one's consciousness (Halliday & Matthiessen, 2004, p. 197), the mental projecting verbs are tailored in such a way to realize these functions. Thus, within the general title of mental process, there are actually different types of projecting items with varying degrees and different types of mentality. Halliday and Matthiessen (1999, 2004) divide them into four different types: cognitive, perceptive, desiderative and emotive. We will use this scheme to analyze the mental verbs.

As shown in Table 4, the two registers share some similarities in their lexical realizations of the mental process. For one thing, they both have "find" as the highest-ranking item; for another, apart from "find", "know" has also appeared in both registers. This means that despite the difference in frequencies, the two registers still share something in common in the mental projection

Despite the similarities in sharing "find" and "know", the two registers differ in other lexical realizations of the mental process. This can be best shown by the lexical item "believe", which ranks the second in news report, but none in academic article. This may be related to the fact that "believe" is human oriented, which fits well in news report, since a very important part in news is about human or human-related events (Harcup & O'Neill, 2017). This property can be seen from the Sensers that are configured together with the term "believe." Among the 9 uses, 7 of the Sensers are human, either individual or collective. The other 2 are realized by passive voice, which means that the human Senser is implicit. In contrast, the term does not fit well in academic article since the world of knowledge is oriented towards logicality and sensibility. Beliefs, either individual or collective, do not contribute much to the construction of knowledge.

Another point worth detailing about the lexical features of mental projection is the variation of the types of sensing. Just as Table 4 shows, among the four types of sensing proposed by Halliday and Matthiessen, academic article contains only the cognitive type. In contrast, news report contains three: cognitive, perceptive and desiderative. According to Halliday and Matthiessen (1999, pp. 143–145), cognitive sensing projects propositions – ideas about information that may or may not be valid; desiderative sensing projects proposals – ideas about action that has not been actualized but whose actualization is subject to desire; the perceptive type does not usually project but can accommodate preexisting projections, that is, the facts that are already projected through Fact clauses. The variation of sensing types shows that news reporters engage others in more varied psychological activities than academic writers. While academic writers mentally invite others mainly to help develop a better knowing of the world, news writers invite others not only to develop a better knowing of what happened as facts, but also to perceive the events in the world and to foresee what will happen in the future. These cases rarely appear in academic articles. With most of the mental projections and most projecting words being of the cognitive type, what the authors of the academic world do is to bring others' knowledge, what others know, into their own discourses. According to Zagzebski (2017), knowledge is a highly valued state in which a person is in cognitive contact with reality, and it is manifested by the fact that what the subject knows is a true proposition about the world. This means that the world of knowledge is one of cognition instead of perception, desideration or emotion. In this case, mental processes realized by cognitive projecting items would be better choices for academic writers to link their own knowledge world to others'. The other types, which are used to deal with people's feelings, desires and emotions are possible, but not the best choices for knowledge building.

4.1.2 – The participant

Compared with the process, participant is not as central. But since they are directly involved in the process by bringing about its occurrence or being affected by it in some way (Halliday & Matthiessen, 2014, p. 221), they are closer to the process than the circumstances. For this reason, a process and its participants form the very core of a configuration. For the projecting structures, the most important participants are the Sayer and the Senser. Since they are configured with different processes, they differ in their functions: the Sayer represents the "signal source" in a semiotic process (Matthiessen et al., 2010, p. 238), while the Senser is the participant endowed with consciousness (Halliday & Matthiessen, 2014, p. 249). Nevertheless, when used to make a citation, both represent the origin of the cited contents. In this case, they can be seen as the general participant for information-sourcing. In the following discussion, we will use the term "projector" as the superordinate for both types of participant.

We identified two major differences between the two registers in the lexical grammar of the projector. The first relates to the subcategorization of the nominals and the second to the lexical realizations.

The modifying elements

The elements that modify the participants are called taxonomic elaborations, through which a nominal group is consecutively recategorized on the delicate scale by adding a range of modifiers before or after the Head (Halliday & Matthiessen, 1999, p. 83). It happens when the speaker/writer intends to record and locate the participant more precisely in the referential space.

Our data indicate that the two registers vary significantly in terms of the recategorization of the projector. While academic writers typically represent it with a single noun, the news reporters frequently add a series of modifiers to the Head noun. In some cases, there can be very lengthy modifications, such as the following example:

> I blame him and the Israeli army for all the blood," said Abdul Jaleel al-Abed, the knife attacker's father, who gathered with neighbors at his home, which is now slated for demolition by Israel, in a Palestinian village whose roads have been blocked with high dirt berms by the Israeli army.

In this example, the reporter uses one nominal group and 3 down-ranked relative clauses to identify who "Abdul Jaleel al-Abed" is and how he is related to the situation of the text. This formulation of the projector seems to be the unmarked form in news reports. In contrast, academic articles seldom construe the projector with additional information, be it identity or otherwise. In most cases, the projector is represented with only the proper name or a general noun. The following are two typical examples:

> Kane (2013) correspondingly stressed that…
> Scholars have proposed that…(Avraham and First 2003…).

Therefore, the variation in participant elaboration seems to be systematic between the two registers in constructing the information source. Two reasons may relate to this feature. The first is the importance of the participant's identity in different registers. To cite from others, news reporters are more information-oriented while academics attach more importance to knowledge building. So, the former is more concerned with who the projector is and how he is related to the immediate situation, while the latter focuses more on whether anyone has researched a topic and how far he has gone in the world of knowledge construction. The second reason probably lies in the social salience of the projectors in an institution. While news witnesses are often unknown to the newsreaders, scholars have a closer "academic" social bond since they do work and research in similar fields. In the least, an academic writer knows that someone he quotes does similar work and they belong to more or less the same social institution. In this case, the additional information of the projector is largely backgrounded. This can explain the tradition in the academic world that typically emphasizes the weight of the "key" experts in the reference list of an academic article. It seems that to some extent the quality of the article depends on the significance of the key scholars to whom references are made.

Another reason for the absence of the elaboration of academic projectors may be that the academic readers themselves have a works cited list available, where they can find the relevant information for identifying the projector. By contrast, this availability of information is not possible for news reporters, since a news report only makes the news text symbolic for identifying source information through the formulation of the projector instead. This suggests that the generic structure also plays a key role in the meaning making choices of the projector.

Types of projector

The second difference lies in the types of projector. We categorized the projectors into five types based on their semantic meanings: gp – general person (e.g., experts, analysts), pp – particular person (e.g., Hyland, the US president), or – organization (e.g., the government), np – non-person (e.g., studies, research) and no – no participant (nothing to indicate the projector). The ratio of the different types in each register is presented in Table 5.

Table 5 – **The different types of projector**

	News report	Academic article
Gp	14%	9%
Pp	68%	56%
Or	12%	4%
Np	4%	13%
No	2%	18%

As shown in the Table above, particular persons are the most favored type for writers of both registers, with news reports scoring higher than academic articles. Then general persons take the second place, also with news reports outnumbering academic articles. In contrast, the proportions of non-person and no-projector for academic articles far exceed those of news reports. These are the cases when either the projector is represented by some achievement of the person (e.g., "study", "research") or itis left absent with the use of passive voice. These differences show that there is a higher degree of identification of the projector in news reports than in academic articles, a result that resonates with the conclusions reached above. These differences also strengthen our earlier findings that news reports attach greater importance to the sourcing and flowing of the cited information through the presence of the Receiver. In this case, who says/thinks what is as important for keeping the trace of information as through whom the information flows.

4.1.3 – Variation in circumstance

Circumstances are the elements associated with or attendant on the process (Halliday & Matthiessen, 2014, pp. 310–314). Their function is to provide extra information about "when, where, how and why" the event happens. Consequently, they are typically expressed as adverbial groups or prepositional phrases, and if there are any participants involved (e.g., in the case of prepositional phrases), they only participate indirectly.

Relating circumstances to projection means placing them under certain local contexts in which the act of projection is carried out. In this case, the Sayer/Senser not only says or thinks something, but also does so in a certain manner, at a certain time, in a certain place, etc., depending on what kinds of circumstance are employed. As part of the syndrome of the projecting structure, the circumstances bring with them part of the second-order context, which assists the audience orient themselves with the prior situations of the projected wordings or thoughts.

Our data show that there are two major differences between the two registers in their realizations of projecting circumstances. One is the frequency and the other is the types.

Among all the projections extracted, 160 news reports contain at least one circumstantial element while the ratio for academic articles is 130. This difference suggests that the local context of the cited content is more richly construed in news reports than in the academic articles. In many cases, news reports contain several layers of circumstances, such as the following:

> Colomo said <u>by telephone from the village of Santa Irene in the western highlands of the central American nation</u>: "My husband is a farmer and there are days he works and other days we don't eat."

In contrast, projecting structures in academic article mostly contain singular circumstances, like "perceptively" in the following case:

> Quinn (2017) <u>perceptively</u> argues, broad affinities exist between characteristics of credit markets and deep-seated tendencies in American political culture.

So, if we take into account the cases of more than one circumstance the frequencies will be still higher in news reports than in academic articles. This difference can be explained by the nature of eventing in different registers. News writers are supposed to model the events realistically. In this case, more information from the prior context provides more indices for news readers to better orient themselves with the reality of the news events. In contrast, academic articles are the expounding type of activity, the one that relates to our experience either by categorizing the phenomena or by explaining them. This is a world of knowledge in which the existence of many things is not so much confined to the immediate time-space dimension: the truth and value of a certain concept remains through time. Consequently, the original context of the cited text does not have as much influence on the effectiveness of the citation in the new context. This can explain the lower ratio of circumstances of the projecting structures in academic articles.

The second difference lies in the types of circumstances each register favors. The most favored types by news reports are locations of time and place, while for academic articles, matter, quality and abstract locations are the most preferred. In news reports, locations are usually concrete, suggesting the time or place of the events. In contrast, locations in academic articles are typically abstract. Examples are "in an article", "in literature", "in his/her work". Clearly, these circumstances are the locations where knowledge is stored. In some cases, the abstract locations are nominalizations of some mental processes, such as "in his review", "in his analysis". These nominalized forms wrap up part of the knowledge processing of the prior context and provide the background for the cited contents.

Unlike locations, matter and quality are more frequently used in academic articles. Examples are: matter ("to this respect", "with respect to", "in this sense"); quality: ("importantly", "implicitly", "perceptively"). The relative salience of matter of circumstance is related to the nature of knowledge representation in academic articles: making a logical connection among the research topic, the flow of thoughts and the cited contents. Only when the three factors are logically connected can the writer's reasoning process become sound and the presentation of knowledge become reasonable. By so doing, academic articles will obtain more convincing power. This point is supported by the fact that the other kinds of circumstance, although not so frequent, also construe a logical relationship, such as "because of (reason)", "Given that…(condition)" and "in a similar line (comparison)". So, with these circumstances, an academic writer can rhetorically contextualize the projected content and recontextualize it in the current text, so that others can help him make more sense of his own research. In this case, unlike news reports which relate the current context to a context of the realistic world, circumstances in academic articles relate the knowledge of the writer to that of others in a logical context.

Besides matter, circumstances of quality are also more frequent in academic articles. According to our data, these are mostly adverbial groups with an adverb as Head, mostly the "-ly" kind. This type of circumstance is special since they bring the writer into the local context into which others are being projected. Compared with others, this one is more interpersonal, since it expresses a tone of appraisal and evaluation of the writer (Martin & White, 2003). For instance:

Importantly, Keller (1998) has pointed out that…
As Abrams trenchantly observed…

Our data show that news writers do not use this type so frequently. The reason probably is that, unlike academic writers who, in order to prove his own argument, need to take a stance by evaluating others and find out "who's with me" and "who's against", the news writers' priority is to withdraw as much as possible from personal involvement with others' wordings and sensings so as to produce "hard" news (Reinemann et al., 2012). This again consolidates the finding that news reporters tend to be more independent from the cited voices while academic writers are more involved with them.

4.1.4 – A sociocultural interpretation

So far, we have discussed the variation of projections across two registers. It can be concluded that the verbal and mental projecting resources form systematically varied patterns in citing others into different registers. These strategic uses of projection can be interpreted with regards to the sociocultural values of different registers. In this case, we need to consider two aspects: the nature of the activity types and the institutional roles involved (Matthiessen, 2015).

In terms of the activity types, news reports construe a world of event, while academic articles construe one of knowledge. It is this difference that partly motivates the writers of each field to strategically quote and report others through projection. The key features of an event are its timeline of the different episodes and the characters and their relations. As a result, who does what, where and when are essential issues worth eventing, because they determine the authenticity of the news. This can be achieved by inviting others (witnesses, political authorities, etc.) into the picture and to include their voices. This motivates the use of objective projection through which the episodes of the event are represented as truthfully as possible. This may be the major distinction between the real news (hard news as it is often called) and what has been criticized as "soft news" (Prior, 2003). In this sense, using proper forms of projection to construe the episodic happenings of the event ensures the "hardness" of the news. In contrast, what is construed in academic articles is the scientific and abstract modeling of the world. Through this activity, researchers constitute a world of abstract knowledge, which mainly consists of categories and their relations. In doing so, the academic writers are doing two things: explaining why general classes of events take place or categorizing general classes of entities in terms of taxonomies, hyponymic and/or meronymic, and/or characterization (Matthiessen, 2015). The first equals the question of "why" and the second, that of "what". In this case, the academic writers need to know how much of the "what" and "why" questions have been answered in order to better answer them. It is this basic requirement of knowledge construction that partly motivates the academic writers to project others in particular ways. This process is what is normally termed as "literature review", one essential step to locate one's own research among the historical background of similar studies. Then, in the process of constructing knowledge, academic writers also need to achieve logicality and sensibility. They may do so by conducting experiments and case studies, or by doing mathematical reasoning. But they may also seek support from the established knowledge base and cite the relevant contents into their own. In this case, projecting logically or at least reasonably is more important than realistically.

Then, in terms of institutional relationships, news reports and academic articles involve different agent roles: while news reporters communicate with the general public, academic researchers converse with people of similar social institutions. To communicate news, the news reporter serves as an informer and the news reader as a receiver. Required by the information authenticity, the reporter has to invite others to see and speak for him/her because he/she cannot possibly see everything as a human being. Moreover, very often he/she needs to reduce his/her own involvement in reconstructing the events so as to remain "neutral". Consequently, he/she increases the involvements of others' voices by strategically projecting their wordings. In this sense, we can say projection choices in news reports are more others-oriented. In contrast, an academic writer is more like a truth knower who has some supposedly new discoveries and tries to make it understood by people who are also knowers. In this case, he/she needs to argue for his/her claims and persuade the audience to admit the truth of the discoveries. As a result, his/her projection choices are more self-centered and others' voices will be manipulated more to fit into his/her claims.

In brief summary, it seems that modern English has evolved systematic patterns of citing others through verbal and mental projections for different contexts. These lexical and grammatical choices are consistent and work with a syndrome effect in collectively shaping the cited worlds and voices. The sociocultural values of different contexts are the motivating force for the strategic uses of quoting and reporting.

5 – Conclusion

In this research, we have taken a cross-registerial and lexicogrammatically based approach to the language of quoting and reporting. This helps us better understand the citing behaviors in general and gives us a more comprehensive view of the quoting and reporting resources with their potentials in discourse construction. First, quoting and reporting involve a syndrome of co-functioning language resources. By re-examining the relevant issues under the scope of verbal and mental projections, we gain a more in-depth understanding of the "syndrome" of the structures beyond the lexical features. Second, projection (at least verbal and mental projections) can be seen as a semantic strategy composed of different systems that create the meaning potential for quoting and reporting others into one's own text. In this sense, different quoting and reporting patterns can be explained by their institutionalized choices of the projecting resources. It is the nature of the socio-semiotic activity and the institutional relationships that determine the nature of quoting and reporting.

This research also has pedagogical implications. With a more in-depth understanding of the systematic workings of quoting and reporting, students learning reading or writing can make more sense of certain citing behaviors, and in return, can construct more register-appropriate discourses. However, due to the constraints of one article, this research is limited in scale of analysis and richness in data. We have just focused on the typical projection structures used for quoting and reporting. In fact, other sub-systems are also available for the language users, for instance, projection of Angle (according to) or projection through Fact-clause. In addition, we have only studied two registers, news reports and academic articles. Some other registers also make wide use of projection and must contain other meaningful patterns and variants which are again correlated with their own contextual dimensions. Further research on these aspects can be done in the future.

NOTES

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REFERENCES

Banfield, A. (1973). Narrative style and the grammar of direct and indirect speech. *Foundations of Language*, *10*(1), 1–39. https://www.jstor.org stable/25000702

Candlin, C. N., & Maley, Y. (1997). Intertextuality and interdiscursivity in the discourse of alternative dispute resolution, In B. L. Gunnarsson, P. Linell, & B. Nordberg (Eds.), *The construction of professional discourse* (pp. 201–222). Harlow: Longman.

Charles, M. (2006). The construction of stance in reporting clauses: A cross-disciplinary study of theses. *Applied Linguistics*, *27*(3), 492–518. https://doi.org/10.1093/applin/aml021

Charles, M. (2007). Argument or evidence? Disciplinary variation in the use of noun *that* pattern in stance construction. *English for Specific Purposes*, *26*(2), 203–218. https://doi.org/10.1016/j.esp.2006.08.004

Coffin, C. (2002). The voices of history: Theorizing the interpersonal semantics of historical discourses. *Text* 22.*4,* 503–28. https://doi.org/10.1515/text.2002.020

D'hondt, S., & van der Houwen, F. (2014). Quoting from the case file: How intertextual practices shape discourse at various stages in the legal trajectory. *Language and Communication, 36*, 1–6. https://doi.org/10.1016/j.langcom.2013.12.008

Entman, R. M. (2004). *Projections of power: Framing news, public opinion, and US foreign policy*. Chicago: University of Chicago Press.

Fairclough, N. (1992). *Discourse and social change*. Oxford: Blackwell Publishers.

Floyd Moore, A. (2000). The reporting verbs and bias in the press. *Revista Alicantina de Estudios Ingleses, 13*, 43–52. http://dx.doi.org/10.14198/raei.2000.13.04

Halliday, M. A. K. (1985/1994). *An introduction to functional grammar* (2nd ed.). London: E. Arnold.

Halliday, M. A. K., & Matthiessen, C. M. I. M. (1999). *Construing experience through meaning: A language-based approach to cognition*. London & New York: Cassell.

Halliday, M. A. K., & Matthiessen, C. M. I. M. (2004). *An introduction to functional grammar* (3rd ed.). London: Hodder/Arnold.

Halliday, M. A. K., & Matthiessen, C. M. I. M. (2014). *Halliday's introduction to functional grammar*. London: Routledge.

Harcup, T., & O'Neill, D. (2017). What is news? News values revisited (again). *Journalism Studies*, *18*(12), 1470–1488. https://doi.org/10.1080/1461670X.2016.1150193

Holt, E. (1996). Reporting on talk: The use of direct reported speech in conversation. *Research on Language and Social Interaction*, *29*(3), 219–245. https://doi.org/10.1207/s15327973rlsi2903_2

Hyland, K. (1999). Academic attribution: Citation and the construction of disciplinary knowledge. *Applied Linguistics*, *20*(3), 341–367. https://doi.org/10.1093/applin/20.3.341

Hyland, K. (2004). *Disciplinary discourses: Social interactions in academic writing*. Ann Arbor, MI: University of Michigan Press.

Hyland, K., & Tse, P. (2005). Evaluative *that* constructions: Signalling stance in research abstracts. *Functions of Language*, *12*(1), 39–64. https://doi.org/10.1075/fol.12.1.03hyl

Jullian, P. M. (2011). Appraising through someone else's words: The evaluative power of quotations in news reports. *Discourse & Society*, *22*(6), 766–780. https://doi.org/10.1177/0957926511411697

Koskela, M. (2013). Same, same, but different: Intertextual and interdiscursive features of communication strategy texts. *Discourse & Communication*, *7*(4), 389–407. https://doi.org/10.1177/1750481313498655

Kristeva, J. (1980). *Desire in language: A semiotic approach to literature and art*. New York: Columbia University Press.

Martin, J. R., & White, P. R. (2003). *The language of evaluation* (Vol. 2). Basingstoke: Palgrave Macmillan.

Matthiessen, C. M. I. M. (2009). Multisemiosis and context-based register typology: Registerial variation in the complementarity of semiotic systems. In E. Ventola, & A. J. G. Moya (Eds.), *The world told and the world shown: Multisemiotic issues* (pp. 11–38). London: Palgrave Macmillan.

Matthiessen, C. M. I. M. (2015). Register in the round: Registerial cartography. *Functional Linguistics*, *2*(1), 9. https://doi.org/10.1186/s40554-015-0015-8

Matthiessen, C. M. I. M., & Kashyap, A. K. (2014). The construal of space in different registers: An exploratory study. *Language Sciences, 45*, 1–27. https://doi.org/10.1016/j.langsci.2014.04.001

Matthiessen, C. M. I. M, Teruya, K., & Lam, M. (2010). *Key terms in systemic functional linguistics*. London: A & C Black.

Mindich, D. (1998). *Just the facts—How "Objectivity" came to define American journalism*. New York & London: New York University Press.

Patterson, T. E. (2000). *Doing well and doing good*: *How soft news are shrinking the news audience and weakening democracy*. Cambridge, MA: Harvard University Press.

Petric, B., & Harwood, N. (2013). Task requirements, task representation, and self-reported citation functions: An exploratory study of a successful L2 student's writing. *Journal of English for Academic Purposes, 12*(2), 110–124. https://doi.org/10.1016/j.jeap.2013.01.002

Prior, M. (2003). Any good news in soft news? The impact of soft news preference on political knowledge. *Political Communication*, *20*(2), 149–171. https://doi.org/10.1080/10584600390211172

Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1972). *A grammar of contemporary English*. London: Longman.

Reinemann, C., Stanyer, J., Scherr, S., & Legnante, G. (2012). Hard and soft news: A review of concepts, operationalizations and key findings. *Journalism*, *13*(2), 221–239. https://doi.org/10.1177/1464884911427803

Scollon, R. (2004). Intertextuality across communities of practice: Academics, journalism and advertising. In C. L. Moder, & A. Martinovic-Zic (Eds.), *Discourse across languages and cultures* (pp. 149–176). Amsterdam: John Benjamins.

Searle, J. (1975). Indirect speech acts. In P. Cole, & L. Morgan (Eds.), Syntax and semantics volume 3: Speech acts (pp. 59–82). New York: Seminar Press.

Thompson, G. (1994). *Reporting: Collins cobuild English guides 5*. London: Harper Collins Publishers.

Thompson, G., & Yiyun, Ye. (1991). Evaluation in the reporting verbs used in academic papers. *Applied Linguistics*, *12*(4), 365–382. https://doi.org/10.1093/applin/12.4.365

Thompson, P., & Tribble, C. (2001). Looking at citations: Using corpora in English for academic purposes. *Language Learning & Technology: A Refereed Journal for Second and Foreign Language Educators, 5*(3), 91–105. https://www.lltjournal.org/item/3055

White, P. R. (2012). Exploring the axiological workings of 'reporter voice' news stories—Attribution and attitudinal positioning. *Discourse, Context & Media*, *1*(2), 57–67. https://doi.org/10.1016/j.dcm.2012.10.004

Zagzebski, L. (2017). What is knowledge? In J. Greco, & E. Sosa (Eds.), *The Blackwell guide to epistemology* (pp. 92–116). Oxford: Blackwell.

DATA COMMENTARY AS A MULTIMODAL LITERACY TASK

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ABSTRACT

This paper explores the writing of a data commentary as a multimodal literacy practice. It analyses the entities construed in the field of a clustered bar chart and those in the corresponding verbal data commentaries of four university students, focussing on the descriptive report stages. The results show the importance of building a more delicate taxonomy of entities in the verbal text than that of the bar chart. The elaboration of an intermediate layer of abstraction – the result of aggregating entities from the lowest level of the bar chart taxonomy and naming the resultant entity – can enable the construal of a general trend, which in turn obviates any need to resemiotise specific data points other than the most important. By contrast, replicating the hierarchical structure of the entities construed in the original bar chart tends to lead to greater redundancy between the bar chart and the verbal data commentary. The findings can be used to inform teaching practice.

KEYWORDS

Data commentary, multimodal literacy, bar charts, field, genre

1 – Introduction

The term data commentary refers to the verbal text that accompanies a visual figure – graph, table, chart – in academic writing. Data commentaries can be found embedded in texts spanning the breadth of academic life from undergraduate assignments (Johns, 1998), to master and PhD theses (Eriksson & Nordrum, 2018; Nordrum & Eriksson, 2015) and research articles (Busch-Lauer, 1998; Nordrum & Eriksson, 2015). They similarly cross a range of disciplines in the sciences and social sciences such as engineering (Eriksson & Nordrum, 2018; Sancho Guinda, 2011), medicine (Busch-Lauer, 1998), statistics (Wharton, 2012) and economics (Johns, 1998). Yet despite their prevalence across academia, the teaching of how to write a data commentary tends to be eschewed by the disciplinary professors (Johns, 1998) and left to the lot of the English for Specific Purposes (ESP) classes (Sancho Guinda, 2011). Furthermore, despite Swales and Feak's (1997) call to teach data commentary as a task that requires critical thinking, students have continued to struggle to know what to say in the data commentary and how to say it. Studies have shown that they may find it difficult to select appropriate content from the visual figure (Eriksson & Nordrum, 2018), create an appropriate stance with regard to claims (Sancho Guinda, 2012; Wharton, 2012), and/or underestimate the need to verbally integrate the figure in the data commentary (Blåsjö, 2011). Many of these studies have been underpinned by a genre-based approach, where the data commentary is seen as staged, even though they do not necessarily agree on what exactly the stages are. Swales and Feak (2012), for example, propose a three-stage structure. By contrast, Sancho Guinda (2012) argues that data commentary sits at the borderline of a genre and is part skill, part genre. Irrespective of these differences, there is consensus that the data commentary moves from presentation of the figure and a selective description of its content to an interpretation of the implications, explanation or discussion of the content. The first two stages – presentation and description – seem to correspond to stages in a descriptive or compositional report in which a phenomenon is classified then described (Rose, 2007).

While these prior studies on data commentary suggest pedagogical benefits from exploring it through genre-based stages, they are limited in that their focus on the verbal text alone does not fully acknowledge the multimodal nature of the writing task, for in the context of an ESP class, the students typically do not produce the visual texts for which they must write the commentary. As a result, such studies shed little light on what is going on when a student reads the figure in order to write the data commentary. This paper broadens the analysis to explore writing a data commentary in an ESP context as a task requiring multimodal literacy. It seeks to answer the question "How are the meanings represented in a bar chart resemiotised in a verbal data commentary?" It examines the field construed through a clustered bar chart that constituted the source text for a verbal data commentary and compares the results with the field construed in four students' verbal texts and how it maps onto the presentation of the figure and the descriptive stages. The analysis will focus on the entities represented in the graph and those construed in the verbal text. Although figures also build field, the analysis of the verbs in figures is outside the scope of the paper. It is an exploratory study whose aim is to contribute to a better understanding of the intersemiotic relations between the visual and the verbal texts and gain insight into the "informed decisions" (Nordrum & Eriksson, 2015, p. 61) the writer needs to make about the content of the graph. A second aim is to consider briefly how the findings from the analysis might be used to help inform teaching practice.

2 – Data commentary as a multimodal literacy task

Writing a data commentary when the writer has not generated the source visual text is necessarily a multimodal literacy practice, for it is essential to understand the figure in order to select what to resemiotise in the verbal commentary. Indeed, the verbal text would not exist without the visual, and vice-versa. The visual source text in this paper is a clustered bar chart, shown in Figure 1. Graphs organise data spatially by means of arrays (Doran, 2018), which arrange field-specific meanings along graded properties. They make it possible to discern patterns in the data, and through arrays on the vertical and horizontal axes, such as in a line graph, they are suited to showing continuous change (Doran, 2018). In a bar chart, by contrast, the equidistant spacing among the bars on one of the axes typically organises the data by means of a taxonomy rather than an array. The data commentary must resemiotise (O'Halloran, Tan, & Wignell, 2016) some of these meanings in the verbal mode, a process that Bezemer and Kress (2010) call transduction. The extent to which the verbal text fulfils the expectations of the genre depend not only on which meanings from the graph are resemiotised, but also how they are resemiotised, and how they are mapped onto the generic stages. The intersemiotic changes can be tracked through a comparison of the field instantiated in the figure and that of the verbal text. This is illustrated in the next section through the analysis of four student texts, selected from a corpus of 66 texts.

3 – Data and analysis

The students who produced the data commentaries were in their third year of an Economics, Management or Finance degree in a Portuguese university and enrolled in an elective course unit of Technical English. They were studying the fast-fashion business model and had been taught generic stages for the data commentary based on the stages in Swales and Feak (2012).

- Presentation;
- General trend;
- Descriptive highlights;
- Explanation.

Presentation verbalises a link between the figure and its content, the general trend identifies a general trend or pattern in the results, the descriptive highlights select salient or important data points from the graph that illustrate the general trend or may run contrary to it, and the explanation explains what may have led to the results shown in the graph, or discusses their implications. To follow the stages, which are distinguished through changes to particular configurations of field and tenor, is important if the text is to meet the reader's expectations of the genre (Martin, 1997, 2009). Thus, how clearly the data commentary unfolds through the stages of presentation, general trend, descriptive highlights and explanation can be considered as one measure of its success.

3.1 – Field of the bar chart

The source visual text for the writing of the data commentary was a clustered bar chart on the environmental impact of clothing purchases in Sweden for one year (Figure 1).

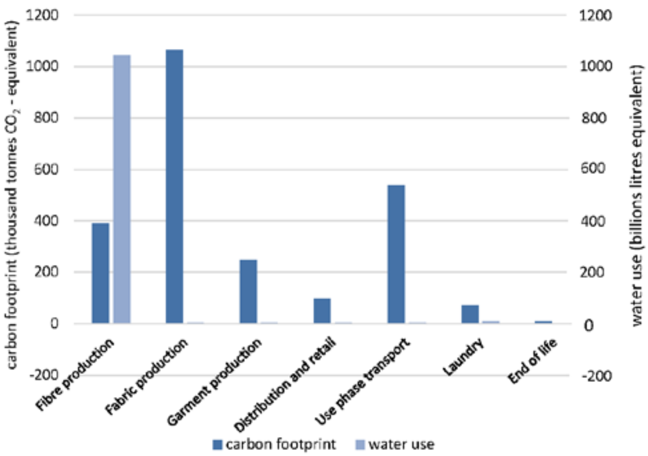

Figure 1– **Environmental impact of clothing purchases in Sweden for one year.**

(Roos et al., 2015, p. 4)

Grammatically, the bar chart is an exhaustive analytical structure (Kress & van Leeuwen, 2006). The Carrier is realised by the whole, which construes the environmental impact of the clothing lifecycle, and the Possessive Attributes are realised by the bars, which construe the amount of carbon emissions or water use of the different stages of the clothing lifecycle. In addition, there is a covert taxonomic structure (Kress & van Leeuwen, 2006), realised by the legend. The spatial alignment of the boxes representing carbon footprint and water use construes them as members of a class, Subordinates to a Superordinate (Kress & van Leeuwen, 2006) that is not represented in the visual mode in the bar chart.

The field construed by the bar chart includes arrays and taxonomies. There is an array of carbon emissions on the primary vertical axis, which is quantified using thousands of tonnes CO2 equivalent, and one of water use on the secondary vertical axis, which is quantified using billions of litres equivalent. The length of each bar construes meaning by virtue of its spatial alignment along the array; the longer the bar, the more carbon emitted or the greater the water use. Visually there are also two taxonomies built up along the horizontal axis. The colour coding of the bars directs the viewer to perceive bars of the same colour to be of the same thing. Thus, the dark blue bars are perceived to be a different thing from the light blue bars, although both share the characteristic that they are measurable. The second visual taxonomy is built through the spatial alignment of the bars. Although the space between each bar construes each bar as a discrete entity, the alternating narrow and wider spaces create visual pairs that suggest that each pair forms an entity and that there are seven of these entities in a taxonomic relation.

The labels on a chart are also important. Not only do they enable a represented participant in the image (Kress & van Leeuwen, 2006) and a verbal label to share meaning, they also build taxonomies of entities (Doran, 2018). From the perspective of field, taxonomies organise entities by means of classification or composition (Martin, 2013). In this case the verbal labels are all nominalizations of processes and they construe activity entities (Hao & Humphrey, 2019). Realised as a nominal group, activity entities, which Hao and Humphrey (2019, p. 14) gloss as "technical' nominalizations", can also build taxonomies to construe field. Thus, the labels along the horizontal axis – fibre production, fabric production, garment production, distribution & retail, use phase transport, laundry, and end of life – build a compositional taxonomy (Martin, 2013) with the activity entity clothing life cycle, which is construed as Qualifier in the title of the graph. Moreover, their alignment and spacing visually represent them as members of a class. The labels on the vertical axes and in the legend – carbon footprint and water use – can be read as entering into taxonomic relations with the title of the bar chart, environmental impact. In the verbal mode the relation might be glossed as causal: the environmental impact is the result of the carbon footprint and water use, but the important thing here is that the visual mode of the graph represents them in a taxonomic relation by means of the analytical structure (Kress & van Leeuwen, 2006): the environmental impact is made up of the carbon footprint and water use. The taxonomic relation is reinforced by means of the spatial alignment of the labels in the legend, which suggests that 'carbon footprint' and 'water use' are members of a class. The hierarchical structure of these taxonomies becomes apparent when they are resemiotised visually as classificational taxonomic structures (Kress & van Leeuwen, 2006).

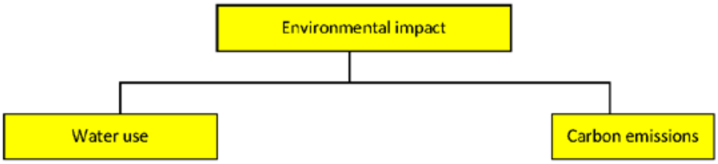

Figure 2 – **Taxonomy of environmental impact in bar chart**

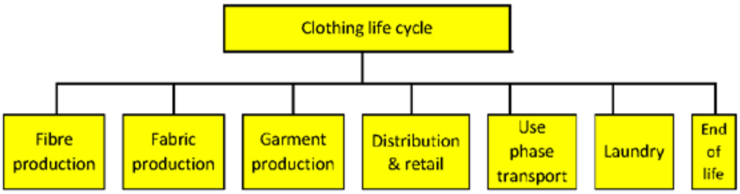

Figure 3 – **Taxonomy of the clothing life cycle in bar chart**

Figure 2 shows the classificational taxonomy (Martin, 2013) of environmental impact, represented as Superordinate (Kress & van Leeuwen, 2006), and the activity entities – carbon footprint and water use – represented as Subordinates (Kress & van Leeuwen, 2006), co-hyponyms of environmental impact. Figure 3 shows the compositional taxonomy (Martin, 2013) of the clothing life cycle, with clothing life cycle as Superordinate and fibre production, fabric production, garment production, distribution & retail, use phase transport, laundry, and end of life as Subordinates, co-meronyms in a part-whole relationship. In both cases the field of the graph is made up of two levels. The taxonomy of the clothing life cycle, illustrated in Figure 3, will serve as the basis for comparison with the field construed in the verbal texts.

3.2 – Field in the verbal data commentaries

The first text for comparison, which was typical of many of the students' texts, shows high redundancy with the graph. The clause complexes are numbered for ease of reference, and the activity entities construing the field of the clothing life cycle are in bold.

Text A

[1] The bar chart in Figure 1 shows the environmental impact of the **clothing life cycle**, both in its carbon footprint (thousand tonnes CO2 equivalent) and its water use (billion litres equivalent). [2] Different phases of **this cycle** are presented with the associated amount of both these variables. [3] Shockingly perhaps, water use is nearly entirely associated with **fibre production**, accounting for over 1000 billion litres, whereas water use associated with **laundry** is practically non-existent. [4] Unlike water use, the carbon footprint variable is somewhat more spread out over **this life cycle**, but unevenly nonetheless. [5] It is mostly associated with **fabric production**, accounting for an astonishing 1.1 million tonnes of CO2, followed by **use phase transport** and **fibre production**, which account for about 580 thousand and 400 thousand tonnes of CO2, respectively. [6] Additionally, it is also associated in smaller amounts with **garment production**, **distribution and retail** and **laundry**.

The verbal text resemiotises the field of the graph through figures of being, retaining the two-level hierarchy of the taxonomy of the clothing life cycle. In addition, it explicitly verbalises six of the seven co-meronyms of the clothing life cycle. The result of these resemiotisations is a rather flat data commentary and a high degree of redundancy with the meanings construed in the graph. Moreover, with regard to fulfilling the expectations of the genre, the text presents the graph in clause complexes [1] and [2], and describes the data in the descriptive highlights, clause complexes [3] - [6]. However, the second stage, which identifies the general trend of the data, is not clear. Although clause [4] does generalise a trend for the carbon footprint, there is no corresponding general trend for water use, and the descriptive highlights that follow clause [4] are quite exhaustive, verbalising all but one of the co-meronyms. Thus, the verbal data commentary adds little, if anything, to the meanings construed in the graph. Swales and Feak (1997) have identified data commentaries such as this as mere "information transfer" because they show no evidence of critical thinking. Nor do they suggest the "informed decisions" that Nordrum and Eriksson (2015) argue are crucial to the genre.

In a number of student data commentaries, the verbal text construes a more complex taxonomy of the clothing life cycle than that construed by the bar chart. A typical example is given here.

Text B

[1] The graph shows the environmental impact of **the clothing life cycle**, judging by its carbon footprint and water use. [2] First off, it is clear there is a significant difference between **fibre, fabric and garment productions.** [3] In **fibre production**, there is a tremendous use of water of around 1050 billion litres coupled with a considerable carbon footprint rounding 400 thousand tonnes of CO2 or equivalent. [4] In **garment production**, the water usage is nearly null and the carbon footprint represents 250 thousand tonnes of CO2 or equivalent.

[5] After **production**, **distribution and retail**'s carbon footprint round 100 thousand tonnes of CO2 or equivalent and approximately no water use. [6] The **use phase transport**'s carbon footprint reaches an astonishing 550 thousand tonnes of CO2 or equivalent whilst **laundry**'s carbon footprint is of around 100. [7] The water use in both is nearly null. [8] In **the end of life** stage, the water use and the carbon footprint are almost inexistent.

[9] In conclusion, the environmental impact of **clothing life cycle** is very erratic. [10] **The production phase** is the most damaging to the environment, with **fibre production** being the one which uses more water, by far, and **fabric production** the one which has a higher carbon footprint. [11] The following stages of **clothing life cycle** have considerably less environmental impact except for **the use phase transport**, which has a huge carbon footprint. [12] Overall, the impact clothing has on the environment is surprisingly high and worrying.

Similar to text A, field is instantiated through figures of being, but the taxonomy of the clothing life cycle includes an intermediate level not present in the field built up in the bar chart. By aggregating the initial phases of fibre production, fabric production and garment production, the student has introduced a distinction between production and post-production in clause complex [5]. Although post-production is not explicitly stated, it could have been as a rewrite of [11] shows.

[11] The following stages of clothing life cycle have considerably less environmental impact except for the use phase transport, which has a huge carbon footprint.

[11'] The post-production phase has considerably less environmental impact except for the use phase transport, which has a huge carbon footprint.

Aggregating the initial phases and naming them has two effects on the text. First, it enables the student to make a more general claim about the meanings construed in the graph. The first clause in [10] (**The production phase** is the most damaging to the environment) verbalises a general trend or pattern. Second, this general trend contributes to a more abstract, analytical text, for the field is hierarchized. The taxonomy built through text B is illustrated in Figure 4. The original field construed in the bar chart is highlighted in yellow, the added Interordinates (Kress & van Leeuwen, 2006) are highlighted in green and activity entities that are not verbalised in the data commentary or the bar chart but are implicit are paler, to represent their absence.

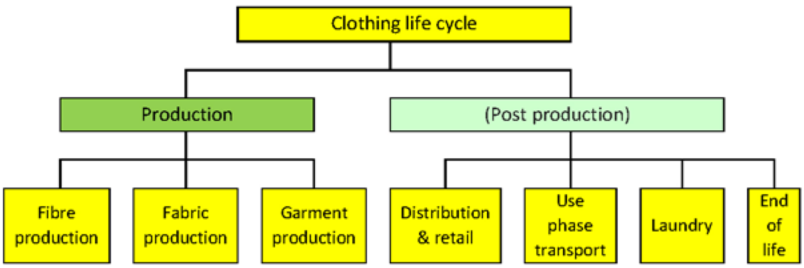

Figure 4 – **Taxonomy of the clothing life cycle: Text B vs bar chart**

Despite the increased abstraction of the verbal text, it still only partially meets the expectations of the genre. This becomes clear when the field is mapped onto the generic stages. Table 1 shows the correspondence between stages and the field of the clothing life cycle.

Table 1 – **Correspondence between stages and fieldof the clothing life cycle in Text B**

Stage	Clause complex	Field activity entities
Presentation	[1]	clothing life cycle
General trend?	[2]	fibre, fabric and garment productions
Descriptive highlights	[3] - [8]	fibre production, garment production, production, distribution & retail, use phase transport, laundry, end of life
Conclusion	[9] - [12]	clothing life cycle, production phase, fibre production, baric production, following stages of clothing life cycle, use phase transport

It is doubtful whether clause [2] functions as a general trend because it resemiotises three co-meronyms form the lowest level of the taxonomy of the clothing life cycle. The descriptive highlights exhaustively replicate the field construed in the graph, unfolding in the same order as the horizontal axis on the bar chart but with the addition of 'production' as co-meronym of the clothing life cycle, and superordinate of the co-meronyms fibre, fabric and garment production. As a result, the text reads as redundant to the graph, a feeling that is heightened by resemiotising the spatial alignment of the bars with the arrays of the vertical axes as Numeratives realised as numbers. The student has added an extra stage, which I have called 'Conclusion', in which he makes deductions about general trends. Thus, the function of the preceding stage – the descriptive highlights – is not to illustrate the general trend through selected examples, but to provide evidence for the deductions of general trends in the conclusion. This would explain the exhaustive and redundant description in the descriptive highlights.

Some of the verbal texts resemiotise the two-level taxonomy of the clothing life cycle as a three- or four-level taxonomy in the initial stages of the data commentary. This seems to increase the potential for making more general claims about trends or patterns in the meanings construed in the graph. The resultant texts construe a more complex field that that of the graph and suggest a deeper analysis, which contributes to less redundancy between the verbal data commentary and the visual image of the bar chart. Text C exemplifies a data commentary whose stages unfold in accordance with the genre.

Text C

[1] The environmental impact of **the clothing industry** in the 21st century is higher than ever. [2] In just a few hundred years, the average person has more than doubled his wardrobe size, which has had a negative impact of the environment.

[3] Figure 1 shows a downwards trend of the environmental impact of **clothing** over **its lifecycle**, where **the early stages of production** are much more impactful than the impact that comes with everyday **use in the hands of consumers**. [4] **Fibre and fabric production** are the most damaging stages with the former using over one thousand litres of water and the latter releasing over one thousand tonnes of CO2 to the atmosphere.

The field is built predominantly through figures of being, with a few figures of doing. The initial stage of the data commentary ([3]) is prefaced by some contextual information ([1] & [2]), which introduces a level higher than the 'clothing life cycle': the 'clothing industry'. Beginning with the more general entity the 'clothing industry' enabled the student to return to it in the explanation stage of the data commentary, which is not shown here, as he extended the discussion to include other facets of the clothing industry. The first clause complex of the data commentary proper ([3]) fuses the stages of presentation and general trend. As in text B, the general trend is enabled by aggregating co-meronyms of the original taxonomy of the bar chart, but the selection of which co-meronyms to aggregate and the subsequent naming of the intermediate level is different. While in text B the student verbalises an intermediate activity entity that creates an implicit distinction between production, which is explicitly verbalised, and post-production, which is not, in text C, the student has introduced two intermediate activity entities: the early stages of production and everyday use in the hands of consumers. The former aggregates fibre production, fabric production and garment production, and the latter use phase transport and laundry. The descriptive highlights comprise one clause complex only, and they resemiotise only two co-meronyms form the lowest rank of the bar chart's field: fibre production and fabric production. In other words, although the field construed through the data commentary is more complex, for it elaborates that of the graph by adding two new levels, it is not exhaustive, for the field construed through the graph instantiates entities that are not resemiotised in the verbal text. Finally, there is a clear movement from the highest level of the taxonomy to the lowest as the generic stages unfold; logogenetically the text develops through elaboration.

The more elaborate hierarchical structure of the activity entities construed in Text C is illustrated in Figure 5, which also shows the taxonomic differences in field between the verbal text and the graph. The original taxonomy construed in the graph is highlighted in yellow, added entities are highlighted in green, and activity entities present in the graph but not resemiotised verbally in the text are paler.

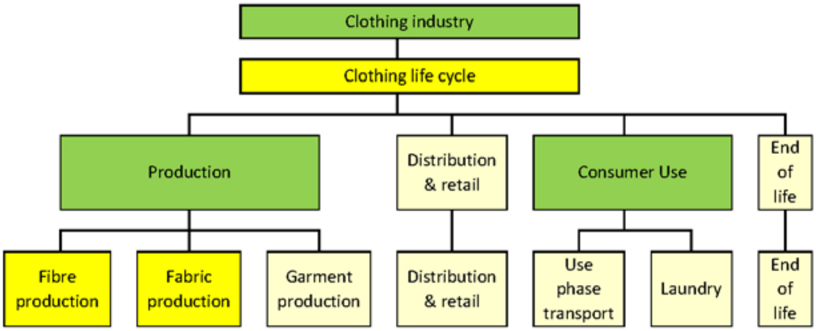

Figure 5 – **Taxonomy of the clothing life cycle: Text C vs bar chart**

A few students chose to interpret the graph more dynamically, highlighting change over time during the clothing life cycle as if the bar chart were a temporal graph. In this case field is construed predominantly through figures of doing, and the co-meronyms of the clothing life cycle are resemiotised as Circumstances.

Text D

[1] The bar chart presented shows the environmental impact of **clothing** in each phase of **its life cycle**, from **production** to **retailing** and then **personal use**. [2] This impact is measured by water use and carbon emissions. [3] Water use shows a general decreasing trend since, after reaching approximately 1050 billion litres during the **fibre production**, it plummets to nearly 0 litres until **clothing's end of life**. [4] Carbon emissions, on the other hand, behave quite erratically throughout the different phases. [5] They peak in the **fabric production phase** to 1100 000 tonnes of CO2 and then decrease substantially until reaching 100 000 tonnes, their lowest level.

Resemiotising the spatial differences in height of the bars as processes – behave, plummet, peak, decrease, reach – suggests an ergative analysis in which carbon emissions and water use construe Medium. These verbs are typically found to build the field of business, particularly in finance (Gerow & Keane, 2011; Vaghi & Venuti, 2003), and while they also contribute to building the field, their analysis is beyond the scope of this paper.

Similar to Text C, Text D builds a more complex field for the clothing life cycle, made up of three levels. Production, retailing and personal use can be considered co-meronyms of the clothing life cycle, and superordinates, respectively, of fibre production, fabric production and garment production; retailing and distribution; and use phase transport and laundry. Only three of the seven co-meronyms of the lowest level are resemiotised in the verbal text: fibre production, fabric production and end of life. The hierarchy of the taxonomy is exemplified in Figure 6, in which the original taxonomy of the bar chart is highlighted in yellow, added levels are highlighted in green, and entities instantiated in the bar chart but not resemiotised in the verbal data commentary are paler.

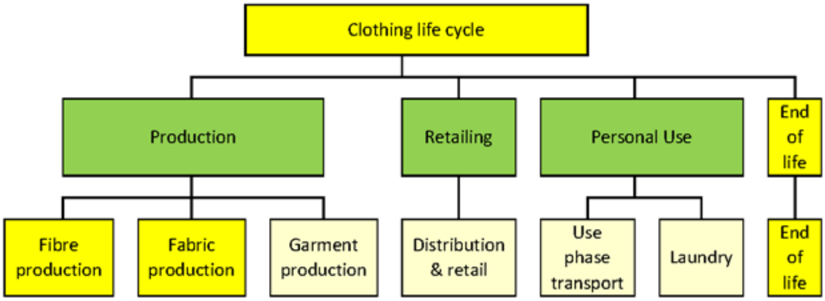

Figure 6 – **Taxonomy of the clothing life cycle: Text D vs bar chart**

Although text D builds a more complex hierarchized field for the clothing life cycle, unlike text C, this is realised in the first stage of the data commentary, when the verbal text presents the visual figure (clause complexes [1] and [2]). Furthermore, the aggregation of elements is not used to realise the general trend. Instead, there are two general trends that verbalise co-meronyms of the field of environmental impact: water use ([main clause 3]) and carbon emissions ([4]). The general trends resemiotise the differences in height of the bars in the chart congruently as a process and adverbial group, 'behave quite erratically' ([4]) and by means of grammatical metaphor, with the process 'decrease' reconstrued as epithet in a nominal group, 'a general decreasing trend' ([main clause 3]). Although text D seems to deviate slightly from the sequence of the generic stages, each general trend is followed by descriptive highlights (dependent clause in [3] and clause complex [5]). Thus like text C, text D moves down the hierarchy from the general to the specific as the text unfolds, and in doing so, the unfolding stages meet the expectations of the genre.

4 – Discussion

While the analysis of the bar chart and the individual texts sheds light on how the bar chart has been resemiotised, comparisons among them contribute to a better understanding of what may constitute evidence of Swales and Feak's (1997) critical thinking and Nordrum and Eriksson's (2015) "informed decisions". Two aspects will be considered: the importance of selection in what to resemiotise in the descriptive highlights, and the importance of the more complex field taxonomy and the general trend.

Texts A and B resemiotise most, if not all, of the Possessive Attributes – the bars – of the bar chart, verbalising the corresponding activity entities from the lowest rank of the field of clothing life cycle instantiated in the bar chart. They also resemiotise many of the data points construed by the alignment of the bars with the relevant array. By contrast, text C resemiotises only the longest bar for water use and the longest bar for carbon emissions, and their respective alignments with the relevant array, verbalising only fibre production and fabric production and the numeric values of the data points in litres of water and tonnes of CO2. Text D resemiotises both the longest and shortest bars for water use and carbon emissions and their respective numeric values. Research on simple bar charts has shown that, in the absence of a label or colour that increases the salience of a specific bar to represent its importance, the longest bar is perceived as the most salient and represents the most important meaning in the bar chart (Elzer, Carberry, & Zukerman, 2011). In limiting the resemiotisation of meanings from the bar chart to the longest bar for water use and for carbon emissions, the writers of Texts C and D have successfully interpreted the meanings in the bar chart and highlighted the most important in the verbal commentary. This selection suggests competence in reading the bar chart. Thus, multimodal literacy can be seen to underpin the informed choice that Nordrum and Eriksson (2015) argue is fundamental to a good data commentary. It may also suggest the critical thinking deemed important by Swales and Feak (1997). Moreover, in texts C and D, the visual bar chart and the verbal data commentary become a "multimodal ensemble" (Kress, 2010) in which neither mode is the vehicle for all of the meanings. Lastly, the use of the most important specific data points to elaborate on the general trend in the more successful data commentaries echoes findings from the field of English in which more highly graded texts were able to move away from the temporal sequence of a story to select significant events and relate them to an abstract meaning (Macken-Horarik, 2006).

Second, although Swales and Feak (2012) do not consider the general trend an essential stage of the data commentary, its absence in text A contributes to a less successful data commentary. Texts A and D are similarly organised despite differences in realisations: after presenting the bar chart, they describe water use and then carbon emissions. Yet, text D is successful and text A is not. Although resemiotising the relations between the activity entities through verbs which echo the field of finance in the figures of doing certainly contributes to the success of text D, it is not because text A builds the field through figures of being that it is ineffective. Rather, a combination of features seems to contribute to its inefficacy. First, as argued previously, the descriptive highlights do not select the most important meanings of the bar chart. Second, unlike text D, text A does not elaborate on the taxonomic field of the bar chart and it lacks a general trend for water use. The conjunction of these features limits the text from unfolding in a meaningful way from the more general to the more specific, a characteristic of more abstract, academic writing. The importance of 'naming' in construing abstraction is well documented in SFL (e.g. Martin, 2013; Ravelli, 2004). In this case, aggregating the co-meronyms of the lowest rank of the clothing lifecycle and naming them 'production' or 'consumer use' introduces a layer of abstraction not represented in the bar chart. It can also enable the construal of general trends, as in texts B and C. The results of this analysis, suggesting the importance of verbalising a general trend in the data commentary before describing specific data points, are in line with studies investigating how to verbalise graphs for the blind (Ferres et al., 2013), which have found that this sequence facilitates the blind person's ability to understand the information construed in the graph.

5 – Conclusions and pedagogical implications

In this paper I have argued that writing a data commentary in an ESP context is a task that requires multimodal literacy, for the visual data source and the verbal text have different semiotic work to do. The verbal text depends on the transduction of meanings from the visual data source to the verbal mode, in which both the choice of which meanings to resemiotise and how to resemiotise them will influence the extent to which genre expectations are fulfilled. The analysis of field construed in a bar chart and four students' data commentaries shows that one factor influencing success is the complexity and completeness of the field of entities instantiated in the verbal text compared to that of the bar chart. The more successful texts in this analysis elaborate on the field of entities represented in the bar chart, introducing a layer of abstraction not represented in the bar chart. The entities in this layer are the outcome of aggregating entities – co-meronyms – from the field instantiated in the bar chart, and they can be used to construe claims about general trends or patterns of meanings in the bar chart. Furthermore, verbalising a general trend enables the writer to limit redundant verbalisations of meanings construed in the graph such that only the most interesting or important specific data points are resemiotised and highlighted. A second factor influencing the text is the logogenetic building of field through entities. The more successful verbal data commentaries build field through elaboration, creating a movement down the taxonomy from the more general or abstract to the more specific as the text unfolds. Finally, the analysis of field confirms that the visual data source – the bar chart – and the verbal data commentary contribute different meanings to the multimodal ensemble such that neither mode is the vehicle for all the information.

The findings of this analysis may not be generalizable to all other graph types or tables, but it is a short step to consider how they could be used to inform the teaching of data commentary, complementing a genre-based approach. One possible activity would be to analyse the field of entities construed in a visual graph and the field of entities construed through the corresponding verbal data commentary, resemiotising each as a classificational taxonomy. The analysis and the resultant taxonomies may help sensitise students not only to layers of abstraction in the verbal text, but also to the criteria for choosing which meanings from the graph to resemiotise in the data commentary. The taxonomies could also serve as the basis for analysing how field maps onto the generic stages. Such activities could complement activities that focus on how different processes – relational and material – verbalise the relations between the entities. Taxonomies might also be useful during the joint construction and independent writing steps. For example, students could build a taxonomy of the field of entities of the data source, and consider how the co-hyponyms or co-meronyms on the lowest level might be aggregated to create an intermediate layer of abstraction. The intermediate layer can then be used to generate a general trend or pattern.

REFERENCES

Blåsjö, M. (2011). From percentage to prediction: University students meeting a parallel language of visuals and numerals. *Ibérica, 22*, 123–140.

Busch-Lauer, I. (1998). 'Non-verbal elements and data commentary in English medical texts'. In I. Fortunet Goméz, S. Posteguillo, J. C. Palmer, & J. F. Coll (Eds.), *Genre studies in English for academic purposes* (pp. 109–132). Castello de la Plana: Publicaciones de la Universitat Jaume I, D.L.

Doran, Y. J. (2018). Building knowledge through images in physics. *Visual Communication, 18*(2), 1–27. https://doi.org/10.1177/1470357218759825

Elzer, S., Carberry, S., & Zukerman, I. (2011). The automated understanding of simple bar charts. *Artificial Intelligence* 175, 526–555. https://doi.org/10.1016/j.artint.2010.10.003

Eriksson, A., & Nordrum, L. (2018). Unpacking challenges of data commentary writing in master's thesis projects: An insider perspective from chemical engineering. *Research in Science & Technological Education*, *36*(4), 499–520. https://doi.org/10.1080./02635143.29'018.1460339

Ferres, L., Lindgaard, G., Sumegis, L., & Tsuji, B. (2013). Evaluating a tool for improving accessibility to charts and graphs. *ACM Transactions on Computer-Human Interaction, 20*(5), Article 28. http://dx.doi.org/10.1145/2533682.2533683

Gerow, A., & Keane, M. T. (2011). Identifying metaphoric antonyms in a corpus analysis of finance articles. In L. Carlson, C. Hölscher, & T. Shipley (Eds.), Proceedings of the 33rd annual meeting of the Cognitive Science Society (pp. 3288–3292). Austin, Texas: Cognitive Science Society.

Hao, J., & Humphrey, S. L. (2019). Reading nominalizations in senior science. *Journal of English for Academic Purposes,* 42, 1–15. https://doi.org/10.1016/jeap.2019.100793

Johns, A. M. (1998). The visual and the verbal: A case study in macroeconomics. *English for Specific Purposes, 17*(2), 183–197. https://doi.org/10.1016/S0889-4906(97)00010-0

Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication.* London, Routledge.

Kress, G., & van Leeuwen, T. (2006). *Reading images: The grammar of visual design.* London, New York: Routledge.

Macken-Horarik, M. (2006). Hierarchies in diversities: What students' examined responses tell us about literacy practices in contemporary school English. *Australian Journal of Language and Literacy, 29*(1), 52–78.

Martin, J. R. (1997). Analysing genre: Functional parameters. In F. Christie, & J. R. Martin (Eds.) *Genre and institutions: Social processes in the workplace and school* (pp. 3–39). London: Continuum.

Martin, J. R. (2009). Genre and language learning: A social semiotic perspective. *Linguistics and Education, 20*, 10–21. https://doi.org/10.1016/j.linged.2009.01.003

Martin, J. R. (2013). Embedded literacy: Knowledge as meaning. *Linguistics and Education, 24*, 23–37. http://dx.doi.org/10.1016/j.linged.2012.11.006

Nordrum, L., & Eriksson, A. (2015). Data commentary in science writing: Using a small, specialized corpus for formative self-assessment practices. In Marcus Callies, & Sandra Götz (Eds.), *Learner corpora in language testing and assessment* (pp. 59–83). Amsterdam/Philadelphia: John Benjamins Publishing Company.

O'Halloran, K. L., Tan, S., & Wignell, P. (2016). Intersemiotic translation as resemiotisation: A multimodal perspective. Signata. https://doi.org/10.4000/signata.1223

Ravelli, L. (2004). Familiar territory, shifting grounds: Aspects of organization in written texts. In L. Ravelli, & Ellis, R. (Eds.), *Analysing academic writing: Contextualised frameworks* (pp. 104–130). London: Continuum.

Roos, S., Sandin, G., Zamani, B., & Peters, G. (2015). Environmental impact of Swedish fashion consumption: Five garments – sustainable futures. Mistra Future Fashion. http://www.mistrafuturefashion.com/wp-content/uploads/2015/06 Environmental-assessment-of-Swedish-fashion-consumption-LCA.pdf

Rose, D. (2007). Reading genre: A new wave of analysis. *Linguistics and the Human Sciences, 2:2*, 185–204. https://doi.org/10.1558/lhs.v2i2.185

Swales, J. M., & Feak, C. B. (1997). From information transfer to data commentary. In T. Miller (Ed.), *Functional approaches to written text: Classroom applications* (pp. 64–76). Washington, DC: United States Information Agency.

Sancho Guinda, C. (2011). Integrating approaches to visual data commentary: An exploratory case study. In V. K. Bhatia, P. Sánchez-Hernández, & P. Pérez-Paredes (Eds.), *Researching specialized languages* (pp. 115–135). Amsterdam/Philadelphia: John Benjamins.

Sancho Guinda, C. (2012). Proximal positioning in students' graph commentaries. In C. Sanches Guinda, & K. Hyland (Eds.), *Stance and voice in written academic genres* (pp. 166–183). Houndmills: Palgrave Macmillan.

Swales, J. M., & Feak, C. B. (2012). *Academic writing for graduate students: Essential tasks and skills.* 3rd ed. Ann Arbor: University of Michigan Press.

Wharton, S. (2012). Epistemological and interpersonal stance in a data description task: Findings from a discipline-specific learner corpus. *English for Specific Purposes, 31*, 261–270.

Vaghi, F., & Venuti, M. (2003). The Economist and the Financial Times. A study of movement metaphors. In D. Archer, P. Rayson, A. Wilson, & T. McEnery (Eds.), Proceedings of the Corpus Linguistics Conference (pp. 828–834). Lancaster: UCREL.

LEGITIMATE CODES OF EXCHANGE: GAINING AWARENESS FROM TRANSNATIONAL INQUIRY OF LANGUAGE ACQUISITION

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ABSTRACT

The U.S. and Mexico are historically connected despite the current political tensions. Following a research exchange, two university instructors from either side of the border sought to bring together their pre-service teachers through an International Virtual Exchange (IVE) exploring theories of language acquisition with a goal of fostering cultural awareness and global competency. This qualitative study examines student reflections after IVE on language learning between pre-service elementary school teachers from California, USA (N=7) and pre-service English as a Foreign Language (EFL) teachers from Puebla, Mexico (N=7). The extracted data was analyzed using the conceptual toolkit offered by Legitimate Code Theory to investigate the interlocutors' reflections on their exchange. The research questions that this study addresses are: What focus did the LCT analysis reveal in student reflections and how might an LCT analysis provide insights into participants' constructed experiences? The focus of each reflection was analyzed through LCT and themes were quantitatively evaluated to reveal a total prevalence of Epistemic Relations.

KEYWORDS

Legitimation Code Theory, specialization dimension, IVE, language acquisition inquiry

1 – Introduction

Understanding the nature of language development and language acquisition has been identified as of key importance for teachers working with linguistically diverse students (Valdés, Bunch, Snow, & Lee, 2005). Moreover, in today's globally complex world, teachers' ability to model global competence for their students is an imperative. The United Nations Secretary-General on Youth Envoy has identified global competency as a primary indicator of success for youth in the global workforce and in achieving sustainable development goals (Hunter, 2015). Responding to global interconnectedness marking the 21st century, higher education's charge has been to graduate globally competent citizens who could navigate the social, economic, and political forces of globalization (Turlington, 1998; Lumina Foundation, 2011; American College on Education, 2017). Likewise, educators within the Language Awareness movement have built pedagogical models for engaging pre-service teachers in cultural understanding and communication (Ruggiano Schmidt, 1998; Ruggiano Schmidt & Finkbeiner, 2006; Finkbeiner & Lazar, 2015) contributing to global competency. Yet international exchanges which support global competency are only available to, at best 10%, of the student body (Guth, 2020; American College on Education, 2017). International Virtual Exchange (IVE) has been promoted as a means of expanding intercultural exchange to a larger segment of the university population (Guth, 2020). Ruggiano Schmidt and Finkbeiner (2006) developed the ABC curricular model to support intercultural awareness. This model builds intercultural awareness through an inquiry process in which students write a self-exploratory **A**utobiography. Then an interview and written **B**ibliography about an intercultural partner. Lastly, students evaluate their cultural biases through a **C**omparison, **C**ontrast and **C**ritique paper exploring the partners' and their own notions of culture in order to identify their own bias (hence, ABC model). This ABC model has been successfully applied in a variety of disciplinary contexts, including International Virtual Exchange (Finkbeiner & Lazar, 2015). The current study sought to examine students' participation in an ABC adapted activity through the lens of Legitimation Code Theory (LCT) for the purpose of exploring the explanatory power of LCT within a novel social context.

Following an international research exchange, we, the authors of this paper, were inspired to bring our students together to build Language Awareness and global competency through IVE. While our countries share a common border, it is currently a source of political tension. Yet the communities on either side are intricately connected historically, socially, and economically. To achieve our goal, we designed flexible exchange activities which would allow our students to come together using English or Spanish as a medium of communication to explore perspectives on understanding language acquisition which is a learning outcome in both our courses.

Ortega (2013) has proposed that teachers must understand language acquisition within both naturalistic and instructed contexts. Naturalistic contexts include opportunities outside of a classroom where learners acquire languages in multilingual communities, workplaces, etc. without formal instruction. At the same time, formal instruction at school, university, or private classes may be a gateway for language acquisition and for specialized professional discourses used in today's globalized world. Building an understanding of these diverse language contexts has also been identified as of key importance for public school teachers working with learners in both Mexico and the United States (US) public schools (Garcia, 2009).

Understanding the nature of language development and language acquisition was a unifying curricular theme in both of our courses. The first course was for pre-service English language teachers in a Second Language Acquisition program at a university in Puebla, Mexico. English Language Learning in Mexico has been a controversial topic because there exists a lack of "communicatively proficient English teachers" in the country (Borjian, 2015, p. 164), despite the "Mexican government's mandates to promote the teaching of English to students across grade levels," (SIPSE, 2017, p. 165). The partnered course, offered at a California State University, was for pre-service primary and elementary school teachers working towards California teaching credentials. As California has a long history with Mexico, the students in California schools are predominantly of Hispanic descent. In California schools, 20% of the students are designated as needing English language support and of that number, 16% speak Spanish as a heritage language (Ed-data, 2019). For this reason, schools of higher education training pre-service teachers have been called to incorporate curriculum which prepares teachers to work with linguistically diverse students (Valdés, Bunch, Snow, & Lee, 2005). Moreover, the goal of offering "equitable, non-discriminatory education to all children" (Young, 2018, p. 24) is also central to Young's call for raising language awareness in primary school education in order to bring together stakeholders who understand the language and cultural diversity within their communities. Our research exchange provided the perfect opportunity to bring together communities connected, yet separated by a border, in order to understand the diverse contexts of language acquisition and learning – a concept of central importance for all teachers. We designed activities drawing from the ABC model (Finkbeiner & Lazar, 2015) which brought together our classes through IVE.

2 – Internationalizing the curriculum

IVE also known as Collaborative Online International Learning (COIL), Globally Networked Learning, or Telecollaboration are collaborative learning exchanges conducted through digital technology (Guth, 2020). These collaborations may allow students from different parts of the globe to engage in digital exchanges for the purpose of language and intercultural learning, gaining intercultural perspectives, and to participate in project based problem-solving. Telecollaboration has also been used for the purpose of computer assisted language learning but with mixed results (as reported in Przymus, 2017). In a review of the literature on computer assisted language learning through telecommunication, exchanges which focused on language practice reported mostly failed results (Przymus, 2017). Przymus instead used a "calculated pedagogical" design which encouraged the use of code-switching through his Functional Approach to Code-switching Electronically (FACE) framework (Przymus, 2014 as cited in 2017). He proposed a "call to action for education to rethink language learning and practice" by engaging students in code-switching or other pedagogical interventions which go beyond "static depictions of culture and monolithic target-language identities" (Belz & Thorne, 2006 as cited in Przymus, 2017, p. 54).

Our design drew on Finkbeiner and Lazar's ABC's pedagogical model (2017) but matched students together through IVE, who had the flexibility to use either English or Spanish, in exploring their experiences and thoughts about language learning. First, IVE is an approach to pedagogy which has been used with the ABCs model and has the potential to offer more students an intercultural learning experience than study abroad. Second, prior to the activities, students prepared for the exchanges by reflecting on the topics in their heritage languages. In other words, students had the time to consider the topics of the exchange deeply and discuss the topics in class with their peers and instructor, before engaging in dialog with their intercultural exchange partner. The purpose of this sequence of activity was to allow students processing time before the exchange. Thus, while the topic of the exchange was authentic, it was not spontaneous. Students could prepare and thoroughly articulate their ideas in advance. In this way, the activity drew on Przymus (2017), but also aimed to support global competency and language awareness.

3 – Global competency and language awareness

The theme of the activities around which the student exchanges occurred drew on the ABC model presented in Finkbeiner and Lazar (2015) built from Ruggiano Schmidt (1998). The ABC model, named because it was a transatlantic grant funded project (Finkbeiner & Lazar, 2015), employed a strict structure for the purpose of exploring cultural similarities and differences. We followed this model for exploring intercultural similarities and differences, but grounded the exchanges by topic within the cultural contexts of students' respective language learning experiences. Each phase of the exchange began with a reflection by the students. Phase A was an Autobiography in which students reflected on their own language acquisition and language learning experiences. Students also discussed theories of Second Language Acquisition in class and the ways in which their experience was reflected by theory. Phase B was a Biography which was based on an interview of their IVE partner, whose lived experience occurred in another national context. Finally, phase C was a cross-cultural comparison of their own and partner's experience. During the IVE, the participants thoughtfully compared concepts of language acquisition, translanguaging, and intercultural communication. Following these activities students reflected upon the experiences which provided a metacognitive lens of their constructed perspectives.

4 – Reflection as metacognition

Reflection has been proposed as a means of understanding student experience. White, Frederiksen and Collins (2009) report that collaborative reflection may help students to think more deeply. Opportunities for reflection are best employed in a social context allowing reflection on multiple perspectives. As such our interest was to examine students' post-interaction reflection to consider meaning construction through a Legitimation Code Theory lens.

5 – Explanatory power of Legitimation Code Theory (LCT)

Legitimation Code Theory (LCT) is a framework that emerged from Basil Bernstein's code theory (Maton & Chen, 2020). Bernstein sought to explain how *social codes* established and defined social communities. Codes are like a sociolinguistic grammar which signals cultural messages (Bernstein, 1990). Bernstein, working with Halliday and Hasan, reflected a major shift in linguistic thought toward semiotic uses of language in education which emerged as Systemic Functional Linguistics (SFL) (Halliday, 1995). Building from this work, Maton proposed Legitimate Code Theory (LCT) as a way of understanding the mismatch in social concepts present in 'academic languages' and 'academic learning practices', as well as differences between 'what is known' and 'who possesses knowledge'. In order to fill this gap, Maton (2014b) claims that LCT provides a framework for Academic Language and Learning (ALL). "LCT views knowledge as both socially produced and real, in the sense of having effects" (Maton & Moore, 2010 in Maton & Chen, 2020, p. 2). In other words, LCT aims to capture the multidimensionality of Bernstein's social codes.

The LCT framework can help language analyzers to understand multidimensional concepts in different circumstances, and different degrees of difficulty and disciplines of study. Moreover, it can be applied in education and beyond (Maton, 2014b, 2017b; Doran, 2018). LCT aims to analyze any utterance through systematic and integrated lenses (Maton, 2014a, 2017a); thus, as qualitative study, it examines general tendencies. Particularly, in the current study, we proposed that LCT may provide the explanatory power to examine the characteristics of the students' metacognitive experience.

LCT analysis addresses five dimensions: semantics, specialization, autonomy, temporality and density (Maton, 2014a, 2014b, 2017a, 2017b, Legitimation Code Theory website, n.d.). In Figure 1, each of these dimensions identifies different coding schemas. First, the semantic dimension identifies the semantic gravity and semantic density codes. Second, specialization addresses the epistemic relations and the social relations codes. Third, the autonomy dimension has two codes as well: the positional autonomy and the relational autonomy. Meanwhile, the temporality dimension has the temporal position code and the temporal orientation code. Finally, the density dimension works with the material density and the moral density codes (Maton, 2014a, 2014b, 2017a, 2017b, Legitimation Code Theory website, n.d.).

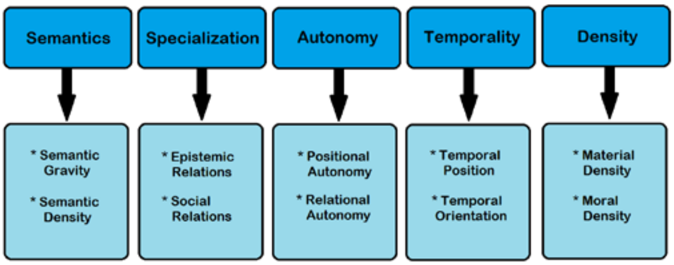

Figure 1 – **LCT framework dimensions**

Specifically, this study is focused on the specialization dimension from the LCT framework: "Specialization begins from the simple premise that every practice is about or oriented towards something and by someone" (Maton & Chen, 2020, p. 3). Therefore, this study approached the specialization dimension because the IVE experience provided participants the opportunity for a meaningful exchange of specialized knowledge about their language and learning experiences. In simpler terms, the analysis section of this paper aims to reveal the constructed experience of the participants as they stated their understanding about objects or subjects. In order to achieve the analysis, we designed a series of parallel reflective activities. We then partnered students between our classes and asked students to interview each other gaining each other's experiences, thoughts, and perspectives on the learning activities. The exchanges between students were conducted through IVE. Following the exchanges, students reflected on the experience. Thus, we incorporated a written reflection as a means of constructing meaning around intercultural exchanges for the purpose of building cultural awareness. At the conclusion of the course, the written data from these exchanges were extracted and analyzed through a LCT framework. In other words, since the "specialization codes generate knowledge-knower structures of different kinds" (Martin & Maton, 2017, p. 32), this study aimed to investigate the explanatory power of students' constructed experiences and how they differed (Maton, Hood, Shay, 2016), applying the specialization plane of the LCT framework to a novel social context. This would allow the researchers to explore the relation between this study's participants and their subjects/objects in terms of weakness or strength within the specialization code.

Particularly, when analyzing the written data, it was necessary to classify all reflections according to the partnered participants in order to contrast information. Later, each of the utterances identified in the reflections were classified into two main sections: Epistemic Relation (Subject–Object) and Social Relation (Subject–Subject) following Maton (2014a, 2014b, 2017a, 2017b, Legitimation Code Theory website, n.d.). The application of this analysis is explained in the data analysis section below. Simply put, drawing on LCT provided a new way of seeing the constructed experience of our respective students and how their shared experiences on language acquisition changed or expanded their thinking. Therefore, our research questions are: (1) What focus did the LCT analysis reveal in their reflections? (2) To what extent an LCT analysis provides insights into participants' constructed experiences?

6 – Research methodology

6.1 – Adaptation of the ABC model

Each ABC phase was reflected upon and the data for the reflection was stored in the university learning management system. Structured reflection as a data source is a method of capturing the meta-cognitive work of an activity. It may occur before, during or after a task (Avineri, 2017). This study elected to collect data on "reflection-on-action" (Murphy, 2014 as cited in Avineri, 2017) in order to capture the ways in which the students made sense of the intercultural exchange. As this was a structurally designed reflection, it can be characterized as Reflection using the capital 'R' as student reflections provided summative data on their experiences.

Students were notified of the study and given the option to consent or opt out of the study. Their consent or withdrawal from the study was recorded blindly so that the instructors did not know whether the students elected to participate until after the completion of the course. At that time, the data was cleaned and prepared for the meta-analysis. The data on the students' perception is qualitative in nature (Kothari, 2004). In total, pre-service elementary school teachers from California, USA (N=7) and pre-service EFL teachers from Puebla, Mexico (N=7) elected to participate in the study. As previously mentioned, the extracted data was analyzed using the conceptual toolkit offered by the LCT framework to investigate the interlocutors' reflections on their exchange.

7 – Data analysis

Regarding the data analysis process of this study, these researchers used two types: descriptive and analytical (Kothari, 2004). Firstly, the descriptive methodology was useful to obtain a description of the structure of intercultural exchange experience. Specifically, this data collection was achieved through field notes. Secondly, the analytical research consisted of making a critical evaluation of cleaned data obtained from the reflective memos written by the participants (Kothari, 2004) using the LCT framework.

Over a period of four months, the students in this study communicated with their international partner in order to construct an academic relationship. After building trust between IVE partners, a final reflection about their whole experience was assigned following the ABC Model (Finkbeiner & Lazar, 2015). This analysis was only concerned with the *specialization dimension* from the LCT framework. The findings are based on epistemic and social relations only. Moreover, since participation was voluntary as stated above, this research analyzed a total of fourteen reflections from this IVE. Likewise, during the data analysis process, it was necessary to identify if the reflections had either a *knowledge, knower, elite* or *relativist code*. In order to do so, all possible focuses were identified, i.e., the main objects (epistemic relations) or subjects (social relations) within their statements. A significant step was distinguishing if subjects were demonstrating possession of specialized knowledge (Knowledge code), if the attributes of actors were emphasized (Knower code), if a subject was possessing specialist knowledge (Elite code) or if anything else was mentioned instead of the others (Relativist code) (Maton, 2014a, 2017a; Doran, 2018). In the following section of this article, the results of this research are indicated.

8 – Findings and discussion

In total, this research reports four main findings. The first research question is *what focus did the LCT analysis review in their reflections?* This depended on the country where the participants were from. Mexican participants considered five focuses (Maton, 2017a): *personal information*, *second language acquisition/learning (SLA)*, *experience with an IVE partner*, *a third language learning and mother tongue*. Also, even though American participants decided to talk about six focuses which are similar to the Mexican students' focuses, they added the *bilingualism* focus as part of their reflections.

The second finding was that this study's participants wrote a total of two hundred sixty-three utterances in their reflections. Specifically, Mexican participants wrote one hundred thirty-five and American participants wrote one hundred twenty-eight:

Table 1 **– Participants' directional focus**

Focus	Mexican Participants		American Participants	
Personal Information	**4**	*11*	**10**	*12*
Second Language Acquisition/Learning	**32**	*17*	**24**	*12*
Experience with your IVE partner	**42**	*20*	**30**	*26*
3rd Language Learning	**5**	-	**1**	-
Mother Tongue	**3**	*1*	**7**	*2*
Bilingualism	-	-	**4**	*2*
Total	**86**	*49*	**75**	*53*

As Table 1 displays, the majority of utterances written by Mexican and American participants were mostly focused on their experience with their IVE partner (M=62 and A=56) positively and negatively. According to Maton (2017a), focus refers to what is being written or spoken about. He claims that there are three types of focuses: (1) content focus, (2) directional focus, and (3) behavioral focus. Therefore, we can assert that the type of focus that the participants from this study had were utterances with directional focus. To be clear, a directional focus is based on talking or writing about this experience when undertaking this IVE activities. Therefore, it seems that this experience was very important and fruitful for them academically and personally (Przymus, 2017). Moreover, in total, the second most important focus was based on their process of second language learning or acquisition (Garcia, 2009; Ortega, 2013). That is why participants decided to share it with their IVE partners too (M=49 and A=36). Conversely, Mexicans did not mention anything about bilingualism and they produced fewer utterances about their mother tongue (N=4). Meanwhile, Americans talked less about their third language learning (N=1) followed by bilingualism (N=6). The following examples would illustrate some of these focuses:

Focus: Bilingualism
Participants C (American)*: We both* ***(S)*** *agreed that what helped us learn Spanish and English properly had to be the assistance that we had from our parents* ***(O)****. (Knowledge ER+)*

Focus: Mother Tongue
Participant 2 (Mexican)*: I* ***(S)*** *want to teach my own language because Spanish is one of the most beautiful languages of all the world* ***(O)****. (Knowledge ER+)*

Focus: 3rd Language Learning
Participant B (American)*: I* ***(S)*** *took French* ***(O)*** *my senior year and didn't start Spanish classes again until my spring semester of my freshman year of college. (Relativist ER-)*

Thirdly, one hundred sixty-one utterances (See Table 1) are representing participants' epistemic relations utterances, eighty-six from Mexicans and seventy-five from Americans. Therefore, it means that the lowest number of utterances, in both participants, is in regard to their social relations (italic numbers). Hence, the LCT basis in this research is not focused on knower terms but in knowledge mainly. This is because these participants had experienced all reported events in their reflections; thus, that was their "language of legitimation" (Maton, 2000, 2007, 2014 in Maton & Chen, 2020, p. 2). The following example represents how a social relation looks like:

> ***Focus: Personal Information***
> ***Participant 4 (Mexican)***: *There, I* ***(S)*** *had the chance to talk to <u>a couple of German tourists</u>* ***(S)*** *in English. (Relativist SR-)*
> ***Participant D (American)***: *Considering <u>my parents</u>* ***(S)*** *didn't have their education in the United States, it made it much more difficult having them help <u>me</u>* ***(S)*** *with school work. (Relativist SR-)*

In answer to the second research question, as previously stated, the obtained results from the strong and weak relations point out that the maximum number of utterances written by Mexicans and Americans are located in the epistemic relations (See Table 2). Predominantly, Americans referred more to strong epistemic relations (N=44); meanwhile, the Mexicans denoted weak epistemic relations (N=44). The following examples help to illustrate what a weak or strong epistemic relation seems like:

> ***Couple (7-G)***
> ***Focus: Experience with your IVE partner***
> ***Participant 7 (Mexican)***: *We both studied the same, so <u>we</u>* ***(S)*** *shared <u>knowledge, and some data that she did not know</u>* ***(O)****. (Knowledge ER-)*
> ***Participant G (American):*** *It was especially interesting FOR <u>ME</u>^* ***(S)*** *to hear <u>his outside opinion on how the U.S. looks to other countries</u>* ***(O)****. (Knowledge ER+)*

This means that the knowledge code was significant for them. Thus, we believe that this answers the second research question of this study, because an LCT analysis provides insights into participants' constructed experiences since they really care, believe, or identify themselves possessing or lacking some specialized knowledge. In other words, their main goal is to prepare themselves to know about specific objects of study (Maton, Hood, & Shay, 2016).

Table 2 – **Strong and weak relations**

		American Participants	Mexican Participants
Epistemic Relations	Strong (+)	**44**	42
	Weak (-)	31	**44**
Social Relations	Strong (+)	40	29
	Weak (-)	13	20

To sum up the results of this analysis, we refer to Maton, Hood and Shay (2016) who highlight that usually, there is a specific code that is dominant as the base of accomplishment or not. Nevertheless, this can or cannot be "transparent, universal or uncontested" (p. 13). Therefore, the specialization plane that Maton (2014a) suggests to use would demonstrate the results of this research in the following Figure 2.

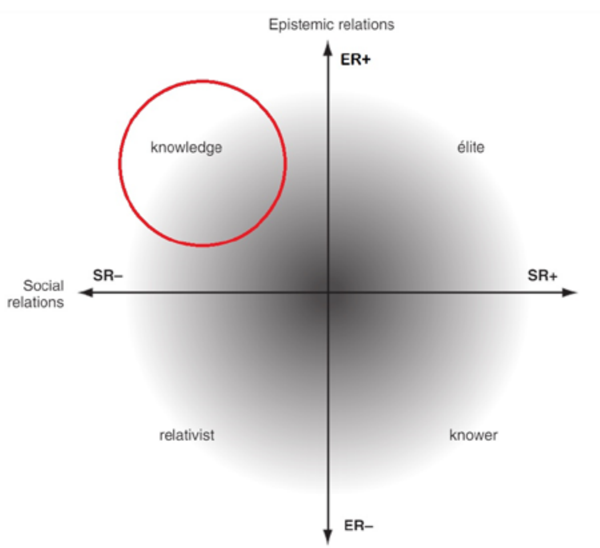

Figure 2 – **Specialization plane results**

9 – Limitations and conclusion

LCT is a relatively new analytical framework. Our aim at using the LCT framework was to examine its explanatory power in revealing the foci within student reflections on their IVE learning experience. Moreover, we wondered to what extent the LCT analysis would provide insights into the participants' constructed experiences. However, this article does not attempt to make generalizations about how an IVE helped pre-service teachers build their awareness of language acquisition or learning. In fact, this paper only obtained results from a small sample population which was analyzed through LCT lenses. Another limitation is the small number of volunteer participants (N=14) in the analysis which could have affected the results. Or there may have been some possible misunderstanding between participants due to language proficiency or shyness.

In summary, this study aimed to understand how the structured reflections between Mexican and American pre-service teachers' IVE experiences were revealed through LCT analysis. The findings demonstrated in this inquiry are that Mexican and American participants revealed five similar focuses (Maton, 2017a), which basically marked their experience in this IVE (RQ1). In addition, this study asked to what extent the LCT analysis might provide insights into the participants' constructed experiences. In sum, the Mexicans and Americans reflections are located in the *epistemic relations* where *knowledge code* showed as lack or possession of some specialized knowledge respectively (RQ2). While the research questions in this study were answered, it needs to be clarified that the researchers of this project lack expertise in the LCT framework. Therefore, for further research, we suggest a deeper analysis to locate specifically this finding on an epistemic plane (Maton, 2014a) which would allow a clearer understanding of the ontic and discursive relations of these utterances. Also, an analysis based on the weakening or strengthening relations (ER↑/↓, SR↑/↓) from this research can be decoded to identify their drift or shift (Maton, Hood, & Shay, 2016). In conclusion, this study has shown that LCT may provide the explanatory power to examine the characteristics of the students' metacognitive experience. However, more research is needed which employs an LCT analysis to further investigate the operational power of the LCT framework in other social contexts.

REFERENCES

American Colleague on Education. (2017). *Mapping Internationalization*. https://www.acenet.edu/news-room/Documents/Mapping-Internationalization-2017.pdf

Avineri, N. (2017). *Research methods for language teaching.* China: Palgrave.

Bernstein, B. (1990). *The structuring of pedagogic discourse: Vol 4. Class, codes and control*. London, England: Routledge.

Borjian, A. (2015). Learning English in Mexico: Perspectives from Mexican teachers of English. *The CATESOL Journal*, 27(1), 163–173. https://files.eric.ed.gov/fulltext/EJ1111752.pdf

Doran, Y. (2018, October 8–9). *Legitimation Code Theory* [Workshop]. XIV Congress of Asociación de Lingüística Sistémica Funcional de América Latina, ALSFAL. Benemérita Universidad Autónoma de Puebla. Mexico. http://www.facultaddelenguas.com/alsfal/

Ed-Data. (2019). *Education data partnership state of California public schools report teachers by ethnicity 2018–2019*. https://www.ed-data.org/article/Teachers-in-California#a1

Finkbeiner, C., & Lazar, A. (2015). *Getting to know ourselves and others through the ABCs: A journey toward intercultural understanding*. Charlotte, NC: Information Age Publishing.

Garcia, O. (2009). *Bilingual education in the 21st Century.* Malden, MA: Wiley-Blackwell.

Guth, S. (2020, May 27). A Brief historical overview of virtual exchange. *Virtual exchange and global learning* [Webinar]. BRaVE. http://faubai.org.br/pt-br/webinarios-faubai-brave-sobre-intercambios-virtuais/

Halliday, M. (1995). *Language and the theory of codes*. In A. R. Sadovnik (Ed.), Knowledge and pedagogy: The sociology of Basil Bernstein (pp. 127–144). Westport, CT: Greenwood.

Hunter, B. (2015). Global competence amongst youth is critical to achieve sustainable development goals. *United Nations, Secretary-General Envoy on Youth*. https://www.un.org/youthenvoy/2015/07/global-competence-amongst-youth-critical-achieve-sustainable-development-goals/

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. Third Edition. New Delhi, India: New Age International.

Legitimation Code Theory. (n.d.). Introducing LCT. Legitimation Code Theory Website. https://legitimationcodetheory.com/home/theory/introducinglct/

Lumina Foundation. (January 2011). *The degree qualifications profile.* https://www.luminafoundation.org/files/resources/dqp.pdf

Martin, J. R., & Maton, K. (2017). Systemic functional linguistics and Legitimation Code Theory on education: Rethinking field and knowledge structure. *Onomázein* [online], 12–45 [February, 2021]. ISSN: 0717-1285. https://www.redalyc.org/articulo.oa?id=134550067006 https://doi.org/10.7764/onomazein.sfl.02

Maton, K. (2014a). *Knowledge and knowers: Towards a realistic sociology of education*. London: Routledge.

Maton, K. (2014b). A TALL order? Legitimation Code Theory for academic language and learning. *Journal of Academic Language & Learning*, *8*(3), A34–A48. ISSN 1835-5196-48.

Maton, K. (2017a). Making waves together: How LCT can help crack the codes of education. BRISTOL Conference.

Maton, K. (2017b). Making the invisible visible. Second international Legitimation Code Theory conference, LCT2.

Maton, K., Hood, S., & Shay, S. (2016). *Knowledge-building: Educational studies in Legitimation Code Theory*. NY: Routledge.

Maton, K., & Chen, R. T-H. (2020). Specialization codes: Knowledge, knowers and student success. In J. R. Martin, K. Maton, & Y. J. Doran (Eds), *Accessing academic discourse: Systemic functional linguistics and Legitimation Code Theory* (pp. 35–58). London, Routledge http://legitimationcodetheory.com/knowledge-base-2/maton-k-forthcoming-specialization-from-legitimation-code-theory-how-the-basis-of-achievement-shapes-student-success-in-martin-j-r-maton-k-doran-y-j-eds-academic-discourse-systemic-f/

Ortega, L. (2013). *Understanding second language acquisition*. New York: Routledge.

Przymus, S. D. (2017). Bilingually traversing the US/Mexico "wall" via a classroom telecollaborative exchange: Translanguaging online with the functional approach to code-switching electronically (FACE). *Issues and Trends in Educational Technology, 5*(2), 36–59. https://doi.org/10.2458/azu_itet_v5i2_przymus

Ruggiano Schmidt, P. (1998). Know thyself and understand others. *Language Arts, 76*(4), 332–340. http://www.jstor.org/stable/41482987

Ruggiano Schmidt, P. (2015). The origin of the ABCs: A crusade to develop compassionate educators. In C. Finkbeiner, & A. Lazar (Eds.), *Getting to know ourselves and others through the ABCs: A journey toward intercultural understanding* (pp. 1–10). Charlotte, NC: Information Age Publishing.

Ruggiano Schmidt, P. R., & Finkbeiner, C. (2006). *ABC's of cultural understanding and communication: National and international adaptations*. Greenwich, CT: Information Age Publishing.

SIPSE. (2017). En México, salones con más de 30 alumnos. Grupo SIPSE. Retrieved on 28/02/19 from: https://sipse.com/mexico/informe-ocde-mexico-primer-lugar-sobrepoblacion-aulas-escolares-180244.html

Turlington, B. (1998). Foreward. *Reforming higher education curriculum.* (Eds.) J. A. Mestenhauser, & B. J. Ellingboe. Phoenix, Az, U.S.A.: The American Council on Education.

Valdés, G., Bunch, G., Snow, C., & Lee, C. (2005). Enhancing the development of students' language(s). In L. Darling-Hammond, J. Bransford, P. LePage, K. Hammerness, &

H. Duffy, (Eds.), *Preparing teachers for a changing world: What teachers should know and be able to do* (pp. 126–168). San Francisco, U.S.A.: Jossey-Bass.

White, B., Frederiksen, J., & Collins, A. (2009). The interplay of scientific inquiry and metacognition. In Douglas J. Hacker, John Dunlosky, & Arthur C. Graesser (Eds.), *Handbook of metacognition in education* (pp. 175–204). NY, U.S.A.: Routledge.

Young, A. (2018). Language awareness, language diversity, and migrant languages in primary school. In P. Garrett, & J. M. Cots (Eds.), *The Routledge handbook of language awareness* (pp. 23–39). N.Y. USA: Routledge.

7

BRIDGING THE LINGUISTIC GAP BETWEEN SECOND AND THIRD GRADE STUDIES: VISUALIZING TAXONOMIC RELATIONS IN JAPANESE ELEMENTARY SCHOOL TEXTBOOKS FROM IDEATIONAL AND TEXTUAL PERSPECTIVES

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ABSTRACT

This paper explores taxonomic relations in third-grade (ages 8–9) social studies textbooks and second-grade and third-grade Japanese (Kokugo) textbooks by applying discourse semantic systems discussed in Martin and Rose (2007), namely Ideation and Identification. Systemic Functional Linguistics (SFL) have researched various types of texts used for teaching subject areas in English-speaking countries (Schleppegrell, 2004; Rose & Martin, 2012). However, the Japanese language used in third-grade social studies textbooks has been a blind spot that Japanese studies of SFL and other studies with a different orientation, including linguistics and education, have not fully described. This study compares taxonomic relations in the first unit of third-grade Japanese social studies textbooks against taxonomic relations found in second-grade and third-grade Japanese (Kokugo) textbooks. The intent is to illustrate how the meanings structuring the taxonomic relations in those two types of Japanese texts are spread in the text as the texts unfold. It shows that the fundamental taxonomic relations of the Japanese (Kokugo) texts are repetitions and part-whole relations while the ones of the third-grade social studies textbooks are series relations. The differences suggest that if teachers learned to recognize such differences in the texts they use with students, they would be better prepared to teach using the texts.

KEYWORDS

Taxonomic relations, ideational meanings, social studies, textbook analysis, Japanese

Introduction

This study is one of the initial attempts to explore Japanese school subjects from a Systemic Functional Linguistic (SFL) perspective. In particular, it draws attention to social studies education for Japanese third graders. Japanese third grade is the first year of teaching and learning social studies in the Japanese education system. Japanese third-grade social studies education concerns 'the state of affairs in the nearby regions and municipalities,' 'manufacturing industry and retails seen in the region' 'the activities to protect the safety of the region,' and 'the transition of the regions' (Ministry of Education, Culture, Sports, Science and Technology, 2017a). Teaching such region-specific social studies contents has been seen as difficult for Japanese elementary school teachers (e.g., Ito, 2006; Shimura, Iabaraki, Yamamoto, & Ohsaki, 2014). When they teach upper-grade social studies classes, the teaching contents are felt more concretely because they are more likely familiar with the nationwide/worldwide social studies contents, such as Japanese history and world geography. However, in teaching third-grade regional contents, they are often less familiar with the teaching contents. Since Japanese elementary-school teachers working in public schools get transferred to a different school every four to five years, they do not necessarily know about the region they are teaching in (Ito, 2006). In addition, Japanese elementary school teachers are expected to teach not only social studies but also other school subjects. They are not always specialized in teaching social studies. For example, in the survey research by Shimura et al. (2014) collected from 152 Japanese elementary school teachers teaching social studies to any grade levels, it has been reported that the Japanese elementary school teachers without a college degree in teaching social studies tend to be more uncertain how they could explore the nearby area and research it for their own teaching.

A couple of teachers' textbooks for elementary social studies education (e.g., Kimura, Kato, & Nagata, 2010; Nakanishi & Kobayashi, 2018) suggest teachers for reading the social studies textbooks approved by the government. Kimura et al. (2010) have argued, "the textbooks approved by the government are the outcomes of authors' arduous study of teaching materials for social studies education and they are the embodiments of typical examples of its teaching contents." (p. 55). On the other hand, as reported in Nakanishi and Kobayashi (2018), some teachers view the social studies textbooks as inapplicable to teaching third-grade regional contents. Indeed, no matter what region the textbook is focusing on, it will be geographically distant from where a majority of the students live. From that perspective, reading the nationally authorized textbooks is not always directly related to teaching and learning regional contents. In Kurita's (2011) survey of 124 Japanese elementary school teachers, the majority of those surveyed reported that they spend the most class hours on teaching with social studies textbooks. Additionally, some said that they need more concrete help for teaching regional contents (Kurita, 2011). It is hard to generalize teachers' needs from surveys since each has different interests and contexts, but solving this controversy on the pedagogical effects of using the social studies textbooks would need more research based on third-grade social studies textbooks. The teachers' textbooks mentioned above and the Commentary on the Elementary School National Curriculum Standard (Ministry of Education, Culture, Sports, Science and Technology, 2017d) have provided discussions on how the social studies contents/topics presented in the curriculum guidelines can be interpreted and developed for teaching third-grade social studies classes. Those discussions, however, seldom proceed with how the social studies contents/topics are described in the social studies textbooks and what is going on in there so that the suggestion on understanding third-grade social studies through reading the textbooks could be felt abstract for non-specialists in teaching social studies. Therefore, it is necessary to examine third-grade social studies textbooks to reveal how they reflect the social studies contents/topics presented in the curriculum guidelines and inform teachers how they could make use of third-grade social studies textbooks to teach third-grade social studies.

Studies of Japanese (Kokugo) textbooks

Although texts adopted for teaching school subjects in English-speaking countries have been investigated from a perspective of Systemic Functional Linguistics (SFL) over a decade (e.g., Martin & Veel, 1998; Schleppegrell, 2004; Coffin, 2006; Fang & Schleppegrell, 2008; Rose & Martin, 2012; Humphrey, 2017), it is quite exceptional to find such pedagogical investigations in SFL studies of the Japanese language. Japanese SFL studies, to date, have been largely led by the linguistic frameworks developed by Teruya (2007) and by the Kyoto Grammar research group (Tatsuki, 2004), but only a few studies have been concerned with pedagogy/education and have discussed how those SFL frameworks could contribute to areas of teaching in Japanese. In fact, many subject areas in the Japanese education system, including third-grade social studies education, are undiscussed or incomplete from the Japanese SFL perspectives. Japanese SFL studies are, in other words, still in the stage that requires fundamental studies bridging the gap between linguistics and pedagogy/education.

The social studies textbooks for Japanese third grade, which are in most cases the first volumes of social studies textbooks designed for third and fourth grades, have been less studied not only by the Japanese SFL studies but also by the studies in other fields. Butler (2011) has also said research on basic Japanese vocabularies used in each subject area other than the Japanese (Kokugo) class has started recently and that there are only a few Japanese studies conducted on the grammatical structures in the textbooks. In a couple of corpus-linguistic researches (Tanaka, 2015; Tanahashi, 2015), for instance, third-grade social studies textbooks are included as part of the data set. However, in those studies, third-grade social studies textbooks have been treated under the name of bigger units like 'social studies textbooks' or 'social studies textbooks at the elementary school level,' and their linguistic data do not receive individual attention. One of the reasons for this lack of attention is probably the amount of data in the third-grade social studies textbooks. Because third-grade social studies textbooks have fewer words than textbooks used in upper grades or in other subject areas, they account for only a small part of the quantitative data in the comparison. Besides, corpus-based studies often collect the data from more than a single subject area for a specific grade. In those studies, the third-grade social studies textbooks come to be statistically insignificant. It seems fair to say that those few studies outside SFL succeeded in recording the quantitative data on the Japanese social studies textbooks, especially in terms of vocabulary. However, they have difficulty describing the contents of data in their papers and pointing out possible linguistic complications for Japanese third graders from qualitative or semantic perspectives.

The lack of research for third-grade social studies textbooks also means that it is hard for Japanese elementary school teachers to grasp how reading social studies textbooks could be challenging for Japanese third-grade students. Since SFL studies of the English language have argued that different subject areas realize different types of discourse and language patterns (Schleppegrell, 2004; Fang & Schleppegrell, 2008), Japanese third graders are believed to face a new type of Japanese discourse and Japanese language patterns in reading social studies textbooks as well. Text 1, for example, may look very concise and less challenging for many Japanese adults, but the prior research on Japanese social studies textbooks above would not be able to provide much support for students and teachers even if students struggle with understanding the text.

Text 1 – **A third-grade social studies text**

北コースの探検

あおいさんたちは、学校から北の方に向かって、たんけんに出かけました。
「学校のすぐ北がわには、大きなスーパーマーケットやコンビニエンスストアなど、いろいろな店があって、人も多いね。」
「大きなマンションもところどころにあったよ。」
「北にずっと歩いていくと、田や畑があるね。農家の人に話を聞いたよ。」

小学社会3・4年上(日本文教出版, 2018, p. 10)

The Exploration of the North Course

Aoi and her friends went exploring from (their) school to the north.
"On the just north side of our school, there are various stores like a big supermarket and a convenience store, and there are many people."
"There were also big mansions in places."
"If (we) keep going to the north, there are rice fields and fields. (We) asked a farmer to tell a story."

Shogaku Shakai 3.4 Jyo (Nihon Bunkyo Shuppan, 2018, p. 10)

Some may reason the possible difficulty of the social studies textbooks for kanji (the Chinese characters used in the Japanese language), as has been discussed in the studies including the textbooks for upper grades (e.g., Kawauchi, 2015; Tanahashi, 2015). That is, however, not the only variable that the third-grade social studies education demands from the students in reading the textbooks. This SFL study explores other linguistic factors that deviate from students' prior school experience and challenge the students. By applying SFL analysis, we can derive a better understanding of the textbooks that are used to teach these courses, and in doing so can proceed to suggest a more accessible reading to all Japanese elementary school teachers while also demonstrating a practical application of SFL.

Methodology

Textbooks

In order to find subject-specific language patterns in third-grade social studies textbooks, it is necessary to examine what kind of discourse patterns the students get used to before and during the third grade and what kind of discourse patterns they face for the first time in reading third-grade social studies textbooks. During the first two years of elementary school education, students take Japanese (Kokugo), arithmetic, living environment studies, physical education, drawing and crafts, music, and moral education. Among these classes, the Japanese elementary school curriculum assigns the most class hours, about one third of total class hours, to Japanese (Kokugo) class in both first and second grades. According to the Ministry of Education, Culture, Sports, Science and Technology (2017b), "students' nature and abilities to correctly understand and properly express in Japanese" are the primary objectives. Textbooks for Japanese (Kokugo) class are the key to examining the literacy development of Japanese students in the context of these objectives. Living environment studies also has similarities with social studies and science, but as the aim is "to grow students' independence through activities in the sphere of their lives" (Ministry of Education, Culture, Sports, Science and Technology, 2017d), the class is more activity-based than textbook-based. In fact, each text in the living environmental science textbooks is mostly within one or two clauses. This paper, therefore, compares social studies textbooks and Japanese (Kokugo) textbooks.

This paper adopts the first unit of four social studies textbooks for Japanese third graders and five texts from second-grade and third-grade

Japanese (Kokugo) textbooks. The four adopted third-grade social studies textbooks are *Shinpen Atrashii Shakai 3.4 Jyou* (Tokyo Shoseki, 2018b), *Shogaku Shakai 3.4 Jyou* (Kyoiku Shuppan, 2018b), *Shogaku Shakai 3.4 Jyou* (Nihon Bunkyo Shuppan, 2018), and *Shakai 3.4 Jyou* (Mitsumura Tosho, 2018d). They are all approved by the Minister of Education, Culture, Sports, Science, and Technology and the council thereof. One of those textbooks is used in the Japanese social studies education. However, this study has found the third-grade social studies textbook published by Mitsumura Tosyo (2018d) arranged its texts and visual aids quite differently from the other three textbooks. It shares some linguistic features with the other textbooks, but for this reason, the findings of this paper are discussed based on the other three textbooks.

The five Japanese (Kokugo) texts chosen for this study are "Beaver's Huge Construction" written by Shiro Nakagawa (as contained in Tokyo Shoseki, 2018, pp. 36–43), "A Zoo's Veterinarian" written by Miya Ueda (as contained in Mitsumura Tosho, 2018b, pp. 104–111), "Sukh's White Horse" written by Yuzo Otsuka (as contained in Mitsumura Tosho, 2018a, pp. 98–113), "Medaka" written by Hiroshi Sugiura (as contained in Kyoiku Shuppan, 2018a, pp. 36–41), and "the Line of Ants" written by Tetsuya Otaki (as contained in Mitsumura Tosho, 2018c, pp. 78–82). The first three texts are taught to second graders, and the latter two texts are used for third graders. These five texts are selected because they are discussed in *Elementary Kokugo Classes of Literatures and Explanations: Year 2* (Jidou Gengo Kenkyukai, 2014a) and *Elementary Kokugo Classes of Literatures and Explanations: Year 3* (Jidou Gengo Kenkyukai, 2014b). *Elementary Kokugo Classes of Literatures and Explanations* is the book series that discusses the teaching methods of major texts in the Japanese (Kokugo) elementary school textbooks from first to sixth grade. Every book in this series highlights two story texts and two explanation texts. "Sukh's White Horse" is counted as a story while the other four texts are counted as explanations. In SFL terms, the former is what Rose and Martin (2012) called literary texts or more precisely narrative texts, and the latter four are called factual texts (Rose & Martin, 2012). The reason for adopting more explanation/factual texts than story/literacy texts is because they are typically considered to be closer to texts in social studies textbooks (Kikkawa, 2007).

The first unit of the four textbooks concerns the area where student characters in the textbooks live. The areas are not fictional, as they do exist somewhere in Japan. In the texts, the student characters play a role showing example activities in a social studies class. These activities imply what students are supposed to do and learn in the social studies class and how students should be engaged in the activities. The student characters in these texts discuss and suggest ways to know more about the area, and they share the experience of how they explore routes/courses. They also show the maps of the area that they draw and talk about them, or they study the four cardinal directions, north, east, south, and west, and map symbols in this unit. The main texts in this unit are usually organized by dialogues among the student characters, and they also have a couple of clauses inserted before the dialogues, introducing how they come to learn or talk about the topics. These main texts are surrounded by some visual images/pictures, comments, or small sections. The visual images/pictures are described in the captions and sometimes in the comments by the student characters. The small sections in the textbooks have various roles, such as raising questions to initiate students' discussion, directing students' activities, explaining keywords, and restating findings and issues. Some pages also have a section of at least three or four sentences introducing a talk by a person in the area.

This paper includes the data from the main texts and the small sections of these talks in the social studies textbooks, but it excludes the other sections for their insufficient length as a text to include and for the difficulty drawing their semantic relevance to the main texts in an objective way. Since it is not a common practice for the Japanese educational research to publicly share the actual teaching practices in schools, approaching those sections that are more likely used differently depending on teachers would go beyond the reach of this attempt.

Ideation

For the exploration of the texts in those subject areas, this study applies one of the discourse systems proposed by Martin and Rose (2007), Ideation. Ideation is concerned with the meanings of people, things, processes, places, and qualities and how they get connected in discourse and what they construe as the overall picture. This discourse system is composed of taxonomic relations, nuclear relations, and activity sequences. Taxonomic relations cover the relations of those meanings between clauses. Nuclear relations configure the relations within each clause. Activity sequences are about the relations of processes that form field-oriented phases in discourse. This paper provides the findings on taxonomic relations in those texts, but the findings echo the other two discourse systems of Ideation in the texts. The major taxonomic relations in Martin and Rose (2007) are repetition, synonyms, contrast, class, and part. In particular, the class relations are called a classifying taxonomy, and the part relations are called a compositional taxonomy. In the classifying taxonomy, class-member relations are drawn as a horizontal relation, while co-class relations are depicted as a vertical relation. In the compositional taxonomy, whole-part relations are reproduced as a horizontal relation, while co-part relations are portrayed as a vertical relation.

The way to present the data

The findings of taxonomic relations are often displayed in the form of lexical strings, but this study displays the findings by integrating one of the textual discourse semantic systems, Identification (Martin & Rose, 2007). In this study, firstly, the texts have been divided into clauses and then groups based on the meanings of participants (people and things), places, and qualities. This paper has excluded processes due to their close relationship with the analysis of nuclear relations and activity sequences, but it has included pronouns. If two lexical items, for instance, marriage and wedding, are counted as synonyms, and the readers are supposed to understand them as synonyms, their pronouns should also be treated in the same way. Besides, as the details will be discussed later, possessive pronouns, such as my, our, its, and their, play an important role in showing different features of taxonomic relations in different subject areas so that they should be integrated into this study.

Since this study is also meant to help teachers and students to picture what the texts realize through developing taxonomic relations as well as to understand what knowledge and skills are expected in reading the texts in the school subjects, the data need to be visualized. Figure 1 is the sheet showing the way to input the data in the recording stage of this study. The first group found in the textbooks is input in the cell in the upper-left corner.

A group showing a different meaning from the first group is found in the same clause, it is put in the next column in the same row. If the group is in a different clause, it is put in the next column in the next row. If a repetition or a synonym is found, the group is put in the same column in a different row. In other words, the data put in different rows in Figure 1 mean that they are in different clauses, and the data in different columns mean that they are groups realizing different meanings. The analysis of the other taxonomic relations than repetitions and synonyms are conducted at the next phase. It should be emphasized here that the criteria for those allocations of repetitions and synonyms in this recording stage are narrower than most studies. In the analysis of Silkstone's (1994) text on goannas (as cited in Martin & Rose, 2007, p. 99) in Figure 1, for instance, this study would locate seven groups related to 'goanna' in the same column while groups like 'many goannas' and 'the largest species' would be set in the different columns. The latter two groups may look like a repetition or a synonym of goannas at the word level, but they are different at the group level. For example, the group 'many goannas' includes a Numerative as it is not realized simply as 'goannas.' This Numerative makes the meaning of its group different from the other groups of 'goannas' like a contrast. The clause following 'many goannas,' therefore, refers to the features that all the goannas do not have but only many goannas have. Since these two groups infer their potential to expand the relations with other meanings in the texts, leaving these slight semantic differences in the same unit at this stage of analysis would come to be an issue for a study when analyzing and interpreting further relations as the texts unfold.

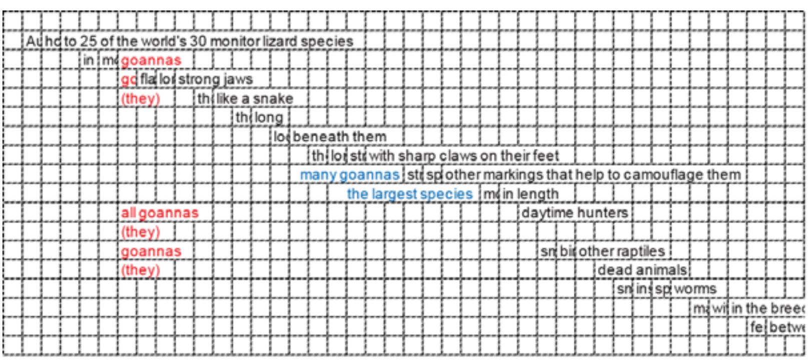

Figure 1 – **The analysis of Silkstone's (1994) text on goannas**

This way of recording the texts at the first phase of analysis consequently has postponed the analysis of the other taxonomic relations until the next phase, but it has also avoided possible analytical redundancies. In most analyses, taxonomic relations other than repetitions and synonyms depend on the realizations of the upper category in the texts. Analyzing 'marriage' and 'friendship' as co-class, for instance, is possible because of their relations to the upper category 'relationship.' Unless the upper category is realized in the text, however, the analysis of the co-class relations needs to be placed on hold and to be revisited depending on the reader's/analyzer's knowledge on the field. Of course, those ideational aspects play an essential part in the analyses, reading, and teaching of texts as considered in the next stage of this analysis, but such analysis dealing with multiple taxonomic relations in different parts of texts was found to be too inefficient to be conducted in this recording stage.

The second stage of this analysis considers all the major taxonomic relations. Since this analysis reflects how the texts in the Japanese (Kokugo) textbooks and the social studies textbooks develop their taxonomic relations throughout the texts, it is necessary to find the main group whose meanings are spread in the text the most. This study has colored such main groups in red. It is also necessary to examine how the main group expands the taxonomic relations with other groups as the text unfolds. Coloring of these expansions is managed in stages. The first groups directly related to the main group taxonomic relations are colored in blue, and the groups related to the groups colored in blue are painted in green. The last group in this study is colored in yellow. In this way, this study can visualize expansions of taxonomic relations in the text, and tell what meanings play the central role in the text and what meanings must be captured to draw the whole picture realized in the text.

Results

Overall, the analyses indicate that the ways to construe taxonomic relations in the first units of the third-grade social studies textbooks differ from those in the second-grade and third-grade Japanese (Kokugo) textbooks. The second-grade and third-grade Japanese (Kokugo) textbooks usually construe the meanings by depending on repetitions and part-whole relations. On the other hand, the third-grade social studies textbooks expand the relations by series. At the level of lexicogrammar, the analyses also show that the taxonomic relations in the Japanese (Kokugo) textbooks are usually realized with a relational process and a possessive pronoun. However, taxonomic relations in the first unit of social studies textbooks do not necessarily rely on those two lexico-grammatical resources.

The Japanese (Kokugo) textbooks

Medaka. Figures 2.1 and 2.2 show the analysis of taxonomic relations for one of the five Japanese (Kokugo) texts, "Medaka." This third-grade Japanese (Kokugo) text represents the most basic features of taxonomic relations in the Japanese (Kokugo) texts. In these figures, the groups meaning 'medaka' are repetitively realized and colored in red in the same column. A couple of its synonymous expressions, such as 'companies' and 'every one of them,' are also seen in different columns. This is simply the issue of the methodology to display the result, but since those synonymous expressions do not expand their own taxonomic relations further in this study, they are also colored in red. Figures 2.1 and 2.2 clearly show the text is about the fish, 'medaka,' and that its fundamental meaning-making resource for taxonomic relations is repetitions. The blue groups in Figure 2.1 and 2.2 also show that several aspects of 'medaka' are expanded in the text. The taxonomic relations are drawn by its part-whole relations involving its body, size, and ways to protect themselves. The groups in green show that the blue groups are further described as 'small,' 'three to four centimeters,' or through numbering items, such as 'first' and 'second.' The taxonomic relation between 'medaka' and 'enemies' is one of antonym, but other than that, the basis of this text is repetitions and part-whole relations. The taxonomic relations in Figure 2.3 are based on this analysis.

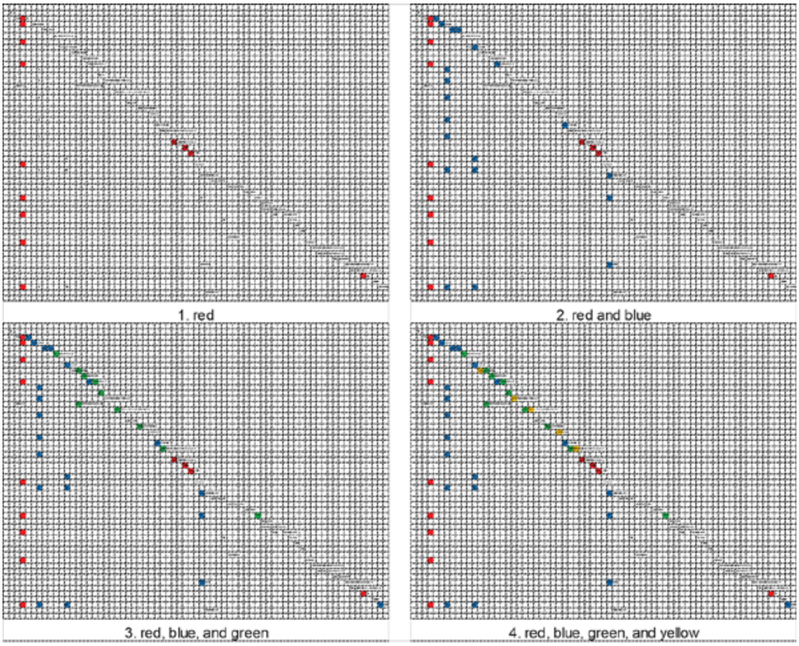

Figure 2.1 – **The procedures of color**

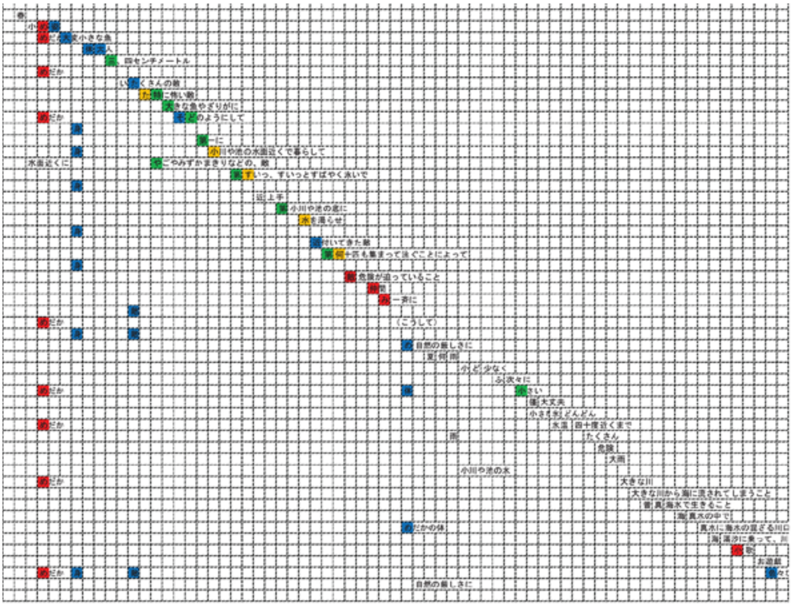

Figure 2.2 – **Medaka**

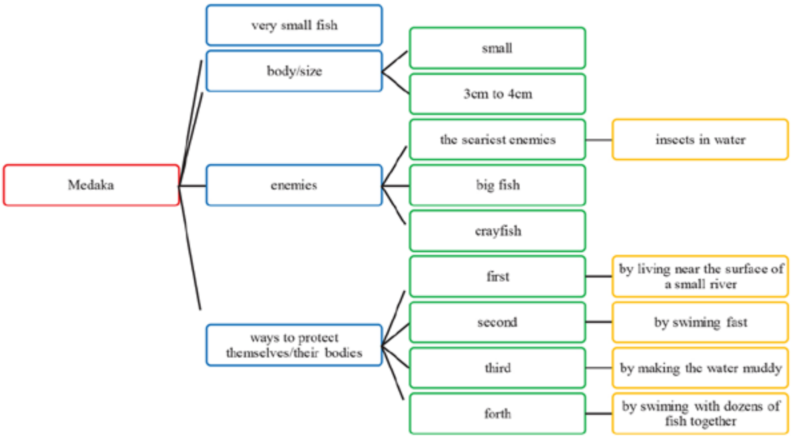

Figure 2.3 – **Taxonomic relations of Medaka**

Beaver's Huge Construction. The third-grade Japanese (Kokugo) text discussed above is similar to the one for the second grade, "Beaver's Huge Construction." The difference between "Beaver's Huge Construction" and "Medaka" is, however, that it has two salient groups leading the expansions of taxonomic relations. As Figures 3.1 and 3.2 show, while 'beavers' is repetitively realized throughout the text, 'trees' is also found several times. Since 'trees' here is simply treated as a thing that the beavers use for their construction of den and the text does not concern who/what possesses the trees, these two groups are shown in the separate figures. However, their meanings are compensatively spread in the text especially at the beginning of the text. Besides, a couple of vocabularies corresponding to parts of trees, such as 'trunk' and 'base,' could be a challenge for some students in getting accurate meanings of the text. One may discuss that the groups of 'trees' only have a secondary status in comparison with the ones of 'beavers,' but paying attention to the two groups would be necessary or valuable in teaching.

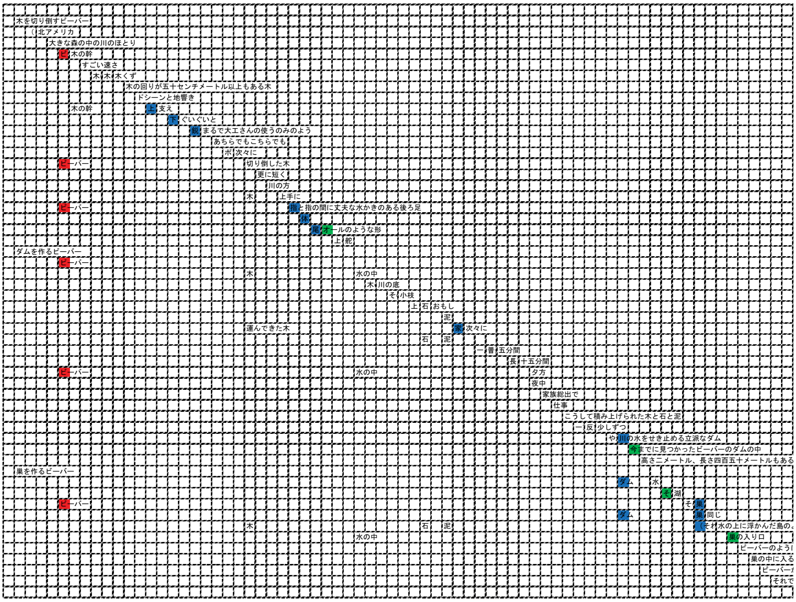

Figure 3.1 – **Beaver’s Huge Construction (based on beavers)**

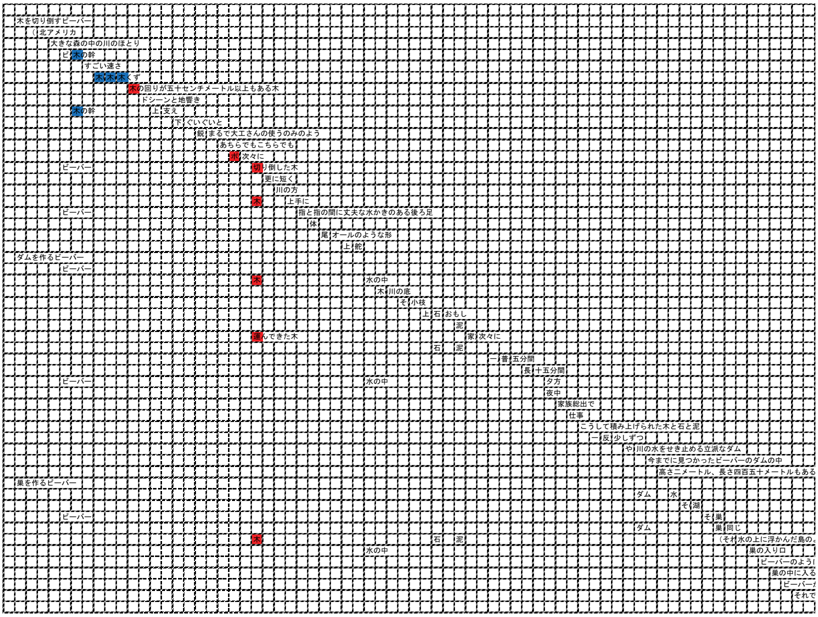

Figure 3.2 – **Beaver’s Huge Construction (based on trees)**

The Line of Ants. Figure 4 is the analysis for “The Line of Ants.” It shows that this third-grade Japanese (Kokugo) text also constructs its taxonomic relations by realizing the meaning of ants through repetitions and part-whole relations in the text. This text differs from the one of “Medaka” in the sense that the main participants in this text, ‘ants,’ do not always mean a generic one but sometimes a specific one while the main participants in “Medaka,” ‘medaka,’ almost always mean a generic one. Because of this difference, the meanings relevant to ants themselves are all colored in red in Figure 4, but the groups are divided into different columns when they have a different identity. Since the main phase of the text is about the experiment that E. O. Wilson conducted to find the way that ants make a line, it needs to realize specific ant(s) that act(s) in a certain way in the experiment alongside the generic ones. To fully appreciate how these slight differences in identities wrapped in the groups sharing the same meaning interact with students’ reading process and understanding, further practical studies of teaching Japanese (Kokugo) are necessary. However, as far as this study concerns, taxonomic relations in this text are also repetitions and part-whole relations like the other Japanese (Kokugo) texts discussed in this study so far.

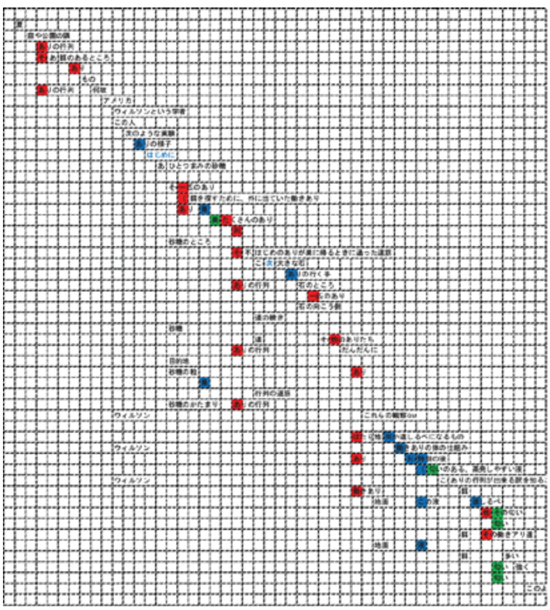

Figure 4 – The Line of Ants

Sukh's White Horse. Figure 5 shows the analysis of "Sukh's White Horse." The length of this story-genre text is much longer than the other Japanese (Kokugo) texts, although Figure 5 covers only two-thirds of the whole text. Compared to the other Japanese (Kokugo) texts, Figure 5 more clearly shows who/what the main participants are in the text. The main character, Sukh, and his horse are realized many times throughout the text, and parts of them are also seen to expand in Figure 5. Since the majority of texts in Japanese (Kokugo) textbooks are story genre, this finding can be an implication that students are most likely to count on these repetitions and part-whole relations in reading texts as they are more used to the texts based on repetitions and their part-whole relations.

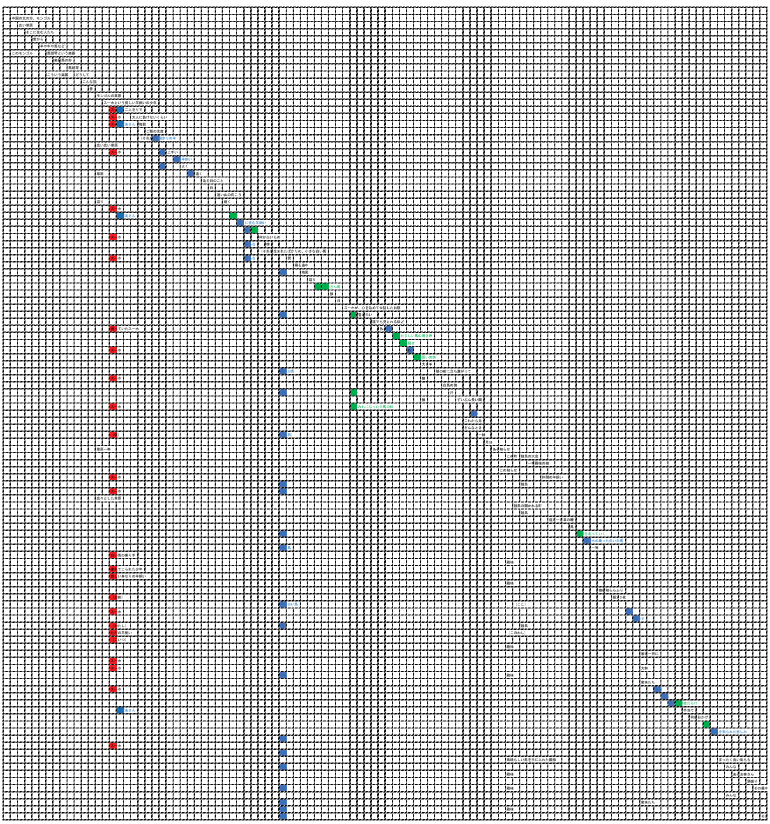

Figure 5 – **Sukh's White Horse**

Zoo's Veterinarian. Figures 6.1 and 6.2 are the analyzes for "Zoo's Veterinarian." This text is about a day of the veterinarian working for the zoo, explained by the veterinarian. However, Figure 6.1, drawing taxonomic relations based on 'veterinarian,' shows that the basis of taxonomic relations in the text is neither 'veterinarian' nor the first person pronoun referring to the veterinarian, 'I.'

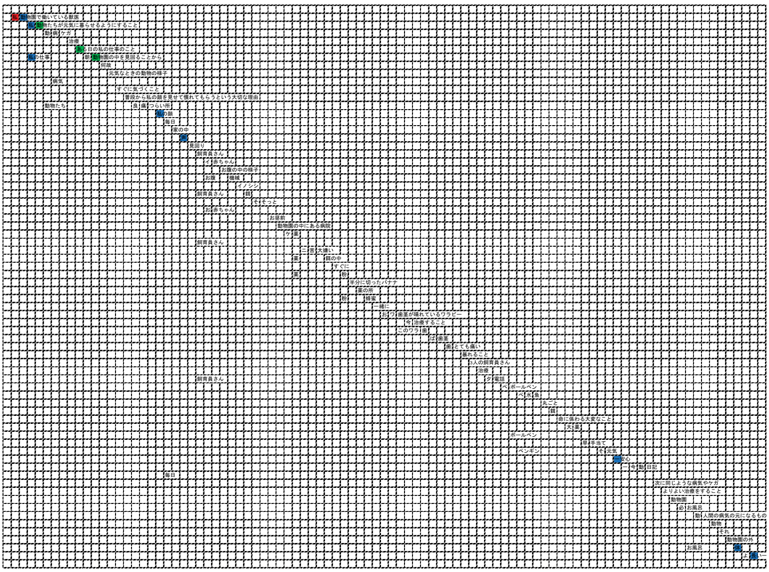

Figure 6.1 – **Zoo's Veterinarian (based on the veterinarian)**

Instead, as Figure 6.2, illustrating the taxonomic relations based on 'animals,' shows, the meanings of the text are more explicitly spread based on the groups related to 'animals.' In this text, the veterinarian sees four animals, a boar, a monkey, a wallaby, and a penguin, and treats the parts that the animals have got hurt. This text indeed omits the first person singular pronoun, which in this text refers to the veterinarian, but the relations between the veterinarian and the animals are drawn by a material process or a mental process rather than a relational process in this text. It is possible to say that it is 'the boar that the veterinarian has treated,' but what the text means is not that the boar is possessed by the veterinarian or that it is the 'veterinarian's boar.' To draw taxonomic relations by applying such relations based on a process other than a relational one would possibly distort the actual relations realized in the text. However, as is known, the four animals belong to the group, 'animals.' It is more like common knowledge about animals, and it could be a subjective way of constructing taxonomic relations, but this knowledge on animals is useful to grasp the picture realized in the text, as this knowledge-based way of constructing the taxonomic relations covers the most part of text (see Figure 6.2). Of course, the taxonomic relations based on 'animals' could be secondary when all the omitted meanings referring to the veterinarian are recovered in the text, but the taxonomic relations based on 'animals' still contribute to the construction of the text. Besides, in this way of approach, the taxonomic relations based on 'animals' are found to be class relations. Since the other Japanese (Kokugo) texts rarely show this type of taxonomic relations, it can be a unique feature of this text. The analysis of taxonomic relations in this text depends on such knowledge-based approach as far as the meanings relevant to the veterinarian are left unrevealed. It is necessary to cover more similar texts showing taxonomic relations that can be found by such knowledge-based approach in order to find out if that type of reading approach is valued in the Japanese education system.

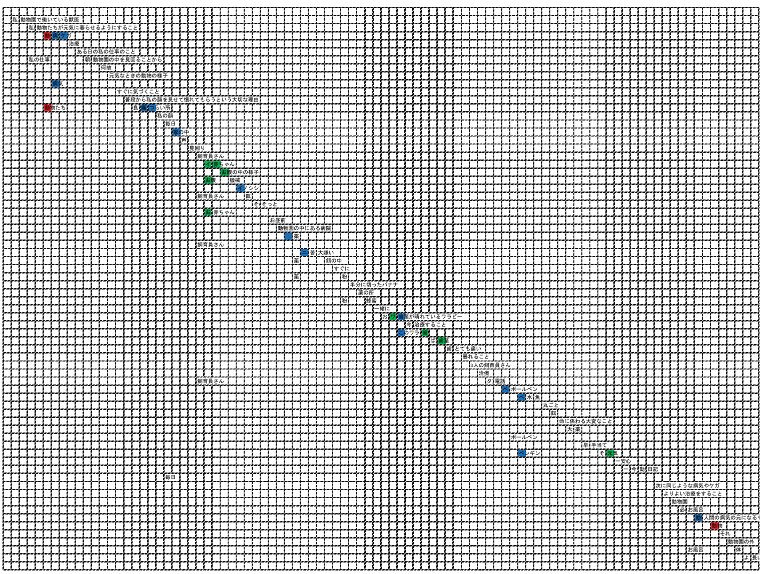

Figure 6.2 – **Zoo's Veterinarian (based on animals)**

The social studies textbooks

Figure 7.1 shows one of the analyses for the third-grade social studies textbooks, titled "The Exploration of the Shrine Course." It should be firstly admitted that each text in the social studies textbooks is much shorter than the Japanese (Kokugo) texts (see also Text 2), but it is not conclusive in Figure 7.1 that the basic taxonomic relations in these social studies texts are repetitions. The group showing the taxonomic relations of repetition the most in this text is '(big) shrine,' but it is realized only three times, and it does not expand taxonomic relations further. In the third-grade social studies texts, in general, groups are rarely assigned in the same column and less associated with part relations and class relations. In most analyzes of the Japanese (Kokugo) texts, on the other hand, part-whole relations can be easily identified through their possessive pronouns in the groups. In the case of "Zoo's Veterinarian," although it demands knowledge about the names of relatively unfamiliar animals for young Japanese students, the upper notion, 'animals,' is realized several times at the beginning of the text. This orientation stage in "Zoo's Veterinarian" makes an adequate foundation to develop readers'/students' expectations to draw the taxonomic relations between 'animals' and its members as the text unfolds. The basic set of taxonomic relations in the social studies texts is clearly different from the one of the Japanese (Kokugo) texts.

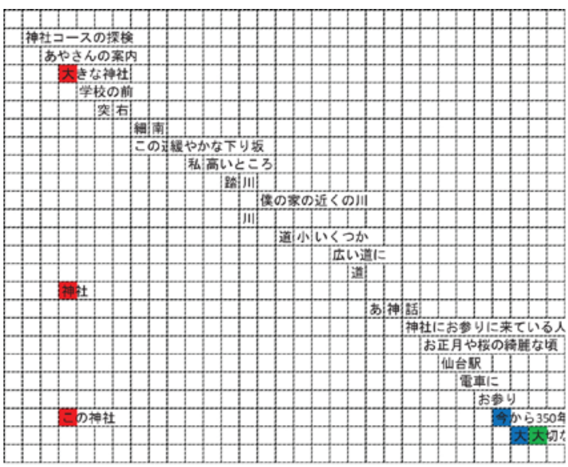

Figure 7.1 – **The Exploration of the Shrine Course (based on a shrine)**

Text 2 – The Exploration of the Shrine Course

神社コースのたんけん

あやさんのあんないで、大きな神社をめざしました。学校の前を通り、つきあたりを右にまがると細い道が南にのびています。「この道はゆるやかな下り坂だね。わたしたちの学校は高いところにあるのかな。」「ふみきりの先に川があるよ。ぼくの家の近くの川と同じかな。」川をこえると、道の両がわには、小さな古い店がいくつかありました。「広い道に出て、道をぐるりとまわると神社が見えてくるよ。」あやさんたちは、神社におまいりに来ている人に話を聞いてみました。

新編 新しい社会 3・4 上 (東京書籍, 2018, pp. 8–9)

The Exploration of the Temple Course

With Aya's guidance, (the students/Aya and her classmates) headed for the big shrine. When (you) pass the front of (their) school and turn right (at) the end of the road, a narrow road extends to the south. "This road is a gentle downhill. I wonder if our school is in a high place." "There is a river ahead of the railroad crossing. I wonder if (it is) the same river as the one near my house." When (they) crossed the river, there were some small old stores on both sides of the street. "When you come out to the big road and turn around (on) the road, you can see the shrine." Aya and her classmates asked a story from the person coming to visit the shrine.

Shinpen Atrashii Shakai 3.4 Jyou (Tokyo Shoseki, 2018b, pp. 8–9)

The arising question here would be whether the first units of social studies textbooks have such taxonomic relations spreading over the whole texts. Figures 7.2 and 7.3, however, indicate that the social studies texts also have a basic set of taxonomic relations (see the groups colored in purple and its subordinating groups colored in brown). In the social studies text, for example, 'the Shrine Course' in the title plays the central role in making taxonomic relations with groups containing the lexical items, such as 'road,' 'school,' and 'river.' One may say that they are in part-whole relations, but their subordinating items can be set in order of the exploration to the destination, 'shrine,' in the text. This means that the taxonomic relations of the social studies texts are more like one of the series relations in Martin and Rose (2007). Although Martin and Rose (2007) are not much concerned about the upper notion of series relations (scales: hot – warm – tepid – cold;

cycles: Sunday – Monday – Tuesday), it is not deniable that these series relations are also based on their upper category like temperature or days of the week.

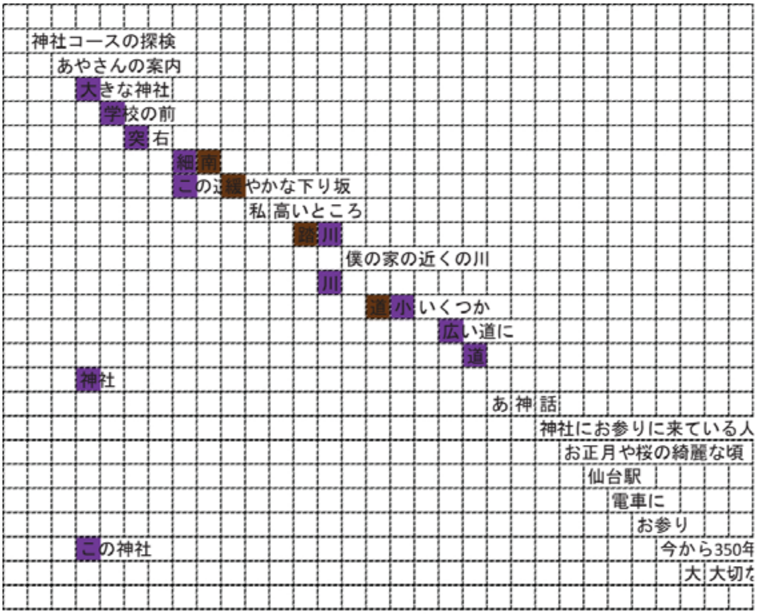

Figure 7.2 – **The Exploration of the Shrine Course (based on the Shrine Course)**

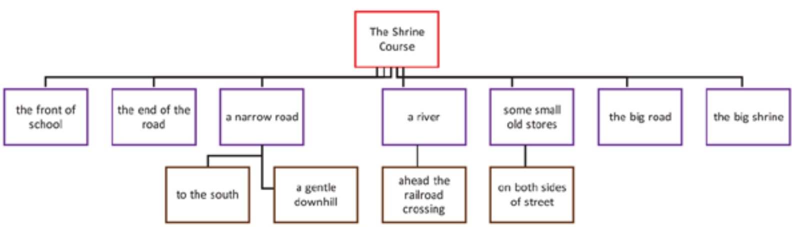

Figure 7.3 – **Taxonomic relations of the Exploration of the Shrine Course**

Finding these taxonomic relations, however, has been through different considerations that have not been necessary for the Japanese (Kokugo) texts. It should be recalled that 'the Shrine Course' is realized as part of a qualifier in the noun group expressed in the form of ideational grammatical metaphor that can be unpacked as 'to explore the Shrine Course.' In the analyzes for the second-grade and third-grade Japanese (Kokugo) texts, it was not necessary to take a closer look at semantic elements within groups, as they do not usually have noun groups with a qualifier meaning realized by a set of a noun and a postposition. The third-grade social studies textbooks, on the other hand, have such noun groups, and their partial meanings oftentimes contribute to maintaining taxonomic relations in the text. Besides, 'the Shrine Course' is realized only once in the whole text, and its taxonomic relations are not clarified by relational process or possessive pronouns. Although most taxonomic relations in the Japanese (Kokugo) texts are accompanied by possessive pronouns signaling its relations to others, the components drawing the series relations in 'the Shrine Course' do not depend on such linguistic resources. In addition, 'the Shrine Course' is a proper noun created for this specific text. Readers need to structure the taxonomic relations of 'the Shrine Course' by expecting that the components will be realized as the text unfolds. Unlike the taxonomic relation between 'animals' and its members, this is not always straightforward since some of the components have a possibility of being included in a different taxonomic relation that could be more familiar to students ('river' – 'nature'; 'shrine' – 'building'). Picturing taxonomic relations in the third-grade social studies textbooks, in other words, needs such investigation of peripheral meanings despite the lower frequency of their realizations in the text, and a more knowledge-based approach for capturing the specific taxonomic relations without relying on a relational process or a possessive pronoun.

Conclusion

This study has illustrated taxonomic relations that are differently spread in the texts adopted for two different subject areas, Japanese (Kokugo) and social studies. Most of the taxonomic relations in the Japanese (Kokugo) textbooks found in the analysis are repetitions and its part-whole relations realized by relational process and possessive pronouns. Some texts require the readers/students to have some knowledge on things to draw their taxonomic relations, but the knowledge is not necessarily challenging for readers/students as it is most likely to be known as everyday knowledge. The first unit of the social studies textbooks, on the other hand, shows that their taxonomic relations are based on series. The series relations consist of the components realized only a few times in the texts, and some of the components are realized below the group level as well. Since the social studies texts do not make a clear foundation on the taxonomic relations in the way that the Japanese (Kokugo) textbooks draw, the readers/third-grade students would need to be informed about the series relations in order to fully grasp the meanings of the texts.

This paper also hopes to broaden the scope of Japanese SFL studies. This attempt has tried to capture the two types of school subjects from the perspective of taxonomic relations. I am sure that other SFL perspectives would detect some possible difficulties for students reading social studies textbooks, but the educational controversy emerging here has been seemingly more concerned with the ideational perspective, and covering the same or a greater volume of theoretical discussions from the SFL perspectives and Japanese social studies education perspectives would not be an ideal in this paper. This paper is also meant to draw the relations between the social studies contents/topics and the authorized textbooks in view of Japanese elementary school teachers and students. By following the discussions by some teachers' textbooks for elementary social studies education (Kimura et al., 2010; Nakanishi & Kobayashi, 2018), it can be said that the first unit of social studies textbooks concerned in this study realizes one of the social studies contents/topics 'the state of affairs in the nearby regions and municipalities' in the form of series relations. Japanese elementary school teachers can enhance students' understanding by paying attention to this relation when they instruct reading exercise. Additionally, they can make use of this relation for their own research of a new region in preparation for teaching that new region.

REFERENCES

Butler, Y. G. (2011). *Gakushu-gengo towa nanika: Kyoka gakushu-ni hituyo-na gengo nouryoku [What is academic language: Language abilities needed for academic studies]*. Tokyo: Sanseido.

Coffin, C. (2006). Historical discourse: The language of time, cause and evaluation, London: Continuum.

Fang, Z., & Schleppegrell, M. (2008). *Reading in secondary content areas: A language-based pedagogy*. Ann Arbor: University of Michigan Press.

Halliday, M. A. K., & Matthiessen, M. I. M. (2014). *Halliday's introduction to functional grammar* (4th ed.). London: Routledge.

Humphrey, S. (2017). *Academic literacies in the middle years: A framework for enhancing teacher knowledge and student achievement*. New York: Routledge.

Ito, H. (2006). Shichouson gappei jidai no shogakkou shakaika chiiki gakusyu to hukudokuhon [What should be of learning for the local study and fukudokuhon (supplementary reader) for 3rd and 4th grade social studies in elementary school under the consolidation of municipalities era]. *The Geographical Reports (Chirigaku Houkoku)*, 102, 1–15.

Jidou Gengo Kenkyukai. (Ed.). (2014a). *Shougaku kokugo bungaku setsumeibun no jugyou: 2 nen [Elementary kokugo classes of literatures and explanations: Year 2*]. Tokyo: Kodomo No Mirai Sha.

Jidou Gengo Kenkyukai. (Ed.). (2014b). *Shougaku kokugo bungaku setsumeibun no jugyou 3 nen [Elementary kokugo classes of literatures and explanations: Year 3*]. Tokyo: Kodomo No Mirai Sha.

Kikkawa, Y. (2007). Shougakkou shakaika kyoukasyo keisai no setsumei teki bunsho wo yomukoto ni hitsuyouna gakusyu naiyou [Learning contents needed for the reading of explanation texts contained in Japanese elementary social studies textbooks]. *Kokugokakyouiku, 62,* 27–34.

Kimura, H., Kato, T., & Nagata, T. (Eds.). (2010). *Shogakkou shakaika kyouiku [Elementary social studies education]*. Tokyo: Gakujutsu Tosho Shuppan.

Kurita, C. (2011). Jittai chousa kara miru syougakkou shakaika jugyou no jittai [Current scenario of social studies classes in elementary schools as seen from actual classroom studies]. *The Research for Social Studies Education, 22,* 15–22.

Kyoiku Shuppan. (2018a). *Hirogaru kotoba: Shogaku kokugo 3 jyo [Spreading language: Elementary Japanese 3 Volume 1]*. Tokyo: Kyoiku Shuppan.

Kyoiku Shuppan. (2018b). *Shogaku shakai 3.4 jyou [Elementary social studies 3.4 Volume 1]*. Tokyo Kyoiku Shuppan.

Martin, J. R. (1992). *English text: System and structure*. Amsterdam: John Benjamins.

Martin, J. R., & Rose, D. (2007). *Working with discourse: Meaning beyond the clause* (2nd ed.). London: Continuum.

Martin, J. R. and Veel, R. (Eds.). (1998). *Reading science: Critical and functional perspectives on discourses of science*. London: Routledge.

Ministry of Education, Culture, Sports, Science and Technology. (2017a). *Shougakkou gakusyu shidou youryou [The elementary school national curriculum standard]*. Tokyo: Toyokan Shuppansya.

Ministry of Education, Culture, Sports, Science and Technology. (2017b). *Shougakkou gakusyu shidou youryou kaisetsu: Kokugo hen [The commentary on elementary school national curriculum standard: Japanese]*. Tokyo: Toyokan Shuppansya.

Ministry of Education, Culture, Sports, Science and Technology. (2017c). *Shougakkou gakusyu shidou youryou kaisetsu: Seikatsu hen [The commentary on elementary school national curriculum standard: Living Environment Studies]*. Tokyo: Toyokan Shuppansya.

Ministry of Education, Culture, Sports, Science and Technology. (2017d). *Shougakkou Gakusyu Shidou Youryou Kaisetsu: Shakai Hen [The commentary on elementary school national curriculum standard: Social Studies]*. Tokyo: Toyokan Shuppansya.

Mitsumura Tosho. (2018a). *Kokugo 2 ge [Japanese 2 Volume 2]*. Tokyo: Mitsumura Tosho.

Mitsumura Tosho. (2018b). *Kokugo 2 jyou [Japanese 2 Volume 1]*. Tokyo: Mitsumura Tosho.

Mitsumura Tosho. (2018c). *Kokugo 3 ge [Japanese 3 Volume 2]*. Tokyo: Mitsumura Tosho.

Mitsumura Tosho. (2018d). *Shakai 3.4 jyou [Social studies 3.4 Volume 1].* Tokyo: Mitsumura Shuppan.

Nakanishi, H., & Kobayashi, T. (Eds.). (2018). *Atarashii kyoushoku kyouiku kouza: Kyouka kyouiku hen 2 shotou shakai ka kyouiku [New teacher education course: Subject pedagogy series 2 elementary social studies education].* Kyoto: Mineruva-Shobou.

Nihon Bunkyo Shuppan. (2018). *Shogaku shakai 3.4 jyou [Elementary social studies 3·4 Volume 1].* Osaka: Nihon Bunkyo Shuppan.

Nishitani, M. (2000). Shougakko no shakaika kyoukasyo no goi to hyougen: Nihongo nouryoku shaken reberu oyobi gaikokujin kyouiku notameno nihongo kyoukasyo to taisyou [The vocabulary and expressions of elementary level social studies textbooks: Contrast with Japanese ability test level and Japanese textbook for foreign children]. *Center for Student Exchange Journal*, *3*, 79–93.

Rose, D., & Martin, J. R. (2012). *Learning to write, reading to learn: Genre, knowledge and pedagogy in the Sydney school*. Sheffieled, UK: Equinox.

Schleppegrell, M. (2004). *The language of schooling: A functional linguistics perspective*. Mahwah, NJ: Erlbaum.

Shimura, T., Ibaraki, S., Yamamoto, K., & Ohsaki, K. (2014). Shakaika jugyou jissen to kyoushi no shakaika senmonsei no jittai bunseki kenkyu: Niigata ken Jouetsu chihou karano chiken [An analytical study of social studies lesson practices and expertise of social studies teachers: Findings from research at Joetsu in Niigata, Japan]. *Joetsu Social Studies, 29,* 31–40.

Silkstone, B. (1994). *Australian reptiles: Lizards*. Sydney: Longman Cheshire.

Tanahashi, N. (2015). Kopas ni motodtuku kanji kyouiku no kaikaku [A reform of kanji education based on corpora]. In M. Tanaka (Ed.), *Koza Nihongo Corpus: Japanese corpus course: Corpus to kokugo kyoiku [Corpus and the Japanese education]*. Tokyo: Asakura Shoten.

Tanaka, M. (2015). Kokugo kyoiku no kiban toshiteno corpus: Goi no shiten kara [Corpus as the basis of Japanese education: From the lexical perspective. In M. Tanaka (Ed.), *Koza Nihongo Corpus: Japanese corpus course: Corpus to kokugo kyoiku [Corpus and the Japanese education]*. Tokyo: Asakura Shoten.

Tatsuki, M. (2004). Communicative unit niyoru theme bunseki: The Kyoto grammar no wakugumi de [Theme analysis by communicative unit: In the framework of the Kyoto grammar]. *Doshisha Studies in English, 76,* 1–20.

Teruya, K. (2007). *A systemic functional linguistics of Japanese*. London: Continuum.

Tokyo Shoseki. (2018a). *Shinpen atarashii kokugo 2 ge [The new edition of new Japanese 2 Volume 2]*. Tokyo: Tokyo Shoseki.

Tokyo Shoseki. (2018b). *Shinpen atrashii shakai 3.4 jyou [The new edition of new social studies 34 Volume 1].* Tokyo: Tokyo Shoseki.

A CROSS-DISCIPLINARY ANALYSIS OF CIRCUMSTANCES IN ENGLISH AND ARABIC ACADEMIC ARTICLE ABSTRACTS

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ABSTRACT

At the heart of Systemic Functional Linguistics lies the notion of context (Halliday & Matthiessen, 2014, p. 3), ranging from the context of culture to the context of situation (Matthiessen, Teruya, & Lam, 2010, p. 77), the analysis of both of which provides "a socially informed theory of language and an authoritative pedagogy grounded in research on texts and contexts" (Hyland, 2002, p. 113). Taking as its context the abstract genre, this study investigates the lexicogrammatical choices of circumstances in academic article abstracts across four disciplines, namely Mathematics, Agriculture, Economics and Philosophy, in two languages, i.e., Arabic and English, in order to explore the extent to which these choices are affected by contextual factors and/or by the relative language typology. To this end, circumstances are analyzed in a corpus of 120 abstracts written by native speakers of each language. The register-based analysis shows that the lexicogrammatical choices of circumstances are determined by disciplinary conventions and that registers occupying the center of the hard-soft classification tend to display more similar choices to those in the extreme than to each other, yet the contrastive analysis does not reveal important variation in preference for Arabic or English.

KEYWORDS

Circumstances, disciplinary variation, language typology

1 – Introduction

Studies of language variation have informed research into English for Academic Purposes, as they provide a better understanding of how language is used in context. That is, they give insight into how research communities function in different genres and registers through analyzing their lexicogrammatical choices. The description of how these choices are mapped with contextual factors has been at the heart of Systemic Functional Linguistics (henceforth SFL) where the interaction between these two strata, i.e., context and lexicogrammar, has been investigated for various linguistic features including causation (Sellami-Baklouti, 2019), and processes (Choura, 2017), yet the literature lacks a register-based analysis of circumstances, which explains why this research aims to study whether the lexicogrammar of circumstances is determined by registerial specificities across the hard/soft domains of knowledge.

Although previous research (Hyland, 2004; Hyland & Bondi, 2006) has attempted to draw the boundaries of the hard and soft domains of knowledge through specifying the recurrent features of each, it has not really focused on whether disciplines of different domains of knowledge occupying the center of the hard-soft cline are more similar to each other than to those in the extremes or not. This chapter aims to answer this question through analyzing circumstances across Mathematics, Agriculture, Economics and Philosophy, and to explore whether their lexicogrammatical choices are determined only by disciplinary specificities or also by the typology of Arabic and English.

In the following section, the interrelation between contextual, semantic and lexicogrammatical choices is described, with a special emphasis on genres and registers. Section 3 reviews circumstances from a systemic functional perspective. Section 4 presents the corpus and the methodology adopted in this research. Section 5 and Section 6 display the findings in relation to disciplinary specificities and language typology. The chapter concludes with section 7 which summarizes the major findings while highlighting the contribution of the study.

2 – Context

SFL studies the meaning potential of language in context (Caffarel-Cayron, 2015, p. 345), with texts seen as instances of language use in context (Halliday & Matthiessen, 2014, p.3) in which individuals construe meaning through making lexicogrammatical choices from the linguistic system. Thus, text types represent the ways by which speakers/writers use language in a variety of contexts (Halliday & Matthiessen, 2014, p. 29) ranging from the potential pole, i.e. context of culture, to the instance pole, i.e., context of situation (Matthiessen, Teruya, & Lam, 2010, p. 77). That is, the relation between text and system is expressed as a cline of instantiation extending from the potential, i.e., system, to the instance, i.e., text, with "intermediate patterns" referred to as subpotential (Halliday & Matthiessen, 2014, p. 28).

Genre has been defined differently in SFL, with Halliday (1978, p. 145) equating it with mode, Hasan (2009, p. 229) defining it as a type of discourse, Martin (1984, p. 25) arguing that it is "a staged, goal-oriented, purposeful activity" and Matthiessen (2013, p. 445) and Mwinlaaru (2017, p. 5) classifying it as text type. Drawing on Mwinlaaru's view (2017, p. 6), genre can be considered as "a more particular, regularized social activity (or situation type) of an institution", and can thus be situated as an instance type along the cline of instantiation (Mwinlaaru, 2017, p. 5). Building on this instance type, this study argues that choices of circumstances are activated by the socio-cultural conventions of the abstract genre considered to be "a knowledge-making goal and research strategy" (Tessuto, 2013, p. 6) representing a real "surrogate" of the article (Niu, 2013, p. 603), on the basis of which readers decide on the quality and relevance of the paper (Busà, 2005, p. 31).

As for register, it is defined "as the local resetting of the global probabilities of the system" (Halliday, 1997, p. 10) involving three variables, namely field, tenor and mode (Halliday, 1985, p. 38). Thus, along the cline of instantiation, register is situated between the meaning potential expressed as a system in the context of culture and the meaning instance realized as a text in the context of situation (Matthiessen, 2015, pp. 1–2) and it can therefore be considered as a subpotential (Mwinlaaru, 2017, p. 5).

Register analysis is useful for exploring different disciplinary contexts (Gardner, 2012, p. 52) because each discipline has its discursive practices (Hyland, 2004, p. 4). Disciplines are classified into the soft versus hard domains of knowledge (Hyland, 2004); while the knowledge system in the hard domain is concerned with the laws of nature investigating "the physical form, structure, nature and laws of motion of nature", in the soft domain it is related to "social laws, human behavior, and the laws of human psychology and thinking" (Jin, 2011, p. 156). These differences are reflected in the argumentative strategies, patterns and vocabulary of the hard and soft domains (Hyland & Bondi, 2006, p. 50), each of which is organized around a set of disciplines displaying various degrees of closeness with respect to the other domain. In fact, along the hard/soft cline, "[t]he natural scientists are the hardest of the scientists, then come technical scientists …. Among the soft scientists, …the social scientists are closer to the hard scientists, and the arts and humanities …take the most extreme position" (Hemlin, 2009, p. 190). However, this classification is not without criticism, given that it does not account for transdisciplinarity, making it difficult to classify disciplines as either hard or soft, nor does it consider the interdisciplinary nature of knowledge (Fortanet-Gomez, 2013, p. 139).

In order to check whether the hard/soft distinction as well as the different degrees of hardness and softness determines writers' choices of circumstances, the study takes as its context abstracts from four disciplines, with Philosophy being softer than Economics and Mathematics harder than Agriculture. The impact of context on choices, as Matthiessen (2018, p. 103) argues, holds even in different multilingual corpora. To explore whether variation comes from contextual factors, the typology of different languages or both of them, this study will also investigate the choices of circumstances in Arabic and English, two typologically unrelated languages.

3 – Circumstances in SFL

SFL studies how language construes meaning in context (Webster, 2019, p. 35). To express meaning, the language user goes through a series of choices from the lexicogrammar, which "is diversified into a metafunctional spectrum, extended in delicacy from grammar to lexis" (Halliday & Matthiessen, 2014, p. 55). At the level of the lexicogrammar, the clause is considered as the most important unit, as it represents "an integrated grammatical structure" into which meanings are mapped (Halliday & Matthiessen, 2014, p. 10). In the experiential line of meaning, the clause, as a medium for human beings to construe their experience of the world, consists of the process enacting a change in the world, participants involved in the experience, and circumstances describing the experience. While processes and participants have a prominent role in clause structure, circumstances lie in the periphery since they "are not directly involved in the process; rather they are attendant on it" (Halliday & Matthiessen, 2014, p. 213), which explains why they are optional elements which increase the organizational structure of the clause in order to describe the situation as the process unfolds. To better understand the role of circumstances in clause structure, two examples are provided:

1a – In 1554, Elizabeth was confined in the Tower by order of Queen Mary.
(Thompson, 2014, p. 281)

1b – قتل خالد بكرا البارحة في الشارع.

Khaled killed Bakr last night in the street.
(Almotawakil, 1995, p. 66)

As shown in (1), circumstances are optional clausal additions used to make the clause more informative through giving details about the process.

Circumstances are classified into four major categories, i.e., enhancing, extending, elaborating and projection, each of which includes other subcategories (See Table 1). Enhancing circumstances describe the extent, location, manner, cause and contingency of the situation encoded by the process (Halliday & Matthiessen, 2014, p. 314), but extending ones include "an element that stands in an extending relation to one of the participants in relation to its participation in the process" (Halliday & Matthiessen, 2014, p. 324). While elaborating circumstances present participants circumstantially through describing their role, projection ones are associated with mental and verbal clauses (Halliday & Matthiessen, 2014, pp. 325–327).

Table 1 – **Types of circumstances** (Adapted from Halliday & Matthiessen, 2014, pp. 313–314)

Categories			Examples
Enhancing	Extent	Distance	For three miles
		Duration	For five hours
		Frequency	Three times
	Location	place	At school
		time	During the meeting
	Manner	means	By means of a microscope
		quality	Reasonably
		comparison	Unlike the former
		degree	Greatly
	Cause	reason	Due to the lack of human resources
		purpose	For the purpose of getting more funds
		behalf	On behalf of the organizing committee
	contingency	condition	In case of emergency
		default	In default of agreement
		concession	Despite severe losses
Extending	accompaniment	comitative	Without his friend
		additive	Instead of Mary
Elaborating	Role	guise	By way of protest
		product	Into a frog
Projection	Matter		Concerning the new project
	Angle	source	According to Mary
		viewpoint	In the opinion of the lawyer

4 – The corpus

A corpus of 120 Arabic and English research article abstracts (henceforth RAAs) totaling 17,701 words (Table 2) and representing four disciplines, i.e., Philosophy, Economics, Agriculture and Mathematics, is sampled from online journals; only untranslated abstracts published in 2017 and 2018 and written by native speakers are extracted, following Wood's criteria (2001). That is, an abstract is chosen if the first author has an English or Arabic name and if s/he is based at universities in English or Arabic speaking countries.

Table 2 – **Corpus description**

	Arabic	English	Total
Mathematics	1639	1535	3174
Agriculture	2722	4100	6822
Economics	1807	1754	3561
Philosophy	1827	2317	4144
Total	7995	9706	17701

The corpus is annotated for circumstances, following the system network in Figure 1, and the sub-corpora are classified according to the layers discipline and language, using the UAM CorpusTool (Version 3.2), which generates frequencies from the sub-corpora. Given that the latter are not equalized, the frequencies are normalized at 1,000 words and are then tested for significance using Fisher's exact test together with Cramer's V when 20% of the expected cell frequencies are less than 5 and when the contingency table includes an expected value below 1. These statistical tests are calculated via the R program (Version 3.6.3).

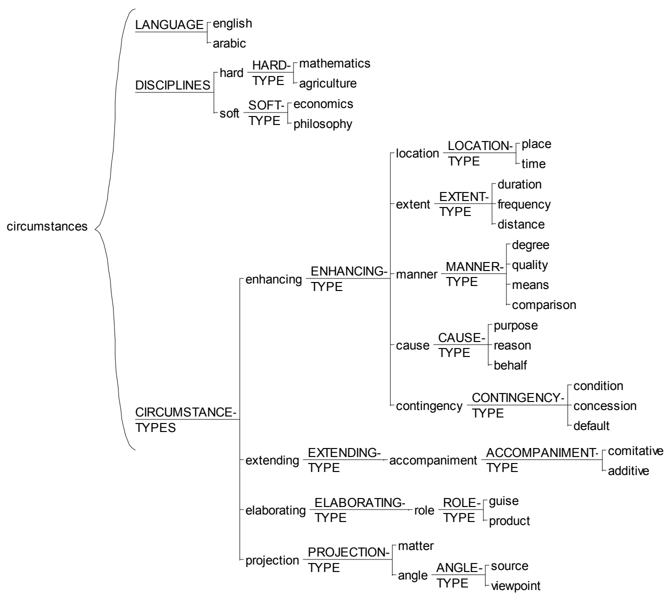

Figure 1 – **Coding scheme**

As shown in Figure 1, in construing the message, academic writers go through different moments of choices from the system of circumstances. The latter are studied, following a register-based approach in order to investigate their variation across disciplines and a contrastive approach so as to explore whether the two languages have similar or different circumstantial choices.

5 – Analysis

A total of 1,281 circumstances are identified and then classified, following the coding scheme in Figure 1, into circumstance types, each of which is illustrated with examples from both the English and Arabic sub-corpora (Table 3).

The normalized frequencies of these circumstance types are calculated and their distribution is interpreted in relation to registerial variation and language typology in what follows.

Table 3 – **Examples of circumstance types from the corpus**

Circumstance types			Examples
Enhancing	Location	Place	(2) to capture the elements of a rice-based production system in northern Thailand.
		Time	(3) حيث صدر أول تقرير يخص عملية التقييم سنة 2017. as the first evaluation report was issued in 2017.
	Manner	Means	(4) لتغطية خطوط الزراعة بشرائح البولي إيثيلين. to cover the agriculture lines by polyethylene strands
		Quality	(5) More precisely, let $P_{q,n}$ be the space of polynomials over F_q.
		Degree	(6) لاستغلالها إلى أقصى حد. to exploit it to a great extent (7) It is widely accepted that the importance of Friedman's Presidential Address to the American Economic Association lies in its criticism of policy based on the Philips curve.
		Comparison	(8) Like Huemer, I will focus on the philosophy of mind.
	Extent	Duration	(9) هذا التخمين ما يزال مفتوحاً حتى الآن. That guess is still open till now.
		Distance	(10) Along the way, I touch on the following topics.
		Frequency	(11) وتم تطبيق الرش بالميثانول25% أربع مرات . The spray with methanol 25% was applied four times.
	Cause	Purpose	(12) The diets formulated for environmental impact objectives
		Reason	(13) تشهد البيئة التّنافسيّة اليوم تحوّلات سريعة ...، بسبب تعدّد وتنوّع المعروض السّلعي. Today's competitive environment is undergoing rapid transformations ... , because of the multiplicity and diversity of commodity exhibits.
		Behalf	(14) of being structurally protected against arbitrary interference with one's life.
	Contingency	Condition	(15) which can then become a cause for concern in terms of enrichment of water bodies in the event of an erosion.
		Concession	(16) أهمّها حداثة سوق قرض الإيجار في الجزائر والفرص الكبيرة المتاحة أمامه رغم المشاكل التي تواجهه the most important of which were the modernity of the rental loan market in Algeria and the considerable opportunities available to it despite the problems it faced.
Extending		Comitative	(17) developed with industry practitioners. (18) We find substantial consistency in locations …, with results suggesting that climate change alone will lead to a contraction…
		Additive	(19) بيّنت نتائج الاختبارات وجود علاقة توازنيّة طويلة الأجل ... إلى جانب وجود عدم تماثل The results of the tests showed the existence of a long-term equilibrium relationship as well as the presence of an asymmetry
Elaborating		Guise	(20) Hourly averaging is then presented as a new candidate policy.
		Product	(21) ترقية صندوق الزكاة إلى مؤسسة زكوية حقيقية. Upgrading the zakat fund into a real zakat institution
Projection	Matter		(22) لذا تساءلنا عن الأرضية النظرية. So we asked about the theoretical ground.
	Angle	Source	(23) According to what I call the 'Vagueness Thesis' ('VT') about belief, 'believes' is a vague predicate.

6 – Findings

When it comes to the first moment of choice – being between enhancing, extending, elaborating and projection circumstances, enhancing circumstances are the most frequent (63.32), which may be attributed to the fact that they describe how, when, where, why, how much, how far, how long and how many times processes unfold during the experiment (2–16 in Table 3). Though grammatically optional, they add to the scientific rigor of the research, as they are informative of the necessary details for the experiment to be understood by practitioners and, as such, they enable writers to meet the requirements of abstracts considered "as stand-alone mini-texts" (Huckin, 2006, p. 93). The fact that enhancing circumstances express a variety of meanings, i.e., location, extent, manner, cause and contingency, may also explain their highest frequency in all the registers (See Table 4).

Compared with enhancing circumstances, the three other types are by far very low. As for elaborating circumstances (4.74), they present researchers' role construed as a circumstance (20–21 in Table 3), and allow writers to highlight their contribution through displaying previous or current findings, thus observing two communicative functions of the abstract genre, i.e., establishing a territory and occupying a niche (Swales, 1990), the second of which is also expressed by extending circumstances (2.71). The latter increase clausal configuration either to express joint participation where researchers involve others in the research process (17 in Table 3) or present a finding in an extending relation to another through prepositional marking in a clause simplex (18–19 in Table 3). The infrequency of both circumstance types may be accounted for by the standards set by gatekeepers in the abstract genre where writers "[attempt] to create suspense" (Choura, 2017, p. 103) rather than extensively display all relations, since abstracts function just "as previews, creating an interpretive frame that can guide reading" (Huckin, 2006, p. 93).

Being the least frequent (1.58), projection circumstances either report other studies in the literature and thus they do not allow writers enough space to display their findings and interpretations (23–24 in Table 3), or just direct readers' attention to the topic of discussion without enabling writers to display their findings (22 in Table 3). Accordingly, whether they project other researchers' voices or theirs into the text, these circumstances are in-frequent, for they do not allow researchers to highlight their contribution in the abstracts under study seen as "screening devices" (Huckin, 2006, p. 93) by which researchers get the assent of the corresponding community.

Table 4 – **Relative frequencies of circumstances per thousand words across disciplines**

	Hard Sciences			Soft Sciences			RAAs
	Mathematics	Agriculture	Average	Economics	Philosophy	Average	
Enhancing	63.64	66.98	65.31	62.62	57.67	60.14	63.32
Extending	2.2	2.63	2.41	3.08	2.89	2.98	2.71
Elaborating	4.09	3.37	3.73	4.49	7.72	6.1	4.74
Projection	0.94	0.43	0.68	1.4	5.55	3.47	1.58

A closer look at the four sub-corpora reveals that circumstances are not equally distributed (Table 4), a difference confirmed by Fisher's exact test which, applied to the four categories together, shows that there are significant differences in the use of circumstances across Mathematics, Agriculture, Economics and Philosophy ($p<0.05$, simulated p-value = 9.999e-05, based on 1000 replicates, two-tailed Fisher's exact test, Cramer's $V = 0.129$), which implies that the lexicogrammatical choices of circumstances are determined by disciplinary specificities.

There are striking differences between the four disciplines when it comes to projection circumstances, with Mathematics (0.94) having a frequency twice that of Agriculture (0.43) and Philosophy (5.55) nearly four times higher than that of Economics (1.4). Their remarkable number in Philosophy indicates that writers opt more for a heteroglossic discourse in order to construct knowledge (23–24 in Table 3), given that this discipline provides "a view of the world encompassing the questions and mechanics for finding answers that inform that view" (Birks, 2014, p. 18). As such, the subject of inquiry dictates the choice of projection circumstances used to present discussions, the results of which are not cumulative (Wang, 2016, p. 375). Although Economics is both progressive and cumulative (Klaes, 2003, p. 39), it has a higher frequency of projection circumstances than Agriculture and Mathematics, which reveals that writers, despite displaying numerical data, lend themselves to argumentation (Dahil, 2010, p. 77) and persuasion in the process of knowledge construction (See 6.4), given that their research field "account[s] for human behavior rather than laws of nature" (Dahil, 2010, p. 77). Compared with these two disciplines, Agriculture has the lowest frequency, which may be attributed to its interest in applying rather than discussing or reporting existing knowledge (Karhana, 2020, p. 2). Quite surprisingly, Mathematics, a discipline related to "the study of numbers, and hence is quantity-oriented" (Tonn, 2009, p. 187), includes more projection circumstances than Agriculture, a difference showing that mathematicians use these circumstances to situate their claims in the appropriate context (See 6.4) so as to reach the adequate level of precision required by their community.

When it comes to elaborating circumstances, Philosophy also operates differently, as it has a higher rate (7.72) than the other disciplines, reflecting that writers choose to construe a participant as a circumstance in order to highlight its role (20–21 in Table 3). Assigning one particular role over another reveals writers' convictions and bears traces of their personal projection in the text, an engagement strategy attributed to the fact that knowledge is constructed in Philosophy through argumentation built on "sequential logical developments of premises" (Watson, 1992, p. 4).

Concerning extending circumstances, there is a slight difference in their distribution across disciplines, with the highest frequency in Economics (3.08). Realized as clausal extensions rather than combination (Matthiessen & Thompson, 1988, p. 303) where the extended message is construed as a prepositional phrase and thus becomes foregrounded (16–18 in Table 3), these circumstances reveal how writers act on the readership through shaping the way they process the message. Enclosing researchers' findings, these extensions highlight their contribution, reflecting their attempts to appeal to the readership and garner support, which better serves the interests of writers in Economics as the latter engage in "an increasingly competitive research environment" (Dahil, 2010, p. 77) where they interact with different parties, each of which tends to be more persuasive than the others.

Taken together, enhancing circumstances are the most frequent in the four disciplines, yet variation across registers is noticeable at greater levels of delicacy, as is explained in the following subsection.

6.1 – Enhancing circumstances across disciplines

Across registers, writers make different choices from the available set of enhancing circumstances, namely location, extent, manner, cause and contingency, so as to meet disciplinary requirements.

As is shown in Table 5, location circumstances dominate the four sub-corpora, with a higher occurrence of place over time circumstances, both of which "[construe] the location of the unfolding of the process in space-time" (Halliday & Matthiessen, 2014, p. 316), yet while place circumstances locate researchers' actions in space (2 in Table 3), time circumstances situate them in their temporal context (3 in Table 3). Thus, the locative function – whether temporal or spatial – introduces the setting of the experiment, which delineates the scope of the study and positions it within the existing body of research. Accordingly, location circumstances allow writers to observe the conventions of the abstract genre through both establishing a territory and occupying the niche (Swales, 1990, p.181). A possible explanation for the high frequency of place circumstances can be found in how knowledge is constructed in scientific research where findings are interpreted in light of the spatial context without which the research cannot be replicable. Across disciplines, Mathematics (30.24) includes the highest number of place circumstances, and Philosophy (4.82) the most frequent time circumstances. These differences come as no surprise, since philosophical writers retrace previous paths of research, each time from a different perspective and with new interpretations (Wang, 2016, p. 375). Because each topic is investigated anew, time circumstances prove useful for anchoring their claims in their temporal context. However, mathematicians specify more the spatial context of their claims in order to provide an accurate account of the experiment and findings while observing "the exactness and precision of mathematical language and methods" (Kumar, 2002, p. 249) so as to make their research replicable.

Table 5 – **Relative frequencies of enhancing circumstances per thousand words**

	Hard Sciences			Soft Sciences			RAAs
	Mathematics	Agriculture	Average	Economics	Philosophy	Average	
Location	33.39	31.95	32.67	30.89	31.12	31.00	31.8
Place	30.24	28.14	29.19	28.64	26.30	27.47	28.19
Time	3.15	3.81	3.48	2.24	4.82	3.53	3.61
Manner	19.84	23.45	21.64	19.65	17.13	18.39	20.56
Degree	1.26	2.93	2.09	3.08	1.20	2.14	2.25
Quality	6.93	11.87	9.4	7.30	10.37	8.83	9.71
Means	11.34	8.06	9.7	8.70	4.82	6.76	8.02
Comparison	0.31	0.58	0.44	0.56	0.72	0.64	0.56
Extent	1.57	5.13	3.35	5.89	4.34	5.11	4.46
Duration	0.31	3.66	1.98	4.49	2.65	3.57	2.99
Frequency	0.94	1.17	1.05	0.56	0.72	0.64	0.90
Distance	0.31	0.29	0.3	0.84	0.96	0.9	0.56
Cause	3.15	3.22	3.18	3.65	2.89	3.27	3.22
Purpose	2.83	2.19	2.51	1.68	1.44	1.56	2.03
Reason	0.31	0.58	0.44	1.96	0.96	1.46	0.9
behalf	00.00	0.43	0.21	00.00	0.48	0.24	0.28
Contingency	5.67	3.22	4.44	2.52	2.17	2.34	3.27
Condition	5.67	2.63	4.15	1.40	1.68	1.54	2.71
Concession	00.00	0.58	0.29	1.12	0.48	0.8	0.56
Default	00.00	00.00	00.00	00.00	00.00	00.00	00.00

Table 5 shows that manner circumstances are not equally distributed across registers, with Mathematics having the highest frequency of means circumstances (11.34) which introduce the instrument used to carry out the research (4 in Table 3) and thus allow writers to accurately explain the experiment, an explanatory function serving Mathematics, a discipline characterized by a higher level of methodological rigor (Brown, 2005, p. ix). Unlike means circumstances, quality ones have close frequencies in Agriculture (11.87) and Philosophy (10.37), a finding which questions the hard/soft distinction (Hyland, 2004). They have an interpersonal function, as they reflect writers' judgment about the situation and serve as cohesive devices when they, for example, link a clause to a previous one through "comparative reference" (Halliday & Matthiessen, 2014, p. 319) (5 in Table 3). Their high frequency in Philosophy reveals writers' intent to get engaged through projecting their values in the text, given that this discipline is "an attempt to provide for oneself an outlook on life based on the discovery of broad, fundamental principle" (Stewart, Blocker, & Petrik, 2010, p. 1). However, quite surprisingly, these circumstances are more frequent in Agriculture (11.87) than Philosophy (10.37), which is inconsistent with Hyland's claim (2017, p. 10) that "authors in the hard sciences generally downplay their personal role to establish … objectivity." The highest frequency of quality circumstances in Agriculture reflects imprecision, resulting from the incertitude and ambiguity characterizing natural systems and from the fact "many agricultural decision-making activities are often vague or based on intuition" (Passam, Tocatlidou, Mahaman, & Sideridis, 2003, p. 727), urging writers to use these circumstances to hedge their claims and to appeal to the readers.

Agriculture (2.93) also shares with Economics (3.08) the highest rate of degree circumstances which indicate "the extent of the actualization of the process" (Halliday & Matthiessen, 2014, p. 320), based upon the writers' evaluations of the situation (6 in Table 3). Accordingly, these circumstances are useful to postulate the possible future implications of the research, building on the study findings, in Agriculture and Economics, two applied disciplines (Biglan, 1973), "the function of [which] is to produce design representation to achieve pragmatic ends, e.g., solving practical problems, increasing utility, improving quality, etc." (Yaghmaie, 2017, p. 134). These circumstances can also be seen as an engagement strategy where the literature review is construed as a common belief rather than a fact (7 in Table 3), revealing traces of personal engagement in the text. Concerning comparison circumstances which are "like a participant …with the same kind of process" (Halliday & Matthiessen, 2014, p. 319), they enable writers to refer to other scholars and to situate their works in the relevant literature (8 in Table 3). They have their highest frequency in Philosophy (0.72), where knowledge is constructed out of "philosophical discussions" characterized by "repetitions and refutations" (Wang, 2016, p. 375) and thus comparison circumstances are useful for siding with one party instead of the other during these verbal arguments.

Across registers, the subcategories of extent circumstances also display variation (Table 5), with duration ones having their highest frequency in Economics (4.49), but their lowest one in Mathematics (0.31), a finding related to the generalizability of findings in each register. In fact, duration circumstances indicate the time span during which the process unfolds (9 in

Table 3); except for four instances, all the others are indefinite and therefore they present context dependent messages, which better serves the interests of writers in Economics who are aware that the social context in which they operate is open to changes over time (Lukka & Kasanen, 1995, p. 85). This awareness of the limited generalizability of their claims justifies the frequency of duration circumstances in Economics compared with Mathematics, the findings of which are context independent, as they are "generalizable geometric properties and mathematical patterns" (Campbell, 1999, p. 106) valid to all times. With regard to frequency circumstances, they are more frequent in Agriculture (1.17) and Mathematics (0.94) and the opposite is true for distance circumstances representing 0.96 in Philosophy and 0.84 in Economics, thus confirming that these choices are determined by the nature of the hard/soft distinction. Compared with distance circumstances which indicate how the process unfolds in space (10 in Table 3), frequency ones identify the number of times the procedure is repeated (11 in Table 3) and thus they construe clearer and more precise messages, which explains why they are more present in the hard sciences characterized by "precise measurement and systematic scrutiny of relationships between a limited number of controlled variables" (Hyland 1998, p. 448). However, distance circumstances, all of which are indefinite in Economics and Philosophy, lack precision, given that the soft sciences cannot reach the same level of methodological rigor as do the hard ones (Hyland, 1998, p. 488). Furthermore, 5 out of the 7 distance circumstances situate researchers in space (10 in Table 3) and hence they have an interpersonal function through which writers create a story-like discourse so as to engage the readership.

At greater levels of delicacy, the choices of cause circumstances vary across the four registers, with purpose circumstances being the most frequent in Mathematics (2.83). Given that purpose circumstances introduce researchers' objectives (12 in Table 3) and thus highlight the importance of the study, their highest frequency in this register can be seen as an engagement strategy meant "to explicitly create a sense of solidarity between the reader and the writer" (McGrath & Kuteeva, 2012, p. 171). This strategy, characteristic of the soft disciplines "prefer[ing] active participation to detached observation" (Ibarra, 2001, p. 175), is unexpectedly found in Mathematics, a hard discipline, and thus it refutes the assumption that this science is detached. As for reason circumstances, they are highest in Economics

(1.96); considering that they provide researchers' explanations (13 in Table 3), their remarkable number may be related to the fact that writers employ them to justify their actions, as they seek to make their claims more valid, thus reflecting writers' awareness of the difficulty of reaching higher levels of accuracy and validity (Kenessey, 1997, p. 132) due to the unreliability (Gonzalez, 2015, p. 1) and inexactness (Hausman, 1992, p. 205) of their methods. Both Economics (1.96) and Philosophy (0.96) have a higher number of reason circumstances compared with the other disciplines, revealing writers' need to explicitly encode reason in the soft sciences since "variables are… more varied and causal connections more tenuous" (Hyland, 1998, p. 448). As for behalf circumstances, they are only present in Agriculture and Philosophy with very low frequencies, i.e., 0.43 and 0.48 respectively, which may be related to the fact that all the instances in the present corpus construe entities against which "action is undertaken" (Halliday & Matthiessen, 2014, p. 322) (14 in Table 3). This process of negative positioning, while uncovering researchers' involvement, does not serve the purposes of abstract writers who invest more in reporting major findings (Swales, 1990, p.179) through displaying relations between variables.

When it comes to contingency circumstances, all the registers have a higher occurrence of condition over concession circumstances due to the fact that the former provide the state of affairs necessary "for the process to be actualized" (Halliday & Matthiessen, 2014, p. 323) and make the relationship between variables explicit (15 in Table 3). Condition circumstances have a remarkable number in Mathematics (5.67), given that this discipline relies on "establishing certain conditions for promoting mathematical reasoning" (Francisco & Maher, 2005, p. 371) in problem solving, followed by Agriculture (2.63), and hence they allow writers in the hard disciplines to be explicit in encoding relations between variables, a finding confirmed by Choura (2019, p. 327). Concerning concession circumstances which construe a negative situation opposed to the proposition encoded by the process (16 in Table 3), and thus enable writers to acknowledge the limitations of their research and hedge their claims, they are highest in Economics (1.12), which may be explained by the complexity of the subject of inquiry where different explanations may arise, given that human behavior "cannot be predicted or measured with the degree of accuracy associated with the pure sciences" (Camiciottoli, 2007, p. 23). Compared with condition and concession circumstances, default ones are absent across the four registers. Although they "have the sense of negative condition" (Halliday & Matthiessen, 2014, p. 323), they downplay researchers' agency in stating the relationship between the variables, which accounts for their absence.

In the corpus, writers go through different moments of choices, with location circumstances being the most frequent, followed second by manner circumstances and third by extent circumstances, a finding not completely supported by Nørgaard (2003, p. 39) who maintains that both Extent and location circumstances have the highest occurrence in English, followed by manner circumstances, thus showing that extent and manner circumstances can be seen as local probabilities of the abstract genre. In fact, writers select first location circumstances to specify the spatio-temporal details in order to set the stage for their study in the abstract, considered as readers' first encounter with the article, and second manner circumstances to create a balance between displaying scientific claims and getting involved with the readership through appealing to value judgment, which is a key feature of this genre (Del Saz Rubio, 2011, p. 269). Extent circumstances are rated third in the corpus; considered as "agnate with lexical grading" (Halliday & Matthiessen, 2014, p. 320), they anchor claims over a spatio-temporal area, construing events either as single sequents taking the form of frequency circumstances or as interval conceptualizations realized through duration and distance circumstances, the second of which reveal writers' imprecision while creating a story-like discourse. With regard to cause and contingency circumstances, they are the least present, which may not be attributed to the conventions of the abstract genre per se, as it is also related to the idiosyncratic properties of the language itself; that is, their low frequency is due to their eventive nature, given that they are "commonly construed as clauses in a clause nexus" (Halliday & Matthiessen, 2014, p. 320).

Across registers, the choices of enhancing circumstances vary, with place, means, frequency and condition circumstances being the most frequent in Mathematics, proving this discipline to be the most rigorous, yet this picture is challenged with the frequency of purpose circumstances, indicating that authors seek to create solidarity bonds with the readership. Like Mathematics, Agriculture has a higher frequency of condition and purpose circumstances than Economics and Philosophy, thus revealing that writers in Agriculture also attempt to observe the accuracy of the experiment while getting engaged with the readership, yet they are more involved and less rigorous than their peers in Mathematics, considering that they opt for quality circumstances to hedge their claims and for degree circumstances showing their imprecision. Economics shares with Agriculture the higher occurrence of degree circumstances compared with the other disciplines, a similarity attributed to the fact that both disciplines are applied sciences, which serves to question the hard-soft distinction. Despite this similarity, writers in Economics engage more in interpersonal relations, as they select reason circumstances to lend credence to their claims, duration and distance circumstances as a strategy of engagement and concession circumstances to market a positive self-image. Compared with other disciplines, Philosophy has the highest number of time circumstances, which is attributed to the non-cumulative nature of knowledge construction in this discipline. It is also the most prominent in strategies of personal engagement and projection into the text, since it has the highest occurrences of comparison and distance circumstances, and is rated second for reason circumstances. The latter, together with distance circumstances, are also frequent choices in Economics, where they convey the same functions. In spite of these similarities testifying to the validity of the hard/soft classification, Philosophy shares with Agriculture the choices of behalf circumstances revealing writers' involvement in addition to quality circumstances expressing value judgment in discourse and being used as a persuasive strategy to convince peers in the research community, which leads to the conclusion that this classification does not account for all the circumstantial choices. To conclude, the analysis shows that the choices of enhancing circumstances vary according to the four registers, each of which displays different degrees of engagement with the readership.

6.2 – Extending circumstances across disciplines

Out of the two subclasses of accompaniment circumstances, comitative circumstances nearly have the same frequency across the four registers (See Table 6). Each comitative circumstance is involved together with the participant in the process and hence the latter is considered as a single instance where both the circumstance and the participant are included (Halliday & Matthiessen, 2014, p. 324). They can be figured out either as co-participants

(17 in Table 3) or appendices (18 in Table 3), and, therefore, they either reflect how knowledge is co-constructed through writers' shared contribution or function as cohesive devices allowing writers to present the findings accompanied by their interpretations, thus contributing to the process of knowledge construction. Accordingly, abstract writers across the four registers employ them in order to occupy the niche.

Table 6 – **Relative frequencies of extending circumstances per thousand words**

	Hard disciplines			Soft disciplines			RAAs
	Mathematics	Agriculture	Average	Economics	Philosophy	Average	
Accompaniment	2.2	2.63	2.41	3.08	2.89	2.98	2.71
Comitative	2.2	2.63	2.41	2.24	2.17	2.2	2.37
Additive	00.00	00.00	00.00	0.84	0.72	0.78	0.33

Additive circumstances are only present in the soft sciences, with 0.84 in Economics and 0.72 in Philosophy. Given that they have the same function as the participant in a clause, and thus the process is figured out as two instances projected into space, one related to the participant and the other to the circumstance realized as a PP "for the purpose of contrast" (Halliday & Matthiessen, 2014, p. 325), they help academic writers foreground the information construed by the circumstance (19 in Table 3) and hence influence readers' perception of the message, with a view to convincing them of their claims. The presence of these circumstances only in Economics and Philosophy is attributed to their being soft disciplines characterized by a higher degree of reader engagement (Hyland & Bondi, 2006, p. 9) and persuasion (Sellami-Baklouti, 2011, p. 515) and by the variety of investigated variables (Hyland, 1998, p. 448), the description of which is made possible through additive circumstances.

Overall, across the four registers, comitative circumstances are more frequent than additive circumstances, a difference attributed to the fact that the former contribute to the process of knowledge construction rather than build a socially interactive reader-writer relationship.

6.3 – Elaborating circumstances across disciplines

Out of the two sub-categories of elaborating circumstances, guise circumstances have a remarkable number in Philosophy (6.75) where they identify a participant as a circumstance (20 in Table 3) so as to make the writing more familiar to the readership, yet they bear traces of personal projection in the text, as writers assign one particular role over another. This strategy of reader engagement better serves the interests of writers in Philosophy where "the lack of objective standard often rewards rhetoric and shrewd manoeuvring" (Wang, 2016, p. 375).

Table 7 – **Relative frequencies of elaborating circumstances per thousand words**

	Hard disciplines			Soft disciplines			RAAs
	Mathematics	Agriculture	Average	Economics	Philosophy	Average	
Role	4.09	3.37	3.73	4.49	7.72	6.1	4.74
Guise	3.78	3.07	3.42	3.36	6.75	5.05	4.12
Product	0.31	0.29	0.3	1.12	0.96	1.04	0.62

As for product circumstances, they are highest in Economics (1.12), followed by Philosophy (0.96). They present the outcome in a concise, yet rather imprecise way compared with a clausal construal of this function (21 in Table 3). Drawing readers' attention to the forthcoming result reveals writers' intent to market a positive self-image so as to get the assent of their community. Their relative frequency in Economics compared with other disciplines may be related to writers' emotional appeal from which "economic writing gains its persuasive appeal" (Henderson, 2010, p. xv). This persuasive strategy is also present in Philosophy but to a lesser extent, given that philosophical writers do not invest as much as writers in Economics do in construing product-oriented messages.

Across the four registers, guise circumstances outnumber product ones, which is justified by the importance of the former in familiarizing the writing to the readership and presenting researchers' interpretations, two important functions in article abstracts.

6.4 – Projection circumstances across disciplines

Out of the two sub-categories of projection circumstances, matter circumstances associated with mental and verbal clauses (Halliday & Matthiessen, 2014, p. 328) are most frequent in Philosophy (2.41), where they specify the topic around which discussions or thoughts revolve (22 in Table 3). Their frequency in Philosophy can be related to its being a discipline where writers engage in verbal discussions about a particular topic and report the existing views (Wang, 2016, p. 375) in order to construct knowledge. Compared with Philosophy, Mathematics has a lower frequency (0.94), yet a more important rate than the two other registers, an unexpected finding explained by the fact that these circumstances are used neither as a way to get involved in discussions nor as a device to display different views in Mathematics, but they serve as a precision device specifying the topic of each claim.

Table 8 – **Relative frequencies of projection circumstances per thousand words**

	Hard disciplines			Soft disciplines			RAAs
	Mathematics	Agriculture	Average	Economics	Philosophy	Average	
Matter	0.94	0.29	0.61	0.28	2.41	1.34	0.84
Angle	00.00	0.14	0.07	1.12	3.13	2.12	1.01
Source	00.00	0.14	0.07	0.28	2.17	1.22	0.62
Viewpoint	00.00	00.00	00.00	0.84	0.96	0.9	0.39

As is shown in Table 8, angle circumstances mainly exist in Philosophy (3.13) and Economics (1.12) where they create a heteroglossic discourse. In fact, source circumstances introduce the source of the message and thus they enable writers to trace back each claim to its issuer (23 in Table 3). They are highest in Philosophy (2.17) where writers construe messages through evoking other researchers' voices since "a homogeneous reconstruction of human knowledge seems doomed to failure" (Wang, 2016, p. 370), thus resulting in a personal and heteroglossic discourse.

Given that viewpoint circumstances introduce the perspective from which the message is presented (24 in Table 3) and thus they allow writers to extensively review previous studies, their similar distribution in Economics (0.84) and Philosophy (0.96) reveals writers' interests in establishing their territory due to the non-cumulative nature of knowledge (Hyland, 2004, p. 71), as they invest more in retracing previous research to get credit for their claims and convince the readership.

Overall, the distribution of both matter and angle circumstances shows that Philosophy seems to be an outlier compared with the other disciplines, since it has the highest frequency of these two sub-categories, confirming that this discipline is the most explicit in strategies of reader engagement and putting into question the hard/soft classification.

7 – Contrastive analysis of circumstances

A contrastive analysis of the lexicogrammar of circumstances is carried out to explore whether their choices are conditioned only by the higher stratum of context – i.e., register and genre – or also by the multilingual nature of the corpus. The quantitative analysis has shown that there are no significant differences in the distribution of circumstantial categories across Arabic and English (Table 9), as is evidenced by Fisher's exact test ($p<0.05$, p-value = 0.88, two-tailed Fisher's exact test; Cramer's V = 0.039), which implies that the their distribution is not determined by the typology of the two languages, a finding confirmed by Mukattash and Kawar's claim (1997, p. 1762) that "English and Arabic are remarkably more similar than they are different," when analyzed for manner adverbials from the perspective of Traditional Grammar.

Table 9 – **Relative frequencies of circumstances per thousand words across languages**

	English	Arabic
Enhancing	50.89	78.42
Extending	2.36	3.12
Elaborating	4.22	5.37
Projection	1.33	2.62
Circumstance types	58.82	89.55

Taken together, the analysis has shown that the typological parameter does not account for the lexicogrammatical choices of circumstances. Given that the classification of circumstances is meaning oriented, "referring to examples such as the location of an event in time or space, its manner, or its cause" (Halliday & Matthiessen, 2014, p. 311), not targeted towards their structural realizations, i.e. nominal group, prepositional phrase or an adverbial group, this finding may imply that typological differences motivate structural rather than semantic variation, as is argued by Teich (1999, p. 194) claiming that "[l]anguages tend to be similar in terms of functional paradigms and different in terms of syntagmatic, surface-syntactic realization."

8 – Conclusion

In this paper, I studied circumstances at higher and lower levels of delicacy in the abstract genre across four registers, i.e., Mathematics, Agriculture, Economics and Philosophy, representing the hard and soft domains of knowledge and across two languages, i.e., Arabic and English, with a view to exploring whether the lexicogrammatical choices of circumstances are mapped with contextual factors and whether they are conditioned by typological differences across Arabic and English. This research has revealed that the four registers share choices for comitative, guise, location and manner circumstances which can be considered as local probabilities of the abstract genre. The register-based analysis has shown that the distribution of circumstances is determined by the conventions of each register. A closer look at the best choices per discipline reveals that place, means, condition, and purpose circumstances are highest in Mathematics, but frequency and quality circumstances are so in Agriculture, and both of them have near frequencies of place and purpose. These choices indicate that writers in both registers opt for enhancing circumstances in order to reach a higher level of precision and scientific rigor, yet they select a different set of subcategories in order to meet the conventions of their respective disciplines, with writers in Mathematics being more precise yet less engaged than their peers in Agriculture. While Philosophy selects time, quality, comparison, guise, source and matter circumstances, Economics chooses duration and reason, and both of them share the choices of distance, additive, product and viewpoint circumstances, revealing that writers in these disciplines report scientific facts while evoking other voices, as they invest in strategies of reader engagement and personal projection in the text, yet the different alternatives set by register present philosophical writers as being more speculative and engaged than those in Economics showing awareness of the limited generalizability of the social context in which they operate.

Among the four registers, Economics and Agriculture share similar choices of place, degree, means, comparison, source and matter circumstances, all of which distinguish them as two mid-way disciplines along the hard/soft cline, yet they tend be more different than similar for the other features, with Economics leaning towards Philosophy and Agriculture towards Mathematics, since each pair has nearer rates of frequency, distance, purpose, reason, condition, additive, product and viewpoint circumstances than the other pair, proving that disciplines occupying mid-position along the hard-soft cline are more similar to those in the extremes than to each other.

Although Mathematics and Agriculture have similarities as do Economics and Philosophy, thus testifying to the importance of the hard-soft distinction, the latter does not account for all the lexicogrammatical choices of circumstances, with, for example, Philosophy and Agriculture showing nearly the same frequency of quality circumstances, though pertaining to different paradigms, which puts into question the validity of this classification.

The contrastive analysis of circumstances reveals that the language parameter does not determine lexicogrammatical choices across registers, a finding which gives further evidence to Teich's claim (1999, p.194) that typological differences are more structurally than semantically motivated.

The study provides evidence that a comparative registerial cross-linguistic methodology is useful for analyzing lexicogrammatical choices in context and capturing similarities and/or differences in a multilingual context, as it "bears the promise of opening up the text view for the system-oriented branch of cross-linguistic study, and the system view for the text-oriented branch" (Teich, 1999, p. 187). This methodological tool gives better insight into how academic conventions vary as a function of context and as such it highlights the determining role of the higher stratum of context (Hasan, 2009) in activating different lexicogrammatical choices across disciplines, thus informing researchers and writers about registerial specificities. The latter have become central in Teaching English for Academic Purposes, since they help teachers develop "disciplinary specific rather than course specific courses" which better "equip students with the communicative skills to participate in particular academic cultures" (Hyland, 2017, p. 21).

Although this study has investigated circumstances, it does not focus on their structural realizations nor does it account for their distribution in other genres such as book reviews or Ph.D. theses. Further studies are thus needed to provide a comprehensive account of the lexicogrammar of circumstances.

REFERENCES

Almotawakil, A. (1995). *quaDha:ya: alluGHati alGarabiyati fi allisa:niya:ti alwaDhi:fi:yati* [Arabic language issues in functional linguistics]. Rabat: Amen House for Publishing and Distribution.

Biglan, A. (1973). Relationships between subject matter characteristics and the structure and output of university departments. Journal of Applied Psychology, 57(3), 204–213. https://doi.org/10.1037/h0034699

Birks, M. (2014). Practical philosophy. In J. Mills, & M. Birks (Eds.), *Qualitative methodology: A practical guide* (pp. 17–30). London/ New Delhi: Sage.

Brown, S. R. (2005). *Structural phenomenology: An empirically-based model of consciousness*. New York: Peter Lang.

Busà, M. G. (2005). The use of metadiscourse in abstracts: A comparison between economics and psychology abstracts. In J. Bamford, & M. Bondi (Eds.), *Dialogue within discourse communities: Metadiscursive perspectives on academic genres* (pp. 31–48). Tübingen: De Gruyter.

Caffarel-Cayron, A. (2015). Systemic functional grammar and the study of meaning. In B. Heine, & H. Narrog (Eds.), *The oxford handbook of linguistic analysis* (pp. 345–372). Oxford: Oxford University Press.

Camiciottoli, B. C. (2007). *The language of business studies lectures: A Corpus-assisted analysis.* Amsterdam/Philadelphia: John Benjamins Publishing.

Campbell, P. F. (1999). Fostering each child's understanding of mathematics. In C. Seefeldt (Ed.), *The early childhood curriculum current findings in theory and practice* (pp. 106–132). New York/ London: Teachers College Press.

Choura, S. (2017). Relational, material, mental and verbal processes in mathematical research abstracts. *International Journal of Research in Humanities, Arts and Literature*, *5*(12), 95–106. http://www.impactjournals.us/journals/international-journals/international-journal-of-research-in-humanities-arts-and-literature

Choura, S. (2019). Grammatical choices of ditransitive patterns in academic articles. *Text & Talk*, *39*(3), 315–340. https://doi.org/10.1515/text-2019-2030

Dahil, T. (2010). The construction and promotion of new knowledge in text. In R. Lorés-Sanz, P. Mur-Dueñas, & E. Lafuente-Millán (Eds.), *Constructing interpersonality: Multiple perspectives on written academic genres* (pp. 61–80). Newcastle upon Tyne: Cambridge Scholars Publishing.

Del Saz Rubio, M. M. (2011). A pragmatic approach to the macro-structure and metadiscoursal features of research article introductions in the field of agricultural sciences, *English for Specific purposes, 30*(4), 258–271. https://doi.org/10.1016/j.esp.2011.03.002

Fortanet-Gomez, I. (2013). *CLIL in higher education: Towards a multilingual language policy*. New York/ Bristol: Multilingual Matters.

Francisco, J. M., & Maher, C. A. (2005). Conditions for promoting reasoning in problem solving: Insights from a longitudinal study. *The Journal of Mathematical Behavior*, *24*(3–4), 361–372. https://doi.org/10.1016/j.jmathb.2005.09.001

Gardner, S. (2012). Genres and registers of student report writing: An SFL perspective on texts and practices. *Journal of English for Academic Purposes*, *11*(1), 52–63. https://doi.org/10.1016/j.jeap.2011.11.002

Gonzalez, W. J. (2015). *Philosophico-methodological analysis of prediction and its role in economics*. London/ New York: Springer.

Halliday, M. A. K. (1978). *Language as social semiotic: The social interpretation of language and meaning*. London: Edward Arnold.

Halliday, M. A. K. (1985: Reprinted in full 1989). 'Part A'. In M.A.K. Halliday, & R. Hasan (Eds.), *Language, context and text: Aspects of language in a social semiotic perspective* (pp. 3–48). Oxford: Oxford University Press.

Halliday, M. A. K. (1997). Linguistics as metaphor. In A. Simon-Vandenbergen, K. Davidse, & D. Noël (Eds.), *Reconnecting language: Morphology and syntax in functional perspectives* (pp. 3–27). Amsterdam: Benjamins.

Halliday, M. A. K. (2014). *Halliday's introduction to functional grammar*. New York: Routledge.

Hasan, R. (2009). The place of context in a systemic functional model. In M. A. K. Halliday and J. J. Webster (Eds.), *Continuum companion to systemic functional linguistics* (pp. 166–189). London/New York: Continuum.

Hausman, D. M. (1992). *The inexact and separate science of economics*. Cambridge: Cambridge University Press.

Hemlin, S. (2009). What is Scientific Quality? In K. Prpić (Ed.), *Beyond the myths about the natural and social sciences* (pp. 175–203). Zagreb: Institute for Social Research.

Henderson, W. (2010). *The origins of David Hume's economics*. London/ New York: Routledge

Huckin, T. (2006). Abstracting from abstracts. In M. Hewings (Ed.), *Academic writing in context: Implications and applications* (pp. 93–103). Birmingham: University of Birmingham Press.

Hyland, K. (1998). *Hedging in scientific research articles*. Philadelphia: John Benjamins.

Hyland, K. (2002). Genre: Language, context and literacy. *Annual Review of Applied Linguistics*, *22*, 113–135. https://doi.org/10.1017/S0267190502000065

Hyland, K. (2004). *Disciplinary discourses: Social interactions in academic writing*. Michigan: The University of Michigan Press.

Hyland, K. (2017). English in the disciplines: Arguments for specificity. *ESP Today*, *5* (1), 5–23. https://doi.org/10.18485/esptoday.2017.5.1.1

Hyland, K., & Bondi, M. (2006). Introduction. In K. Hyland, & M. Bondi (Eds.), *Academic discourse across disciplines* (pp. 7–13). Frankfort: Peter Lang.

Ibarra, R. A. (2001). *Beyond affirmative action: Reframing the context of higher education*. Wisconsin: University of Wisconsin Press.

Jin, Z. (2011). *Global technological change: From hard technology to soft technology*. Chicago: The University of Chicago Press.

Karhana, P. K. (2020). *Agriculture science "a complete study package"*. New Delhi: Arihant Publications India limited.

Klaes, M. (2003). Residual categories and the evolution of economic knowledge. In H. S. Jensen, L. M. Richter, & M. T. Vendel (Eds.), *The evolution of scientific knowledge* (pp. 37–56). Cheltenham /Massachusetts: Edward Elgar Publishing.

Kumar, A. (2002). Research methodology in social science. New Delhi: Sarup & Sons.

Lukka, K., & Kasanen, E. (1995). The problem of generalizability: Anecdotes and evidence in accounting research. *Accounting, Auditing & Accountability Journal*, *8*(5), 71–90. **https://doi.org/**10.1108/09513579510147733

Martin, J. R. (1984). Language, register and genre. In E. Christie (Ed.), *Children writing: A reader* (pp. 21–9). Geelong: Deakin University Press.

Matthiessen, C. M. I. M. (2013). Applying systemic functional linguistics in healthcare contexts. *Text & Talk, 33*(4–5). 437–467. https://doi.org/10.1515/text-2013-0021

Matthiessen, C. M. I. M. (2015). Register in the round: Registerial cartography. *Functional Linguistics, 2*(9). 1–48. https://doi.org/10.1186/s40554-015-0015-8

Matthiessen, C. M. I. M. (2018). The notion of a multilingual meaning potential: A systemic exploration. In A. Sellami-Baklouti, & L. Fontaine (Eds.), *Perspectives from systemic functional linguistic* (pp. 91–120). London/New York: Routledge.

Matthiessen, C. M. I. M., & Thompson, A. S. (1988). The structure of discourse and "subordination". In J. Haiman, & A. S. Thompson (Eds.), *Clause combining in grammar and discourse* (pp. 275–330). Amsterdam/Philadelphia: John Benjamins.

Matthiessen, C. M. I. M., Teruya, K., & Lam, M. (2010). *Key terms in systemic functional linguistics*. London: Continuum International Publishing Group.

McGrath, L., & Kuteeva, M. (2012). Stance and engagement in pure mathematics research articles: Linking discourse features to disciplinary practices. *English for Specific Purposes*, *31*(3), 161–173. https://doi.org/10.1016/j.esp.2011.11.002

Mukattash, L., & Kawar, E. (1997). Manner adverbials in English and Arabic. In R. Hickey, & S. Puppel (Eds.), *Language history and linguistic modelling: A Festschrift for Jacek on his 60th birthday* (pp. 1751–1762). Berlin/ New York: Walter de Gruyter.

Mwinlaaru, I. N. (2017). Bridging boundaries across genre traditions: A systemic functional account of generic patterns in biodata. *Functions of Language*, *24*(3), 259–293. https://doi.org/10.1075/fol.15017.mwi

Niu, G. (2013). A genre analysis of Chinese and English abstracts of academic journal articles: A parallel-corpus-based study. In P. Liu, & Q. Su (Eds.), *Chinese lexical semantics: 14th Workshop, CLSW 2013, Zhengzhou, China, May 10–12, 2013. Revised selected papers* (pp. 603–616). Heidelberg: Springer-Verlag.

Nørgaard, N. (2003). *Systemic functional linguistics and literary analysis: A hallidayan approach to Joyce—A joycean approach to Halliday*. Odense: University Press of Southern Denmark.

Passam, H. C., Tocatlidou, A., Mahaman, B. D., & Sideridis, A. B. (2003). Methods for decision making with insufficient knowledge in Agriculture. *EFITA 2003 Conference*, *5–9*, 727–731. https://www.researchgate.net/publication/228918322_Methods_for_decision_making_with_insufficient_knowledge_in_agriculture

Sellami Baklouti, A. (2011). The impact of genre and disciplinary differences on structural choice: Taxis in research article abstracts. *Text and Talk*, *31*(5), 503–523. https://doi.org/10.1515/text.2011.025

Sellami-Baklouti, A. (2019). Transitivity-ergativity perspectives on causation in legal texts: A contrastive study of Arabic and English website terms of service. *Lingua*, In Press, 1–18. https://doi.org/10.1016/j.lingua.2019.102782

Stewart, D., Blocker, H. G., & Pterik, J. (2010). *Fundamentals of philosophy*. Boston: Prentice Hall.

Swales, J. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.

Teich, E. (1999). System-oriented and text-oriented comparative linguistic research: Cross-linguistic variation in translation. *Languages in Contrast International Journal for Contrastive Linguistics*, *2*(2), 187–210. https://doi.org/10.1075/lic.2.2.04tei

Tessuto, G. (2013). *Investigating English legal genres in academic and professional contexts*. Newcastle upon Tyne: Cambridge Scholars Publishing.

Thompson, G. (2014). *Introducing functional grammar* (3rd ed.). New York: Routledge.

Tonn, V. L. (2009). *Systematics and the economics of culture*. Berlin: Peter Lang.

Wang, H. (2016). *From mathematics to philosophy*. New York/Oxon: Routledge.

Watson, R.A. (1992). *Writing philosophy: A guide to professional writing and publishing*. Illinois: SIU Press.

Webster, J. (2019). Key Terms in the SFL Model. In G. Thompson, W. Bowcher, L. Fontaine, & D. Schönthal (Eds.), *The Cambridge handbook of systemic functional linguistics* (pp. 35–54). Cambridge: Cambridge University Press.

Wood, A. (2001). International scientific English: The language of research scientists around the world. In J. Flowerdew, & M. Peacock (Eds.), *Research perspectives on English for academic purposes* (pp. 71–83). Cambridge: Cambridge University Press.

Yaghmaie, A. (2017). How to Characterize Pure and applied Science. *International Studies in the Philosophy of Science, 31*(2), 133–149. https://doi.org/10.1080/02698595.2018.1424763

DISCURSOS MULTIMODAIS SOBRE EMPREENDEDORISMO JOVEM: UMA ABORDAGEM À REPRESENTAÇÃO SOCIAL NEOLIBERAL EM JORNAIS PORTUGUESES DIGITAIS

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RESUMO

Num contexto mediático nacional que privilegia discursos de recuperação económica, histórias sobre o mercado de trabalho e possibilidades de percursos profissionais para jovens são frequentes. A esfera pública tem dado grande visibilidade a narrativas sobre empreendedorismo jovem como uma oportunidade para criar projetos de autoemprego.

Neste artigo, analisamos a forma como jornais portugueses de referência, na versão digital, negoceiam e disseminam representações construídas em torno de ideologias sobre empreendedorismo jovem como um projeto individual e reflexivo. Com base em textos multimodais publicados online em 2017 e 2018, o trabalho desenvolve uma análise crítica que aborda as escolhas lexicais, o sistema da transitividade e a representação multimodal dos atores sociais, para identificar que narrativas editoriais são privilegiadas em torno do tema e que estruturas interdiscursivas nelas são articuladas. A pesquisa, além disso, investiga as formas a partir das quais os jovens empreendedores representam as suas identidades e experiências nessas instâncias discursivas. O estudo problematiza o conceito contemporâneo de reflexividade, bem como a legitimação pervasiva das noções de agência e escolha, designadamente a partir da ideia de que normalizam um tipo de "estética do empreendedorismo jovem" que suprime outros agentes, estruturas e processos.

PALAVRAS-CHAVE

Análise crítica do discurso, neoliberalismo, empreendedorismo jovem, imprensa portuguesa online

1 – Juventude, neoliberalismo e governamentalidade

As representações da juventude nos media, bem como a forma como os próprios jovens negoceiam as suas narrativas, articulam-se com contextos culturais, sociais e económicos particulares (Anderson, 2010; Fornäs, 1995; Pais, 1993; Pais, Cairns, & Pappámikail, 2005; Pinto-Ribeiro, 2009; Strickland, 2002; Sukarieh & Tannock, 2011, 2015, 2016; Thurlow, 2007). O estudo dos discursos sobre o empreendedorismo jovem na imprensa portuguesa digital que se desenvolve neste trabalho é motivado pela perceção de uma conjuntura de práticas sociais e discursivas que veiculam informação sobre dinâmicas de recuperação económica e sobre o papel dos jovens nesse processo, designadamente através do seu envolvimento em atividades de criação e participação nas dinâmicas do mercado (Strickland, 2002), cada vez mais tecnológico e globalizado.

A abordagem que se privilegia tem em conta o conceito de 'economia política' (Sukarieh & Tannock, 2016) e a forma como pode ser aplicado aos estudos sobre a juventude, designadamente por permitir entender a forma como os indivíduos são caracterizados e catalogados como 'jovens' no seio de contextos que promovem mudanças constantes na própria definição de juventude «como uma identidade, categoria social e ideologia, em relação aos contextos mais vastos de cultura, política e economia local, nacional e global» (Sukarieh & Tannock, 2016, p. 3). O conceito considera, assim, aspetos que envolvem as experiências dos jovens propriamente ditos, a construção social da ideia de juventude e a forma como as elites a utilizam para construir, manter e/ou disseminar políticas e práticas que salvaguardem os seus interesses (Sukarieh & Tannock, 2015, 2016). Dá-se, desta forma, particular destaque à agenda neoliberal, mais especificamente às configurações sociais e económicas que, numa dinâmica dialética, operam mudanças nas vidas e experiências dos jovens, por um lado, e, por outro, às dinâmicas de representação social da juventude que «podem ser produzidas para reestruturar estruturas e práticas mais latas no Estado e na economia» (Sukarieh & Tannock, 2016, p. 8).

Numa sociedade pautada por ideais neoliberais, são cada vez mais evidentes práticas sociais e discursivas que assinalam uma viragem na forma como os jovens são referenciados e na forma como as suas identidades são negociadas. Nas palavras de Sukarieh e Tannock (2011), num contexto em que se valoriza o capital humano, «as competências, forças e maturidade da juventude são enfatizadas e celebradas para empurrar os jovens para o mercado de trabalho» (p. 682). As consequências são visíveis, por exemplo, na forma como esferas e contextos educativos e entidades dedicadas ao desenvolvimento da juventude se articulam com as forças do mercado e os interesses económicos, designadamente pelo investimento no ensino vocacional, na atribuição de prémios de reconhecimento, parcerias de negócio, estratégias e linguagens mercantis, culminando na constituição da juventude como uma categoria indissociável da agenda neoliberal (Tannock, 2001; Sukarieh & Tannock, 2011).

As narrativas das experiências e identidades dos jovens que destacam o seu estatuto de 'mais valias' e 'recursos', em detrimento de outras perspetivas, tais como a pobreza, o desemprego e a desigualdade (Sukarieh & Tannock, 2011, p. 679), tendem a despolitizar aspetos relacionados com as contingências sociais, económicas e políticas no seio das quais estes se movem e negoceiam as suas biografias (Sukarieh & Tannock, 2011). O paradigma que destaca positivamente o potencial dos jovens nos mercados e nas economias assinala também determinadas expectativas ideológicas e institucionais em relação ao tipo de adultos em que se devem transformar (Sukarieh & Tannock, 2015). Assim, um dos desafios que se colocam às abordagens críticas sobre a juventude é o de perceber «como e porquê determinados estereótipos positivos e negativos, ou a própria utilização da etiqueta 'juventude', são mobilizados por diferentes grupos em contextos sociais e económicos que mudam ao longo do tempo» (Sukarieh & Tannock, 2011, p. 689). Uma reflexão crítica deste tipo requer o entendimento do conceito de 'governança neoliberal' e a forma como nele se articulam práticas agentivas.

A governamentalidade é uma forma de poder que constitui sujeitos autónomos e regula a forma como esses sujeitos capitalizam as liberdades para garantir a sua sustentabilidade (Foucault, 1979/2008). Não se trata de uma regulação direta, mas antes da forma como instituições abstratas de poder (como os *media*) mobilizam o potencial de agência dos sujeitos com base no conhecimento e recursos veiculados e disponibilizados pela sociedade, partindo do princípio de que têm igual acesso a esses mesmos recursos e acionam processos de reflexividade (Giddens, 1997, 2001) e gestão de risco (Beck, 1994) adequados para os aplicarem de forma eficaz, como se explana na seguinte passagem:

> Reflexive selves engage in ongoing surveillance and evaluation of themselves and their social environments, as well as ongoing reflection and rationalization on their decisions and behaviours. Put differently, reflexive selves are regularly auditing their lives, just like accountants audit their firms.
>
> (Wilson, 2018, p. 1)

Os processos de decisão, nessa conjuntura, são individuais e deliberados e devem garantir a participação voluntária, hábil e flexível de atores sociais públicos e privados. Uma participação que, com efeito, se coaduna com práticas políticas e económicas. Sob a aparência de ações individuais e voluntárias, os sujeitos parecem validar e reproduzir discursos e práticas de verdade epistemológica (economia, política, etc.) de entidades reguladoras e disciplinadoras, na medida em que estas procuram reestruturar as formas pelas quais cada indivíduo irá gerir as suas responsabilidades. É neste sentido que se poderá considerar que os mecanismos de governamentalidade são tecnologias do *self* (Foucault, 1988, p. 19), pois configuram um tipo de governança consentida e informada, extensível a «todas as esferas da nossa vida» (Chun, 2016, p. 560), como operações que desempenhamos em nós próprios de forma a gerir, cuidar e transformar comportamentos, corpos, condutas pensamentos e maneiras de ser (Dean, 1999; Foucault, 1988; Gill & Scharff, 2011; Wilson, 2018).

As decisões são, por seu turno, tomadas no seio de uma conjuntura económica, política, social e cultural caracterizada pela primazia da transação mercantil, sustentadas pela disseminação da cultura da empresa como orientadora da ação humana (Wilson, 2018). Como o bem-estar dos indivíduos é garantido pelas liberdades de mercado e capacidades e/ou competências de cada um, pela propriedade privada e pelo mercado livre, os valores são os da competitividade e do empreendedorismo:

> Where the meanings of life are transformed, largely autonomously, into meanings that are structured by the market form, then the subjects of (Neo)Liberal rationalities of government emerge as 'free', 'entrepreneurial', competitive, and economically rational individuals.
>
> (Kelly, 2006, p. 24)

Na estrutura neoliberal, o mercado tende a ser representado como uma entidade neutra, acessível e benéfica (Boyles, 2008, p. x), que, por sua vez, facilita a gestão da individualidade e a privatização das subjetividades. Os sujeitos neoliberais ideais são, por isso, os indivíduos capazes de autogerir as suas escolhas e empreender projetos de vida a partir da identificação com subjetividades ideais e boas práticas:

> Neoliberal policies and practices have attempted to remake our everyday lives so that every aspect is minutely measured, assessed and evaluated as 'outputs', in accordance with manufacturing-based standards of production, and defined as 'best practices', which is another term adopted from corporate culture.
>
> (Chun, 2016, p. 558)

Na medida em que a agência neoliberal não é prerrogativa do indivíduo, mas uma «formação discursiva» (Phelan, 2018, p. 561) mobilizada através de relações, redes de poder e fontes de autoridade mais ou menos informais (Rose, 1999), o presente trabalho procura perceber como discursos que articulam as identidades juvenis contemporâneas, as tendências do mercado e narrativas sobre escolha e liberdade individual poderão eventualmente «promover a ideologia neoliberal», debilitando a perceção de outras estruturas e agentes e despolitizando a ação e a análise social (Sukarieh & Tannock, 2011, p. 684).

2 – Objetivos e metodologia

A Análise Crítica do Discurso (ACD) e a Semiótica Social constituem-se como instrumentos teóricos e metodológicos essenciais para a análise dos textos que circulam na contemporaneidade, não só porque reconhecem a complexa redes de modos em que os discursos se materializam, mas também porque apresentam uma perspetiva que atende às dimensões sociais dos textos e seus reflexos na configuração e reconfiguração de identidades.

Para Fairclough (2006), estudar as dinâmicas sociais e a forma como as identidades são socialmente construídas implica observar e desconstruir as escolhas contidas nos textos.

Considerando este enquadramento, são objetivos deste trabalho: a) Identificar as narrativas editoriais que são privilegiadas e as estruturas interdiscursivas que as articulam, através da análise das escolhas lexicais, do sistema da transitividade e da representação multimodal dos atores sociais; b) Analisar as formas através das quais os jovens empreendedores representam as suas identidades e experiências nestas instâncias de discurso; c) Refletir sobre as vozes que são agenciadas e as vozes que são silenciadas; d) Discutir as representações construídas sobre empreendedorismo jovem e a forma como os jornais portugueses de referência negoceiam e disseminam ideologias em torno do tema. Ou seja, analisar-se-á a forma como determinadas configurações discursivas presentes no *corpus* em análise constroem multimodalmente representações sobre a temática do empreendedorismo jovem, refletindo sobre possíveis impactos dessas representações nas identidades e dinâmicas sociais.

Procuraremos, desta forma, observar como determinadas construções discursivas textuais e visuais configuram perspetivas específicas da temática do empreendedorismo jovem – e da juventude em si – procurando, a partir daí, refletir sobre possíveis implicações dessas representações nas identidades e dinâmicas sociais mais vastas. O foco nos significados multimodais parte do princípio de que, além da linguagem, é necessário explorar as práticas sócio-semióticas envolvidas na construção do significado, bem como «as instanciações de pessoas envolvidas em atos de identidade que podem ser caracterizados como fazendo parte de uma reconstrução neoliberal de si mesmos.» (Chun, 2016, p. 567).

Para esta análise da representação editorial e da autorrepresentação dos atores sociais, serão aplicados os instrumentos de análise explorados pela ACD (Fairclough, 2003, 2010), sustentados pelo enquadramento da Linguística Sistémico-Funcional (Halliday, 1994; Halliday & Matthiessen, 2004), tais como interdiscurso e escolhas lexicais, transitividade, representação verbal dos atores sociais (van Leeuwen, 1997, 2008), bem como pela Gramática do Design Visual Design (Kress & van Leeuwen, 2006). A identificação de determinadas ocorrências discursivas nestes textos sobre empreendedorismo jovem tornará também percetível algumas ausências, igualmente significativas para a construção de representações e ideologias em torno do tema.

O *corpus* de análise foi recolhido em edições digitais de jornais e revistas portugueses (*Diário de Notícias*, *Público* e *P3*, *Observador*, *Expresso* e *Visão*). Consideraram-se artigos publicados em 2017 e 2018, a partir de uma pesquisa orientada pela palavra-chave 'empreendedorismo jovem'. A publicação P3, que se constitui como um suplemento do jornal Público, foi considerada na pesquisa por se tratar de uma publicação especialmente orientada para jovens e com expressão nos resultados obtidos, designadamente no que respeita ao número de artigos publicados sobre o tema em análise. A distribuição de artigos por ano e por publicação encontra-se registada na Tabela 1, que serviu de base à construção do *corpus* de análise.

Tabela 1 – **Construção do corpus de análise**

Jornais/Revistas	Notícias (artigos sobre programas de apoio e/ou formação em empreendedorismo)		Perfis (artigos sobre empreendedor e/ou projeto de empreendedorismo) *CORPUS* DE ANÁLISE		Artigos de Opinião	
	2017	2018	2017	2018	2017	2018
Visão	1	1	2	0	0	1
Expresso	3	9	1	2	0	0
Diário de Notícias	7	8	2	2	1	1
Observador	3	9	5	3	1	1
Público	4	6	0	0	1	1
P3	6	4	4	9	0	1
TOTAL	24	37	14	16	3	5
TOTAL (99)	**61**		**30**		**8**	

Nos anos em apreço, foram identificados 99 textos sobre a temática do empreendedorismo jovem: 61 notícias, com informação sobre programas de formação em empreendedorismo e/ou programas de apoio ao empreendedorismo, 30 artigos correspondendo a perfis de jovens empreendedores e/ou perfis de projetos de empreendedorismo e 8 artigos de opinião.

A observação da tabela permite, por si, registar um maior número de peças em 2018, face a 2017, valores também superiores às peças que em trabalho anterior sobre o tema haviam sido registadas em 2016 (Menezes & Conde, s/d). Ou seja, o espaço editorial dedicado à temática do empreendedorismo apresenta um alargamento que evidencia a crescente cobertura mediática do tema.

Observando a distribuição das peças por género jornalístico, podemos também anotar um predomínio de notícias (61 artigos no total), seguido de perfis de empreendedor ou de projeto (31 artigos) e, com muito menor representatividade, de textos de opinião (8). Podemos, a partir destes dados, compreender que as construções editoriais privilegiadas na abordagem ao tema são a notícia e o perfil. Ou seja, textos que ou divulgam programas de formação e/ou apoio ao empreendedorismo ou procuram retratar a figura do empreendedor e dos projetos de sucesso desenvolvidos. Embora não se configure como o género jornalístico mais presente, a pertinência do perfil enquanto género narrativo e as suas implicações na representação sobre o tema justificam a seleção do conjunto destes 30 textos para a análise aqui realizada. Ou seja, o facto de o perfil se constituir como um género menos formal e mais aberto à criatividade textual, também como um género que constrói a noticiabilidade e se foca no valor e diferenciação do objeto (individuo/projeto) perfilado (Sodré & Ferrari, 1986; Vilas-Boas, 2003), sustentou a delimitação do *corpus* de análise.

Significativo é também o número comparativamente mais reduzido de textos de opinião, que pode indiciar um menor investimento em espaços de discussão e abordagens mais críticas sobre o tema.

Considerando os instrumentos de análise propostos e os artigos (perfis de empreendedor e de projeto) selecionados como *corpus* de análise, procurar-se-á, compreender que narrativas são construídas quando se fala de empreendedorismo jovem, que estruturas interdiscursivas estes textos apresentam, que representações constroem sobre o tema, que processos são agenciados e que processos são ausentados e que significados essas presenças e ausências assumem na construção ideológica em torno do par 'juventude e empreendedorismo'. Ou seja, que discursos sobre empreendedorismo jovem são privilegiados e como são discursivamente construídas e disseminadas identidades e ideologias em torno do tema.

3 – Representações de empreendedorismo jovem: escolhas lexicais e interdiscurso

Observando as escolhas lexicais e a interdiscursividade presentes nos 30 perfis em análise, podemos, em primeiro lugar, observar uma transversal valorização do conceito de empreendedorismo. As opções vocabulares evidenciam este enquadramento, apresentando a ideia de empreendedorismo como algo «possível», «positivo», «relevante», «vencedor». Todas as narrativas se estruturam em torno de casos de «sucesso». O empreendedorismo surge também associado uma adjetivação que remete para a inovação («diferente», «novo», «disruptivo», «distinto», «diferenciador»). Ou seja, configura-se um triângulo onde a associação entre empreendedorismo, inovação e sucesso surge como representação naturalizada e legitimada nos textos: «Carolina e Inês concorreram e venceram o Poliempreende» (*P3*, 7 de outubro de 2018) / «O projeto pretende que as candidatas sejam "agentes de transformação e inovação"» (*DN*, 19 de setembro de 2017) / «No caminho da mudança e da inovação» (*Observador*, 10 de fevereiro de 2017) / «É jovem, empreendedor e cria aplicações que permanecem no topo dos rankings mundiais» (*P3*, 28 de junho de 2018) / «A No Cow é o 8º negócio de Daniel Katz que tem apenas 21 anos. No ano passado faturou 8 milhões de euros.» (*DN*, 8 de maio de 2018) / «A iniciativa partiu da ideia de criar em Marvão um projecto turístico "diferenciador", que fosse uma "inovação" em vez de ser apenas "mais uma empresa" na zona» (*P3*, 27 de abril de 2018).

Importa, no entanto, observar como essa inovação e sucesso são narrativamente contruídos. Estas narrativas incidem em dois momentos essenciais: um primeiro associado a processos mentais («imaginar», «sonhar», «acreditar», «desejar») e um segundo correspondente aos bem sucedidos resultados dessa idealização, concretizados na utilização de escolhas verbais que apontam para processos materiais de criação, mudança e transformação: «transformar», «revolucionar», «prometer», «vencer», «capitalizar», «acelerar», «reforçar», «dar tração», «plantar», «iniciar», «motivar», «ajudar», «mudar», «resolver», «expandir» (Halliday & Matthiessen, 2004).

Como exploramos na análise da transitividade, a descrição das etapas de construção dos projetos de empreendedorismo é frequentemente omitida e, nestes artigos, a passagem da inspiração inicial para a consubstanciação do sucesso faz-se por decisão/impulso individual. Sinalizando o léxico privilegiado nos textos, estes empreendedores «decidiram», «arriscaram», «correram riscos», «experimentaram».

Ou seja, as escolhas lexicais selecionadas para representar a passagem entre a ideia e o projeto bem-sucedido evidenciam um movimento súbito, resultante de uma decisão individual cognitiva, mas também emocionalmente impulsionada pela «paixão», «coragem», «audácia», «autoestima» e «persistência» de carácter individual: «Se não havia tinha que criar. E arriscou.» (*P3*, 13 de março de 2018).

Estas narrativas associam o empreendedorismo a um momento de inspiração (descrita num dos textos como uma «epifania») que dá origem a um projeto concretizado e de sucesso: «a magia de fazer acontecer» (*Visão*, 8 de novembro de 2017) / «O caça-sonhos português que ajuda a lançar negócios» (*Observador*, 5 de setembro de 2017) / «Rapidamente largou o negócio das bebidas energéticas e se dedicou a aprimorar a ideia de umas barras de proteína sem lactose. Com jornadas de 18 horas de trabalho diárias, a dormir no chão do escritório do pai, a epifania acabou por acontecer ao fim de ano e meio.» (*DN*, 4 de dezembro de 2018).

«Desenvolvimento», «impacto», «mudança», «crescimento», «eficiência», «lucro», «poder», «valor» são mais algumas escolhas lexicais a sublinhar a valorização de uma «linguagem neoliberal» (Chun, 2016, p. 63) em torno do tema.

A frequente omissão dos contextos e processos de desenvolvimento dos projetos noticiados reforça um ideário onde o sucesso surge como resultado da capacidade de iniciativa dos sujeitos. Surge, assim, uma representação dos contextos económicos como livres e favoráveis à iniciativa individual. Neste sentido, estes discursos encobrem problemáticas relacionadas com as escolhas que são oferecidas e os seus limites, bem como sobre os responsáveis pelas decisões tomadas em torno do leque de escolhas possíveis (Chun, 2016).

Para além disso, estas narrativas associam o empreendedorismo ao universo da aventura, da diversão, da felicidade e da estética, que contribui também para silenciar outras dimensões do trabalho como o esforço, a concentração ou as dificuldades (que, como veremos, surgem frequentemente relativizadas). «Divertido», «feliz» ou «giro» são adjetivos frequentemente associados aos projetos, num movimento de estetização do trabalho e de valorização do empreendedorismo como estilo de vida, como Pedro Lopes que «partiu para a aventura de criar um negócio» (*Observador*, 11 de setembro de 2018) ou como Hugo Félix, criador da Workshoped, que refere: «Pensámos que podia ser giro dar uma ajuda às pessoas» (*P3*, 27 de março de 2018).

Wilson (2018, p. 19) reflete sobre a alegria como ética de trabalho, acrescentando que os indivíduos abraçam as dificuldades da precariedade como uma oportunidade de construção de autoestima e empreendimento emocional, construindo para si um mundo de horizontes abertos e possibilidades dinâmicas.

A observação das marcas lexicais e intradiscursivas conduz a leituras complementares. Verifica-se uma persistente associação do empreendedorismo a um espaço de globalização. O contexto geográfico das narrativas observadas é sempre o mundo e os atores sociais circulam entre o «Porto», «Singapura», «Michigan», «Sillicon Valley», «América do Sul», «Mónaco», «Reino Unido», «Alemanha» e todo um espaço para além-fronteiras, numa clara tendência de internacionalização dos atores sociais e também dos projetos representados: «A Judas londrina da Ana Brasil portuguesa» (*P3*, 5 de junho de 2017) / «O mundo é "muito pequeno" para Hernâni» (*P3*, 22 de maio de 2018) / «A primeira foi há dez anos, quando era um estudante a viajar de mochila às costas pela Península Ibérica» (*Visão*, 12 de agosto de 2017).

Identifica-se igualmente a presença de uma metalinguagem especifica, associada ao fenómeno, e frequentemente apresentada em inglês, o que reforça a construção da ideia de internacionalização anteriormente expressa: «*start-up*», «*matching*», «*jump box*», «*know-how*», «*branding*», «*workshop box*», «*roadmap*», «*ranking*», «*design*», «*developers*», «*upload*», «*crowdfunding*», «*co-work*», «*network*», «*networking*». Esta observação inclui as designações dos projetos: *Walkest – Walk by Forestest*, *Dreamshaper*, *Funny Fatima*, *Engraxat Premium ShoesCare*, *Hello world*, *Ready2Start*, *Workshoped*, *Tiger Time*, *The Paper Toy Factory*, *I-Danha Food Lab*, *Sponsh*, *Sonder*, *InfiniteBook*, *MyPolis*, *No Cow*. Constrói-se nos textos, quer através das vozes das fontes quer da construção narrativa do jornalista, uma gíria profissional específica que representa também a estetização da própria linguagem como um bem de consumo.

Se, por um lado, estas presenças lexicais permitem identificar uma representação internacional do espaço onde os projetos ocorrem, com um foco mais relacional («parcerias», «redes», «comunidades», «sinergias») e mais associado ao movimento do que à fixação espacial, por outro lado, pode identificar-se uma compressão temporal. Os processos entre a ideia e o resultado tendem, como melhor se observa na análise da transitividade, a ser suprimidos.

Identifica-se sempre um tempo rápido, representado pela construção de uma condensação temporal («de repente», «subitamente», «salto», «em menos de 24 horas») e por uma ideia de aceleração («programa de aceleração», «aceleração de competências», «pré-aceleração», «aceleramento de processos», «a todo o gás», «ritmo acelerado», «negócio rápido»).

O tempo surge também projetado num presente/futuro que se representa como digital e tecnológico. Empresas tecnológicas e plataformas digitais alavancam os projetos e são frequentemente referidas nos textos («*Skype*», «*Facebook*», «*Airbnb*», «*Google*», «*Amazon*», «*cloud*», «*app*», «*plataforma*», «*machile learning*», «*tecnologias fantásticas*», «*website*», «*interface*», «*online store*», «*software*») como impulsionadores privilegiados do seu desenvolvimento: «Casou a indústria com as *startups* em São João da Madeira» (*Observador*, 26 de setembro de 2017) / «É um dos líderes da Airbnb, a plataforma online que revolucionou o alojamento local e está a transformar a forma como se viaja no mundo» (*Visão*, 12 de agosto de 2018) / «A Ready2Start foi lançada na Web Summit e é a primeira *startup* nacional que disponibiliza negócios prontos a lançar» (*Expresso*, 14 de novembro de 2018) / «empreendedores e investidores reuniram-se na aldeia histórica para discutir a digitalização da agricultura e a produção biológica» (*P3*, 14 de novembro de 2018) / «O I-Danha Food Lab voltou para cultivar o Silicon Valley do campo" (*P3*, 14 de novembro de 2018).

Estes discursos que, no essencial, já haviam sido identificados na análise de um *corpus* de textos de 2016 (Menezes & Conde, s/d), surgem agora com novas intertextualidades, designadamente com os universos da sustentabilidade e autenticidade. Identifica-se todo um campo lexical 'ambientalista' («natural», «orgânico», «biodegradável», «amigo do ambiente», «vegan») em articulação com o campo da sustentabilidade social («autêntico», «cívico») na descrição dos projetos, titulação e entradas das próprias peças: «Jovem empresário planta árvores por cada par de botas que vende na internet» (*DN*, 16 de setembro de 2017) / «A comida biológica chegou a casa» (*Observador*, 12 de abril de 2017) / «A natureza é a "Musa" destes sabonetes

100% orgânicos» (*P3*, 31 de junho de 2018) / «Roupa portuguesa, sustentável e a preço justo é com Cristiana — e valeu-lhe um prémio» (*P3*, 13 de março de 2018) / «Estes brinquedos portugueses são feitos de cartão biodegradável» (*P3*, 7 de outubro de 2018) / «Nasceu o EcoBook, que depois se transformou no InfiniteBook, um caderno que permite errar, é amigo do ambiente e fatura 250 mil euros» (*Observador*, 11 de setembro de 2018).

A identificação deste novo campo lexical e interdiscursivo permite concluir sobre a construção neoliberal de uma nova economia e estética da sustentabilidade que naturaliza os discursos de ligação entre negócios e ação social («economia social», «empreendedorismo social», «economia de partilha», «impacto social», «participação cívica»).

O recurso à metáfora do unicórnio, que surge verbal (e também visualmente presente) condensa estas construções de significados, surgindo como símbolo máximo destes sujeitos/projetos únicos e excecionais: «estatuto de unicórnio». São consideradas empresas Unicórnio as *startup* tecnológicas que apresentam o «potencial de alcançar uma avaliação de mil milhões de dólares (vulgo, unicórnio)» (*Expresso*, 13 de junho de 2018) e cuja matriz é digital.

4 – Representação editorial dos atores sociais e transitividade

Nesta secção, são analisadas as formas através das quais os jovens empreendedores, nos textos selecionados, são representados no que diz respeito à sua agência e ao seu envolvimento em ações, isto é, são tidos em consideração os papéis sociais que lhes são designados nas escolhas oracionais no plano ideacional (Halliday, 1994; Halliday & Matthiessen, 2004, 2006). A abordagem incide nas escolhas reveladas pelas vozes editoriais.

As escolhas de transitividade reveladas nos segmentos editoriais tendem a representar os jovens empreendedores como atores de processos materiais que os posicionam como agentes de transformação dos seus percursos profissionais. No âmbito das instâncias processuais realizadas por processos materiais, destacam-se aquelas que narrativizam temporalmente as decisões e as ações dos participantes: «Constância ganhou coragem para abrir o primeiro espaço, em agosto de 2015» (*Observador*, 12 de abril de 2017) / «Quis ser médico, trabalhou para Tony Blair, na banca e para um grupo chinês de têxtil, até que lançou a Acredita Portugal.» (*Observador*, 5 de setembro de 2017) / Treze anos depois, criou um jogo e uma aplicação de sucesso, abriu a própria empresa e fundou a Sharkcoders (...) Fez as malas e apanhou um avião até São Paulo, onde reuniu com as quatro maiores empresas da área (...)» (*P3*, 28 de junho de 2018).

Nos exemplos, a agenciação dos jovens empreendedores é caracterizada por ações específicas e isoladas, instanciadas como momentos de decisão desarticulados entre si, mas que, na generalidade, surtem efeitos positivos: «Ainda assim, Cristiana Costa não pára e, já a 22 de Março, vai mesmo apresentar a nova colecção de Verão, na Embaixada Príncipe Real, em Lisboa.» (*P3*, 13 de março de 2018). Desta forma, e como anteriormente referido, as biografias, tal como são desenvolvidas pelas vozes editoriais, sugerem que o sucesso é o resultado de movimentos instantâneos, desenraizados de configurações processuais.

Um dos discursos que se evidenciam nas estruturas oracionais com valor material é a valorização da criação como ação primordial do empreendedor e como elemento indissociável do indivíduo. O processo criativo, todavia, é, nos textos, tendencialmente desagregado de comunidades de discussão e planeamento, transformando-se numa modalidade individualizada e balizada num momento de instantaneidade, designadamente pela omissão de referência ao processo que conduziu à sua materialização: «Com 23 anos, Alexandre Marques criou em Vila Nova de Famalicão a Engraxat, um serviço de limpeza de sapatilhas.» (*P3*, de maio de 2017) / «Todos os produtos usados neste processo foram criados pelo próprio Alexandre (…).» (*P3*, de maio de 2017) / «Cristiana depressa tentou arranjar forma de criar roupa que não danificasse o ambiente (…) Tudo de uma vez só.» (*P3*, 13 de maio de 2018) / «É jovem, empreendedor e cria aplicações que permanecem no topo dos *rankings* mundiais.» (*P3*, 28 de junho de 2008) / «Treze anos depois, criou um jogo e uma aplicação de sucesso.» (*P3*, 28 de junho de 2018).

Este tipo de construção é também reconhecível na forma como os momentos de decisão são instanciados em processos mentais. Os jovens empreendedores perfilados são experienciadores em processos de desiderato que designam à vontade individual o papel de impulsionadora de ações concretas e progressos profissionais passados, presentes e projetados no futuro. A vontade pessoal é o motor da ação, como ilustram os exemplos: «Quando regressar a Moçambique, a jovem pretende trabalhar questões relacionadas com as desigualdades sociais» (*DN, 16 se setembro de 2017)* / «Francisco Costa Leite <u>quis</u> estreitar as relações entre o tecido industrial e as *startups* no município mais pequeno de Portugal, São João da Madeira (...) Tem 25 anos e <u>quer</u> aproximar as indústrias estabelecidas aos novos negócios. (*Observador*, 26 de setembro de 2018) / «O mundo é "muito pequeno" para Hernâni, o investigador que <u>quer</u> descodificar a saúde» (*P3*, 22 de maio de 2018) / «Cristiana Costa <u>quer</u> reactivar e renovar a produção têxtil na Beira Interior.» (*P3*, 13 de março de 2018).

Se, nos exemplos, os desejos e aspirações, muitas vezes movidos pela paixão, funcionam como motores dos avanços profissionais, outras instâncias editoriais privilegiam construções processuais mentais de cognição. Nessas manifestações lexicogramaticais destaca-se a componente reflexiva envolvida em momentos de decisão, isto é, os participantes são construídos como protagonistas dos momentos-chave das suas biografias profissionais, que são representadas discursivamente como o resultado da compreensão das circunstâncias e oportunidades, designadamente em enunciados que recuperam a agenda neoliberal da governamentalidade: «<u>Escolheu</u> São João da Madeira porque acha que é preciso descentralizar o empreendedorismo (...) Aos 25 anos, Francisco Costa Leite <u>está convicto</u> que a digitalização da indústria e a sua ligação aos novos negócios ainda é um caminho que está no início» (*Observador*, 26 de setembro de 2018) / «Em 2017, <u>decidiram</u> apostar numa loja online e numa página no Facebook.» (*P3*, 27 de março de 2017). / «Nem por isso descansou e, em março de 2017, <u>decidiu</u> avançar com uma marca própria.» (*P3*, 28 de junho de 2018). Como refere Kelly, as biografias individuais constroem-se em atos de escolha para maximização das possibilidades de uma boa vida (2006, p. 24)

A relação entre processos materiais e mentais, analisados a partir da forma como são usados pelas vozes editoriais selecionadas, sugere maioritariamente que os contextos em que os jovens se movimentam são favoráveis e isentos de risco e obstáculos potencialmente difíceis de superar. A vontade, isto é, a resiliência interior, nos textos, é a razão pela qual as decisões são tomadas: «Antes de sonhar, era preciso acreditar.» (*Observador*, 5 de setembro de 2017). À semelhança do que se verifica nas realizações de processos materiais, as decisões, como mostram os exemplos citados, são tomadas em momentos específicos e desagregados de um fluxo temporal e circunstancial. São, antes, instanciadas como rasgos de consciência e confiança por parte do jovem empreendedor no seu potencial, nas suas escolhas e nos contextos favoráveis com os quais se vai deparando nos seus percursos: «Depressa compreendeu que "em Portugal não existiam marcas que tivessem esse tipo de preocupações" e quis ser diferente.» (*P3*, 13 de março de 2018) / «Gosta de projectos megalómanos, mas acredita que o mundo, se estiver todo ligado, pode ser "muito pequeno".» (*P3*, 22 de maio de 2018) / «Andreas não teve dúvidas de que o seu percurso passaria pela licenciatura em Engenharia Informática na Universidade de Trás-os-Montes e Alto Douro, em Vila Real. Só aqui, confessa, se apaixonou pela área da programação e robótica.» (*P3*, 28 de junho de 2018).

Se, por um lado, no âmbito das escolhas de transitividade, a agência dos jovens empreendedores é destacada através de processos materiais e mentais que sugerem ações transformadoras, ainda que, como desvendou a análise, estas sejam desenraizadas de dinâmicas processuais, por outro lado, as vozes editoriais realçam a forma como os avanços efetivos nos percursos profissionais dos perfilados são consequência das redes de suporte das quais são beneficiários. Essa configuração torna-se evidente nas circunstâncias que complementam as realizações oracionais de cariz material e mental e que introduzem entidades que desempenham papéis de facilitadoras do sucesso, designadamente na figura de circunstâncias de instrumento e modo: «Miguel Queimado continua no Brasil, o maior mercado da Dreamshaper, a *app* que desenvolveu com a ajuda de professores das universidades de Harvard e Stanford» (*Observador*, 5 de setembro de 2017) / «Foi através desse colega que entrou para o gigante Donghua Group» (*Observador*, 5 de setembro de 2017) / «Tudo o que faz é marcado pelos investigadores e professores que o apoiam.» (*P3*, 8 de maio de 2017) / «Ficaram amigos e da amizade surgiu uma oferta de emprego.» (*Observador*, 5 de setembro de 2017) / «A concretização deste e outros projectos foi alavancada por financiamento externo.» (*P3*, 22 de maio de 2018) / «A avó emprestou-lhe 20 mil euros. Hoje, fatura 500 mil e chegou a Barcelona.» (*Observador*, 12 de junho de 2018).

Além do destaque que é dado ao papel de entidades facilitadoras na obtenção do sucesso dos jovens empreendedores e na própria progressão das suas biografias, que culminam na execução da ideia, um dos recursos que se destacam nos segmentos editoriais são as narrativas temporais com lapsos e omissões de tempos, espaços e agentes, designadamente pela supressão de circunstâncias temporais, contextuais e de modo. Este fenómeno de apagamento acelera as narrativas dos perfilados, permitindo, dessa forma, que dinâmicas processuais inerentes ao trabalho criativo, à duração efetiva e real dos percursos, bem como às contingências, desafios e obstáculos que lhes são inerentes sejam elididas. Os exemplos seguintes ilustram como essa aceleração temporal é realizada por circunstâncias temporais indefinidas, como em: «As duas jovens há muito que tinham a ideia de produzir brinquedos com materiais totalmente reciclados e um projecto universitário foi o incentivo para passaram da ideia à prática.» (*P3*, 7 de outubro de 2018) / «A ideia deu voltas e voltas na sua cabeça até que, em março, o negócio finalmente começou.» (*P3*, 8 de maio de 2017); e em referências de modo esvaziadas de valor instrumental e temporal, que culminam na concretização instantânea de uma ação material e benéfica: «Da mobília emprestada à Sonder» (*Observador*, 12 de junho de 2018) / «"Do nada" ganhou uma competição da sua universidade e o passaporte para a 1.ª edição de Cascais da European Innovation Academy, em Agosto de 2017, "onde tudo mudou"» (*P3*, 23 de abril de 2018).

A aceleração temporal realiza-se também através da omissão de circunstâncias de tempo e modo de forma a sintetizar os percursos, recusando-lhes complexidade e dando apenas destaque ao resultado, representado de forma consensual e inequívoca como positivo e economicamente viável, num enquadramento discursivo em que processos e ferramentas de gestão de risco e conflito são omissos: «A Ana Brasil nasceu em Portugal e viajou para Londres, onde criou a Judas. Este é o resumo de um projecto quase recém-nascido» (*P3*, 5 de junho de 2017) / «A primeira foi há dez anos, quando era um estudante a viajar de mochila às costas pela Península Ibérica. Agora, regressa como vice-presidente de Produto da Airbnb.» (*Visão*, 12 de agosto de 2018) / «Daí até criar a *Au Natural* foi um pequeno passo.» (*P3*, 31 de julho de 2018) / «A avó emprestou-lhe 20 mil euros. Hoje, fatura 500 mil (…)» (*Observador*, 12 de junho de 2018) / «O miúdo de 17 anos que criou um caderno infinito e 5 anos depois chegou ao top da Amazon» (*Observador*, 11 de setembro de 2018).

Outra manifestação de compressão de tempo e processos acontece através da referência a momentos súbitos de criatividade onde a ideia acontece como que por magia, em circunstâncias de lugar e tempo romantizadas: «Tiveram a ideia em abril de 2016, durante um "passeio romântico" a

Sintra.» (*P3*, 27 de março de 2017) / «Daí até criar o seu primeiro jogo de computador, *Kill The Duck*, foi um instante.» (*P3*, 28 de junho de 2018) / «Há quatro anos, com a mulher e o filho de um ano, fez uma longa viagem de autocaravana pela costa portuguesa e espanhola. Foi aí que percebeu que precisava de mudar de vida» (*P3*, 14 de novembro de 2018) / «A ideia que deu origem à Sonder surgiu durante um trabalho de grupo, na faculdade.» (*Observador*, 12 de junho de 2018).

No âmbito das configurações de transitividade reveladas nas instâncias discursivas da voz editorial, poder-se-á ainda discutir a forma como a ideia, enquanto produto acabado, se torna um ator social em si mesmo, substituindo o próprio criador e surgindo redimensionada como agente: «A portuguesa Framie disputou a final da competição mundial de *startups* universitárias Venture Cup» (*Expresso*, 30 de setembro de 2018) / «A Ready2Start quer, nos próximos seis meses, comercializar 50 negócios.» (*Expresso*, 11 de novembro de 2018) / «A Outsystems conseguiu atingir este patamar 17 anos depois da sua fundação. A Feedzai está há dez anos no mercado.» (*Expresso*, 13 de junho de 2018).

No que respeita à representação editorial dos atores sociais, os textos evidenciam ainda um recurso generalizado à personalização por nomeação, sobretudo através da utilização do nome próprio (Miguel, Ana, Joebot, Fred, Ricardo, Cátia,…), que resulta numa hiperindividualização marcada também pela informalidade.

A representação dos atores sociais é também construída pelo recurso a uma personalização por categorização em função da idade, reforçando a juventude como identidade («o jovem», «o miúdo», «o estudante de 18 anos», «o rapaz de 17 anos», «*millenials*»).

Observa-se ainda uma representação por funcionalização dos atores sociais («o mentor», «o fundador», «o empreendedor», «o criador», «o parceiro», «inventor», «equipa vencedora»), a par de uma identificação das identidades com os projetos: «Girl mover» (projecto *Girl move*), «The Dream Catcher which helps launching students businesses» (projeto *Dreamshaper*), «showpolisher of modern times» (projeto *Engraxat Premium ShoesCare*).

Estas opções resultam numa transformação das identidades empreendedoras em bens de consumo, sublinhando a relação entre as representações de empreendedorismo jovem e o ideário neoliberal. Os empreendedores são representados como os agentes, responsáveis pela criação dos seus percursos.

5 – Transitividade e autorrepresentação dos atores sociais

Nesta secção são analisadas as escolhas relativas aos enunciados que correspondem ao discurso direto dos jovens empreendedores perfilados. As fontes dos textos que compõem o *corpus* em estudo são sobretudo os próprios jovens, o que é indicativo do papel que os seus discursos desempenham nas representações. A análise considera, então, as instâncias em que as suas intervenções são destacadas e a forma como se articulam com as escolhas lexicogramaticais das vozes editoriais.

Nas instâncias verbais atribuídas aos jovens empreendedores, é possível perceber um consenso em torno da ideia de que a vontade pessoal prevalece como motor privilegiado da ação: «Fiquei com uma vontade enorme de aprender e a única maneira de aprender era fazer.» (*Visão*, 8 de novembro de 2017). Além disso, as escolhas materiais são sugestivas de que também os recursos para a obtenção de resultados são fruto da capacidade técnica individual, não especializada: «Nós simplesmente começamos do nada, não perguntamos a ninguém.» (*P3*, 31 de julho de 2017) / «Fui a Aveiro, falar com a Susana: 'Que dizes de montarmos uma *startup*?'. Ela disse logo que sim» (Visão, 8 de novembro de 2017) / «Nós acreditávamos que podia ser giro, mas nunca tivemos muita noção do que é que era até lançarmos.» (*P3*, 27 de março de 2018) «Na Musa temos menos produtos porque dediquei-me a cada um deles de uma forma mais exaustiva, para melhorar a qualidade.» (*P3*, 31 de julho de 2018).

Nos textos em estudo, os jovens parecem acatar o imperativo neoliberal que legitima processos dinâmicas de governamentalidade, pois é visível, nas realizações lexicogramaticais, que a lógica da reflexividade individual e os processos de autogestão têm impacto sob a aparência de autonomização, ocultando processos ideológicos de controlo e estandardização de valores. Essa evidência está patente, por exemplo, no uso de processos mentais e materiais, através dos quais os jovens empreendedores aceitam que as dúvidas e inseguranças têm de ser geridas a título individual: «Pensei não tenho nada a perder, vou estudar a ideia desta forma, se correr mal, perdi um bocado de tempo, mas aprendi muito (...) a inovação baseia-se na tentativa e erro, quando nos estamos a lançar para o desconhecido não podemos ter medo» (*Observador*, 11 de setembro de 2018) / «Via as *startups* a levantarem centenas de milhares de euros ou mesmo milhões e eu estava ali com aquele dinheiro a pensar: se eu falhar, estou na merda, o que é que eu vou fazer?", conta Fred sobre o primeiro investimento que recebeu da parte da avó.» (*Observador*, 12 de junho de 2018). De igual modo, processos relacionais indiciam perceções afetivas em relação às condições emocionais e circunstanciais dos seus percursos, percecionados como caminhos de aprendizagem positivos e benéficos: «Eu tive cancro também. Foi difícil, mas a forma que tive de superar a doença foi dedicar-me àquilo que eu queria. E foi incrível essa superação." E agora? "Agora estou mesmo assoberbado em trabalho e estou feliz.» (*P3*, 22 de maio de 2018) / "Sempre estive preparado para falhar e sempre estarei". (*Observador*, 12 de junho de 2018) / «Mesmo que corra mal, eu terei ganho uma enorme experiência e conhecimento. (...) Tendo ambos 23 anos somos bastante novos para montar o nosso próprio negócio e pensámos: vale a pena o risco.» (*P3*, 23 de abril de 2018).

Um dos discursos que se revela mais saliente é a consciência do seu potencial enquanto gestores das suas próprias escolhas. O uso de processos mentais indica que a atitude é a de um otimismo em relação às condições em que os seus projetos ganham visibilidade e competitividade nos mercados, percecionado como contexto de oportunidade: «Em 2011 sabíamos que tínhamos uma tecnologia muito disruptiva, éramos os primeiros do mundo a montar redes de veículos (...) conseguimos ver que o que fazíamos era de facto relevante» (*Visão*, 8 de novembro de 2017). Estes significados positivos encontram eco em processos materiais: «Hoje, estamos a desenvolver a plataforma de comunicação para veículos autónomos. Estamos na crista da onda do que será o futuro da mobilidade.» (*Visão*, 8 de novembro de 2017) e relacionais: «Neste momento, somos a empresa no mundo que tem um maior número de veículos que falam entre si diariamente. Somos a empresa que tem a maior variedade, todo o tipo de carros, camiões, camionetas...» (*Visão*, 8 de novembro de 2017). O valor relacional confere à representação do empreendimento um valor de estabilidade e confiança no posicionamento cimeiro no *ranking* mundial de concorrência, revelando a perceção de que o âmbito de ação é possível a uma escala internacional.

Destaca-se, também, nos enunciados dos perfilados, e como referido na identificação dos campos lexicais predominantes, um sentido de missão transformadora e consciência do seu papel individual nas comunidades em que se movem, revelada, por exemplo, em processos materiais e mentais que sugerem um comprometimento com um tipo de ação interventiva de relevância económica, cívica e social: «É muito importante fazermos essa reflexão e vermos como podemos atacar problemas como a desigualdade social ou o envelhecimento da população» (*Visão*, 8 de novembro de 2017) / «O nosso objetivo é melhorar a qualidade de vida das pessoas.» (*Visão*, 8 de novembro de 2017) / «O poder de um empreendedor é o de mudar o mundo. E espero poder fazer a minha parte.» (*Expresso*, 25 de junho de 2018). / «Queremos uma nova polis de *millennials* a participar política e civicamente nos seus telemóveis» (*Observador*, 22 de maio de 2018).

Apesar de serem evidentes processos que sugerem a importância da participação e do impacto social das ideias, o discurso da fundação e da identidade criadora, por seu lado, surge nos textos como elemento individualizado e responsabilizador do percurso de vida, desligado das entidades abstratas sociais, políticas e educativas, designadamente na forma como os jovens são instanciados em processos materiais que anunciam ações de gestão circunstancializadas em contextos e meios privatizados: «Durante muitos anos, eram os fundadores que metiam dinheiro para aquilo não fechar, basicamente do nosso bolso.» (*Observador*, 5 de setembro de 2017) / «Foi "longe da correria de uma redação" que a jovem jornalista teve o tempo necessário "para pensar no que gostaria que uma revista fosse". "Farta do sistema" e com a "revista pronta, incluindo *market research*", a Ana pensou 'porque não?'. "Acreditava naquilo que tinha feito" e queria "ver se era possível fazer as coisas de forma diferente"» (*P3*, 5 de junho de 2017). As redes informais (amigos e outros contactos) são, aliás, mais valorizadas em detrimento dos sistemas institucionais: «Normalmente é sempre com mais ajuda. Porque, sem ela [ajuda], não consigo fazer nada.» (*P3*, 22 de maio de 2018).

O sentido de privatização da ação empreendedora é ainda, nos relatos dos perfilados, associada a um tipo de domesticação da criatividade, isto é, a ocorrências lexicogramaticais circunstanciais que sugerem que o espaço doméstico e familiar é o lugar privilegiado de produção de conhecimento e riqueza, por oposição a contextos profissionais legitimados como tal. Estas ocorrências constroem também, conforme vimos, uma representação que mistura trabalho e lazer: «Pelo Natal de 2011, fiz um jantar em minha casa e convidei alunos de doutoramento e *pos-doc.*» (*Visão*, 8 de novembro de 2011) / «A jovem do Fundão teve o primeiro contacto com a saboaria em 2013 e começou, "quase que por brincadeira", a fazer os próprios produtos em casa para oferecer à família.» (*P3*, 31 de julho de 108) / «A antiga "casa dos coelhos" que o pai remodelou para o filho poder dormir, em Lisboa, recebeu os agenciados da agência durante nove meses. (...) "Recebemos centenas de pessoas no meu quarto". (...) No início "estava completamente fora do meio empreendedor: "Não abria jornais, não lia newsletters nem ia falar com outras pessoas"» (*Observador*, 11 de setembro de 2018).

6 – A construção imagética do jovem empreendedor e do empreendedorismo jovem

As representações imagéticas privilegiadas nas escolhas editoriais são, sobretudo, conceptuais. Uma configuração deste tipo dá destaque aos jovens perfilados enquanto símbolos da consolidação da identidade empreendedora, omitindo, no plano visual, estruturas narrativas e elementos contextuais que permitiriam identificar a natureza dos percursos e das atividades neles envolvidas, bem como eventuais relações de poder. Tais opções retratam as identidades dos participantes numa articulação estreita com a ideia de negócio e/ou o produto que idealizaram e concretizaram. Na qualidade de atributos possessivos, os objetos aos quais os jovens perfilados dão destaque, sobretudo pela forma como são colocados em primeiro plano, em gestos ritualísticos que lhes conferem uma visibilidade extrema, como acontece nas Figuras 1, 2, 3, 4, 5, 7 e 8 são apresentados como metáforas visuais de um 'troféu' que conquistaram e que é a prova efetiva do sucesso dos seus empreendimentos.

Na medida em que se dá protagonismo a cada um dos jovens empreendedores, como representantes absolutos dos projetos em que estão envolvidos, sem qualquer tipo de referência imagética às respetivas equipas, o discurso que emerge é o da hiperindividualização (Lipovetsky, 2006) da identidade do empreendedor, tal como se verifica na componente verbal das representações, como demonstrado nas análises realizadas nas secções anteriores e nas realizações lexicogramaticais dos títulos designados aos perfis: personalização categorizada por funcionalização, nas Figura 1 («o engraxador»), 3 («o investigador») e 7 («o miúdo de 17 anos»); personalização por nomeação informal, nas Figuras 3, 4 e 5 («Hernâni», «Cristina», «Andreas») e semi-informal, na Figura 2 («João Barros»).

Figura 1 – O "engraxador" que deixa as tuas sapatilhas como novas

P3, 8 de maio de 2017

Figura 2 – João Barros, CEO da Venian: "Os dias dos engenheiros baratos estão contados"

Visão, 8 de novembro de 2017

Figura 3 – O mundo é "muito pequeno" para Hernâni, o investigador que quer descodificar a saúde

P3, 22 de maio de 2018

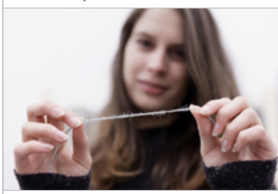

Figura 4 – Roupa portuguesa, sustentável e a preço justo é com Cristiana — e valeu-lhe um prémio

P3, 13 de março de 2018

Figura 5 – Código a código, Andreas quer ensinar todas as crianças a programar

P3, 28 de junho de 2018

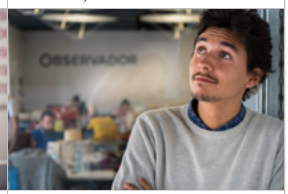

Figura 6 – A avó emprestou-lhe 20 mil euros. Hoje, fatura 500 mil e chegou a Barcelona

Observador, 12 de junho de 2018

Figura 7 – O miúdo de 17 anos que criou um caderno infinito e 5 anos depois chegou ao top da Amazon

Observador, 11 de setembro de 2018

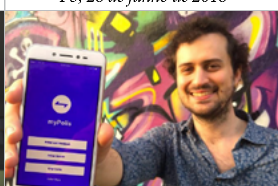

Figura 8 – MyPolis. A plataforma que quer tornar a política mais sexy para *millennials*

Observador, 22 de maio de 2018

Neste alinhamento, os retratos conceptuais identificados nos artigos tendem a essencializar um tipo de atitude e identidade para o jovem empreendedor. Trata-se, sobretudo, de um participante do sexo masculino, jovem, branco, e que demonstra uma atitude descontraída e informal. Note-se, a este respeito, na forma como a indumentária envergada pelos participantes corrobora estes significados: uso de t-shirt (Figuras 1, 3 e 7); ausência de gravata (nas Figuras 5, 6 e 8), na camisa semiaberta (na Figura 8) que sugere uma cultura empresarial que admite a informalidade; na postura relaxada e descomprometida (Figura 6), entendida a partir da forma como o participante é fotografado de braços cruzados, encostado à parede, num plano que o separa de um contexto de trabalho em que se move, a redação do jornal. Os cenários escolhidos completam o sentido simbólico das suas *personas,* sobretudo através de elementos que remetem para a identidade das suas ideias de negócio (Figuras 2, 5 e 8). A Figura 8, sugere, além disso, pelo valor conotativo percebido pela referência ao nome do produto «My Polis» e a presença do graffiti, como elemento de paisagem citadina, uma identidade urbana. Estes atributos são expressos conotativamente pela forma como, por exemplo, os retratados convocam diretamente o espectador em imagens de pedido. Nas fotos, os participantes estão sorridentes e seguram os produtos que conceberam de forma a dar-lhes uma visibilidade de primeiro-plano. O valor dos produtos sobrepõe-se, em termos composicionais, à própria identidade dos participantes enquanto criadores. Tal como se observa nas representações verbais, a dimensão imagética dá relevo a uma noção de empreendedorismo jovem que se articula de forma indissociável com a ideia de sucesso individual como estado de coisas absoluto, inquestionável e legitimado socialmente: «e valeu-lhe um prémio», na Figura 4; «Hoje, fatura 500 mil e chegou a Barcelona», na Figura 6; «criou um caderno infinito e 5 anos depois chegou ao top da Amazon», na Figura 7.

A ideia de sucesso é também construída visualmente através de representações conceptuais simbólicas, nas Figuras 9, 10, 11, 12, 13 e 14, nas quais o foco é o produto e não o elemento humano que está na origem da sua conceção, que surge, aliás, em alguns casos, sobreposto e sem rosto (Figuras 11 e 12).

Figura 9 – A natureza é a "Musa" destes sabonetes 100% orgânicos
P3, 31 de julho de 2018

Figura 10 – Aloha Lisboa, a comida biológica chegou a casa
Observador, 12 de abril de 2017

Figura 11 – Moda: A Judas londrina da Ana Brasil portuguesa
P3, 5 de junho de 2017

Figura 12 – PANTA: Uma revista de cultura e artivismo que celebra a arte pelo mundo
P3, 31 de julho de 2017

Figura 13 – Workshops que vão ter a casa dentro de caixas? É a Workshoped
P3, 27 de março de 2018

Figura 14 – O I-Danha Food Lab voltou para cultivar o "Silicon Valley do campo"
P3, 14 de novembro de 2018

Quando analisadas em articulação com a componente verbal, é possível identificar um paralelo na forma como, no âmbito da transitividade, a ideia é instanciada como elemento agentivo. Embora com um sentido conceptual e não acional, nas representações visuais é criada uma estética de desejo que tem como objetivo aumentar o valor de mercado dos produtos. Estes, por sua vez, são duplamente objetificados: pelo facto de serem bens de consumo e pela forma como estas opções semióticas os transformam em objetos-fetiche, que suscitam desejo e admiração. O uso do termo 'fetiche´ nomeia a forma como objetos de consumo em contextos particulares adquirem propriedades, qualidades, valores e significados intrínsecos atrativos, que provocam desejo (Entwistle, 2000). Observe-se, por exemplo, as opções cromáticas que, no seio do sistema paramétrico (van Leeuwen, 2011), privilegiam a escala máxima de saturação com valores associativos que remetem para temperaturas emotivas e tipos de afeto: o prazer degustativo, na Figura 10; a frescura da terra, na Figura 14; a textura e o aroma marítimo, na Figura 9. Na Figura 11, a escala máxima de brilho destaca a capa da revista enquanto objeto de desejo. Esse elemento surge na posição central da composição, como único objeto nomeado na composição. É re-tratado, além disso, enquanto metáfora de proximidade e ligação afetiva pela forma como é transportado pela figura feminina junto ao corpo.

Figura 15 – Quem é o próximo unicórnio português?
Expresso, 13 de junho de 2018

De igual modo, os títulos dos editoriais introduzem discursos que se articulam com a imagética de desejo e prazer pela forma como remetem para sentidos míticos («a natureza é a "Musa" destes sabonetes»), para o consumo saudável e sustentável («a comida biológica chegou a casa»), para uma estética de autenticidade («sabonetes 100% orgânicos», «o I-Danha Food Lab voltou para cultivar o "Silicon Valley do campo"») e pela referência aos valores da arte, do design e da moda como elementos definidores da identidade da marca («PANTA: uma revista de cultura e artivismo», «workshops que vão ter a casa dentro de caixas? É a Workshoped», «Moda: A Judas londrina da Ana Brasil portuguesa»).

Na Figura 15, a metáfora visual do Unicórnio, na forma de uma representação conceptual simbólica sugestiva, é indicativa de uma abordagem visual que condensa uma definição mítica de empreendedor e do empreendedorismo. O unicórnio designa especificamente empresas tecnológicas cuja disseminação se deve, além de outros fatores, às redes sociais e ao uso de plataformas digitais.

Através da recontextualização do significado de 'unicórnio', adaptado ao contexto das *startup* internacionais com um crescimento repentino, cuja identidade se reconhece na área da tecnologia, o empreendedor é classificado como protagonista de uma narrativa grandiosa, que ganha uma dimensão mística, como a própria figura lendária, que o ultrapassa e que se torna global. A circunstância visual é um espaço aberto, sem fronteiras definidas e sem definição contextual e histórica. O empreendedor é uma personalidade que, podendo ser identificada localmente («unicórnio português», «unicórnio com sangue Luso»), navega, contudo, num mundo digital sem espaço nem tempo. É, além disso, um indivíduo que segue um percurso individualizado rumo ao sucesso, que se apresenta como possível e ilimitado.

7 – Considerações finais

Em conclusão, podemos indicar que, no *corpus* em análise, o jovem empreendedor é representado como agente de transformação, isto é, como um ator social envolvido em ações e dinâmicas de modificação do seu próprio percurso e do espaço cultural e social que o envolve. O empreendedorismo, por sua vez, surge como atividade valorizada, associada à inovação e ao sucesso, e representada como privilégio geracional, aspeto visível na forma como os jovens são associados à produção, criação e implementação de ideias promissoras.

Esta valorização da 'ideia' surge com tal relevância nos textos, que chega a ser representada como um agente, uma entidade autónoma, uma inspiração e um valor supremo, uma espécie de organismo vivo que origina sucesso instantâneo. Os resultados são projetos que resultam em objetos de culto e de desejo e que possuem valor de mercado (são mercadorias/ *commodities*).

Ainda que seja possível identificar um novo discurso de missão enraizado num contexto que não se limita ao lucro económico, mas também ao impacto social, essa formulação é apresentada na forma de um discurso neoliberal, que interliga o campo dos negócios com o campo atuação ambiental e cívica, sob a designação de uma nova «economia social». Esta é, aliás, uma forma de transformação da linguagem em bem de consumo (*commodification of language*), visível também na construção de uma gíria profissional específica, assente na ideia de globalização e de digitalização dos mercados, que se articula num tempo que, nos textos, tende a surgir projetado num presente e num futuro que se representam como digitais e tecnológicos.

Se estas manifestações são significativas para compreender que representações são construídas sobre o empreendedorismo jovem, as ausências identificadas nos textos são igualmente relevantes na construção dos enquadramentos. A análise permite concluir que as redes informais (amigos e outros contactos) são valorizadas em detrimento de sistemas institucionais. Vimos também que as escolhas discursivas dos textos enfatizam um ideal de globalização que aniquila espaços concretos, e que o 'tempo' é referido em termos de um desvio mágico para o presente e projeção para o futuro. O 'passado' é representado como o momento único e isolado, durante o qual a ideia veio à mente. Ou seja, as etapas necessárias para levar a cabo um projeto, outros agentes, bem como dificuldades inerentes aos processos são silenciados por uma lógica discursiva que condensa o tempo e acelera a descrição dos contextos e percursos de concretização.

O trabalho não é representado como trabalho, no sentido de esforço. O trabalho é um chamamento, um estilo de vida e uma experiência agradável e satisfatória. Os processos e as dificuldades do percurso ou são omitidas ou tendem a ser apresentadas como dilemas pessoais, ultrapassados pela vontade e pelo acreditar, por boas escolhas, em discursos que não são enquadrados num espaço concreto, nem no sistema social mais alargado e nas suas contingências. Neste contexto, as conquistas são do jovem empreendedor, hiperindividualizado como agente primordial da sua construção profissional. Essa edificação é visível nas representações multimodais (fotografias de rosto, padrões de personalização por nomeação).

Ou seja, os perfis analisados constroem narrativas desenraizadas. Descrevem vitórias cujos processos de construção surgem narrativamente simplificados, centrados na agência dos indivíduos, e com frequente omissão de processos socioeconómicos mais vastos. Cada indivíduo persegue o seu próprio caminho, percecionando os desafios e os riscos associados individualmente, num movimento de privatização dos problemas (Furlong & Cartmel, 1997).

Ora, esta representação do empreendedorismo como realidade absolutamente positivada e hiperindividualizada pode introduzir riscos de uma «privatização generalizada de áreas de responsabilidade anteriormente públicas» (Kelly, 2006, p. 24). Os discursos neoliberais introduzem, desta forma, o risco de «reduzir quaisquer noções e práticas de uma cidadania política ativa a um grau sem precedentes de passividade e complacência política» (Brown, 2005, p. 43. In Chun, 2016, p. 564).

Deste ponto de vista, Sukarieh e Tannock (2001) defendem que «não são apenas os estereótipos negativos de juventude que precisam de ser interrogados criticamente, mas também os estereótipos positivos» (p. 675), motivo pelo qual é relevante refletir sobre estas representações produzidas e sobre «a relevância política dos *media* noticiosos enquanto formas semióticas, que ativamente constroem um mundo social que privilegia determinadas perspetivas ideológicas» (Phelan, 2018, p. 543).

NOTAS

As citações integradas no texto do artigo correspondem à tradução para português feita pelas autoras.

REFERÊNCIAS

Anderson, A. M. (2010). The constitution of youth: Toward a genealogy of the discourse and government of youth. Doctoral Thesis in Youth Affairs. RMIT University.

Beck, U. (1994). The reinvention of politics: towards a theory of reflexive modernization. In U. Beck, A. Giddens, & S. Lash (Eds.), R*eflexive modernization: Politics, tradition and aesthetics in the modern social order* (pp. 1–54). Cambridge, Malden: Polity Press.

Boyles, D. (2008). *The corporate assault on youth: Commercialism, exploitation, and the end of innocence*. New York: Peter Lang.

Chun, C. (2016). Exploring neoliberal language, discourses and identities. In S. Preece (Ed.), *The Routledge handbook of language and identity* (pp. 558–571). London and New York: Routledge.

Dean, M. (1999). *Governmentality: Power and rule in modern society*. London, Thousand Oaks, New Delhi and Singapore. London: Sage.

Entwistle, J. (2000). *The fashioned body: Fashion, dress and modern social theory*. Cambridge and Maiden: Polity Press.

Fairclough, N. (2003). *Analyzing discourse: Textual analysis for social research*. New York: Routledge.

Fairclough, N. (2006). *Language and globalization*. London: Routledge.

Fairclough, N. (2010). *Critical discourse analysis: The critical study of language*. New York: Routledge.

Foucault, M. (1988). Technologies of the self. In L. Martin, H. Gutman, & P. Hutton. (Eds.) *Technologies of the self: A seminar with Michel Foucault* (pp. 16–49). Massachusetts: The University of Massachusetts Press.

Foucault, M. (2008) [1979]. *The birth of bipolitics: Lectures at the Collège de France*, 1978–1979. Obra original publicada em 1979. London: Palgrave Macmillan.

Fornäs, J. (1995). Youth, culture and modernity. In J. Fornäs, & G. Bolin, *Youth culture in late modernity* (pp. 1–11). London, Thousand Oaks and New Delhi: Sage.

Furlong, A., & Cartmel, F. (1997). *Young people and social change: Individualization and risk and late modernity*. Buckingham and Philadelphia: Open University Press.

Giddens A. (1997). *Modernidade e identidade pessoal* (2.ª ed). Oeiras: Celta Editora.

Giddens, A. (2001) [1990]. *As Consequências da modernidade* (4.ª ed). Oeiras: Celta Editora.

Gill, R., & Scharff, C. (2011). Introduction. In R. Gill, & C. Scharff, *New femininities: Postfeminism, neoliberalism and subjectivity* (pp. 1-17). Hampshire and New York: Palgrave Macmillan.

Halliday, M. A. K (1994) [1985]. *An introduction to functional grammar* (2nd ed.). London: Edward Arnold.

Halliday, M. A. K., & Matthiessen, C. M. I. M. (2004). *An introduction to functional grammar* (3rd ed.). London: Holder Arnold.

Kelly, Peter (2006) 'The entrepreneurial self and 'youth at-risk': Exploring the horizons of identity in the twenty-first century'. *Journal of Youth Studies*, *9:1*, 17–32.

Kress, G., & van Leeuwen, T. (2006). *Reading images: The grammar of visual design*. London and New York: Routledge.

Lipovestky, G. (2006). *A Felicidade paradoxal: Ensaio sobre a sociedade do hiperconsumo*. Lisboa: Edições 70.

Menezes, C., & Conde, I. (no prelo). A construção da identidade neoliberal: Uma leitura dos silêncios e ausências em discursos noticiosos sobre empreendedorismo jovem. In *Livro de Atas do VI Simpósio Mundial de Estudos de Língua Portuguesa (24 a 28 de outubro de 2017)*.

Pais, J. M. (1993). *Culturas juvenis*. Lisboa: Imprensa Nacional-Casa da Moeda.

Pais, J. M., Cairns, D., & Pappámikail, L. (2005). Jovens europeus: Retrato da diversidade. Tempo social. *Revista de Sociologia da USP, 17(2)*, 109–140.

Phelan, S. (2018). Neoliberalism and the media. In Cahill et al. (2018), *The sage handbook of neoliberalism* (pp. 539–552). London: Sage.

Pinto-Coelho (2009). Jovens no discurso da imprensa portuguesa: Um estudo exploratório. *Análise Social,* vol. XLIV, *(191)*, 361-377.

Rose, N. (1999). *Power of freedom: Reframing political thought*. Cambridge, New York, Melbourne and Madrid: Cambridge University Press.

Strickland, R. (Ed.). (2002). *Growing up postmodern: Neoliberalism and the war on the young*. Oxford: Rowan & Littlefield Publishers.

Sodré, M., & Ferrari, M. H. (1986). *Técnica de reportagem: Notas sobre a narrativa jornalística* (5.ª ed.). São Paulo: Summus Editorial.

Sukarieh, M., & Tannock, S. (2011).The positivity imperative: A critical look at the 'new' youth development movement, *Journal of Youth Studies, 14:6*, 675–691.

Sukarieh, M., & Tannock, S. (2015). *Youth Rising: The politics of youth in the global economy*. New York and Oxon: Routledge.

Sukarieh. M., & Tannock, S. (2016). On the Political Economy of Youth: A comment. *Journal of Youth Studies, 19(9),* 1281–1289.

Tannock, S. (2001). The Literacies of youth workers and youth workplaces. *Journal of Adolescent & Adult Literacy, 45(2),* (Oct., 2001), 140–143.

Thurlow, C. (2007). Fabricating youth: New-media discourse and the technologization of young people. In Sally Johnson, & Astrid Ensslin (Eds.), *Language in the media: Representations, identities, ideologies* (pp. 213–233). London: Continuum.

van Leeuwen, T. (1997). A representação dos actores sociais. In R. P. Emília (Org.): *Análise crítica do discurso: Uma perspectiva sociopolítica e funcional* (pp. 169–224). Lisboa: Caminho.

van Leeuwen, T. (2008). *Discourse and practice: New tools for critical discourse analysis.* Oxford: Oxford University Press.

van Leeuwen, T. (2011). *The language of colour: An introduction*. London & New York: Routledge.

Vilas-Boas, S. (2003). *Perfis e como escrevê-los*. São Paulo: Summus.

Wilson, J. (2018). *Neoliberalism*. New York and London: Routledge.

10

ANALYZING PRAGMATIC ELEMENTS IN HEALTH INFORMATION WEBSITES

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ABSTRACT

The ideal multilingual health information website is comprehensible to all readers. Websites in the language of the natives and immigrants should clearly impart the facts and persuade the reader to respond to the health message that will ultimately reduce disease in the diverse community. The use of specialized vocabulary and the attitude of the writer, as conveyed through the text, influences the reader's decision-making process. The purpose of this paper is to describe a methodology to assess two pragmatic determinants – technicality of vocabulary and writer-reader relationship – to determine whether the corpus of multilingual health communication websites is appropriately written with regard to comprehensibility. This approach incorporates an adaptation of the Evaluative Linguistic Framework – which is based on Systemic Functional Linguistics and developed by Clerehan and Buchbinder (Clerehan et al., 2005; Clerehan & Buchbinder, 2006). Results for a sample website in English, Spanish, and Catalan are discussed to demonstrate this methodology. The example shown in this paper should compel researchers and professionals in the translation and language sciences as well as the public health field, respectively, to incorporate this technique in future studies to ultimately improve lay-friendliness and writer-reader relationship in multilingual health information websites.

KEYWORDS

Systemic Functional Linguistics, written health discourse, comprehensibility, Evaluative Linguistics Framework, lay-friendliness

1 – Introduction

Multilingual health information that is comprehensible educates and empowers their target audience (Dixon-Wood, 2001). In the public health field, quality assessments of multilingual health information websites, in terms of comprehensibility, overlook critical details. An ongoing problem is the inability of the general public to discern the quality of health information, in which language plays an integral role. Comprehensibility involves health literacy, which refers to the level where an individual can "obtain, process, and understand basic health information […] to make appropriate health decisions." (Institute of Medicine, 2004), and extends beyond readability by incorporating the influences of the target reader's personal background. This includes their ability to correctly perceive the pragmatic elements of the health information text. A well-written multilingual health information website presumes a low health literacy level of its target readers, which can help reduce health disparities among migrants and minority communities. Such a website features pragmatic elements that avoid misinterpretations. The meaning beyond the words is unquestionably clear. This is one of the goals of the European Commission (European Commission, 2019) in collaboration with the World Health Organization (WHO eHealth, 2019). Two internationally known health organizations – the National Institute of Health and the American Medical Association – recommend sixth grade readability level. However, according to prior research, readability levels are too difficult (ninth grade to university levels).

Poor comprehensibility of multilingual health information websites could exacerbate health disparities caused by a lack of cultural competence. The concept of health disparities is defined as "differences in health status between people that are related to social or demographic factors such as race, gender, income, or geographic region" (American Public Health Association, 2008), in which language plays a vital role. Health literacy varies among the different cultural communities within a city, region or country. Migrant communities are among the high-risk groups: they experience health disparities due to language and cultural barriers, along with discrimination (Brown, 2018; Garcimartín Cerezo et al., 2014). In developed countries, misperceptions persist that migrants import disease. From the host country's health care providers and general public and from within their own cultural community, migrants contend with stigma from multiple sources. Accessibility to health information in a language that the patient understands, and whose cultural background is respected by the writer, is paramount. Along with the website's native language, the translations must be comprehensible and culturally appropriate. Their message's intended meaning must be clearly conveyed.

There is a need for research that incorporates the sociocultural aspects of language in multilingual health information websites using a well-established framework. Clerehan et al. (2005) developed an evaluation tool based on Halliday's theory of Systemic Functional Linguistics (SFL) (Halliday & Matthiessen, 2014), which they and other researchers have used to analyze health communications text, including patient information leaflets (PILs) and informed consent documents (ICDs). The cross-cultural appropriateness of this tool has been demonstrated on patient questionnaires in multiple languages (Clerehan et al., 2016; Petkovic, et al., 2015). This paper aims to demonstrate further refinements to this tool to evaluate multilingual health information websites. Through analyzing two pragmatic determinants – writer-reader relationship and technicality of vocabulary – the study could reveal ways to improve the comprehensibility of health communication texts. Using a linguistics theoretical framework containing sociocultural features, the methodology in this study is designed to identify specialized medical terms and differentiate various writer-reader relationships in multilingual health information websites. Prior research shows the possibility of applying SFL to analyze multilingual health information websites to reveal areas for improvement in comprehensibility in health communication.

The Evaluative Linguistic Framework (ELF) (Clerehan et al., 2005) is based on the theory of SFL in terms of language (text) interacting with the context of situation (the three elements of register) that in turn interacts with the context of culture (genre) (Halliday & Matthiessen, 2014). Genre, the type of text, is determined by "social practices, knowledge, and values," (Morony, 2018, p. e2) all of which constitute culture (Halliday & Matthiessen, 2014). Based on these SFL concepts, the ELF by Clerehan et al. (2005) was designed to analyze health communication texts – in the case of this paper, multilingual health information websites – to determine whether the texts are appropriately written so that they positively influence the comprehensibility, which can result in their usefulness for the readers (Morony, 2018). The ELF is an instrument incorporating nine determinants, each of which is measured via a questionnaire. The first seven include: overall organizational or generic structure of the text, rhetorical elements, metadiscourse, headings, lexical density, factual content of text, and format. The last two of the determinants are the focus of this paper: writer-reader relationship and technicality of vocabulary.

2 – Writer-reader relationship

The writer is identified as the representative who composed the text. This representative could be an individual author or the organization (Sarangi, 2019) that provides the multilingual health information website. The reader is defined as the individual who reads the health information on the website. In a comprehensible and culturally appropriate text, the writer and the reader are identified clearly, and the dynamics of their relationship are distinctly outlined. Within the context of this paper, the writer would be the expert, whose responsibility is to impart knowledge and advice to the reader, who is the lay person. Writer-reader relationship concerns "their relative status, and the implied relationship (the tenor) [which] is indicated by forms of address" (Morony et al., 2018). Analyzing this pragmatic determinant concerns not only the identity of each role player, but the writer's attitude as perceived by the reader. Some examples of attitudes are persuasive, instructional, or collaborative (Clerehan et al., 2005).

The cultural background of the writer and the reader influences the relationship via the text. The ideal text is culturally adapted, as opposed to solely reflecting the writer's background or exclusively representing the country hosting the website, in order to meet the reader's expectations based on their cultural differences. The unique characteristics of each language must be considered when comparing different versions of a multilingual health information website. For example, in English, the second person pronoun is equally applied to informal and formal situations. In Romance languages, there are two different second person pronouns for formal and informal situations (Azevedo, 2005), such as the Spanish *usted* and *tú*, respectively. This important distinction reflects cultural differences.

3 – Technicality of vocabulary

This correlation between writer-reader relationship and technicality of vocabulary lies in the author's assumption of the target audience's reading comprehension and health literacy level (Clerehan et al., 2005). Word choices can make or break the writer's connection with the reader.

While there exists a general understanding of *technicality of vocabulary* in the literature, according to Ha & Hyland (2017), researchers differ on a definition of *technical words* (or *technical vocabulary*) and its features. One definition relates technical vocabulary to the kind of words typically included in text rendered and read within a particular group of specialists. Such a text features vocabulary that is "domain-specific" and "requires scientific knowledge to understand" (Paquot, 2010, p.13), and "includes words closely related to a specific sub-field and not frequent in other fields" (Valipouri & Nassaji, 2013, p. 249). For others, the key to a vocabulary's technicality lies in the fact that such terminology carries a restricted meaning and appears primarily in a particular domain (Mudraya, 2006; Nation & Newton, 1997; Valipouri & Nassaji, 2013; Ha & Hyland, 2017). According to Mudraya (2006, pp. 238–239), such key words possess "no exact synonyms and have a very narrow range of interpretations within a particular field." Vezzani, Di Nunzio, and Henrot (2018, p. 4369) add to this idea: technical terms are "closely related to the conceptual and practical factors of a given discipline or activity." Clerehan et al. (2005) describe technicality of vocabulary as "the degree of complexity of the medical terminology and/or other vocabulary used," which is the definition adopted for this study. Technicality of vocabulary lies under field as it pertains to what is being talked about (Clerehan & Buchbinder, 2006).

A high number of medical words undermines the readability of health information for the general public (Hoste et al., 2010). This paper focuses on the level of specialization of lexis and whether medical jargon appears in multilingual health information websites. The ideal text should be fully comprehensible not only regarding readability but also according to the lay reader's anticipated health literacy level.

The next section provides the history of the evaluation tool formulated by Clerehan et al. (2005). Then the two parts of their evaluation tool will be presented, along with a detailed account of the refinements rendered. The following section will demonstrate the application of this adapted methodology to a sample multilingual health information website, whose results will be discussed.

4 – A linguistic tool based on SFL

Clerehan et al. (2005) collaborated to formulate a linguistic tool based on Systemic Functional Linguistics to assess the quality of patient information leaflets (PILs), which is the document about the medicine in the package. The researchers noted that many studies analyzed readability of public health communication materials using formulas with questionable validity and lacked a scrutiny of "the overall structure or organization of the text, or the vocabulary used… the prior knowledge of the reader or the significance of the role relationships between author and reader" (Clerehan et al., 2005, p. 335). Their study marked the first time, to their knowledge, that a linguistic framework was formulated to evaluate the quality of PILs. Eighteen PILs for the same medication from one country were independently assessed according to their formulated instrument, dubbed Evaluative Linguistic Framework (ELF). Seven relevant features of Systemic Functional theory for evaluating PILs were identified: generic structure, move, rhetorical elements, technicality of vocabulary, appropriate factual content presentation, lexical density, and writer-reader relationship (Clerehan et al., 2005).

Clerehan et al. (2005, p. 342) highlighted the potential that their linguistic tool could have for analyzing health communication texts, which can "detect important features present in patient information leaflets." Unlike statistical comprehensibility approaches used by other studies, Clerehan et al. (2005) showed through their study that a linguistic formula to evaluate PILs can reveal vital information concerning issues such as technicality of vocabulary and writer-reader relationship. They recommended a multidisciplinary process that includes consultation with a linguist to improve the comprehensibility of PILs (Clerehan et al., 2005, p. 343).

In order to propose specific ways to improve the readability of PILs using a new evaluative approach, Clerehan and Buchbinder (2006) tested their linguistically based theoretical framework, ELF, by analyzing the same eighteen samples as in their prior study. The two researchers performed the analysis on linguistic features, which included lexical specialization and writer-reader identities, with a portion thereof verified by a colleague. The identity of the author and the target reader were unclear; several PILs appeared to have been written for healthcare providers and others for patients. As an extension of the doctor-patient relationship, such clarity in health communication text is paramount. The researchers observed that, due to variability at the discourse and the lexicogrammar levels, the PILs fail to meet their aim. The wording was less "spoken-like" than needed for the lay audience. They recommended collaboration between linguists and healthcare providers to render texts that combine "text- and reader-focused" (Clerehan & Buchbinder, 2006, p. 65) linguistic analysis with a public health strategy to produce "empirically tested and theoretically based" (Clerehan & Buchbinder, 2006, p. 65) health communication.

This reader-focused assessment implementing the ELF took place once a new set of PILs was rendered by a healthcare association (Hirsh et al., 2009). Clerehan and Buchbinder's research team analyzed nineteen PILs in English from their prior studies (Clerehan et al., 2005; Clerehan & Buchbinder, 2006) plus a new one, and four new PILs that had been written following the ELF guidelines. Feedback was obtained using three focuses: process (think-aloud while reading the sample, followed by a brief summary of what they had just read), product (writing pluses for positive aspects of the PIL sample and minuses for negative aspects directly on the leaflet, and then rationalize their choices), and opinion (focus group discussion, guided by researchers who asked questions based on the ELF).

Feedback was provided by a focus group of twenty-seven participants, all of whom had the same chronic ailment and had taken one of the medications included in the sample of PILs. The new PILs were preferred over the old PILs. The group favored clear instructions and information. The readers disliked negative or patronizing attitudes by the writer, choosing PILs with an encouraging or reassuring positive tone. Instead of technical vocabulary, the focus group leaned towards lay terminology – i.e., language that the general public can understand – to facilitate comprehensibility. Although several of the questions used in this study required subjective opinions, the focus group's feedback reaffirmed the ability of a linguistic-based evaluative framework for PILs to improve readability. The ELF thus far was applied to a small sample of PILs.

Clerehan and Buchbinder (2006, p. 65) and Hirsh et al. (2009, p. 254) recommended future research applying their linguistic theoretical framework on other patient-focused health texts. Sand et al. (2012) analyzed twenty - ten old and ten new - informed consent documents (ICDs). The researchers defined the readability of an ICD as one that clearly extends an invitation to the reader to enroll in the clinical study and outlines the implications of participation. Any disagreements in the analysis were resolved by consensus between the three researchers. The new ICDs, which were more oriented towards research, were easier to read. The old ones contained excessive information regarding the reader's diagnosis and treatment. The clearer and more concise the documents, the more comprehensible they were. Sand et al. (2012, p. 76) stated that the ELF needed "further validation" for analyzing ICDs. The researchers recommended that future studies include larger samples from multiple countries.

Together with their colleagues, Clerehan and Buchbinder (2016) reformulated the Evaluative Linguistic Framework to evaluate health questionnaires. They tested this version of their linguistic instrument by assessing the quality of self-report health questionnaires in English and French, as well as the Spanish, Dutch, and Turkish versions. By testing two different questionnaires in five languages, they investigated whether the Evaluative Linguistic Framework for Questionnaires (ELF-Q), which included writer-reader relationship and technicality of vocabulary, would work multilingually.

Four researchers tested the ELF-Q on the English version of the questionnaire, while trained natives tested this variation of the linguistic tool on the health questionnaire in their respective languages. The findings showed that the ELF-Q found both questionnaires in all five languages were acceptable, despite minor issues whose editing could enhance readability. The researchers recommended that future questionnaires be formulated and tested using the ELF-Q, a concise, user-friendly SFL-based framework.

Morony et al. (2018) evaluated fourteen patient education materials about chronic kidney disease (CKD) self-management using the ELF. To evaluate this health communication genre, they adapted the writer-reader relationship aspect of the instrument highlighting the importance of clarifying the reader's responsibilities and the urgency of the call to action. The researchers found that most of the materials presumed the reader's prior knowledge about CKD and that the vocabulary was too technical. Additionally, the writers' objectives and the identity of the intended audience were often unclear. The researchers recommended the use of "a theoretically grounded linguistic tool that focuses on the intended audience and their specific needs," (Morony et al., 2018, p. e1) and future research to apply the ELF to other forms of health communication.

This linguistic framework proves practical for analyzing the readability and cultural competence of health communication texts in this study. It should be noted that *cultural competence* in the prior research strictly pertains to linguistics and omits the cultural implications beyond the text. Frequently used health communication assessment tools for text readability, such as the Flesch Reading Ease Formula (Flesch, 1948), lack applicability across different languages, fail to focus on top-down features - including those critical to culture - or bottom-up items (Clerehan et al., 2005, 2016). They do not address the disparity between the scores and the actual readability by the target audience (Clerehan et al., 2016, p. 340). The researchers also criticized the Questionnaire Appraisal System (Willis & Lessler: 1999) for its lack of basis in linguistic theory, as it only partially addresses rhetorical elements and indirectly considers the writer-reader relationship (Clerehan et al., 2016, p. 341).

These studies demonstrate the Evaluative Linguistic Framework's adaptability to evaluate different types of health communication texts. Clerehan et al. (2016, p. 341) stated that the ELF "is likely to be of value for other health care texts such as patient information… which further research may confirm."

5 – Adapting the ELF to evaluate multilingual health information websites

The development, testing, and application of a linguistics-based theoretical framework and its methodology for health communication, from PILs to patient questionnaires, have been accomplished in prior research over the last fifteen years. For the first time, this framework and methodology is being adapted to evaluate two pragmatic determinants – writer-reader relationship and technicality of vocabulary – in multilingual health information websites. The objective is to ascertain whether, regarding writer-reader relationship and technicality of vocabulary, differences exist between the English, Spanish, and Catalan versions of multilingual health information websites on diagnostic tests for tuberculosis (TB) and HIV. Despite available preventive measures, these infectious diseases prevail globally. Educating people to get tested for these two diseases is critical; those whose test results are positive can get treated, which would reduce the global incidence and prevalence. To succeed, it is important to provide a multilingual website that the public from a diverse range of backgrounds can comprehend and to which they will respond accordingly. The analysis examines a corpus of seventy-three multilingual health information websites from the following countries: United States, United Kingdom, Ireland, Spain, Catalonia, Switzerland, and Germany.

For this paper, a sample website from the corpus will exemplify the adaptation of the ELF to multilingual health information websites. A Barcelona-based non-profit outreach organization, BCN Checkpoint, provides information in Catalan (see Appendix A), Spanish (see Appendix B), and English (see Appendix C) to the public about getting tested for HIV.

6 – Hypotheses

Writer-reader relationship

As noted earlier in this paper, the ELF-Q in the study by Clerehan and Buchbinder (2016) found that both questionnaires in all five languages were acceptable, barring minor readability issues. Therefore, the following hypothesis is proposed for writer-reader relationship:

English, Spanish, and Catalan health information websites will reflect the culture of the host country through writer-reader relationship.

Technicality of vocabulary

Askehave and Zethsen (2014) and Montalt et al. (2018) noted that translations of a health communication text from the original language increase the technicality of the vocabulary in the target language, which winds up being more difficult for the general public to comprehend. Numerous studies, including the prior ELF research described earlier, support this observation by Montalt, et al. (2018). Therefore, the following hypothesis with regard to technicality of vocabulary is proposed:

Websites about HIV & TB diagnostic testing in English, Spanish, and Catalan will contain more technical words than necessary, particularly in the translations, however there will be very few extremely technical words unaccompanied by a definition overall.

7 – Analyzing writer-reader relationship

The questionnaire shown in Table 1 is the ELF-Q (Clerehan et al., 2016) to analyze writer-reader relationship in multilingual health information website texts. With regard to tone, specific details – such as persuasion, condescending, reassuring, instructional – will be discerned from discourse markers in the text.

Table 1 – **Writer-reader relationship in the ELF-Q** (Clerehan et al., 2016, pp. 338–339)

Assessment	Appropriate responses
Is it clear who the writer and the intended audience are?	Identity of the writer clear: Yes / No / Uncertain Intended audience clear: Yes / No / Uncertain
Is the relationship between the writer and the reader clear and consistent? For example, are the items consistent in referring to the participant (you, me)?	Relationship is consistent: Yes / No / Uncertain
How positive (encouraging, reassuring) is the tone (for example, nonjudgmental about possible responses)?	Tone is positive: Yes / No / Uncertain
Are items generalizable to respondents in all social strata, age, and ethnic / national groups in target population?	Generalizable: Yes / No / Uncertain
Are the items clear and unambiguous for the target population?	Items clear / unambiguous: Yes / No / Uncertain
Are the response options clear and unambiguous for the target population?	Response options clear / unambiguous: Yes / No / Uncertain

8 – Analyzing technicality of vocabulary

Together with the consultation of general and medical dictionaries for each language that indicate whether a word in question is a lay or specialized word and its usage frequency, the questionnaire shown in Table 2 lists the ELF-Q (Clerehan et al., 2016) technicality of vocabulary questions and answers to assess multilingual health information websites.

Table 2 – **Technicality of vocabulary in the ELF-Q** (Clerehan et al., 2016, pp. 338–339)

Assessment	Appropriate responses
How technical is the vocabulary used in the text?	(Exemplify)
Is any technicality appropriate (for example, if a disease or treatment terms are mentioned, can the participants be expected to know these)?	Technicality appropriate: Yes / No / Uncertain
Are the remaining words among those most frequently used in the language?	Words are in the most frequently used list:Yes / No / Uncertain

Examples of lay versus specialized medical words, according to Hoste et al. (2010) and Montalt et al. (2018), include the following: "germ" versus "bacteria" or "virus", or "sleeping" versus "dormant" or "latent." Hinge words or phrases, such as "is referred to as," "is called," or "known as," may accompany a specialized word. A definition may precede or follow a technical word. Specialized words may be underlined, in italics or bold type. They may feature Greek or Latin affixes – "*intra*dermal" or "pleur*itis*" – or contain multiple capital letters and/or numeric symbols – "CD4 cells," "p24 antigen," or "HIV." Several technical words within a text may be cognates, for instance, "tuberculosis" and "tuberculin." Finally, specialized words may be repeated throughout the text.

9 – Methodology

The two sets of questionnaires from the ELF have undergone pilot tests to identify and troubleshoot potential bias issues. The particular problems are due to a sole investigator conducting the research, which poses a risk of bias due to subjectivity. To reduce sole researcher bias, the answer to each question will be supported with examples from the text. Any patterns between languages and countries among the results of the analyses will be ascertained as this study progresses.

10 – Troubleshooting the technicality of vocabulary analysis methodology

The ELF was created for studies in which inter-rater agreement between multiple researchers could be ascertained. In a study conducted by a sole investigator, the qualitative features of this instrument pose a challenge.

Thus, the Technicality Analysis Model (TAM) (Ha & Hyland, 2017) was incorporated to render the evaluation of the technicality of vocabulary more objective. The TAM was designed to determine the difficulty level of words for teaching discipline-specific English for Academic Purposes courses. Ha and Hyland (2017) applied their methodology to financial texts. Table 3 lists the TAM's five categories of technicality of vocabulary.

Table 3 – **Technicality Analysis Model (TAM)** (Ha & Hyland, 2017)

TAM1 (LEAST technical)	No specialized sense in a dictionary but has a general sense.
TAM2 (SLIGHTLY technical)	Has a specialized sense that contains more details than the related general sense.
TAM3 (MODERATELY technical)	Is monosemous or its specialized sense is remotely or not related to any of its general senses or has a specialized sense that contains more details than the related general sense.
TAM4 (VERY technical)	Is monosemous or its specialized sense is remotely or not related to any of its general senses.
TAM5 (MOST technical)	Has a specialized sense, and cannot be understood literally.

Issues arose in the first pilot test using general and specialized dictionaries plus two well-known English general language corpora for word usage frequency. The frequencies recorded in the British National Corpus (BNC) matched the *Cambridge Dictionary*'s inclusion criteria: "tuberculin" and "induration" had lower frequencies than "sputum." "Sputum" was listed in the *Cambridge Dictionary* as specialized, whereas neither tuberculin nor induration were listed. Despite this, all three words appeared in both the *Oxford English Dictionary* and the *Merriam-Webster Dictionary* as lay words.

Words in Catalan had their share of surprises. For example, based on the criteria, "embarassada" [pregnant] was classified as "very technical" or TAM4. It had a specialized sense in the medical dictionary. However, it is a commonly known word with few synonyms that would appear on a health information website, two of which are "està esperant un bebé" [is expecting a baby] and "en estat" [rough translation: in state, meaning: with child] (Embaràs, 2015). Other alternatives are inappropriate for a health information website: "encinta" [pregnant] is more likely to appear in an old novel, and one must use the colloquial "prenyada" [knocked up] with discretion, as it could be considered disrespectful (Embaràs, 2015). To align with its English and Spanish counterparts, a TAM2 classification would be more appropriate for "embarassada," but the Catalan dictionaries and general language corpus did not permit this. Oddly, "embarassada" had an unusually low word usage frequency in the Catalan general language corpus. The TAM's effectiveness for financial language (Ha & Hyland, 2017) failed to replicate for medical language.

This reflects the importance of using both general and specialized – medical – dictionaries, and the questionable reliability of general language corpora for word usage frequency when evaluating health communication texts. Therefore, general language corpora were replaced with dictionaries that include word usage frequency. Also, TAM2 & TAM3 and TAM4 & TAM5 were consolidated (Table 4).

Table 4 – **Adapted version of TAM (TAM+)**

TAM1 (LEAST technical)	The definition according to the word's usage in the text has no specialized sense in a dictionary, only a general sense.
TAM2-3 (SLIGHTLY to MODERATELY technical)	The word is monosemous, OR has a specialized sense that contains more details than its related general sense, OR is remotely or not related to any of its general senses.
TAM4-5 (VERY to MOST technical)	The word is monosemous, OR its specialized sense is remotely or not related to any of its general senses, OR has a specialized sense that cannot be understood literally.

11 – Technicality of text

The Technicality of Text instrument, outlined in Table 5, was formulated expressly for this study. It draws from data gathered through the ELF technicality of vocabulary questionnaire and the TAM+ assessment for the website, plus a review of two criteria for spotting technical words – whether they are preceded or followed by a definition (for which the text gets 2 points per occurrence), and hinges (also 2 points per occurrence).

Table 5 – **Technicality of text evaluation instrument**

Additional notes & deciding factors	Appropriate responses
Definitions/explanations, including use of hinge words	List all the examples from the text
Number of definitions / explanations	1 point per example listed in the preceding list
Use of layman's terms instead of a technical word that has not been used anywhere in the selected text	List all the examples from the text
Number of times	1 point per example listed in the preceding list
Are any of the TAM4-5 words accompanied by hinge words or definitions?	List all the examples from the text

First, for each language version of a website, technical words are extracted and added to a word list. The first column contains the extracted technical word. The second column lists the websites in which the technical word appears. The next three columns display the results of the consultation in the three dictionaries: whether the word is lay or specialized in a general dictionary, the usage frequency dictionary listing, and whether the word appears in the medical dictionary. If the medical dictionary indicates multiple senses (meanings) for the technical word, the number of senses and how many of them are applicable to the websites are recorded. The TAM+ ranking is based on the results of the three dictionary consultations for each word. Finally, the data is plugged into the Technicality of Text questionnaire for each language version of the website.

12 – Results

ELF writer-reader relationship

The results of the writer-reader relationship analysis are the same for the three language versions in all but one of the questions. For the outlying question – "Are items generalizable to respondents in all social strata, age, and ethnic / national groups in target population?" – the answer was "uncertain" for the English version, and "no" for the other two language versions.

ELF technicality of vocabulary

With regard to the ELF technicality of vocabulary questionnaire, there are no differences between the three versions. The nontechnical words are among those frequently used in each language.

Technicality of vocabulary: TAM+

The Catalan version featured 9 TAM1 (least technical) words, 16 TAM2-3 (slightly to moderately technical) words, and 7 TAM4-5 (very to most technical) words. The Spanish text contained 7 TAM1 words, 17 TAM2-3 words, and 5 TAM4-5 words. The English version had 7 TAM1 words, 22 TAM2-3 words, and 2 TAM4-5 words. An example from each category for each language is listed in Table 6 below.

Table 6 **– Examples of TAM+ words from sample**

TAM+ Classification	Catalan version	Spanish version	English version
TAM1	Cita	Cita	Appointment
TAM2-3	Biològic	Biológico	Biological
TAM4-5	Antiretroviral	Antirretroviral	Antiretroviral

Technicality of text

Two technical terms were explained in all three language versions. For example, “negative” was explained using a hinge word.

Catalan: **Vol dir que** no es detecten anticossos del virus. [**This means that** no virus antibodies were detected.]

Spanish: **Quiere decir que** no se detectan anticuerpos del virus. [**This means that** no virus antibodies were detected.]

English: **This means that** no virus antibodies were detected.

In all three versions, the use of two technical terms – “window period” and “confirmatory test” – were avoided through explaining the concept. Additionally, the English version referred to “the test” whereas the other two language versions implemented a lengthy descriptive term, for example, in Spanish, “la prueba de detección de manera rápida” [the rapid screening test]. None of the TAM4-5 words were accompanied by hinge words or definitions in the three language versions.

13 – Discussion

This is the first time that the SFL-based ELF has been applied to analyze writer-reader relationship and technicality of vocabulary in multilingual health information websites. The sample in this paper, BCN Checkpoint website’s three language versions, shows several differences in terms of the two pragmatic determinants.

ELF writer-reader relationship

The writer represents the people who work at the BCN Checkpoint, an outreach organization for gay and bisexual men and transsexual women, via the first-person plural pronoun in the website text. According to Sarangi (2019), the reader perceives the writer as the organization as a whole, rather than an individual representative. A health information website is a product provided by the “cultural institution of healthcare: an example of the region intermediate between culture and situation within context" (Matthiessen, 2013, p. 444) in SFL. As such, the writer of the website text forms a part of the "network of institutional roles in healthcare" (Matthiessen, 2013, p. 447) and reflects the tenor of the text, whether they are self-representing as an individual or representing the organization.

All three versions of the website identify the reader with the question, "Do you think you might have been at risk of contracting HIV?" In the Spanish and Catalan versions, by using the second-person informal "tú," the BCN Checkpoint writer addresses the reader on equal footing. This reduced power distance is lost in the English version, whose language lacks the two variations of the second-person pronoun. The writer-reader relationship is consistently clear throughout the text.

In addition to the concept of public health as a cultural institution (Matthiessen, 2013), the ELF question regarding the tone gauges whether the health information has been adapted from the "Voice of Medicine" to the "Voice of the Life-world" (Mishler, 1984, p. 104). It is crucial for the writer to consider the reader's situation in terms of HIV or TB risks factors outside of the healthcare realm, in the real world. The writer can successfully persuade the reader by referring to potential or likely lifestyle scenarios of the reader in problem-solution or condition-consequence statements. The following example demonstrates the condition-consequence (Hoey, 2001) direct appeal with markers (in bold) to convince the reader to heed the website's call to action:

> English: **If** you are **therefore** a sexually active person, **it is advisable** that you take the HIV test at least once or twice a year. **If** you have several partners or you don't always use a condom, **consider** taking the test every three months.

These two sentences use a modal clause and an imperative, respectively, to give clear response options. The reader could choose to get tested every three months. If the reader does not get tested every three months, there is an implied increased risk to their own health as well as that of their partners. This modulation approach (Martin & White, 2005, p. 54) avoids criticism and condemnation while encouraging the reader to make the right decision.

The next question assesses whether a reader from the target audience, whether old or young, and regardless of social strata or nationality or ethnicity, could relate to the message in the health information website. "Strata" in this case pertain to economic, education, and/or social status within their community. This reader's cultural background and the writer's ideology as reflected through word choices influence the effects – be they inclusion, discrimination, and stigma – that the health information website text has on the reader. In BCN Checkpoint's website, the intended audience is a specific population, addressed in an inclusive manner using a first-person plural pronoun (in bold) in both Catalan and Spanish:

> Catalan: Els homes gais, bisexuals i les dones transsexuals **som** especialment vulnerables al VIH per diverses raons d'ordre biològic estructural i social. *Per tant*, *si* **ets** una persona sexualment activa *és aconsellable* que **et facis** la prova del VIH almenys un cop o dos a l'any. [**We** gay and bisexual men and transsexual women are especially vulnerable to VIH for various biological, structural, and social reasons. Therefore, *if* **you** are a sexually active person, *it is advisable* that **you** take the HIV test at least one or two times a year.].

> Spanish: Los hombres gais, bisexuales y las mujeres transexuales **somos** especialmente vulnerables al VIH por diversas razones de orden biológico estructural y social. *Por lo tanto*, *si* **eres** una persona sexualmente activa *es aconsejable* que **te hagas** la prueba del VIH al menos una vez o dos al año. [**We** gay and bisexual men and transsexual women are especially vulnerable to HIV for various biological, structural, and social reasons. *Therefore, if* **you** are a sexually active person, *it is advisable* that **you** take the HIV test at least one or two times a year.]

The inclusive "we" makes clear that the organization represents and works with this specific population, as well as who is responsible for taking action. The convincing word "therefore" indicates that the writer assumes that the reader is "one of us." The first-person plural from the Catalan and Spanish versions is replaced by the third person in the English version:

English: Gay men, bisexuals and transgender women are especially vulnerable to HIV for various structural/biological and social reasons. *If* **you** are *therefore* a sexually active person, *it is advisable* that **you** take the HIV test at least once or twice a year.

This paints an exclusionary image of "them." This problem is compounded by the convincing word "therefore," along with the second-person pronoun addressing the reader as "a sexually active person" within a condition-consequence sentence, which gives the impression of the writer as accusatory and judgmental. The reader will wonder whether the writer assumes that all gay men, bisexuals, and transgender women are sexually active. Whether this was intentional, or this sentence was written in an unfortunate manner so as to erroneously infer a cultural misperception about gay men, bisexuals, and transgender women, the use (or misuse) of the convincing word "therefore" risks offending the reader, who may not heed the call to action. The meanings beyond the words of the writer-reader relationship within the contexts of situation and culture affect the way that the reader interprets BCN Checkpoint's message.

Due to the differences between languages regarding the use of pronouns, the sample website supports the hypothesis that the attitude of the writer reflects the home country of the website and fails to culturally adapt the translated versions in order to address minority groups appropriately.

ELF technicality of vocabulary & TAM+

In all three language versions, technical words are used inappropriately. "Antiretroviral" and "antiretroviral therapy" are ranked TAM4-5 and are unaccompanied by a hinge word or explanation. The writer assumes that the reader would know that "antiretroviral" relates to drugs that block HIV-type viruses and "antiretroviral therapy" refers to treatment for HIV. Also, "antibodies" and "new generation tests" are undefined. Such assumptions by a health communication writer renders the text more technical and less readable (Askehave & Zethsen, 2014; Montalt et al., 2018).

Another notable finding is the TAM+ classification of "HIV." In both Catalan and Spanish, this acronym for "human immunodeficiency virus" is a very-to-most technical word, whereas it is slightly-to-moderately technical in English. Acronyms accompanying familiar words in multiword units to communicate specialized knowledge negatively affect its comprehension (Brieger & Pohl, 2002; Yang, 1986). The same classification applies to terms containing "HIV," which in all three language versions of the BCN Checkpoint website text includes "HIV test" and "HIV specialized hospital." This text garners a negative response to the ELF question regarding whether the remaining words are among those frequently used, which ties in with the technicality of text assessment.

Technicality of text

The last sentence in the BCN Checkpoint website could be rewritten with more simple lay terms to clarify the advantages of early detection of HIV:

> Catalan: Un diagnòstic precoç del VIH ofereix molts avantatges de cara al tractament clínic i evolució de la infecció. [An early HIV diagnosis offers many advantages in the face of clinical treatment and evolution of the infection.]
>
> Spanish: Un diagnóstico precoz del VIH ofrece muchas ventajas de cara al tratamiento clínico y evolución de la infección. [An early HIV diagnosis offers many advantages in the face of clinical treatment and evolution of the infection.]
>
> English: An early HIV diagnosis offers many advantages regarding clinical treatment options and how the infection evolves.

Ending the text with this sentence leaves the reader wondering about the progression of HIV infection and the details of the various clinical treatments.

A slight difference exists between the number of technical words in the Catalan and Spanish compared with the English text. The Catalan text contains 431 words, the Spanish version has 418 words, whereas the English text has 427 words. The TAM2-3 and the TAM4-5 words are calculated with the total number of words in the text and rounded to the nearest whole number to quantify the technicality of the text. The English version, at 6%, is slightly more technical than the Catalan and Spanish texts, both of which are 5%, supporting the hypothesis. This reflects – in terms of equivalence – the 20–30% average in specialized texts, yet the target audience of health information websites such as BCN Checkpoint lack the vocabulary of the Voice of Medicine and therefore require the language of the Voice of the Life-world (Mishler, 1984, p. 104). These texts would be clearer and more comprehensible with wording in the target community's own language, incorporating only the absolutely necessary technical words (Ardasheva & Tretter, 2017) accompanied by an explanation. To reduce the percentage of technicality in the text, the writer should replace more of the technical terms by describing the concepts, as they did for "window period" and "confirmatory test."

14 – Limitations and recommendations

The ELF and the TAM have been implemented by groups of researchers with inter-rater agreement. This is the first study conducted by an individual researcher to incorporate the ELF approach combined with a TAM adaptation. While this combination strengthens the methodology, its reliability and validity performed by an individual, compared with those by a team of researchers, should be tested in future studies.

15 – Conclusion

This paper described an SFL-based methodology to evaluate two pragmatic determinants – writer-reader relationship and technicality of vocabulary – in a corpus of multilingual health information websites. The findings related only to the example in this paper. Based on the differences in pronoun usage as well as the presence of a convincing word in a condition-consequence sentence describing a specific population between languages of the sample, the hypothesis that English, Spanish, and Catalan health information websites would reflect the culture of the host country through writer-reader relationship was supported. The presence of excessive technical terms unaccompanied by explanations and the lack of clarity in the text confirmed the hypothesis that websites about HIV &

TB diagnostic testing would contain more technical words than necessary, especially in the translations. Furthermore, there were very few extremely technical words unaccompanied by a definition. Whether the results in this paper reflect those of the analysis of the corpus is yet to be determined. This demonstration should compel researchers and professionals in the fields of translation, linguistics, and public health to implement this methodology in future research to improve writer-reader relationship and lay-friendliness in multilingual health information websites.

NOTES

1 Permission has been received from Rosemary Clerehan and Rachelle Buchbinder to reproduce the writer-reader relationship and technicality of vocabulary sections of the ELF-Q in this paper.

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REFERENCES

American Public Health Association. (2008). *Health disparities: The basics.*

Ardasheva, Y., & Tretter, T. R. (2017). Developing science-specific, technical vocabulary of high school newcomer English learners. *International Journal of Bilingual Education and Bilingualism, 20*(3), 252–271. https://doi.org/10.1080/13670050.2015.1042356

Askehave, I., & Zethsen, K. K. (2014). A comparative analysis of the lay-friendliness of Danish EU patient information leaflets from 2000 to 2012. *Communication & Medicine, 11*(3), 209–222. https://doi.org/10.1558/cam.v11i3.20700

Azevedo, M. M. (2005). Addio, adieu, adios: A farewell to arms in three romance languages. *The Hemmingway Review, 25*(1), 22–42.

Brieger, N., & Pohl, A. (2002). *Technical english: Vocabulary and grammar.* Andover, UK: Heinle Cengage Learning.

Brown, T. H. (2018). Racial stratification, immigration, and health inequality: A life course-intersectional approach. *Social Forces, 96*(4), 1507–1540.

Clerehan, R., Buchbinder, R., & Moodie, J. (2005). A linguistic framework for assessing the quality of written patient information: Its use in assessing methotrexate information for rheumatoid arthritis. *Health Education Research, 20,* 334–344. https://doi.org/10.1093/her/cyg123

Clerehan, R., & Buchbinder, R. (2006). Toward a more valid account of functional text quality: The case of the patient information leaflet. *Text & Talk*, *26*(1), 39–68. https://doi.org/10.1515/TEXT.2006.003

Clerehan, R., Guillemin, F., Epstein, J., & Buchbinder, R. (2016). Using the evaluative linguistic framework for questionnaires to assess comprehensibility of self-report health questionnaires. *Value in Health, 19,* 335–342. https://doi.org/10.1016/j.jval.2016.01.008

Dixon-Wood, M. (2001). Writing wrongs? An analysis of published discourses about the use of patient information leaflets. *Social Science Medicine, 52*, 1417–32. https://doi.org/10.1016/S0277-9536(00)00247-1

Embaràs. (2015). In A. Jané, *Diccionari de sinònims* (3rd ed.). https://sinonims.iec.cat/sinonims_cerca_sin.asp?pclau2=embaras&offset=-1

European Commission. (2019). Goal 10. Reduce inequality within and among countries. https://ec.europa.eu/sustainable-development/goal10_en

Flesch, R. (1948). A new readability yardstick. *Journal of Applied Psychology, 32*(3), 221–233. https://doi.org/10.1037/h0057532

Garcimartín Cerezo, P., Serra Galceran, M., González Soriano, M., Mestres Camps, L., & Leyva Moral, J. M. (2014). Design and evaluation of an educational course in cultural competence for nursing. *Procedia Social and Behavioral Sciences, 132*(2014), 262–268.

Ha, A. Y. H., & Hyland, K. (2017). What is technicality? A technicality analysis model for EAP vocabulary. *Journal for English for Academic Purposes, 28*(2017), 35–49. https://doi.org/10.1016/j.jeap.2017.06.003

Halliday, M. A. K., & Matthiessen, C. M. (2014). *Halliday's introduction to functional grammar* (4th ed.). London: Edward Arnold.

Hirsch, D., Clerehan, R., Staples, M., Osborne, R. H., & Buchbinder, R. (2009). Patient assessment of medication information leaflets and validation of the Evaluative Linguistic Framework (ELF). *Patient Education & Counseling*, *77*, 248–254. https://doi.org/10.1016/j.pec.2009.03.011

Hoey, M. (2001). *Textual interactions*. London: Routledge.

Hoste, V., Vanopstal, K., Lefever, E., & Delaere, I. (2010). Classification-based scientific term detection in patient information. *Terminology, 16*(1), 1–29. https://doi.org/10.1075/term.16.1.01hos

Institute of Medicine. (2004). *Health literacy: A prescription to end confusion*. Washington, DC: National Academies Press.

Martin, J. R., & White, P. R. R. (2005). The language of evaluation: Appraisal in English. London: Palgrave Macmillan.

Matthiessen, C. M. I. M. (2013). Applying systemic functional linguistics in healthcare contexts. *Text & Talk, 33*(4-5), 437–467. https://doi.org/10.1515/text-2013-0021

Mishler, E. (1984). *The discourse of medicine: Dialectics of medical interviews.* Norwood, New Jersey: Ablex.

Montalt, V., Zethsen, K., & Karwacka, W. (2018). Medical translation in the 21st century – challenges and trends. In V. Montalt, K. Zethsen, & W. Karwacka (Eds.) *Retos actuals y tendencias emergentes en traducción médica / Current challenges and emerging trends in medical translation* (pp. 27–42). MonTI 10. https://doi.org/10.6035/MonTI.2018.10.1

Morony, S., Webster, A. C., Buchbinder, R., Kirkendall, S., McCaffery, K. J., & Clerehan, R. (2018). A linguistic analysis of health literacy demands of chronic kidney disease patient education materials. *HLRP: Health Literacy Research and Practice, 2*(1), e1–e14. https://doi.org/10.3928/24748307-20171227-01

Mudraya, O. (2006). Engineering English: A Lexical frequency instructional model. *English for Specific Purposes, 25*(2), 235–256. https://doi.org/10.1016/j.esp.2005.05.002

Nation, I. S. P., & Newton, J. (1997). Teaching vocabulary. In J. Coady, & T. Huckin (Eds.), *Second language vocabulary acquisition* (pp. 238–254). Cambridge: Cambridge University Press.

National Prevention Information Network. (2015). Cultural competence. Centers for Disease Control and Prevention. https://npin.cdc.gov/pages/cultural-competence

Paquot, M. (2010). *Academic vocabulary in learner writing: From extraction to analysis.* London: Continuum.

Petkovic, J., Epstein, J., Buchbinder, R., Welch, V., Rader, T., Lyddiatt, A., … Guillemin, F. (2015). Toward ensuring health equity: Readability and cultural equivalence of OMERACT patient-reported outcome measures. *The Journal of Rheumatology*, *42*(12), 2448–2459. https://doi.org/10.3899/jrheum.141168

Preguntas para el doctor: Pruebas para la tuberculosis latente. (March 25, 2019). Retrieved June 29, 2019, from: https://healthfinder.gov/espanol/temas/Category/consultas-con-el-doctor/pruebas-de-deteccion/preguntas-para-el-doctor-la-prueba-de-la-tuberculosis-latente

Sand, K., Eik-Nes, N. L., & Loge, J. H. (2012). Readability of informed consent documents (1987–2007) for clinical trials: A linguistic analysis. *Journal of Empirical Research on Human Research Ethics*, *7*(4), 67–78. https://doi.org/10.1525/jer.2012.7.4.67

Sarangi, S. (2019, July). "Intuitive expertise" and the professional order. *ESFLC2019*. Talk presented at the 29th ESFL Conference, Leiria, Portugal.

Testing for Latent Tuberculosis: Questions for the Doctor. (February 27, 2019). Retrieved June 29, 2019, from: https://healthfinder.gov/HealthTopics/Category/doctor-visits/talking-with-the-doctor/testing-for-latent-tuberculosis

Valipouri, L., & Nassaji, H. (2013). A Corpus-based study of academic vocabulary in chemistry research articles. *Journal of English for Academic Purposes, 12*, 248–263. https://doi.org/10.1016/j.jeap.2013.07.001

Vezzani, F., Di Nunzio, G. M., & Henrot, G. (2018). TriMED: A multilingual terminological database. In *Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC-2018).*

Willis, G., & Lessler, J. (1999). *Question appraisal system: QAS-99*. Centers for Disease Control and Prevention and Health Promotion. Rockville, MD.

World Health Organization. (2019). What is health promotion. https://www.who.int/healthpromotion/fact-sheet/en/

Yang, H. (1986). A new technique for identifying scientific/technical terms and describing science texts. *Literary and Linguistic Computing, 1*(2), 93–103. https://doi.org/10.1093/llc/1.2.93

APPENDIX A

Catalan version of sample multilingual health information website

La prova del VIH

Creus que pots haver estat en risc de contraure el VIH? A BCN Checkpoint et facilitem la prova de detecció de manera ràpida, confidencial i gratuïta.

Mitjançant un procediment tan senzill com un petita punxada indolora al dit i en només 20 minuts sortiràs de dubtes.

Si el resultat de la prova és negatiu:

Vol dir que no es detecten anticossos del virus. Malgrat tot, per poder descartar completament una infecció per VIH s'han de deixar transcórrer almenys 3 mesos des del moment en què potencialment una persona s'ha exposat al virus. De tota manera, amb les proves de darrera generació aquest període, de vegades, pot escurçar-se. Davant qualsevol dubte, l'equip de BCN Checkpoint t'orientarà oportunament.

Si el resultat de la prova és positiu:

Tingues present que, avui en dia, el tractament antiretroviral permet equiparar l'esperança i la qualitat de vida de les persones amb VIH amb les de la resta de la població. A BCN Checkpoint t'oferirem el suport i l'assessorament que necessitis per afrontar aquesta situació en les millors condicions.

De tota manera, un resultat positiu de VIH sempre s'ha de confirmar mitjançant una segona prova que gestionarem des del mateix centre sense cap cost per a tu.

Si el resultat d'aquesta segona prova confirma el resultat positiu estarem al teu costat per orientar-te sobre què caldrà fer a partir d'aquest moment. A BCN Checkpoint, t'oferirem la possibilitat de tramitar-te nosaltres mateixos una cita a un hospital de referència de VIH. D'altra banda, el centre disposa també d'un programa de serveis adreçat específicament a persones amb VIH

Cada quan caldria fer-se la prova?

Els homes gais, bisexuals i les dones transsexuals som especialment vulnerables al VIH per diverses raons d'ordre biològic estructural i social.

Per tant, si ets una persona sexualment activa és aconsellable que et facis la prova del VIH almenys un cop o dos a l'any. Si tens múltiples parelles i no sempre fas servir el condó, considera fer-te la prova cada 3 mesos.

Un diagnòstic precoç del VIH ofereix molts avantatges de cara al tractament clínic i evolució de la infecció.

Appendix B

Spanish version of sample multilingual health information website

La prueba del VIH

Crees que puedes haber estado en riesgo de contraer el VIH? En BCN Checkpoint te facilitamos la prueba de detección de manera rápida, confidencial y gratuita.

Mediante un procedimiento tan sencillo como un pequeño pinchazo indoloro en el dedo y en sólo 20 minutos saldrás de dudas.

Si el resultado de la prueba es negativo:

Quiere decir que no se detectan anticuerpos del virus. Sin embargo, para poder descartar completamente una infección por VIH se deben dejar transcurrir al menos 3 meses desde el momento en que potencialmente una persona se ha expuesto al virus. De todos modos, con las pruebas de última generación este periodo, a veces, puede acortarse. Ante cualquier duda, el equipo de BCN Checkpoint te orientará oportunamente.

Si el resultado de la prueba es positivo:

Ten presente que, hoy en día, el tratamiento antirretroviral permite equiparar la esperanza y la calidad de vida de las personas con VIH con las del resto de la población. En BCN Checkpoint te ofreceremos el apoyo y el asesoramiento que necesites para afrontar esta situación en las mejores condiciones.

De todos modos, un resultado positivo de VIH siempre debe confirmarse mediante una segunda prueba que gestionaremos desde el mismo centro sin coste para ti.

Si el resultado de esta segunda prueba confirma el resultado positivo estaremos a tu lado para orientarte sobre qué habrá que hacer a partir de este momento. En BCN Checkpoint, te ofreceremos la posibilidad de tramitarte nosotros mismos una cita en un hospital de referencia de VIH. Por otra parte, el centro dispone también de un programa de servicios dirigido específicamente a personas con VIH.

¿Cada cuando habría que hacerse la prueba?

Los hombres gais, bisexuales y las mujeres transexuales somos especialmente vulnerables al VIH por diversas razones de orden biológico estructural y social.

Por lo tanto, si eres una persona sexualmente activa es aconsejable que te hagas la prueba del VIH al menos una vez o dos al año. Si tienes múltiples parejas y no siempre usas el condón, considera hacerte la prueba cada 3 meses.

Un diagnóstico precoz del VIH ofrece muchas ventajas de cara al tratamiento clínico y evolución de la infección.

Appendix C

English version of sample multilingual health information website

The HIV test

Do you think you might have been at risk of contracting HIV? At BCN Checkpoint we can give you the test quickly, confidentially and free of charge.

It only takes a simple painless finger prick, and in just 20 minutes you will have your results.

If the test result is negative:

This means that no virus antibodies were detected. Despite this, in order to totally rule out a HIV infection at least 3 months should have gone by since the time a person might have been exposed to the virus. However, with the new generation tests this period can sometimes be shortened. If you have any doubts, the BCN Checkpoint team will be happy to clarify them.

If the test result is positive:

Keep in mind that today, antiretroviral treatments enable people with HIV to have a life expectancy and quality of life equal to that of the rest of the population. At BCN Checkpoint we offer you the support and counselling you need to deal with this situation in the best conditions.

Nevertheless, a positive HIV test result always needs to be confirmed by means of a second test which we provide here at the centre without any cost to you.

If the second test result comes out positive as well, then we will be at your side to offer you guidance as to what you need to do from that moment on. At BCN Checkpoint we offer you the option of arranging an appointment for you at a HIV specialised hospital. In addition to this, the centre also provides a series of services that specifically cater to people living with HIV.

How often should you get tested?

Gay men, bisexuals and transgender women are especially vulnerable to HIV for various structural/biological and social reasons.

If you are therefore a sexually active person, it is advisable that you take the HIV test at least once or twice a year. If you have several partners or you don't always use a condom, consider taking the test every 3 months.

An early HIV diagnosis offers many advantages regarding clinical treatment options and how the infection evolves.

FROM NICE AND GENTLE TO DECEITFUL AND VIOLENT: THE TRAJECTORY OF THE BEAR IN *I WANT MY HAT BACK*[1]

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[1] The present paper explores the intermodal relations between images and words. However, images are not shown as permission to use them has not been granted by the editors.

> behind their seeming simplicity and playfulness, stories for and by children are, on a closer consideration, remarkably complex, and an aid to and index of the interactional and cognitive development of the child
>
> (Toolan, 1988, p. 215)

ABSTRACT

Children's picture books constitute a recognizable educational concern which have become increasingly sophisticated, due to the complex relation between images and verbal language. Thus, comprehension of the story demands reading both the text and visual modes and their intermodal relations. Based on systemic functional linguistics, the grammar of visual design and on the study of picture books, this paper investigates the verbal, visual and intermodal aspects concerning interpersonal meanings of the picture book *I want my hat back* (Klassen, 2012). We examine interpersonal meanings in verbal language in terms of mood choices (Halliday & Matthiessen, 2014) and Attitude (Martin & White, 2005), whereas, visually, we concentrate on the Affiliation and Feeling of characters and readers, and between characters (Painter & Martin, 2011; Painter, Martin, & Unsworth, 2013). Results show that verbally the use of specific MOOD choices and negative polarity, besides the visual features as colors and angles, contribute to the development of the main character's trajectory: from a polite, sensitive character to a violent being. Moreover, choices involving differences in commitment are balanced throughout the story, contributing to the construal of irony and humor which, in turn, requires readers to position themselves aligned with their point of view and experience.

KEYWORDS

Children's picture books, intermodal relations, grammar of visual design

1 – Introduction

Children's picture books have attracted the attention of scholars in different areas of research, such as Arizpe and Styles (2003), Nodelman (1988), and Nikolajeva and Scott (2006). According to Salisbury and Styles (2012, p. 90), for instance,

> Academic theorists analyze aspects of picturebooks and visual literacy from a range of perspectives. Their studies over the last 30 years have looked at and recognized not only the dynamic relationship between word and image in children's picturebooks, but also the importance of visual design and the multiplicity of meanings offered by the genre.

Nikolajeva and Scott (2006), who analyze the interplay between images and texts in picture books, state that these books have an influential role concerning the socialization and representation of children. Similarly, Nodelman (1988, p. 43) says that young readers "can learn to develop a rich and subtle consciousness of the special characteristics of picture-book narrative –and can immensely enjoy doing so" (in Heberle & Constanty, 2016, p. 91). Furthermore, according to Hunt (1991), picture books constitute a valuable contribution to the literary and bibliographical history, as well as to literacy and culture. Hunt also highlights that picture books are at the height of the relation between word and image in narratives.

Specifically in social semiotics and multiliteracies, studies concerning children's picture books, based on the grammar of visual design and/on systemic functional linguistics (as the present study), include those by Christie (2005); Lewis (2001); Painter, Martin and Unsworth (2013); Unsworth (2013); Constanty (2018) and Heberle and Constanty (2016). These authors emphasize the verbal and visual synergy in children's picture books, which can be seen as "a key means of apprenticeship into literacy, literature and social values" (Painter, Martin, & Unsworth, 2013, p. 1).

Aligned with these authors, we highlight the relevant role of carrying out analyses of both linguistic and visual meanings, along with intermodal relations in the interpretation of picture books. In addressing these aspects, the present study draws on the area of multimodal discourse analysis, which explores theory in alignment with the analysis of semiotic resources, as well as the semantic expansions which derive from the combination of semiotic choices in multimodal phenomena (O'Halloran, 2011).

Our study also draws on research related literacies by Anstey and Bull (2006), Kalantzis, Cope, Chan and Dalley-Trim (2016); Macken--Horarik, Love, Sandiford and Unsworth, (2018), especially regarding new ways of engaging students to fully understand texts. In this sense, we aim at contributing to the field with an analysis based on Constanty (2018), as part of a broader research project entitled 'Social practices in contemporaneity: multiliteracies, identities and multimodal narratives' (Heberle, 2015)[1], which investigates children's picture books as one type of multimodal narratives.

Considering the potential of picture books to develop multimodal literacy, Constanty (2018) examines the intersemiotic relations that underscore children's picture books to create interpersonal meanings. Her data was collected from the 2014 Brazilian National Program: Library at School (Programa Nacional Biblioteca da Escola), as well as other awarded picture books, from which she analyzed seven picture books, based on Painter, Martin and Unsworth's (2013) framework for the study of intermodal relations in picture books.

From the aforementioned research we present the study of the picture book *I want my hat back*, written and illustrated by Jon Klassen and edited by Walker Books. This picture book follows the choice of depicting characters as animals, a characteristic of stories with strong morals, such as fables, or of stories that touch on important social values. In Anthony Browne' Voices in the Park (1998), for instance, the characters are anthropomorphized as chimpanzees while the narrative focuses on themes such as social inequalities, unemployment, and difficult family relationships. Burke and Copenhaver (2004, p. 212) also point to the important role of animals in children's books "to become reflective and critical concerning life problems and life choices."

2 This research is funded by the Brazilian Science and Technology Research Council (CNPq).

In this sense, for our analysis the main research questions are: 1) how are interpersonal meanings realized in verbal language and in images? and 2) how do they work together to position readers emotionally? Specifically, we examine interpersonal meanings in verbal language in terms of mood choices (Halliday & Matthiessen, 2014) and Attitude (Martin & White, 2005), based on systemic functional linguistics. For the visual analysis, we concentrate on the Affiliation and Feeling of characters and readers, as well as between characters in picture books (Painter & Martin, 2011; Painter, Martin, & Unsworth, 2013). We also explore the notions of commitment and coupling which encompass intermodality and the construction of irony.

First, we outline the theoretical background which underpins the analysis, focusing on the interpersonal meanings. Then we report on our analysis of verbal and visual meanings and, to conclude, we point out the relevance of carrying out tasks related to reading multimodal texts, encompassed by a clear theoretical framework, as a tool to develop multimodal awareness.

2 – Using systemic functional linguistics and the grammar of visual design to study interpersonal meanings in picture books

Scholars concerned with multiliteracies such as Unsworth (2006, 2014), Thomas (2014), and Anstey and Bull (2006) have argued that students need to understand how verbal and visual meanings are multimodally constructed. In this sense, systemic functional linguistics (SFL, Halliday, 1994) provides the tools to develop a systematic investigation of the lexicogrammatical, semantic and contextual choices in a text. SFL has been adapted and expanded to the functional semiotic account of images (Kress & van Leeuwen, 1996, 2006), as well as to intermodal relations of images and verbal text of picture books (Painter, Martin, & Unsworth, 2013).

In SFL, as proposed by Halliday (1994), there are three strands of meanings or basic functions of language, related to the ways human beings use language: ideational, interpersonal and textual metafunctions. As Martin and Rose (2008, p. 24) explain:

> Ideational resources are concerned with construing experience: what's going on, including who's doing what to whom, where, when, why and how and the logical relation of one going-on to another. Interpersonal resources are concerned with negotiating social relations: how people are interacting, including the feelings they try to share. Textual resources are concerned with information flow: the ways in which ideational and interpersonal meanings are distributed in waves of semiosis, including interconnections among waves and between language and attendant modalities (action, image, music, etc).

Painter and Martin (2011) adapt principles of SFL to the interplay between modes in picture books and propose the notions of commitment and couplings to analyze complementary relationships. These authors consider "the degree to which each [mode] "commits" meaning in a particular instance and the extent to which […] that commitment converges with or diverges from that of the other modality" (Painter & Martin, 2011, p. 132). Therefore, image and text can commit different meanings, forming what the authors call divergent couplings, or they can commit the same meaning, which is termed convergent coupling. Following Painter et al. (2013) when interpersonal couplings converge, they create resonance.

In verbal language, the interpersonal metafunction involves interpersonal relationships and evaluative meanings (Martin & White, 2005). According to Halliday and Matthiessen (2004), interpersonal meanings are seen as 'exchange', between interlocutors. They are organized in four primary speech functions: to give or demand information (called proposition) or goods and services (called proposal). These interactive roles are realized by the grammatical system of MOOD, which is encoded by three syntactic Moods: declarative, interrogative and imperative.

To have a general view of possible forms of coupling interpersonal meanings, we refer to the parallel relations traced by Kress and van Leeuwen (2006) concerning speech acts and image acts. Thus, while in verbal language there are four primary speech functions: offer, command, statement and question (Halliday & Matthiessen, 2004), images may function as offers or demands, terms which refer to the kind of interaction between the character/participant in the image and the viewer/reader, as explained next.

According to Kress and van Leeuwen (2006), the representation of participants constitutes the point of intersection with the way viewers are addressed. In the visual mode, this can be achieved through images of demand or offer, and in the verbal mode by interrogative, imperative or declarative sentences. An example of convergence would be an image which depicts a participant gazing at viewers, followed by a question, thus, reinforcing the form of addressing viewers. On the other hand, in an offer representation, if the character does not gaze at the viewers and the text conveyed is in the imperative mood, there is divergence in the form of address, since imperatives usually require a demand directed to the reader/ interactant, and the image does not establish this kind of interaction.

Furthermore, visually, other systems operate to construe the relationship between readers and characters, such as Involvement and Power, Pathos, Social Distance, which we explain as follows. Regarding the system of attitude, Kress and van Leeuwen (2006) propose two categories: 1) involvement or detachment relations among viewers and depicted participants; and 2) relations of power. The horizontal angle determines the type of involvement or detachment readers have with characters. Thus, participants depicted in a frontal angle are more likely to 'involve' readers, while the ones represented obliquely are more detached from viewers.

Concerning the vertical angle, it construes relations of power by positioning the characters as being looked at from a high perspective, thus placing the participant in a vulnerable position. The opposite, when the represented participant is viewed from a low angle, s/he is positioned as exerting power over viewers or other characters. An equal power status among viewers and represented participants is achieved by aligning the latter at the eye level angles. Accordingly, Painter et al. (2013) propose that such a resource can be applied concerning the characters and the construction of their power relations in picture books.

In relation to interpersonal meanings, Kress and van Leeuwen (2006) also propose the system of modality, a term which has its basis on linguistics and is extended to visual components concerning the credibility of images. Concerning picture books, the notion of modality requires a more specific framework. In this sense, Painter et al. (2013)

propose a different system, termed Pathos. These authors suggest that picture books may have three different drawing styles: minimalist, generic and naturalistic, and they will have various roles in the construction of reader-character relationship. The minimalist style represents human characters with circles or ovals for people's heads and does not accurately depict facial and body proportions. Such type of style positions readers to appreciate the story, distancing them from characters, while the other two tend to create a more empathic role among readers and characters.

According to Kress and van Leeuwen (2006, p. 124), choices in 'social distance' are related to the size of frame and "to the choice between close-up, medium shot and long shot, and so on." In children's picture books the social distance system also builds the relationship between reader and the character. This way, characters depicted in a close-up shot are closer to readers than characters represented in a long shot. Parallel to Social Distance, Painter et al. (2013) propose the system of Proximity which also assists in the construction of the relations between characters. These, in turn, can be positioned side-by-side or touching each other, which creates a sense of affinity among the represented participants. On the other hand, in the case of picture books, when these latter are depicted distanced from each other, the representation may create the notion of detachment between the characters.

For instance, in the picture book *Inê*s (Mello & Massarani, 2015), a historical narrative set in the 1300's, the author, Roger Mello, utilizes a narrator who is part of the story, the main character's daughter– Beatriz, to establish an amicable relation with readers. At the same time, the narrator unfolds the tragic end of Inês de Castro, Beatriz's mother, who was killed under the emperor's order. The interaction with readers is established via interrogatives and an imperative clause. Visually the characters are depicted in a minimalist style, in long shots and massively depicted as offers.

Overall then, at certain moments, there is divergence between the forms of addressing readers, who are required to interact mostly through the verbal text, at the same time that they are kept at a disengaging stance, established by the visual choices. This way, readers are maintained at an emotionally safe distance but are not entirely detached from the events narrated and may even sympathize with the child-narrator, since Beatriz establishes pseudo-conversations with the child-readers.

As previously mentioned, the interpersonal metafunction also involves evaluative meanings, which, within the Appraisal system in SFL (Martin & White, 2005) in turn, are realized by the systems of: Attitude, Engagement and Graduation, as well as Evaluation. According to Martin and White (2005), three sub-classes compose the Attitude system: Affect, Judgment, and Appreciation. In the present work, we focus on the system of Affect, since it deals with positive and negative feelings to describe emotions, as in the Epithet (adjective) 'cheerful', or behavior which deploys emotional conditions, for example: 'smiling'. Martin and White (2005) include three groups of emotions organized according to a system of oppositions; happiness or unhappiness; security or insecurity; satisfaction and its opposite, dissatisfaction.

Visually, affect may also be represented by facial features and body position, as proposed by Painter et al. (2013). Moreover, the authors also consider that judgment may be visually invoked in readers. This way, the systems of Affect and Judgment, firstly explored regarding their verbal aspects (Martin & White, 2005), may also be conveyed through images.

To conclude this section, we mention an attitudinal divergent pair concerning Affect, which occurs when the visual representation of the character's feeling diverges from the depiction. On the first page of the picture book *The sad book* (2004), written and illustrated by Michael Rosen, for instance, there is a drawing representing the author who is smiling. The text begins with the sentence: "This is me being sad." The book was written by the author at the time of his son's death and this first image of a happy man coupled with a verbal text – which conveys an opposite type of emotion of what was depicted – construes irony.

Overall, the analysis of interpersonal meanings allows us to see the relations between readers and characters, as well as the way characters relate to each other. Furthermore, the system of Attitude may also be inscribed visually, and it is represented by the systems of Affect and Judgment. If on the one hand the proximity of characters with readers is signaled by shots, drawing style, and angles, on the other, a world conveying emotions and social relations between characters unfolds in picture books, as we present next.

3 – The bear, the rabbit, and a hat: Building up relationships, lies and behavior in *I want my hat back*

The narrative is based on a bear's search of a lost hat and has two intriguing main characters: the bear himself and a rabbit. Curiously, after having politely asked different animals if they had seen his hat, the protagonist meets the rabbit who is depicted with the hat on the top of his head. The rabbit claims not to have seen or stolen the hat. A few pages later, the bear comes to his senses and realizes that the rabbit was lying. This way, he comes back to face the rabbit and is subsequently depicted wearing his beloved hat. However, the bear seems to have lost his gentleness – initially conveyed by his kind manner of interacting with the other characters and, when asked if he has seen a rabbit, not only does he answer that he has not, but also adds that he has not eaten any rabbits.

3.1 – Interpersonal meanings in verbal language in I want my hat back

The basic story of *I want my hat back* (Klassen, 2012) is linguistically constructed with declarative and interrogative sentences by the bear and also with the dialogues between the bear and different animals he meets while searching for his hat. These linguistic features show differences in the syntactic structure, as well as variations in the degrees of politeness, which contribute to the construal of the characters' nature. Besides, not only does the verbal text have its role, but the lack of it, during the highly emotional moment of the story, are crucial in the construction of the narrative.

The first sentence instantiated by the material process "My hat is gone" immediately situates readers in relation to the problem raised by the character, which can lead us to consider the narrative as a clause-relational problem-solution pattern (Winter, 1994[2]). The bear continues "I want it back," and these two sentences can trigger a potential alignment between the protagonist and the child-reader, allowing the young read-

[3] According to Winter (1994, p. 49) "the moment you put together any two sentences for a purpose, your listener or reader looks for a sensible connection between their topics." Winter considers two types of relations between clauses in a text: basic clause relations and basic text structure. A problem-solution pattern is considered a basic text structure within the Situation-Evaluation pattern.

ers to share the bear's feelings and find out about the main character's dilemma. The bear's desire is reinforced by other emotive processes, such as 'miss' and 'love', which appear during the moment that precedes the turning point of the narrative.

The bear's thoughts and emotions are realized by declarative sentences. However, interrogative sentences also operate and help to approach readers and the bear, as it is possible to read on page spread 8: "What if I never see it again?" From this doubt, the bear conveys his distress for not finding his hat and readers accompany this feeling. This way a conversation between the protagonist and readers is established, suggesting a strong interpersonal appeal.

The lines of each interactant in the dialogues also have different colors, a feature that can contribute to the identification of speech turns, and of speakers as well. The verbal text is foregrounded by white pages, while the images are depicted against a beige background. To illustrate, we refer to the first dialogue between the bear and the frog (a), as well as the one between the bear and the rabbit (b).

(a) Have you seen my hat?
No, I have not seen any hats around here.
Ok. Thank you anyway.

(b) Have you seen my hat?
No. Why are you asking me.
I haven't seen it.
I haven't seen any hats anywhere.
I would not steal a hat.
Don't ask me any more questions.
OK. Thank you anyway.

In terms of color as a visual feature, the sentences in the dialogue correspond to the same color attributed to the interactant, whereas the bear has his verbal text in black. Likewise, the rabbit is the only character that has his speech lines represented in a different color than the one used to illustrate his body. Not coincidentally the rabbit's color– used to convey the animal's lines– corresponds to the color of the hat, since he has stolen it and has lied to the bear about not having seen it. This way, color functions as an alert that signals to readers where the 'lost' object is.

The intermodal relation concerning the rabbit's lie can be seen not only by means of the lexicogrammatical choices used in the verbal text, but also by his speech moves. Such a change in the pattern in the images, aligned with the verbal text, indicates discontinuity in relation to the sequence of previous answers given by the other animals to the bear's question. On the first page spread the bear situates readers concerning his problem and his wish. Then, on the next two-page spreads, he asks a fox and a frog if they have seen his hat. The animals answer negatively. After that, the bear asks a rabbit about his hat (see dialogue (b) above).

Without having realized that the rabbit was wearing his hat, the bear thanks him politely, as he has done before with the fox and the frog. Then, the bear continues his survey, asking a turtle, a snake and a beaver about his hat. The characters answer a little differently from the pattern established in the answers given by the previous characters. Nevertheless, the rabbit's answer stands out, due to discontinuity in the type of answers provided earlier, the extent – as it is much longer than the other answers, and a change in politeness.

Regarding discontinuity, the fox, the frog and then the rabbit answer negatively. However, the rabbit's answer changes the pattern, as he uses different moves, as can be seen in dialogue (b) above. For instance, the rabbit does not apply the auxiliary 'have', or the participle form 'seen'. Instead, he answers "No" very straightforwardly. Thus, after having asked the bear the reason for the question, the rabbit echoes the answers provided so far that he has not seen any hats and adds complementary information about not stealing a hat. By emphasizing the negative polarity, the character not only denies his mistake, but also replaces it with what he wants to sound as 'true' information: the fact that he would not steal a hat.

The rabbit's answer creates some sort of counter expectation, once he provides more information than required, denying a possibility of stealing. Considering that in a dialogue, responding moves tend to be short, while initiating moves are normally long (Eggins, 2004), the rabbit's answer is expected to be simply 'Yes' or 'No'. Furthermore, the rabbit is breaking Grice's maxim of quantity: "Do not make your contribution more informative than is required" (Grice, 1994, p. 61). Besides, his answer points to the rabbit's confronting move regarding the bear's approach. Therefore, a defensive position is construed, which will also be eventually used by another 'guilty' animal by the end of the story: the bear himself.

Regarding politeness, in his answer, the rabbit denies that he has seen the hat emphatically by repeating the negative "haven't seen" and by using "any" and "anywhere." Additionally, there is no modulation to attenuate the request in the imperative (his last sentence to the bear, in dialogue (b) above). This way, the rabbit answers in a very direct form; at the same time, he seems to give the tone of the conversation. On the other hand, the bear, who has always been gentle by thanking the animals, is taken by surprise with the amount of information provided and with the rude tone of the rabbit's talk.

Thus, the dialogues contribute to the construal of attitudinal features of the characters. Throughout the story, the bear follows "a system of etiquette," handling the events appropriately (Goffman, 1967, p. 114), as he not only asks about his hat but, after listening to the answers, thanks each of the animals he speaks with. Besides, he also offers help by means of a modulated offer ("Would you like me to…"), which indicates his gentleness and politeness.

Nevertheless, the bear's good manners literally disappear when he realizes that the rabbit was wearing his hat, and he decides to go back and confront the rabbit. There is, thus, a change in the background color which turns from beige into red. Also, the small letter fonts used so far change to capital letters and they are much bigger than the fonts used throughout the picture book. The verbal text on the page spread conveys the following: "I HAVE SEEN MY HAT!"

This way, the capital letters add meaning to the illustration of the bear's sudden recall of who he has come across, as well as who was wearing his hat. Furthermore, on the succeeding pages, the bear is depicted running into the rabbit's direction, since his arm, along with his body forms a vector indicating his movement towards the former. The verbal text is also conveyed in capital letters– an aspect which construes the notion that the bear seems to be shouting. In this sense, the use of fonts assists in the construction of the protagonist's attitudinal response of outrage at the rabbit's deceit.

The dialogues play with different possibilities of demanding and offering information, as well as of offering services. Choices in MOOD help to create the character's attitudes and changes in MOOD also imply a shift in the protagonist's nature. Thus, at the end of the story the bear's response corresponds to a confronting type of answer – similar to the rabbit's. This strategy is used to cover the fact that he has done something 'wrong', thus, becoming guilty and defending himself, even before having being accused. Again, negative polarity constitutes an interesting response. In this respect, Martin and White (2005, p. 280) state that: "Unlike positive, negative implicates its opposite" as "something in the air is being denied." Thus, the bear spreads in the air his guilt for having eaten the rabbit.

The study of Mood choices allows us to see how degrees of politeness, present in every speech act, contribute to the construal of the characters' nature. The bear's subtle change is reflected in language use which, in turn, reflects the character's behavior. However, the verbal analysis is not enough, since the analysis of the images also allows us to establish the connection between characters, and among characters and readers, as well as to provide evidence of who are the 'guilty' ones along the story. This aspect is explored next.

3.2 – The interactive meanings in images in *I want my hat back*

As previously mentioned, the selected picture book consists of declarative and interrogative sentences by the bear as well as various dialogues that unfold along the story. Converging with the verbal interactions in the dialogues, the story is visually represented by the depiction of the characters facing each other. At specific moments, such as the one depicted on page spread 13, the setting is absent. This absence of visual contextual circumstances, aligned with an accurate 'dosage' between distancing and approaching readers to the characters, as well as the bear in relation to the other animals, contribute to focusing on the turning points of the narrative, as we show below.

In general, characters are represented in long shots as well as in oblique angles, adding to simulate a certain detachment between readers and the characters. Besides, as characters are, mostly, kept at the eye level, an equal position of power between readers and characters is construed. These points are aligned with what Painter et al. (2013) call a 'watch and learn' story, in which readers are not required to engage much, but to follow the events, mainly by images of offer.

Readers are thus positioned to accompany the bear's saga in search for his hat. By the succession of the character's offers, the pace of the events is maintained until the first turning point of the story, which happens when the bear stops asking about his hat and lies on the grass, wondering what will happen if nobody finds his hat. This image depicts the character in low angle, which construes a sense of vulnerability, once readers can see him 'from above'. Such position is contrasted with his huge proportions as the bear occupies both pages of the spread, and half of the height of the page. On the succeeding pages, the protagonist, still lying on the grass, answers the deer that he has lost his hat. At this moment he starts to describe how it looks like and realizes he has seen his hat.

In terms of visual meanings, the image with a red setting, mentioned before, constitutes an exception, because it is the only one with a different color used in the background. Thus, what has been illustrated up to this point in beige turns into red. The written text, however, is exposed in a white background which, in turn, foregrounds the capital letters used on it.

The use of the color red activates the symbolic relation of angriness, as red is considered an energetic color and the feelings it evokes seem associated with blood and fire (Bang, 2016). This way, the red background helps to convey the mood of the character at an important moment of the narrative: when the bear realizes that the rabbit was both wearing his hat and also lying. The bear is thus depicted with his eyes wide open, which also indicates he has come to his senses.

In relation to the construal of the character's feelings, the bear is not characterized as having a mouth, which could suggest an expression of affect. Instead, by means of a minimalist style, Klassen conveys emotions through the bear's eyes. The protagonist is drawn with a sort of almond shaped eyes, suggesting that he may be, at times, gazing at readers. Such a gaze is not a direct one, once he and all the characters are represented in oblique angles, but it may construe certain proximity regarding the child-reader and the bear.

Besides, the bear's eyes also convey the main character's feelings at certain moments of the narrative, such as when he realizes that the rabbit has stolen his hat and opens up his eyes. In addition, following such moment, when he decides to come back and confront the rabbit, the image depicts the bear's expression of angriness, and also the notion that he is 'coming back', as all the animals the character has spoken to are aligned in the order of the meetings: from the right-hand page to the left one.

At the same time, the bear is depicted leaving all these characters 'behind', as he turns his back to them, and moves to the end of the left-hand page. This way, the vectors formed by the bear's legs foreground the character's movement, as well as the return to the beginning of the story, when the bear first talked to the rabbit. Following the subsequent events, the protagonist, still with his eyes showing anger, finally meets the mischievous rabbit and accuses him of having stolen his hat, as presented before.

Overall, then, the narrative is marked by detaching readers from characters by means of images of offers and long shots. However, the imagetic choices also involve, in general, the representation of characters at the eye-level, which helps to suggest proximity between readers and characters. Apart from that, one image that also creates such proximity occurs when the bear faces the rabbit. Thus, after having shouted his accusation, the protagonist faces the rabbit. This moment constitutes one of the main events of the narrative.

The image which represents such moment depicts the bear and the rabbit's interaction from a medium to a close up shot, a distance which construes a close look at the represented participants by the readers and suggests a sensation of accompanying the story that unfolds right before their eyes. Moreover, this proximity also reverberates in the 'notion' that the characters have bigger proportions than they have had along the story. Such choice puts in evidence the physical features of both characters and, with them, the power that encompasses their relationship. At this point there is no doubt that the bear is much bigger than the rabbit: while the first is tall and strong (occupying almost all the right-hand page), the second is much smaller and, apparently, fragile (occupying half of the left-hand page).

It is also possible to observe that power is construed not only by the depiction of a powerful animal such as the bear – which highlights the notion that he is at the top of the food chain – but also by the gazes exchanged. The rabbit, being smaller, is obliged to look up to the bear, denoting his powerless position concerning the latter. This moment is not conveyed by any verbal text and keeps readers' attention to the event that unfolds. Moreover, the absence of the written information emphasizes the confronting exchange of gazes. After this hostile meeting, equilibrium is reestablished, signaled by the depiction of the bear sitting down, wearing his beloved hat, – as if he could, finally, rest.

However, the bear seems to have changed his gentle way of relating with others, as, on the subsequent page spread, he turns his back to the squirrel who has asked him if he has seen a rabbit. This way, the protagonist's position indicates both lack of movement – once he is depicted in the same position he was on the previous page spread – accompanied by a lack of good manners. Thus, the change of the protagonist's good manners and the unfortunate outcome of the rabbit culminates with the end of the story. The protagonist is depicted alone, as he sits down and wears his little red hat.

Overall, it is possible to observe the intricate relation between the visual and the verbal meanings. Even the simple choice of using the speech lines according to the animal-interactant involves a clever intermodal relation that is well explored in the picture book. This way, to conclude the paper, we explore how intermodal relations construe interpersonal meanings.

3. 3 – The intermodal analysis and the construction of irony

Having explored the interpersonal meanings of the verbal and visual texts separately, we turn to the study of their intermodal relations. The interpersonal meanings are now analyzed regarding three different aspects: Affiliation concerning readers in relation to characters; Affiliation between characters, and the system of Feeling.

In general lines, the intermodal relations between the visual and the verbal meanings tend to be convergent concerning the system of Affiliation. This occurs because the visual choices of this system are in line with a detaching stance, such as the depiction of characters in oblique angles, in long shots, and by images of offer, as presented before. The verbal text, in turn, resonates with the visual information/story offered by means of declaratives and interrogatives used by the protagonist as well as the dialogues exchanged by the characters. In fact, at the turning points of the narrative, the verbal text helps to align readers and characters. This may be achieved by choices of verbs that express the character's feelings as well as by changes on the Mood choices. In this sense the interplay between the verbal text and the images creates an interesting emotive appeal.

The interplay of image and verbal text, besides approaching and creating a close relation between readers and the protagonist at certain moments, also construes irony and positions readers in a privileged 'point of view'. The interplay here is related to the colors used in the written text and not so much in relation to the verbal content. As already mentioned, the written text has different colors and they link the speech turn to the represented character. This arrangement assists in both identifying the character's speech turn, and also, and more importantly, calling readers' attention to the red hat that the rabbit is wearing. This way, the hat is signaled to readers who can 'see' that the rabbit is overtly deceiving the bear, as shown by the red color present in both the typeface and the hat. What is more, some sort of identification with the young readers may arise from the rabbit's deceitful attitude, since some children probably tell their parents bald-faced lies by denying what they did.

Similarly to the skillful use of the font colors to construct subtle meanings, Klassen also expresses Feelings by changing the typeface. This happens when the bear realizes he had seen his hat and when he accuses the rabbit for having stolen his hat. In these two specific moments the verbal text is deployed in capital letters and in bigger fonts, as a means to signal the sudden recall of the bear, and his expression of angriness. Moreover, the author depicts little differences in the main character's eyes conveying the character's attitudinal response. This way, the image and the typeface contribute to the construal of most of the feelings, once they are not explicitly conveyed in terms of attitudinal lexis.

Concerning Affiliation between characters, their orientation also construes interesting interpersonal meanings. For instance, most animals respond to the bear quite politely. Resonating such politeness and cooperativeness, they are represented accordingly: facing their interactant. On the other hand, irony is partially constructed by depicting the rabbit in a coping position, whereas the verbal reaction indicates the opposite. This way, despite an apparent cooperative face-to-face interaction, the verbal text commits the rabbit's confronting response. Moreover, the rabbit is seen wearing the sought-after hat, whereas he denies having seen it, thus construing ideational divergence between what is committed verbally and what is depicted imagetically.

In relation to characters' orientation and speech functions and reactions, it is interesting to mention how such interplay construes the bear's attitudinal shift. In the last dialogue presented, on the penultimate page spread, when the bear answers the squirrel with a confronting answer, he is depicted with his back to the squirrel. This way, both visual and verbal modes converge to the same defensive attitude to build up an impolite and unkind character – contrary to the way he had been represented at the beginning of the story; thus, demonstrating a shift in the character's gentle attitude.

Concerning the high emotional moment of the narrative, illustrated on page spread 13, the analysis demonstrates how the absence of verbal narration creates an implicit idea of what will take place between the bear and the rabbit. This means that the depiction of the confronting exchange of gazes, the lack of conversation – suggested by the lack of written text – signal that something is about to happen. As presented earlier, such lack of conversation is evoked by the lack of commitment of the verbal text.

Also as seen before, only on the penultimate page spread, readers find out what took place during the interaction. This is shown by the bear's answer, when he affirms he would not eat a rabbit – which is the opposite idea of what he has done. In this sense, the verbal text commits more information than the image and, as the visual text does not deliberately convey the fact, irony and dark humor fulfill the omitted information.

4 – Concluding remarks

To conclude the analysis, it is worth mentioning Klasen's remarkable play with the interpersonal meanings of language, which, in alignment with the visual orientation of the characters, construe their natures. This way, important grammatical notions which encompass the dialogues, such as confronting reactions and different Mood choices have shed light upon aspects that underscore every day social interaction.

In this sense, when the verbal text is not instantiated, it also construes a great deal of the story. Thus, following what happens, at times, in real life situations in which conversation no longer exists, and dialogue is replaced by violence, the story unveils the unfortunate rabbit's fate. The lack of instantiation of the verbal text is a means of creating irony which, in turn, creates humor and foreshadows what was about to happen (and that, seems to have happened).

The picture book is thought-provoking and the details of written text and visual features not only constitute a compelling tale, but also immerse readers in a rich multimodal experience. We argue that by carrying out reflective discussions concerning the semiotic resources applied in a picture book, children may become aware of how multimodal literary texts work. In this sense, the present study has tried to demonstrate that interpersonal meanings and differences in commitment in picture books require readers to position themselves concerning the ethical actions of the characters in accordance with their point of view and experience. This way, following Burke and Copenhaver (2004, p. 212) "putting the animals to work in the classrooms" under a reflective perspective, "[…] could increase both the power and control learners can exert over their experiences."

NOTES

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REFERENCES

Anstey, M., & Bull, G. (2006). *Teaching and learning multiliteracies: Changing times, changing literacies*. Newark, DE: International Reading Association.

Arizpe, E., & Styles, M. (2003). *Children reading pictures: Interpreting visual texts*. London and New York: Routledge Falmer.

Brasil. (2015). *Programa nacional biblioteca na escola (PNBE).* Brasília: Ministério da Educação; Fundo Nacional de Desenvolvimento da Educação (FNDE).

Bang, M. (2016). *Picture this: How pictures work*. Boston, MA: Little, Brown & CO.

Brown, A. (1988). *Voices in the park*. New York: DK.

Burke, C., & Copenhaver, J. (2004). Animals as people in children's literature. *Language Arts*, 81(3), 205–213.

Cristhie, F. (2005). *Language education in the primary years*. Sydney: UNSW Press.

Constanty, V. (2018). *Verbal and visual intermodal relations in the construction of interpersonal meanings in children's minimalist picture books*. (Doctoral thesis). Universidade Federal de Santa Catarina. Florianópolis.https://repositorio.ufsc.br/handle/123456789/193765

Eggins, S. (2004). *An introduction to functional grammar*. London: Edward Arnold.

Goffman, E. (1967). Interaction ritual: Essays on face-to-face interaction. Aldine.

Grice, P. (1994). Logic and conversation. In R. M. Harnish (Ed.), *Basic Topics in the Philosophy of Language* (pp. 57–73). New York: Harvester Wheatsheaf.

Halliday, M. (1994). *An introduction to functional grammar* (2nd ed.). London: Edward Arnold.

Halliday, M., & Matthiessen, C. (2004). *An introduction to functional grammar* (3rd ed.). London: Edward Arnold.

Halliday, M., & Matthiessen, C. (2014). *Halliday's introduction to functional grammar* (4th ed.). London/ New York: Routledge.

Heberle, V. (2015). Projeto CNPq. Social practices in contemporaneity: Multiliteracies, identities and multimodal narratives. Brazilian Science and Technology Research Council (CNPq).

Heberle, V., & Constanty, V. (2016). Meaning without words: Analyzing the picture book Bárbaro through a social semiotic perspective. *Letras, 26*, 89–109. Santa Maria. https://periodicos.ufsm.br/letras/article/view/25325/14663

Hunt, P. (1991). *Criticism, theory and children's literature*. Oxford, UK, Cambridge, Mass., USA: B. Blackwell.

Kalantzis, M., Cope, B., Chan, E., & Dalley-Trim, L. (2016). *Literacies* (2nd ed.). Sydney: Cambridge University Press.

Klassen, D. (2012). *I want my hat back*. London: Walker Books.

Kress, G., & van Leeuwen, T. (2006). *Reading images: The grammar of visual design*. London: Routledge.

Lewis, D. (2001). *Reading contemporary picture books: Picturing text*. London. Routledge.

Macken-Horarik, M., Love, K., Sandiford, C., & Unsworth, L. (2018). *Functional grammatics: Re-conceptualizing knowledge about language and image for school English*. London and New York: Routledge. [E-reader version].

Martin, J. R., & White, P. R. R. (2005). *The language of evaluation: Appraisal in English*. Basingstoke, UK: Palgrave Macmillan.

Martin, J. R., & Rose, D. (2008). *Genre relations: Mapping culture*. London and Oakville, CT: Equinox Publishing.

Mello, R., & Massarani, M. (Illustrador) (2015). *Inês*. São Paulo: Companhia das Letrinhas.

Nikolajeva, M., & Scott, C. (2006). *How picturebooks work*. New York: Garland.

Nodelman, P. (1988). *Words about pictures: The narrative art of children's picture books*. Athens, GA: University of Georgia Press.

O' Halloran, K. L. (2011). Multimodal Discourse Analysis. In K. Hyland, & B. Paltridge (Eds.), *The Bloomsbury companion to discourse* (pp. 120–137). London and New York: Continuum.

Painter, C., & Martin, J. R. (2011). Intermodal complementarity: Modeling affordances across image and verbiage in children's picture books. *Studies in Systemic Functional Linguistics and Discourse Analysis (III)*, 132–58. Beijing, China: Higher Education Press.

Painter, C., Martin, J. R., & Unsworth, L. (2013). *Reading visual narratives: Image analysis of children's picture books*. Sheffield: Equinox Publishing Ltd.

Rosen, M., & Blake, Q. (Illustrator) (2004). *The sad book*. London: Walker.

Royce, T. (2007). Multimodal communicative competence in second language contexts. In T. Royce, & W. Bowcher (Eds.), *New directions in the analysis of multimodal discourse* (pp. 361–403). Mahwah, NJ: Lawrence Erlbaum.

Salisbury, M., & Styles, M. (2012*). Children's picturebooks: The art of visual storytelling*. London: Laurence King.

Toolan, M. (1998). *Narrative: A critical linguistic introduction*. London and New York: Routledge.

Unsworth, L. (2006). Towards a metalanguage for multiliteracies education: Describing the meaning-making resources of language-image interaction. *English Teaching: Practice and Critique, 5*(1), 55–76. https://www.researchgate.net/publication/259568410_Towards_a_metalanguage_for_multiliteracies_education_Describing_the_meaning-making_resources_of_language-image_interaction

Unsworth, L. (2014). The image/language interface in picture books as animated films. In L. Unsworth, & A. Thomas (Eds.), *English teaching and new literacies pedagogy: Interpreting and authoring digital multimedia narratives* (pp. 105–121). New York: Peter Lang Publishing.

Winter, E. (1994). Clause relations as information structure: Two basic text structures in English. In M. Coulthard (Ed.), *Advances in written text analysis* (pp. 46–68). London: Routledge.

12

CHANGING PERSPECTIVES: WRITING EXHIBITION REVIEWS IN HIGHER EDUCATION

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ABSTRACT

In this case study, undergraduate English major students and pre-service teachers were asked to write reviews of two exhibitions they visited as part of a course on multimodality and social semiotics. At the beginning of the course, students struggled to distinguish between and produce this genre, writing personal reflections and failing to connect their experiences with academic knowledge. During the intervention described in this study, scaffolded writing tasks were used as teaching tools, and detailed feedback was given on the students' reviews. The students were introduced to the structure of response genres (Martin & Rose, 2008) and the role of semantic waves (Maton, 2013) in academic writing. Drawing on the concept of semantic gravity within the Semantics dimension of Legitimation Code Theory (LCT) (Maton, 2013, 2014), student reviews were analyzed to understand how different types of knowledge practices (i.e., disciplinary knowledge versus personal experiences) appear in the reviews. Based on pre- and post-intervention analyses of student texts, this study demonstrates how explicit writing instruction contributed to knowledge-building through written production.

KEYWORDS

Arts integration, museum education, multimodal literacy, genre-based pedagogy, Legitimation Code Theory

1 – Changing perspectives: Writing exhibition reviews in higher education

University students of the arts and humanities are often requested to write a variety of genres, most frequently from the genre families of arguments and text responses. In this process, they are expected to organize their reading, teaching or artistic experiences in the context of a certain disciplinary framework. The completion of such an assignment requires the understanding of academic expectations, and more importantly, the students need to possess the skill of examining an experience through the academic looking-glass. Explicit writing instruction plays a significant part in this work as it can achieve much more than helping students with the creation of a successfully assessed text. Teaching practices which aid writing development can have a positive impact on the students' reasoning skills and knowledge-building within a discipline.

This study shows how two pedagogical approaches were implemented in the context of a university course on multimodal literacy development. The two frameworks are genre-based pedagogy informed by Systemic Functional Linguistics (SFL) (Martin & Rose, 2008) and the Semantics dimension of Legitimation Code Theory (LCT) (Maton, 2013, 2014). Genre-based pedagogy developed by SFL educational linguists informs scaffolding literacy development with a focus on the semiotic features of texts. LCT is a sociological framework for researching and informing educational practice, and it conceptualizes knowledge practices and their organizing principles within social fields of practice. More specifically, the Semantics dimension of LCT conceptualizes organizing principles underlying knowledge practices through their semantic codes. It is important to keep in mind that SFL and LCT are separate theories with 'different insights that are complementary and which together can offer greater explanatory power' (Martin, Maton, & Doran, 2020, p. 26). In the context of this research study, they are brought together to support literacy development mostly by revealing how students can access academic knowledge in the context of a unique artistic experience. However, the two theories offer different aspects on how students represent experiences, insights and knowledge in academic texts, and the text analyses presented here do not aim to prescribe certain knowledge practices to the different stages of their texts.

The study demonstrates how the understanding of genre structures (Martin & Rose, 2008) and insights into the organizing principles of knowledge practices by examining context-dependency as explained in LCT Semantics (Maton, 2014) contributed to changes in the students' written production based on the experiences of visiting art exhibitions during the course.

2 – Working with genres

Resonating with Martin and Rose (2008), in this study genres are viewed as 'staged, goal-oriented social processes. Staged, because it usually takes us more than one step to reach our goals; goal-oriented because we feel frustrated if we don't accomplish the final steps; social because writers shape their texts for readers of particular kinds' (p. 6). These three aspects of genres all have significant pedagogical implications in writing instruction as they provide students with awareness of the context, purpose and audience of their writing.

The aim of SFL-informed genre-based pedagogy (hereafter genre pedagogy) is to reveal the organizing principles of different genres through explicit pedagogy, and Hyland (2007) describes it as 'perhaps the most clearly articulated approach to genre both theoretically and pedagogically' (p. 153). The main advantages of genre pedagogy have been summarized by Hyland (2004, pp. 10–16): explicit, systematic, needs-based, supportive, empowering, critical and consciousness-raising. Not only does SFL-informed genre pedagogy comprise all of these characteristics, it also recognizes the need for an explicit focus on knowledge building to participate in writing (e.g., Martin & Rose, 2012). The scaffolding pedagogical model of genre pedagogy is the Teaching Learning Cycle (TLC) as presented by Rothery (1994). Among its various adaptations, the most widely used TLC is represented in Figure 1 below, showing the core stages of Deconstruction, Joint Construction and Independent Construction with Field Building and Context Setting throughout the different cycles of learning.

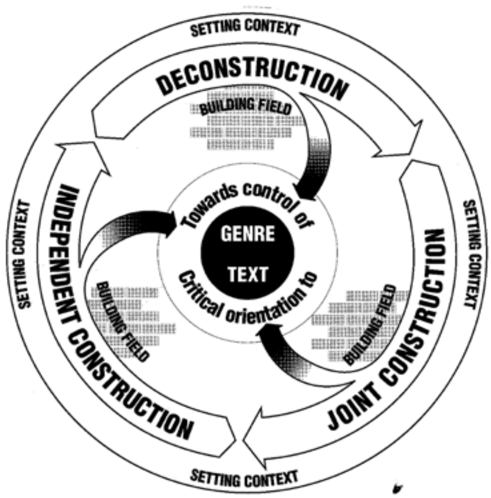

Figure 1 – **The teaching learning cycle** (Rothery, 1994, p. 8)

The TLC model has also been applied in academic L2 contexts (e.g., the SLATE project, Dreyfus, Humphrey, Mahboob, & Martin, 2016). In her work on text-based syllabus design, Feez (1998) adapted the stages of the TLC for the field of adult second language learners in five stages: Building the context, Modelling and deconstructing the text, Joint construction of the text, Independent construction of the text, and Linking related texts. Hyland (2019) further adapts and details this model with different teacher roles and tasks defined in the context of L2 writing instruction (p. 72).

In L2 academic contexts, genre pedagogy can successfully guide writing instructors as it has already informed second language pedagogy in higher education contexts, showing positive influence on written production. After research studies in L1 contexts in the 1980s, genre pedagogy has been adapted for ESL teaching (e.g., McCabe, Gledhill, & Liu, 2015). Hammond and Derewianka (2001) highlight several implications of the theory for second language teaching contexts, for example the understanding of language as a system for making meaning; the importance of social and cultural contexts of language use; the analysis of the target situation, and the importance of focusing on language at the text level as well as at the sentence level (p. 192).

The positive impact of genre pedagogy has been emphasized in connection with its influence on the development of genre awareness (Yasuda, 2011), with special attention paid to summary writing, (Chen & Su, 2012; Yasuda, 2015), and also in connection with Task-Based Language Teaching (Yasuda, 2017). Chen and Su (2012) argue that genre-based approaches are more beneficial in terms of content development and rhetorical organization rather than linguistic accuracy and lexical diversity. Apart from such positive impact, the necessity of pedagogic metalanguage for teachers has also been discussed as a major factor for the success of the pedagogy (Rose & Martin, 2012).

3 – Response genres: Focus on review writing

Control of reviews within the response genre family (Rose & Martin, 2012) is a key expectation for students especially in arts and humanities courses. In Humphrey's (2016) words, 'response genres are used to appreciate and respond to cultural works in the curriculum area of English and music, drama, film studies and visual arts' (p. 101). Although Humphrey (2016) also reports that media review is more typical in the middle years of schooling, and 'the broad conception of a review in professional and academic life makes it problematic to recontextualize for academic use' (p. 117), it was chosen to serve two academic purposes within the context of the course. First, its staging – Context, Description, Evaluation – provides a framework to evaluate exhibitions. The first two stages followed by Evaluation help students structure their own ideas and describe an experience from an academic perspective. Second, the review is a kind of genre that can be found in students' reading experiences in both everyday (popular journalism) and academic contexts (book and course book reviews). This can make a writing task more accessible with realistic goals. As Christie and Derewianka (2008) argue, 'the typical thematic structure of the review has the merit that it gives direction and order to the manner in which the apprentice writer may go about the writing task' (p. 62).

The definition of genre as 'staged, goal-oriented processes' (Martin & Rose, 2008) contains the important concept of stages, which are instrumental in both writing instruction and data analysis. These stages are defined as 'recurrent local patterns' (Martin & Rose, 2008, p. 6) and assist the writer to achieve their goals by completing these stages. These stages can also become the units of analysis in the data analysis phase of the research.

4 – Different kinds of knowledge

The idea that different kinds of knowledge are woven together in academic discourse have interested linguistic and educational research for decades since Bernstein and Halliday began collaborating in the 1960s (Martin, Maton, & Doran, 2020, p. 10). Both SFL and LCT approaches to knowledge and academic discourse have been informed by Bernstein's (e.g., 2000) characterization of knowledge in terms of common-sense (everyday) and uncommon sense (educational) knowledge that learners encounter as they proceed from primary to secondary and tertiary education (e.g., 1975). Painter (1999, p. 71) as well as Macken-Horarik (1996, p. 236) summarize the differences between common-sense and educational knowledge and highlight their main characteristics and significance in pedagogical practice. Common-sense knowledge is characterized by its relevance to a specific context, shared experiences, and it is based on observation and participation in activities. Educational knowledge is distant from personal experience and is based on semiotic representation that construes abstract and technical meanings. As Painter (1999) points out, conscious, well-planned teaching and written monologic discourse are typical of educational knowledge (p. 70). When preparing students for participation in academic discourse, these various aspects of knowledge need to be taken into consideration. For example, the recurring stages of Field building within the TLC model supports this ongoing focus on building educational knowledge to achieve successful written production.

From a sociological perspective, LCT also investigates the role of knowledge in social practices, and it extends Bernstein's code theory and Bourdieu's field theory (for a detailed account, please see Maton 2014, Chapter 2). Instead of simply showing the presence or absence of knowledge-building, LCT focuses on its basis by conceptualizing the organizing principles underlying knowledge practices (Martin, Maton, & Doran, 2020). This type of analysis reveals the values, dispositions and norms that shape different practices under the visible surface. However, LCT does not see fields in binary oppositions of common-sense or educational knowledge. Rather, it takes a relational perspective on the sets of practices in different fields.

5 – LCT semantics

While genre pedagogy informed the organizing principles of texts during my teaching and analysis, the concept of semantic gravity within the Semantics dimension of LCT served as a tool to help students see the underlying principles or 'the rules of the game' shaping academic discourse and ways of knowing (Chen, Maton, & Bennett, 2011, p. 146). By making valorized knowledge visible, LCT advances social justice: it enables teachers and students to examine educational practices which contribute to building knowledge over the time of lessons and courses.

Semantics is one of the three elaborated sets of concepts or dimensions of LCT. The other two dimensions explore the different organizing principles underlying practices, dispositions and contexts as a species of legitimation codes: Specialization and, Autonomy as presented in Table 1 below.

Table 1 – **Four dimensions of Legitimation Code Theory**

Dimension	Referent relations	Concept
Specialization	meaning	semantic gravity, semantic density
Semantics	social-symbolic	epistemic relations, social relations
Autonomy	external	positional autonomy, relational autonomy

LCT Semantics both theorizes and makes visible the means by which legitimized practices are enacted in different contexts, for example cultural studies, visual arts, pedagogy, engineering, jazz or dance. This dimension views social fields of practice as *semantic structures* whose organizing principles are conceptualized as *semantic codes* that comprise *semantic gravity* (SG, focusing on context-dependence) and *semantic density* (SD, focusing on complexity) (Maton, 2020, p. 62). The two can be analyzed either together or separately.

Semantic gravity reveals the degree to which meaning relates to its context, and it is always relational. More specifically, context-dependency is described in terms of stronger and weaker semantic gravity, always along a continuum of strengths, and not in terms of dichotomous characterizations such as 'concrete' or 'abstract' knowledge. In Maton's (2013) words, semantic gravity is construed as a continuum of strengths with theoretically infinite capacity for gradation and variation (p. 110). Stronger semantic gravity indicates more context-dependency, weaker semantic gravity indicates less context-dependency. Put simply, stronger semantic gravity is associated with more manifest experiences, for example the description of an event or the close analysis of a task, and weaker gravity indicates less focus on these experiences, moving towards generalized and abstract ideas. In this sense, semantic gravity analyzes changes over time: 'moving from the local particulars of a specific case towards generalizations' (Maton, 2020, p. 63). These movements result in shifts in semantic gravity, which are profiled both horizontally and vertically as shown in Figure 2. Horizontally, it describes changes over text time. Vertically, it presents the strengths of semantic gravity from stronger to weaker context-dependency.

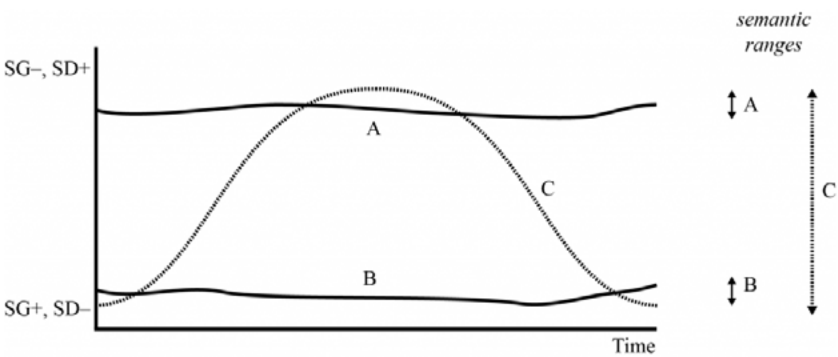

Figure 2 – **Three semantic profiles** (Maton, 2013, p.13)

The *semantic range* of the text is constituted in these two directions over time. In previous studies presenting analyses of semantic gravity, three typical semantic profiles have been described as seen in Figure 2. The high semantic flatline, Profile A, represents relative context-independent practices, for example theoretical discussions. The low semantic flatline, Profile B, represents practices which remain constrained in their own context, for example anecdotes. The semantic wave which is depicted in Profile C, represents semantic shifts, indicating movements within the context-dependency of the text, for example a teacher's explanation of the concept of salience in images through visual examples.

Although semantic waves within texts, lessons, courses and curricula may take many forms (Maton, 2020, p. 82), their waving (i.e., changes in the strength of semantic gravity) models how different practices are represented and contribute to building knowledge over time. The infinite possibility of shifts between higher and lower semantic profiles also illustrates how knowledge is built up gradually, and how these movements happen step by step. Long jumps between practices might leave students and readers confused, missing essential steps in the lessons or texts. The waves can be used to visualize these strategies, guide lesson planning and build arguments and reflection both in speaking and writing as they weave different types of knowledge and ways of knowing together.

This study draws on the concept of semantic gravity to explore how different forms of knowledge appear in the students' written assignments. The shifts between different knowledge practices are analyzed and made visible through *semantic waves*, which inform knowledge-building practices within the larger text time of a whole course or a shorter text time of a writing assignment. Research enacting semantic waves has already informed academic writing, for example Clarence (2017) uses semantic waves to analyze peer writing tutorials, and Kirk (2018) uses them to analyze EAP curriculum design. Other LCT research studies have focused on semantic gravity in the context of ethnographic research (Hood, 2016), physics assessment (Georgiou, 2016), the integration of engineering knowledge (Wolff & Luckett, 2013), and knowledge-building in vocational curricula (Shay & Steyn, 2016). These studies point to the crucial role of semantic waves in knowledge-building within educational contexts.

6 – Context of research

Students usually arrive with diverse experiences and knowledge of text types at the English Studies programs at universities. In the Hungarian context, most of the language development courses focus on perfect-ing students' spoken and written skills for an advanced level (CEFR C1) proficiency exam at the end of the first year. However, there is no uniform understanding regarding what genres are expected from students at different courses and universities as course coordinators create the writing and language development syllabi based on different approaches to genres and writing pedagogy. The most common written tasks are argumentation, interpretation and critical reflection in English Studies programs. In this context, SFL-informed genre pedagogy provides a clear overview of guidance for the writing instructor and the students.

In a foreign language learning context, previous experiences with genres in the students' L1 often influence their writing in new educational contexts (e.g., Kang, 2005), and this issue of transfer of L1 writing practices needs to be remembered during writing instruction. Several elements of the Hungarian secondary school exam text types correspond to the taxonomy of school genres described by Rose and Martin (2012). Secondary school exams in Hungarian Language and Literature (Oktatási Hivatal, 2017), require knowledge of genres from the genre families of arguments and text responses: exposition, critical interpretation and comparative critical interpretation of literary works. Control of bureaucratic and rhetorical text types such as complaints, requests, comments, appraisals and letters of reference are also expected by the end of secondary education. However, at secondary school level English, students are not expected to be familiar with academic genres. Instead, the following text types are defined as requirements: at intermediate level (Common European Framework of Reference, CEFR B1) personal communication (e-mail, message, blog, journal entry), invitations, letters; at upper-intermediate level (CEFR B2) letter to the editor and article for a (student) newspaper (Oktatási Hivatal, 2017). This suggests that students need a new introduction to academic genres in English in the context of their university studies.

7 – Research aims and questions

One of the aims of the 'Making Meaning with Visual Narratives' course was to develop the students' multimodal literacy skills and to guide them in gaining control over multimodal resources. However, aiming theoretically too high, or in other words the 'Icarus effect' (Maton, 2013, p. 19) would be counterproductive in this context. In this respect, knowledge-building during the course was designed with semantic shifts in mind that connect the students' previous experiences and the shared experiences with the abstract concepts and analytical framework of social semiotic multimodality (e.g., Kress, 2010).

Within this context, I formulated three research questions in connection with the students' written responses to two exhibition visits.

1. How does the review writing task contribute to knowledge-building during the course?
2. What knowledge practices are present in the students' reviews?
3. How can genre-based pedagogy contribute to the students' learning?

8 – Participants

In the autumn term of 2018, there were 15 students in the course, and they all completed the review writing tasks. Thirteen students followed the English teacher training program and had another field of study apart from English, one student was in the English Studies program, and one student was a visiting student. The students' level of English was advanced (CEFR C1 and C2), and they were in the fourth year of their studies.

9 – Procedures

A glimpse at the main blocks of the course in Table 2 reveals its organizing principles, informed by the phases of the TLC (Rothery, 1994). During the first, Deconstruction phase, students were introduced to social semiotic multimodal analysis through image and multimodal text discussions and reading tasks. As a special extension, five lessons were dedicated to two museum visits, which are described as the lessons of the intervention, based on a complete TLC specifically designed for the purpose. In the final, Independent Construction phase of the whole course, during the last two seminars, the students presented their research projects inspired by the course.

The written tasks comprised four different types of texts during the course: recounts, descriptions, reviews and a slideshow/poster presentation. First, students wrote recounts of childhood reading, and then recounts of memorable museum experiences to recall significant events which had shaped their own relationship with reading and museums. During the first lessons, to practice multimodal analysis, students wrote descriptions of images and multimodal texts such as paintings, picture book pages, websites and magazine covers. Then, during the exhibition visits, the students wrote two reviews of two separate exhibition. The final presentation task was the creation of a multimodal text such a presentation (for a full account of the tasks during the course, see Wünsch-Nagy, 2020).

Table 2 – **Overview of the course schedule**

	Lessons 1-3	Lessons 4-5	Lessons 6-10		Lessons 11-13
Content	Guided text discussions; Theoretical readings	Detailed text discussions, focus on visual grammar, intermodal relations, picture books	Exhibition 1 Pre-visit preparation: speech bubbles and comic books; language and learning in museums; Post-visit discussion	Exhibition 2 Pre-visit preparation: online resources to learn about the exhibition; language and learning in the museum; Post-visit discussion	Students' presentations of their chosen topics on multimodal text analysis
Writing tasks	Picture descriptions, Recounts	Review examples	Exhibition review 1	Exhibition review 2	Slideshow / poster presentation
TLC phases	Deconstruction		**Embedded TLC in the context of exhibition visits**		Independent Construction

10 – Scaffolding review writing: Lesson steps

The intervention discussed in this study focuses on the specific TLC designed around the two exhibition visits. Preceding and during the exhibition visit block of the seminar, two sessions were dedicated to the discussion of comic books, picture books and illustrated books in class. After the shared reading and analysis of some books, students selected a book and presented it to their peers. During these oral book presentations, the three main stages of the review genre were introduced. Following this session, the students were encouraged to read reviews in popular magazines and newspapers and also revised the stages of the review genre through model texts (Martin & Rose, 2008). A useful addition to this step was the joint drafting of a review and re-ordering the paragraphs of model reviews.

During the same sessions, the students were also introduced to the LCT Semantics concept of context-dependency with the help of a tutorial video on using semantic gravity in writing (AUT literacy for assessments, 2018) and discussions about semantic gravity in writing and teaching. For easy access and clarity, semantic gravity was illustrated through an overview of linking concrete experiences with generalizations and theories/concepts, which represents a three-level analysis of semantic shifts.

The first exhibition visit took place in a small gallery near the university. The title of the exhibition was *Kids'n'Comics*, and the exhibits were artworks of contemporary Hungarian graphic artists. The exhibition was organized to guide the visitor through stories of growing up. This small exhibition space created opportunities for collaborative group dialogues before, during and after the exhibition. The second exhibition visit happened at the *Bacon, Freud and the Painting of the School of London* exhibition at the Hungarian National Gallery. This famous and popular exhibition displayed almost ninety paintings on two floors and several rooms. The students received a list of questions organized around the topics of multimodality, learning and language in the exhibition.

During the exhibition visits, further scaffolding was provided through a list of viewing questions, directing the students' attention to the presence of semiotic resources and the learning opportunities they offered. The reviews were written after a short class discussion that followed the exhibition visits. Students received feedback both in terms of the structure and the logical development of the review. In the case of reviews that presented strong context-dependency or no semantic shifts, the feedback included comments on semantic waves in the paragraphs.

After the second visit, students prepared another review based on the instructions in Table 3. The reviews were assessed with a focus on the structure and the organization of ideas in the texts. In both writing tasks, students were asked to take on the role of a language teacher who writes for fellow teachers about the exhibition in an English language teaching journal.

Table 3 – **The second review writing task**

Write a review about the 'Bacon, Freud and the Painting of the London School' exhibition. In your review, discuss the following topics. Context 1. What is this exhibition about? • Description 2. Describe the use of language and the interplay of semiotic resources at the exhibition. 3. Evaluation • Evaluate the use of written text in the exhibition. Write your review in 600–800 words.

11 – Data collection and analysis

The two sets of exhibition reviews written by the 15 students were collected, resulting in 30 reviews with each review between 600 and 900 words. These texts were analyzed in three cycles. The first reading of the texts happened during the course, when feedback was given to the students, focusing on the review stages and semantic waves. Then, the second and third readings provided more in-depth analysis of the texts with the same focus points. First, I examined the students' understanding of the review genre in the two sets of texts. Second, I looked at the context-dependency of the reviews, coding the texts based on meaningful units, which were sentences or clauses in some cases.

To guide the analysis and make the coding decisions transparent, a translation device was developed based on other research studies enacting LCT semantic gravity. Three translation devices (Maton, 2014; Georgiou, 2016; Kirk, 2018) were studied in detail. The basic principle of creating a translation device or external language of description (Maton, 2016) is the same across all translation devices enacting semantic gravity, that is that they represent LCT concepts and connect them with the description of the coded content and examples from the data. This way, these translation devices can be read from left to right and vice versa, making the analysis explicit and transparent. The translation device for this particular study is presented in Table 4.

Table 4 – **Translation device for the semantic gravity analysis of students' exhibition reviews**

Semantic gravity	Coding categories	Coding of responses	Description of coded content	Example quote from student reviews
Weaker ↑	SG--	Enacting theories	Student refers to a theoretical principle, specialized or abstract knowledge without reference to the exhibition	'As Gunther Kress expresses particular perceptions can be conveyed by different semiotic modes.' (C3_S5_R2)
	SG-	Generalization	Student makes generalized comments about the exhibition while explicitly providing some references to multimodal perspectives	'Last but not least, size is also a means of meaning-making.' (C3_S5_R2) 'Besides language and the paintings, as semiotic resources, other signs of meaning-making are present in this exhibition.' (C3_S5_R2)
	SGØ	Summary	Student summarizes the exhibition experience	"photographs have a quite important role in some artists' work" (C3_S5_R2) 'Visualizing the exhibition as a timeline enables us to discover the incredible dialogues between artists.' (C3_S5_R2)
	SG+	Description	Student describes the exhibition space and objects with concrete examples	'The exhibition presents almost ninety paintings from painters of the London School (Francis Bacon, Lucian Freud, Frank Auerbach, and Leon Kossoff), and also from contemporary artists who have been inspired by their figurative work of art (Cecily Brown, Lynette Yiadom-Boakye).' (C3_S5_R2) 'Francis Newton Souza is playing with light in 'Two Saints in a Landscape', a completely black painting' (C3_S5_R2)
↓ Stronger	SG++	Personal response	Student reflects on personal engagement, opinions and emotions during the exhibition experience	'I was a bit disappointed, but fortunately I was able to find some quite interesting comics' (C3_S5_R1) 'I also liked that both the drawings and the texts had a big enough size to read and look at.' (C3_S5_R1)

During the analysis and coding of the reviews, the first readings determined the strengths of context dependency that could be observed. This is how five levels of semantic gravity were defined for the analysis of the student texts based on the variety of the knowledge practices they exhibited in the reviews as can be read in the 'Description of coded content' column. In the teaching practice, these were reduced to the three levels of concrete experiences, generalized ideas and theories. For example, if the content contained expressions such as 'I was a bit disappointed' or 'I also liked that', the response was coded as [SG++], functioning as the students' self-reflection. Such a perspective gives insights into the student's personal reactions and emotional engagement. The next level coded as [SG+], contained detailed descriptions of the exhibition space and objects such as 'Francis Newton Souza is playing with light in '*Two Saints in a Landscape*', a completely black painting.' This describes a concrete example from the exhibition, informing the reader about the context of the event. Descriptions which summarize the exhibition experience, for example, 'photographs have a quite important role in some artists' work' were coded as [SGØ]. When students described the exhibition space while explicitly providing some references to multimodal perspectives, their responses were coded as [SG-], for example 'size is also a means of making meaning.' The weakest level of semantic gravity was coded as [SG--], representing abstract and specialized knowledge, often referencing academic work. For example, the response 'Kress argues that particular perceptions can be conveyed by different semiotic modes' introduces a theoretical approach without any references to the exhibition space.

12 – Results and discussion

In the following section, I will answer each research question (RQ) by first presenting the results of the analysis, and then interpreting and discussing them. One pair of reviews by the same student is used to illustrate the findings. This pair of reviews, as also explained in the results of the RQ2 is representative of the whole group in terms of the changes in students' semantic profiles.

RQ1: How does the review writing task contribute to knowledge-building during the course?

Results

This research question aimed at understanding how review writing tasks shaped the students' museum visit experience in the context of the course. As introduced in the overview of the context of this research, the students' writing was supported by the scaffolding tasks which helped with the different genre stages as described by Martin and Rose (2008). Reading the texts in three cycles during the data analysis, eclectic writing practices were found in all of the students' first reviews. Most typically, the students' initial reviews contained elements of a variety of genres such as recounts, personal responses and critical interpretations with elements of descriptions.

Table 5 – **Genre structures in a first review**

Paragraph	Expected genre stage	Observed stages: genres	Example from data (C3_S5_R1)
1	Context	Record of events: recount Reaction: personal response	'I visited the exhibition mostly because it was a group activity and I have an interest in the topic.'
2	Description	Description: review Record of events: recount	'When I saw the first scene I immediately felt the connection; it drew my attention.'
3		Background: historical	'To be honest, this realization I encountered made me feel good in a way that I could finally benefit from my history courses at university. On top of that, I was working in a summer camp for children, where we dealt with the Roman Empire, and I was so proud of my little brother, who also took part, that he had learnt the name of the roman sword, whereas a lot of people do not know.'
4		Evaluation: review	'This shows the numerous adaptability of comics.'
5		Evaluation: personal response	'As a reflection on the visit itself I could start with the relevance to the course.'
6		Reaction: personal response	'Personally, I felt empowered by the little knowledge I gained so far.'
7	Evaluation	Reaction: personal response	'Finally, I would like to add that this kind of group activity fulfils my requirements for an open-minded educational setting.'

Table 5 shows a set of examples of the different elements detected in a typical Review 1. This text was also used to illustrate the semantic gravity analysis in RQ 2. Different texts showed different combinations of stages from different genres.

After the feedback given on the first reviews and the discussion of the aim of each stage, the second set of reviews showed more control of the review structure, with a growing tendency to include interpretative and analytical comments instead of personal comments about the exhibition details during the Description stage. There were only four students who produced a review based on the task instructions. Eight students followed the expected three stages but they included some analysis, evaluations or personal responses in the descriptive paragraphs. Three students' texts strongly combined personal responses, recounts and descriptions all through their texts. An interesting change after the first reviews was the students' tendency to include multimodal analysis based on the newly studied theoretical concepts. Except for the three cases of strongly mixed texts, personal remarks were shared in the Evaluation stage, taking the role of the language teacher, not the everyday museum visitor.

The skill of writing in a particular genre is necessary for teachers and professional writers, as they are often assigned to teach or write based on precise guidelines. Implicitly, students are expected to possess these skills by their secondary school exams. In the first reviews, students based their observations on their personal preferences, feelings and opinions, and less on objective descriptions, analysis and evaluation. The reasons for the initial writing challenges can be the result of the transfer of writing attitudes acquired in the students' L1 writing education and the lack of clear instructions in their writing experiences. These interpretations can be further investigated with the help of interviews. The shift in the students' positions is also seen a result of the activation of their freshly encountered knowledge and the introduction of explicit genre pedagogy.

The most significant observation regarding writing tasks is the need for clear specifications about the function of the stages in the genre, and making the students understand that good observational skills manifest in written descriptions, which are necessary for further analysis and evaluation. When students become confident about writing various text types for specific audiences, they can organize their own observations and ideas in a meaningful way, and they can be prepared for critical interpretation and reflection. This way a review writing task is an important step in building knowledge about a certain topic such as the pedagogical value of exhibition visits.

RQ 2: What knowledge practices are present in students' reviews?

Results

As discussed above, this study draws on the LCT concept of semantic gravity to understand the different knowledge practices demonstrated by the students. The specifications of the multimodal social semiotic disciplinary context of the course resulted in clear expectations regarding what knowledge practices needed to be demonstrated in the texts, and a wide semantic range was estimated in the reviews. Writing about an exhibition visit implies the necessity of context-dependency, with exact details of the exhibition space and objects. Since the students were assigned the role of an expert teacher who prepared the review with knowledge of the pedagogical and multimodal meaning-making potential of museums, they were also expected to demonstrate insights from such perspectives.

As described in the previous section on the genre specifications, the first set of texts mostly contained elements of personal responses and recounts. From the perspective of semantic gravity analysis, such elements in the students' texts resulted in strong semantic gravity within the writer's personal context, instead of the expected description of the museum space or summary of the experience. This is the main reason for the introduction of the coding level SG++, which indicates the strongest level of context-dependency, representing opinions and observations strictly from the viewer's own perspective, locked in the immediate context of the self.

The semantic profiles presented below in Figures 3 and 4 are show tendencies of the changes in the most typical students' semantic profiles in Review 1 and 2, who followed the review structure but still combined different genre elements in them. Figure 3 presents one detailed semantic gravity analysis of a typical first review, based on clause and sentence level analysis of the students' text already featured in Tables 4 and 5. Examples from the student's text are added to the semantic profile, and the complete translation device used for the analysis can be consulted in Table 4.

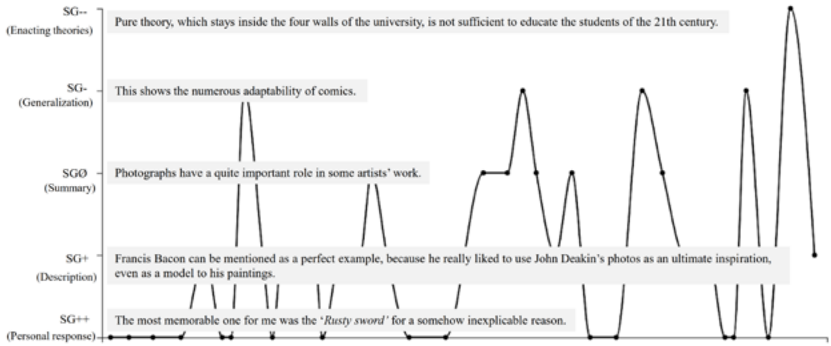

Figure 3 – **Semantic gravity analysis of the first exhibition review (C3_S5_R1)**

The sentences at the beginning of the text (the first four black dots) show strong semantic gravity which reflect a series of personal comments about the students' feelings at the exhibition, for example:

> I visited the exhibition mostly because it was a group activity and I have an interest in the topic. [SG++] I have tried to use comics in my English lessons, but I have not exposed myself to them enough yet. [SG++]

This example from the second paragraph of this review shows how the students shift between description, personal response, generalized ideas and multimodal perspectives:

> The most memorable one for me was the '*Rusty sword*' for a somehow inexplicable reason. [SG++] When I saw the first scene, I immediately felt the connection; it drew my attention. [SG++] I fell in love with [SG++] the concept of a tricolour comic, especially the concept of adding a third emphasizing colour to the black and white 'background'. [SGØ]

In this first text, the student shared details of the exhibit, but it was presented from an extremely personal perspective, almost as if this piece of text was part of a letter to the friend. After the feedback given on this first review, the students' second writing showed less focus on the personal feelings, and more on the exhibition itself. As a comparison, Figure 4 presents the semantic gravity analysis of the same student's second exhibition review.

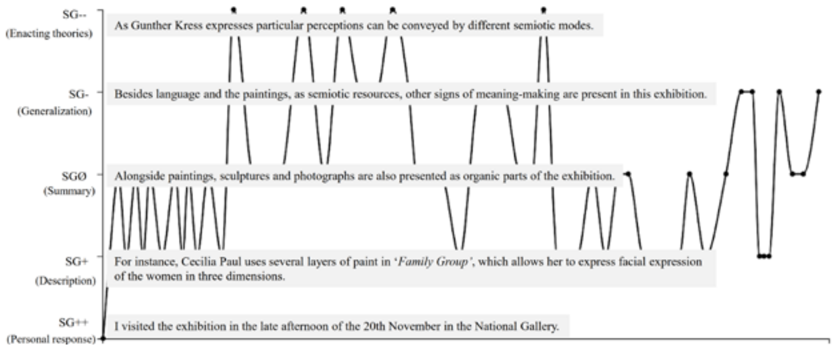

Figure 4 – **Semantic gravity analysis of the second exhibition review (C3_S5_R2)**

In the second review, the semantic threshold has clearly moved up a level, which, consulting the translation device created for the study, shows the point of reference, the concrete examples were based on the exhibition space and not on the student's own personal experience. This profile also shows a typical writing strategy of introducing highly valued expert voices as introductions to observations, thus structuring the descriptions through multimodal theories, which is not necessarily typical in entertainment reviews:

> Alongside paintings, sculptures and photographs are also presented as organic parts of the exhibition. [SGØ] Alberto Giacometti's figurative sculptures can be seen as the adaptation of the paintings; as the characters would come alive. [SG+] This serves a complementary role in meaning-making, as a film adaptation to a book. [SGØ] Photographs have a quite important role in some artists' work. [SGØ] Francis Bacon can be mentioned as a perfect example, because he really liked to use John Deakin's photos as an ultimate inspiration, even as a model to his paintings. [SG+]

In this second example, the student provides a summary of the exhibition, and at the same time gives insights into observations techniques, and illustrates the commentary with concrete artistic examples.

The most significant result is that the students' point of reference became the exhibition itself instead of their own personal memories and feelings induced by the exhibition. Similar changes can be seen in 12 reviews, but three of these concentrated their personal reflections in the evaluation which means stronger semantic gravity [SG++] in the Evaluation of the exhibition. 12 students kept a raised semantic profile at the level of [SG+], which indicates a focus on the museum as a source of examples. Three students kept the subjective, personal engagement in the second review, showing signs of knowledge-based observations, but still seen through a lens of personal beliefs, opinions and feelings all through the description.

After the feedback on the first reviews, students gained understanding of the different knowledge practices, achieving a wider semantic range with the introduction of multimodal viewpoints through descriptions and illustrative details from the exhibitions. Another course with similar writing practice would most certainly help students with more confident control of their knowledge practices in different interactions and writing tasks.

Semantic gravity waves and knowledge-building

The semantic gravity analysis indicates that the move away from a strong reliance on their personal perspectives was the first major shift the students performed. The distancing objectivity of descriptions is what prepares students for forming an evaluation, and then for the analysis and critical interpretation of texts and events. Creating these shifts and weaving the experiences with viewpoints demonstrating specialized knowledge are essential practices for taking part in well-informed and knowledge-powered dialogues in the classroom or any discourse community. Responding to the everyday experience enacting academic, expert roles demanded a shift in the students' way of thinking. Changing their social role in the context of the visit also meant changing the knowledge practices they enacted in the reviews. This conceptual development is related to a higher level of semiotic mediation, described as metasemiotic mediation (Coffin & Donohue, 2014, p. 117). Apart from the metalanguage of genre pedagogy, the metalanguage of semiotic resources also gave access to more meanings within this academic discourse.

Based on these results, semantic gravity analysis can be used as a teaching and feedback tool to help students make visible these shifts between their knowledge practices, and as an analytical tool as well. An important step in the analytical process is the creation of the translation device presented earlier in this paper, which can be adapted for different research contexts.

RQ3: How can genre-based pedagogy contribute to the students' learning?

The discussion of this research question is based on the insights provided by the intervention procedures and the analysis presented above. The development observed in the students' review writing can be interpreted as the result of explicit genre-based pedagogy implemented not only in the intervention phase, but all through the course design. Students were asked to write different genres for different pedagogical purposes all through the course. First, the recount of a memorable experience activated their own memories of museum visits. Then, the picture descriptions prepared them for the objective description of multimodal texts. The multimodal text analysis enacting theories helped them enact new concepts of social semiotic multimodality which they relied on in the final presentations. The reviews discussed here as part of the intervention had the greatest impact on the students' understanding of the social and pedagogical role of different texts not only in education, but in other aspects of their lives.

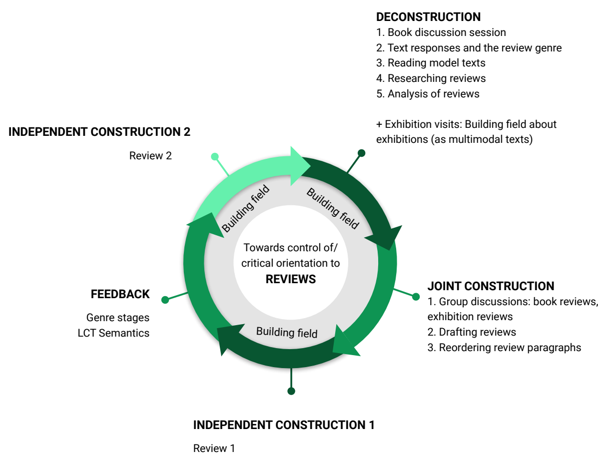

Figure 5 – **The teaching learning cycle adapted for review writing during the course**

During the intervention stage built around the exhibition visits, the stages adapted from the scaffolding model of the TLC provided a clear pedagogical approach to guide students in this writing development as presented in Figure 5: Deconstruction of model texts, Joint Construction based on group discussions and writing tasks, Independent Construction 1, Feedback 1, Independent Construction 2, Feedback 2. Repeating the Independent Construction twice, based on explicit prompts and feedback helped students concentrate on their exhibition experiences instead of having to guess the expectations of the course tutor.

The integration of the TLC aimed to illustrate how the model can be adapted to guide students towards control of different genres. However, the text production outcome of the TLC was only one of its benefits during the course. The process of arriving at the Independent Construction stage created a rich learning experience which included a variety of speaking and writing activities both individually and as a group. During this course, the TLC provided an empowering pedagogical model with the possibility of shaping it to the students' needs and the objectives of the course.

13 – Conclusion

This small-scale qualitative study focused on specialized knowledge-building within a course on multimodal social semiotics with English language teacher trainees, who were asked to write exhibition reviews among other text types. The several readings and the analysis of the data show that making expectations within a writing task explicit and realistic is key to successful writing development. Not only were the expected stages modeled and practiced before writing, the students also received further scaffolding through feedback enacting the LCT concept of semantic gravity, visualizing and analyzing the context-dependency of their writing. These findings indicate that the more explicit scaffolding and feedback are, the more controlled and informative the students' writing can become. Presenting the writing task with a focus on the relevance of context, target audience and organizing principles of writing contributed to the students' learning. Apart from receiving an introduction to review writing, the students also practiced organizing their ideas with the help of the LCT Semantics concept of semantic gravity. Semantic gravity contributed to this process as a teaching, assessment and analytical tool, informing both the teacher and the students about the knowledge practices enacted in exhibition review writing in terms of their relative context-dependency.

These exhibition visits created memorable learning experiences and formed the basis of further knowledge-building. However, such experiences without the collaborative discussion of multimodal analytical perspectives and the individual writing tasks would have remained only positive memories. In this learning process, the genre-based approach to writing instruction has proven to be time-saving and empowering both for the students and their tutor.

REFERENCES

Bernstein, B. (2000). *Pedagogy, symbolic control and identity: Theory, research, critique* (2nd ed.). Oxford: Rowman & Littlefield.

Chen, R., Maton, K., & Bennett, S. (2011). Absenting discipline: Constructivist approaches in online teaching. In F. Christie, & K. Maton (Eds.), *Disciplinarity: Functional linguistic and sociological perspectives* (pp. 129–150). London: Continuum.

Chen, Y-S., & Su, S-W. (2012). A genre-based approach to teaching EFL summary writing. *ELT Journal*, *66*(2), 184–192.

Christie, F. (1990). The changing faces of literacy. In F. Christie (Ed.), *Literacy for a changing world* (pp. 1–26). Victoria: The Australian Council for Educational Research.

Christie, F., & Derewianka, B. (2008). *School discourse*. London: Continuum.

Clarence, S. (2017). A relational approach to building knowledge through academic writing: facilitating and reflecting on peer writing tutorials. In S. Clarence, & L. Dison (Eds.), *Writing centres in higher education: Working in and across the disciplines* (pp. 49–65). Stellenbosch: SUN Press.

Coffin, C., & Donohue, J. (2014). A language as social semiotic based approach to teaching and learning in higher education [Supplement]. *Language Learning, 64*(1).

Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment*. Cambridge, U.K: Press Syndicate of the University of Cambridge.

Dreyfus, S. J., Humphrey, S., Mahboob, A., & Martin, J. R. (2015). Genre pedagogy in higher education: The SLATE project. Palgrave Macmillan.

Feez, S. (1998). *Text-based syllabus design*. Sydney: MacQuarie University/AMES.

Georgiou, H. (2016). Putting physics knowledge in the hot seat: The semantics of student understandings of thermodynamics. In K. Maton, S. Hood, & S. Shay (Eds.), *Knowledge-building: Educational studies in Legitimation Code Theory* (pp. 176–192). Abingdon, England: Routledge.

Halliday, M. A. K. (1978). *Language as social semiotic*. London: Edward Arnold.

Hammond, J., & Derewianka, B. (2001). Genre. In R. Carter, & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages*. Cambridge: Cambridge University Press.

Hood, S. (2016) Ethnographies on the move, stories on the rise: Methods in the humanities, in K. Maton, S. Hood, & S. Shay (Eds.), *Knowledge-building: Educational studies in Legitimation Code Theory* (pp. 176–192). London: Routledge.

Humphrey, S. (2017). *Academic literacies in the middle years: A framework for enhancing teacher knowledge and student achievement*. New York: Routledge.

Hyland, K. (2007). *Genre and second language writing*. Ann Arbor: University of Michigan Press.

Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing, 16*, 148–164.

Hyland, K. (2019). *Second language writing*. Cambridge: Cambridge University Press.
Kang, J. Y. (2005). Written narratives as an index of L2 competence in Korean EFL learners. *Journal of Second Language Writing, 14*(4), 259–279. https://doi.org/10.1016/j.jslw.2005.10.002
Kirk, S. (2019) *Enacting the curriculum in English for academic purposes: A Legitimation Code Theory analysis*. (Doctoral dissertation, Durham University). http://etheses.dur.ac.uk/12942/
Kress, G. (2010). *Multimodality: A social semiotic approach to communication*. London: Routledge.
Macken-Horarik, M. (1996). Literacy and learning across the curriculum: Towards a model of register for secondary school teachers. In R. Hasan, & G. Williams (Eds.), *Literacy in society* (pp. 232–278). London, UK: Longman.
Martin, J. R., & Rose, D. (2008). *Genre relations*. London: Equinox.
Martin, J. R., Maton, K., & Doran, Y. J. (2020). Academic discourse: An inter-disciplinary dialogue. In J. R. Martin, K. Maton, & Y. J. Doran (Eds.), *Accessing academic discourse: Systemic functional linguistics and Legitimation Code Theory* (pp. 1–32). London: Routledge.
Maton, K. (2013). Making semantic waves: A key to cumulative knowledge-building. *Linguistics and Education*, *24*(1), 8–22.
Maton, K. (2014). *Knowledge & knowers: Towards a realist sociology of education*. London: Routledge.
Maton, K. (2016). Starting points: Resources and architectural glossary. In K. Maton, S. Hood, & S. Shay (Eds.), *Knowledge-building: Educational studies in Legitimation Code Theory* (pp. 233–243). London: Routledge.
Maton, K. (2020). Semantic waves: Context, complexity and academic discourse. In J. R. Martin, Karl Maton, & Y. J. Doran (Eds.), *Accessing academic discourse: Systemic functional linguistics and Legitimation Code Theory* (pp. 59–85). London: Routledge.
McCabe, A., Gledhill, C., & Liu, X. (2015). Systemic functional linguistics and English language teaching. *TESOL International Journal, 10*(1), 1–10.
Wünsch-Nagy, N. (2020). Multimodal literacy development in a higher education English Studies classroom. Manuscript submitted for publication.
Oktatási Hivatal [Educational Authority]. (2017). Központi **írásbeli** feladatsorok. [Exam papers of the secondary school leaving exams]. https://www.oktatas.hu/kozneveles/erettsegi/feladatsorok
Painter, C. (1999). Preparing for school: Developing a semantic style for educational knowledge. In F. Christie (Ed.), *Pedagogy and the shaping of consciousness: Linguistic and social processes* (pp. 66–87). London: Cassell.
Rose, D., & Martin, J. R. (2012). *Learning to write, reading to learn: Genre, knowledge and pedagogy in the Sydney school*. Sheffield, UK: Equinox.

Rothery, J. (1994). *Exploring literacy in school English (Write it right resources for literacy and learning)*. Sydney: Metropolitan East Disadvantaged Schools Program.

Shay, S., & Steyn, D. (2016) Enabling knowledge progression in vocational curricula: Design as a case study. In K. Maton, S. Hood, & S. Shay (Eds.), *Knowledge-building: Educational studies in Legitimation Code Theory* (pp. 138–157). London: Routledge.

Wolff, K., & Luckett, K. (2013). Integrating multidisciplinary engineering knowledge. *Teaching in Higher Education, 18*(1), 78–92.

Yasuda, S. (2011). Genre-based tasks in foreign language writing: Developing writers' genre awareness, linguistic knowledge, and writing competence. *Journal of Second Language Writing*, *20*, 111–133.

Yasuda, S. (2015). Exploring changes in FL writers' meaning-making choices in summary writing: A systemic functional approach. *Journal of Second Language Writing, 27*, 105–121.

Yasuda, S. (2017). Toward a framework for linking linguistic knowledge and writing expertise: Interplay between SFL-based genre pedagogy and task-based language teaching. *TESOL Quarterly*, *51*(3), 576–606.

ESCRITA COLABORATIVA: METADIÁLOGOS E ESCOLHAS

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RESUMO

Ao utilizarem a língua, os falantes ou escreventes realizam escolhas. Os objetivos desta comunicação são analisar o discurso que acompanha as escolhas de alunos portugueses ao escreverem um texto, colaborativamente, em pequeno grupo, e observar a evolução dessa dimensão metalinguística, ao longo da educação básica. O enquadramento teórico é tomado da Linguística Sistémico-Funcional (LSF) (Halliday, 2013; Halliday, 2014; Martin & Rose, 2007) e também da perspetiva que atribui à consciência metalinguística um papel na escrita (Myhill & Newman, 2016). A LSF integrou as escolhas inconscientes na instanciação do sistema linguístico, mas as escolhas também podem emergir de forma consciente. Em relação à metodologia, foi registada a interação entre os participantes durante a escrita em grupo, em diferentes níveis de escolaridade. A análise teve por base a avaliatividade ou manifestação de atitudes em relação às propostas para construir o texto. Os resultados mostram o aumento dessas propostas, que implicam escolhas, com o nível de escolaridade. Esse aumento é acompanhado por manifestações metalinguísticas das posições dos participantes face às propostas. Observa-se ainda um alargamento dos recursos linguísticos e textuais que podem ser objeto de escolha. Como implicações, defende-se a integração de escolhas e da sua discussão metalinguística na aprendizagem da escrita.

PALAVRAS-CHAVE

Escolha, escrita, escrita colaborativa, atividade metalinguística, metadiálogo

1 – Introdução

O uso da língua num determinado contexto é marcado por escolhas. A Linguística Sistémico-Funcional (LSF) (Halliday, 2014) integrou no próprio sistema linguístico a realização de escolhas enquanto construção do significado (Halliday, 2013; Fontaine, 2013). Um dos reflexos dessa integração foi a atribuição à dimensão de escolha de um caráter inconsciente, ou seja, a escolha é tomada enquanto concretização de possibilidades proporcionadas pelo sistema, o que, por si, não implica "consciousness or intention" (Matthiessen, Teruya, & Lam, 2010, p. 69). Segundo esta perspetiva, nas palavras de Fontaine (2013), tendo em conta a posição hallidayiana de colocação do foco nas relações inter-organismos e não na dimensão intra-organismo (Halliday, 1978), a escolha "does not include active or conscious intention, as in an act of deciding" (Fontaine, 2013, p. 5). Contudo, apesar desse foco, como salienta Fontaine (2013), o próprio Halliday reconhece a relevância de outras abordagens (Fontaine, 2013, p. 5) e a LSF tem vindo a integrar perspetivas em que a dimensão consciente e intencional das escolhas é tida em consideração (Asp, 2013; O'Donnell, 2013). A partir de uma perspetiva neurolinguística, Asp (2013) considera os utilizadores da língua como "agentes" do seu discurso, "not only capable of, but continuously making, conscious choices in discourse" (Asp, 2013, p. 178).

No caso da escrita, em que a concretização de possibilidades também está, obviamente, presente, a dimensão das escolhas conscientes tem sido colocada em relevo, numa tradição de análise que inclui a perspetiva de Vygotsky (Vygotsky, 1991a,b), a ligação à metacognição e à consciência metalinguística (Camps & Milian, 2000; Myhill, Newman, & Watson, 2020) e que se estende a abordagens no interior da LSF (O'Donnell, 2013).

Numa dessas abordagens, O'Donnell (2013) defende que a LSF também deve incluir uma orientação para o processo e não apenas para a análise das escolhas manifestadas no texto/produto. Analisando dados do registo dos batimentos nas teclas ("keystroke-logging methods") do computador, O'Donnell (2013) advoga que, em relação à escrita, a dimensão da escolha linguística deve ser perspetivada no âmbito do próprio processo, pois aí são tomadas decisões em diferentes níveis, desde o nível organizativo até ao nível das escolhas sintáticas e lexicais. Essas decisões manifestam-se na dinâmica do processo, com avanços e recuos em relação a decisões anteriores, pois, na escrita, ao contrário do que acontece na oralidade, "we can delete text, change our wording, insert new text at previous points, or move text to earlier or later points." (O'Donnell, 2013, p. 248).

A dinâmica do processo de escrita é, efetivamente, captada pelo registo dos batimentos nas teclas do computador. Contudo, este método não nos dá acesso às razões ou motivações que fundamentam as alterações realizadas por quem se encontra a escrever. Por debaixo da superfície que se manifesta pelas modificações, adivinha-se todo um mundo constituído por posições do sujeito face ao objeto linguístico-textual. Esse objeto vai sendo por ele considerado, seja registado no papel ou ecrã, seja formulado apenas mentalmente (Barbeiro, 1999; Calil, 2012, 2016). As posições podem ser de aceitação ou de rejeição, segundo graus mais ou menos acentuados, e fundadas em razões precisas e específicas ou em razões que remetem para uma perceção mais global do funcionamento do texto, face ao propósito sociocomunicativo prosseguido no contexto situacional e sociocultural.

A escrita colaborativa em interação direta dos participantes ("escrita reativa", na designação de Lowry, Curtis, & Lowry, 2004) dá acesso às alterações que vão sendo propostas e a esse mundo de posições dos sujeitos em relação ao objeto linguístico-textual que vão delineando e produzindo. A emergência de propostas e posições expressas pelos participantes entre si concede à escrita colaborativa um valor pedagógico, para além do valor de instrumento de pesquisa em relação ao processo de escrita (Camps, Guasch, Milian, & Ribas, 2000). Justifica-se, por essas duas vertentes, a análise dos conhecimentos ativados e das posições expressas na escrita colaborativa, orientadas para a tomada de decisão em relação ao objeto linguístico-textual, em diferentes níveis de escolaridade e de desenvolvimento da escrita.

Devido à imensa quantidade de dados que a análise da interação na produção colaborativa de um texto implica recolher, geralmente, os estudos têm-se focado apenas num nível ou grupo específico: por exemplo, Camps et al. (2000) focaram-se no ensino secundário; Sturm (2016), em adultos que experimentam dificuldades de escrita; Herder et al. (2018), no nível do ensino primário. A comparação direta entre níveis ou grupos encontra, por isso, obstáculos.

Para além disso, no conjunto alargado das manifestações que têm sido consideradas sob a denominação de "metalinguística", os estudos têm-se restringido a alguns aspetos ou níveis de consciência, raramente abrangendo um leque alargado de manifestações segundo uma abordagem integrada e integradora. Os próprios instrumentos ou categorias de análise têm sido construídos sobretudo de forma indutiva, baseados nos dados e propósitos específicos do estudo, seja criados de raiz (Myhill et al., 2020), ou adaptando categorias de estudos próximos anteriores à especificidade dos dados (Sturm, 2016). Faltam estudos que apliquem à escrita colaborativa e às manifestações de consciência metalinguística sistemas de análise gerais já construídos (ainda que em permanente reconstrução) e com poder analítico robusto já revelado — por exemplo, o sistema de avaliatividade (Martin & White, 2005; Martin & Rose, 2007; Halliday, 2014). Adicionalmente, os estudos realizados têm adotado predominantemente uma abordagem qualitativa, o que em muitos casos (sem pôr em causa os seus contributos para o conhecimento do campo) se deve ao já referido volume elevado de dados que é necessário recolher, transcrever e analisar quando esses dados são constituídos pela interação na escrita colaborativa. Esse volume é multiplicado quando o estudo incide sobre diferentes categorias de participantes, correspondentes ao nível de escolaridade ou a outras categorias.

O presente estudo toma como objeto as manifestações de consciência metalinguística em quatro níveis de escolaridade do ensino básico. Assume uma perspetiva integrada que inclui diferentes manifestações metalinguísticas, para expressar a posição do sujeito em relação à escrita e ao processo de construção do texto. Para a análise dessas manifestações das posições do sujeito, toma como base o sistema de avaliatividade desenvolvido no âmbito da LSF (Martin & White, 2005; Martin & Rose, 2007; Halliday, 2014). Os seus objetivos são, assim, identificar no discurso em interação que acompanha a tomada de decisão e as escolhas dos alunos do ensino básico ao escreverem um texto, colaborativamente, as posições metalinguísticas dos participantes, analisar essas posições considerando a sua natureza avaliativa, os domínios linguístico-textuais particulares sobre os quais incidem e o conhecimento (metalinguístico) que manifestam, e captar a evolução da dimensão metalinguística, ao longo da educação básica.

2 – Enquadramento concetual

2.1 – Escrita colaborativa e atividade metalinguística

A presença de atividade metalinguística na interação posta em prática na escrita colaborativa tem sido evidenciada nalguns estudos (Camps, 1994; Barbeiro, 1999; Camps et al., 2000; Gutiérrez, 2008; Calil, 2012, 2016; Sturm, 2016; Herder et al., 2018). Essa presença tem sido perspetivada para o estudo da consciência metalinguística dos sujeitos e para o estudo da relação da consciência metalinguística com a própria atividade de escrita, designadamente quanto ao papel que pode desempenhar no desenrolar do processo e nas decisões tomadas no seu decurso. Para operacionalizar os estudos, têm sido propostas sistematizações e categorizações da atividade metalinguística que ocorre na escrita. Camps et al. (2000) analisaram os enunciados metalinguísticos encontrados em seis transcrições da interação ocorrida durante a escrita de um texto argumentativo por estudantes do ensino secundário, organizados em pequenos grupos de dois ou três estudantes. Encontraram diferentes tipos de enunciados de reformulação: os que apenas enunciam a proposta de alteração, os que manifestam uma rejeição da proposta anterior ou, pelo menos, o seu questionamento, sem comentários metalinguísticos, os que acompanham a proposta de reformulação com comentários, mas sem recurso a termos metalinguísticos e os que integram nos comentários termos metalinguísticos específicos. Os enunciados considerados incidem sobre diversos domínios: aspetos discursivos, como os relativos aos escritores/emissores, destinatários, funções e intenção do texto, estrutura do texto, aspetos linguísticos, ortografia e pontuação. Contemplam ainda na análise os enunciados avaliativos.

Na análise de rasuras orais durante a escrita conjunta de uma história inventada, por parte de alunos recém-alfabetizados, Calil (2012, 2016) encontra comentários que incidem sobre aspetos pragmáticos (relativos à realização da tarefa), textuais (que remetem para a ordem ou unidade textual) e semânticos (que manifestam a procura do termo ou significado adequado).

Sturm (2016) considera um número elevado de categorias (15) para analisar as atividades cognitivas postas em prática por escritores adultos com dificuldades na escrita. Entre essas categorias, encontram-se atividades que dizem respeito à realização da tarefa, à formulação de propostas de ideias e de texto, à apresentação de comentários e avaliações. Estes podem incidir na execução da tarefa, nas ideias que vão sendo apresentadas e no texto que vai sendo proposto ou escrito.

A ligação crucial da consciência metalinguística às escolhas que a escrita implica é salientada por Myhill et al. (2020). As conversas ou diálogos metalinguísticos ("metatalk", na designação adotada em língua inglesa, designadamente por Myhill & Newman, 2016, *i. a.*) em torno dessas escolhas constituem um meio de os professores alargarem a aprendizagem dos alunos, em relação ao valor específico que os recursos linguísticos adquirem, contribuindo para que o texto alcance o seu propósito sociocomunicativo num determinado contexto. As unidades de análise que adotam situam-se num nível superior ao enunciado, correspondendo a sequências de fala ou diálogos, o que permite apreender a forma como os professores orientam esses diálogos para construir a aprendizagem dos alunos em relação à construção do texto escrito e à consciência das escolhas que podem ser geradas.

As análises referidas permitem identificar tipos de atividades e tipos de comentários, tendo sobretudo em conta os domínios sobre que incidem, a natureza dos comentários ou o conhecimento metalinguístico. Gutiérrez (2008) categoriza as manifestações de atividade metalinguística na escrita colaborativa em reformulações textuais (as operações de modificação do texto), ações orais (de aceitação, rejeição, questionamento, repetição) e comentários. Considera que as reformulações podem apresentar atividade metalinguística implícita ou explícita, as ações orais consistem em atividade metalinguística implícita e os comentários constituem atividade metalinguística com caráter explícito.

Os comentários constituem atividade metalinguística com caráter explícito; as ações orais (de aceitação, rejeição, questionamento, repetição) consistem em atividade metalinguística implícita e as reformulações podem apresentar atividade metalinguística explícita ou implícita. Adota, por conseguinte, uma perspetiva que integra as operações ou propostas, as ações sobre elas e a reflexão sobre o objeto linguístico-textual, que pode acompanhar as propostas e ações.

2.2 – Posicionamento metalinguístico

Neste estudo, tomaremos também uma perspetiva integrada como base da nossa análise. A partir da proposta de Gutiérrez (2008) e das propostas desenvolvidas no âmbito da LSF, consideramos que a *posição ou atitude do sujeito* pode manifestar-se também em relação às propostas para construir o objeto linguístico-textual. Essa *posição* constitui a base da atividade metalinguística quanto à revelação da orientação para a tomada de decisão sobre uma operação ou objeto linguístico textual. Acima desse nível, a posição pode ser expressa com maior ou menor força, com recurso a mecanismos de avaliatividade e gradação que afirmem ou reforcem a possibilidade (modalização) ou a obrigação (modulação), que expressem ou amplifiquem um valor (Halliday, 2014; Martin & White, 2005; Martin & Rose, 2007), ou que recorram à apresentação de argumentos que fundamentem, de forma explícita, a posição do sujeito em relação às propostas apresentadas no processo.

Como explicitam Martin e Rose (2007), a avaliatividade "is concerned with evaluation – the kinds of attitudes that are negotiated in a text, the strength of the feelings involved and the ways in which values are sourced and readers aligned." (p. 25). Essas atitudes podem manifestar-se segundo três tipos: o *afeto* (que consiste na expressão da emoção dos indivíduos no discurso, emoção que pode ser positiva ou negativa), o *julgamento* (que avalia as pessoas, o seu caráter, e que também pode ser positivo ou negativo, no campo pessoal, com a expressão de admiração ou de crítica, e no campo moral, com a expressão de elogio ou de condenação) e a *apreciação* (que consiste na expressão de atitudes em relação às coisas, da afirmação do seu valor, também com uma polaridade positiva ou negativa). A avaliatividade pode ser expressa de forma direta ou explícita ou também de forma implícita, neste último caso, por meio da indicação das manifestações fisiológicas ou comportamentais a que as avaliações deram origem. Para além disso, a avaliatividade pode apresentar diferente gradação, ou seja, a expressão das atitudes pode ser realizada discursivamente segundo diferentes níveis de força, com recurso a intensificadores, a palavras com valores semânticos mais ou menos fortes, à modalização, etc.

Em relação ao presente estudo, de entre os tipos de atitudes referidos, está em relevo a *apreciação*. A grande diversidade de coisas sobre que pode incidir é expressa por Martin e Rose (2012, p. 37) através da enumeração contida no seguinte excerto:

> Appreciation of things includes our attitudes about TV shows, films, books, CDs; about paintings, sculptures, homes, public buildings, parks; about plays, recitals, parades or spectacles and performances of any kind; feelings about nature for that matter - panoramas and glens, sunrises and sunsets, constellations, shooting stars and satellites on a starry night. As with affect and judgement, things can be appreciated positively or negatively.

A apreciação das coisas mencionadas é feita por meio da língua, do discurso, mas a própria língua utilizada no discurso ou, na perspetiva do processo de escrita, a própria língua considerada para formar o texto pode ser objeto de apreciação, adquirindo essa apreciação uma dimensão metalinguística. Também as soluções para levar à prática o processo de produção do texto são suscetíveis de apreciação. O foco do estudo incide precisamente sobre a manifestação da atitude dos participantes em relação às propostas linguístico-textuais para construir o texto e em relação às formas de concretizar o processo.

3 – Metodologia

3.1 – Atividade e participantes

A atividade no âmbito da qual foi realizada a recolha de dados consistiu numa tarefa de escrita colaborativa, realizada por alunos do segundo, quarto, sexto e oitavo anos do ensino básico. Os alunos escreveram o texto em interação presencial, em pequenos grupos de três elementos, numa sala sem outras atividades a decorrer. A modalidade de escrita colaborativa posta em prática correspondeu, assim, à modalidade de "escrita reativa" (na designação de Lowry et al., 2004).

A tarefa foi a mesma para todos os anos de escolaridade: a escrita do relato de uma visita ficcionada à cidade de Leiria, a cidade dos participantes, por parte de três amigos, cujos nomes (João, Rui e Lena) foram indicados pelo investigador. Foram também disponibilizados a cada grupo um conjunto de postais ilustrados relativos a pontos turísticos da cidade, como apoio à ativação do conhecimento e à seleção de elementos a integrar no texto. Foi dado o tempo necessário para a realização da tarefa, cuja duração foi gerida pelos alunos (tendo variado entre dez minutos e uma hora, sendo a duração média de 35 minutos).

Os grupos foram organizados aleatoriamente dentro da turma, com a condição de serem grupos mistos quanto ao género (e, tendo sido retirados do conjunto de eventuais participantes no estudo, no caso do segundo ano, alunos que manifestavam ainda um nível muito limitado na competência de escrita). Em cada ano de escolaridade, foram constituídos oito grupos, em turmas de duas escolas diferentes, da cidade de Leiria. No total, participaram no estudo 96 alunos, 24 por ano de escolaridade, com representação igual dos dois géneros (12 rapazes e 12 raparigas). Foram produzidos 32 textos, tendo cada participante de registar o texto na sua própria folha de papel.

Procedeu-se ao registo áudio e vídeo da atividade desenvolvida por cada grupo, tendo os registos sido objeto de transcrição da interação para realização da análise. As folhas nas quais cada estudante escreveu o texto foram recolhidas, no final da tarefa, como meio de acesso ao texto escrito pelo grupo.

3.2 – Análise

A análise incidiu sobre a transcrição da interação, tendo o foco do presente estudo sido colocado nas manifestações das posições dos sujeitos em relação à atividade de escrita em curso e aos objetos linguístico-textuais considerados no processo de escrita. Foram também tidas em conta na análise as operações conducentes à construção do texto (estas operações podem consistir em adição, supressão, substituição e deslocação, embora esta categorização não seja analisada neste estudo).

Em relação às posições dos sujeitos face às propostas, foram tomadas em conta o sentido dessas posições e a respetiva força. Para operacionalizar a análise, tomou-se em consideração a perspetiva da avaliatividade (Martin & White, 2005; Martin & Rose, 2007; Halliday, 2014). Assim, para o sentido das posições, foi considerada a apreciação com valor positivo ou favorável, negativo ou desfavorável, tendo ainda sido considerados, de forma específica, os casos de questionamento que não apresentam uma orientação definida, mas que pretendem obter ou suscitar uma clarificação. Apesar de, como foi referido, as atitudes poderem encontrar-se realizadas de forma implícita, por exemplo, através da apresentação de propostas alternativas ou do ato de começar imediatamente a escrever, restringiu-se a análise neste estudo às manifestações de apreciação que emergem na própria interação discursiva, ou seja, manifestações verbais explícitas da atitude em causa. De igual modo, também não foram incluídas as atitudes quando foram manifestadas apenas de um modo não verbal, por exemplo, através da expressão facial.

Para a análise da força das posições, considerou-se um nível de base, constituído pela simples expressão de aceitação ou concordância e de recusa ou discordância e um nível em que os participantes reforçam as suas posições. Para a análise deste nível, consideraram-se mecanismos como a modalização, a modulação, a valoração e tendo-se considerado também a argumentação, ou seja, a apresentação de argumentos para fundamentar as posições. A análise da gradação dentro destas categorias poderia ser levada ainda mais longe, considerando os valores modais específicos ou os graus dos adjetivos e advérbios. Na quantificação efetuada para o presente estudo, interessou-nos sobretudo o contraste entre a simples recusa ou aceitação, manifestadas na interação, e o reforço dessas posições, com recurso aos mecanismos referidos. Na componente qualitativa encontram-se exemplos de amplificação que assentam nalguns dos mecanismos considerados.

Procedeu-se também à distribuição das manifestações da posição dos sujeitos pelos domínios sobre que incidem as posições expressas em relação às propostas de construção do texto, considerando-se a execução da tarefa e os domínios linguístico-textuais. Estes últimos podem ser respeitantes à estrutura, aí incluindo os aspetos relativos à presença/ausência, ao género textual, e às opções quanto à representação do discurso (como a inclusão ou não de diálogo ou discurso direto). Podem também dizer respeito à língua que constitui o texto, na vertente de conteúdo ou na vertente da forma, ou seja, da formulação linguística ou expressão adotada para construir o conteúdo no texto. Finalmente, pode estar em causa o domínio da representação escrita, que integra áreas como a ortografia, a caligrafia, a pontuação e as possibilidades de configuração gráfica.

Em relação às dimensões referidas, apresentam-se os resultados quantitativos, globalmente e discriminados pelos diferentes anos de escolaridade. Mesmo considerando que a amostra de casos em cada ano de escolaridade não é elevada (devido ao grande volume de dados a tratar que a análise de transcrições implica), procedeu-se à aplicação de testes estatísticos de análise de variância aos indicadores globais, para verificação da existência de contrastes significativos entre os níveis de escolaridade (com recurso ao programa estatístico SPSS, versão 27). Foram aplicados os testes de análise de variância unidirecional, após verificação da igualdade de variâncias.

Aprofundou-se a análise segundo uma perspetiva qualitativa orientada pela observação na interação da ativação de eixos que fundamentam as escolhas dos participantes. Os eixos selecionados são relativos a escolhas que não são determinadas pela correção linguística ou pelo conteúdo que se quer exprimir, mas que correspondem a escolhas entre alternativas de formulação linguística, designadamente por tomada em conta da frequência de utilização de uma unidade no texto ou de tratamento de determinado tópico, e pela realização de um investimento na própria linguagem, pela escolha dos recursos linguístico-textuais utilizados no texto, de forma que este adquira um valor que lhe seja reconhecido enquanto produto verbal.

Adota-se, por conseguinte, uma metodologia mista, com uma vertente quantitativa, que efetua a contabilização comparativa entre os diferentes níveis de escolaridade quanto às manifestações dos participantes com caráter metalinguístico (tendo-se contabilizado as ocorrências, independentemente da sua repetição no discurso), e com uma vertente qualitativa que procura identificar eixos de progressão quanto aos fundamentos metalinguísticos e sua explicitação no processo de tomada de decisão na escrita colaborativa.

4 – Resultados

Começamos por apresentar os resultados sob uma perspetiva quantitativa, discriminando os valores alcançados pelos diferentes níveis de escolaridade. Na Tabela 1, são apresentados os resultados médios relativos às operações. Como é expectável que os textos mais longos ativem um maior número de operações, indica-se também a extensão média dos textos produzidos em cada nível e o cálculo do rácio que coloca em relação as duas variáveis, ou seja, correspondente ao número de operações por palavra.

Tabela 1 – **Operações**

Ano	Total	*média*	Extensão	Rácio (extensão)
2.º	429	*53,6*	81,1	0,65
4.º	1006	*125,8*	156,5	0,83
6.º	1690	*211,2*	177,8	1,27
8.º	2435	*304,4*	237,9	1,38

Os valores absolutos e respetivas médias apresentam contrastes bem marcados entre os níveis de escolaridade, segundo uma progressão crescente (a aplicação do teste de análise de variância unidirecional revela que as diferenças são significativas: $Z_{3,28}$=39,058, p=.000; segundo os resultados do teste de comparações múltiplas as diferenças de médias são consideradas significativas entre todos os níveis de escolaridade). A progressão encontrada acompanha as diferenças que também existem em relação à extensão dos textos. Adicionalmente, podemos referir que a relação entre as duas variáveis é atestada pelo coeficiente de correlação linear (r=0,797, p=0.01).

A existência de relação entre o número de operações e a extensão textual coloca as questões de saber se o maior número de operações é apenas um reflexo da extensão dos textos e se a força das operações em função dessa extensão se mantém, se se atenua ou se é reforçada. O indicador apresentado na última coluna da Tabela 1, correspondente ao rácio de operações em relação à extensão, revela que a presença da componente de operações se reforça, mesmo tendo em conta a extensão textual. Globalmente, entre o segundo e o oitavo anos existe um aumento significativo do rácio, cujo valor aumenta para além do dobro (de 0,65 para 1,38 operações por palavra). Este contraste é considerado estatisticamente significativo ($Z_{3,28}$=8,788, p=0.000, mas as diferenças entre os grupos passam a ser significativas apenas entre os grupos do 2.º ou 4.º anos em comparação com o oitavo ano).

Encontrada uma progressão crescente quanto ao número de operações, o foco desloca-se para a manifestação de posições dos participantes em relação à atividade de escrita e aos objetos linguístico-textuais considerados. A Tabela 2 apresenta os valores relativos às manifestações das posições dos participantes, colocando-os também em relação com a extensão textual, por meio de rácio.

Tabela 2 – **Posições dos participantes**

Ano	Total	*média*	Extensão	Rácio (extensão)
2.º	1077	*134,6*	81,1	1,67
4.º	1684	*210,5*	156,5	1,47
6.º	2464	*308,0*	177,8	1,83
8.º	3123	*390,4*	237,9	1,75

Tal como no indicador relativo às operações, existe uma progressão crescente quanto aos valores absolutos e respetivas médias. Considerando estes valores, os contrastes são significativos (sendo o valor de Z de $Z_{3,28}$=9,572, p=0,000; o teste de Scheffé de comparações múltiplas estabelece como significativas as diferenças entre o 2.º e o 6.º ou o 8.º anos e entre o 4.º e o 8.º). O rácio correspondente à relação com o número de palavras não apresenta uma regularidade de progressão paralela à encontrada para as operações, pois existe uma redução ligeira nos valores médios entre o segundo e o quarto anos de escolaridade, mas os valores do sexto e do oitavo anos voltam a suplantar os níveis precedentes (de qualquer modo, os contrastes entre os grupos relativamente aos rácios com a extensão textual não são considerados significativos: $Z_{3,28}$=0,468, p=0,707; assim sendo, a rácio de manifestações das posições dos sujeitos por relação com a extensão textual acompanha o crescimento dessa extensão, mas não vai para além dela).

As posições dos sujeitos manifestam-se com ampla força quer no sentido favorável, que apresenta globalmente alguma predominância, quer no sentido desfavorável, como se observa na Tabela 3. O questionamento, sem orientação definida, num ou noutro sentido, apresenta valores bem mais reduzidos, ou seja, de um modo geral, os sujeitos definem-se em relação às propostas, quer para as aceitar, quer para as rejeitar.

Tabela 3 – **Orientação das posições**

Ano	2.º		4.º		6.º		8.º		Total	
	N.º	%	N.º	%	N.º	%	N.º	%	N.º	%
Favorável	536	*49,8*	912	*54,2*	1154	*46,8*	1595	*51,1*	4197	*50,3*
Desfavorável	484	*44,9*	726	*43,1*	1221	*49,6*	1410	*45,1*	3841	*46,0*
Questionamento	57	*5,3*	46	*2,7*	89	*3,6*	118	*3,8*	310	*3,7*
Total	1077		1684		2464		3123		8348	

Em relação à força com que as posições são expressas, o nível de base representa uma proporção inferior a metade das posições (42,5%), como se observa na Tabela 4, enquanto o reforço por meio de mecanismos de modalização, modulação, valoração e argumentação corresponde, no seu conjunto, a mais de metade das posições. Salienta-se o mecanismo respeitante à argumentação, ou seja, à explicitação de razões fundamentadoras da posição favorável ou desfavorável, que alcança, no conjunto dos posicionamentos, incluindo o de base, um valor superior a um terço, em contraste com as percentagens inferiores a 10% de cada um dos outros mecanismos de reforço. A atividade de escrita colaborativa constitui, por conseguinte, um palco de apresentação de argumentos para a tomada de decisão em relação às propostas apresentadas.

Tabela 4 – **Força das posições**

Ano		**2.º**		**4.º**		**6.º**		**8.º**		**Total**	
		N.º	**%**	**N.º**	**%**	**N.º**	**%**	**N.º**	**%**	**N.º**	**%**
Base		421	*39,1*	708	*42,0*	1115	*45,2*	1301	*41,7*	3545	*42,5*
Reforço	Modalização	58	*5,4*	139	*8,3*	148	*6,0*	214	*6,9*	559	*6,7*
	Modulação	84	*7,8*	82	*4,9*	170	*6,9*	123	*3,9*	459	*5,5*
	Valoração	85	*8,9*	168	*10,0*	170	*6,9*	315	*10,1*	738	*8,8*
	Argumentação	429	*39,8*	587	*34,9*	861	*34,9*	1170	*37,5*	3047	*36,5*

Os domínios em relação aos quais os sujeitos são chamados a tomar posição e decisões cobrem a execução da tarefa de escrita e a generalidade das componentes implicadas pela construção do texto: os aspetos estruturais, as vertentes de seleção de conteúdo e de formulação linguística, e a dimensão da representação gráfica da escrita. Conforme mostram os resultados da Tabela 5, em todos os níveis de escolaridade, as posições dos sujeitos manifestam-se no processo de escrita correspondente à tarefa solicitada (construção colaborativa do relato de uma visita ficcionada), proeminentemente, em relação à seleção de conteúdo, vertente da representação linguística a que correspondem cerca de metade das posições manifestadas. A vertente da formulação linguística também surge de forma saliente, com um valor global de 26,7%. Ambas as vertentes apresentam uma progressão percentual crescente, considerando os níveis de escolaridade (essa progressão efetua-se, entre o 2.º e o 8.º anos, de 28,9% para 52,3%, no caso da seleção do conteúdo, e de 20,0% para 31,5%, no caso da formulação linguística). O espaço para o crescimento proporcional destes domínios é encontrado pela redução do peso ocupado no processo pelas posições relativas à execução da tarefa e pelos aspetos mecânicos (desenho das letras) e convencionais (ortografia e pontuação) da representação escrita. O peso alcançado pelo domínio da execução da tarefa no 2.º ano deve-se sobretudo à gestão e distribuição dos contributos entre os participantes que, frequentemente, toma como referência um modelo de contribuição "à vez", pelo menos para a geração da proposta inicial que será objeto de aceitação ou reformulação no grupo. Este domínio continua presente, mas, para além da participação no interior do grupo, passa a integrar posições relativas à execução de subprocessos como a leitura e revisão do texto já escrito, a consagração de tempo a gerar propostas para o texto que se segue, para além da gestão (da pressão) do tempo para a realização da tarefa. Ainda que com valores reduzidos, saliente-se, em contraste com o 2.º ano, a presença mais saliente dos domínios respeitantes à representação do discurso, sobretudo em relação à integração ou não de diálogo e ao estatuto do narrador, mostrando que estes aspetos passaram a ser alvo de escolhas, nos níveis de escolaridade mais elevados. Algo similar sucede com o domínio relativo ao género, sobretudo no que caracteriza os subgéneros "relato de visita" e "história de aventura".

Tabela 5 – **Domínios sobre que incidem as posições**

Ano		**2.º**		**4.º**		**6.º**		**8.º**		**Total**	
Domínios		**N.º**	**%**	**N.º**	**%**	**N.º**	**%**	**N.º**	**%**	**N.º**	**%**
Tarefa	Execução	263	*24,4*	157	*9,3*	242	*9,8*	174	*5,6*	836	*10,0*
Estrutura	Título	5	0,5	1	*0,1*	5	*0,2*	3	*0,1*	14	*0,2*
	Género	0	—	1	*0,1*	33	*0,9*	19	*0,6*	53	*0,6*
	Rep. discurso	0	—	0	—	24	*1,3*	50	*1,6*	74	*0,9*
Rep. linguística	Conteúdo	311	*28,9*	833	*49,5*	1314	*53,2*	1634	*52,3*	4092	*49,0*
	Formulação	215	*20,0*	401	*23,8*	630	*25,6*	985	*31,5*	2231	*26,7*
Rep. gráfica	Ortografia	109	*10,1*	94	*5,6*	67	*2,7*	62	*2,0*	332	*4,0*
	Pontuação	118	*11,0*	172	*10,2*	138	*5,6*	181	*5,8*	609	*7,3*
	Caligrafia	17	*1,6*	15	*0,9*	9	*0,4*	8	*0,3*	49	*0,6*
	Config. gráfica	39	*3,6*	10	*0,6*	2	*0,1*	7	*0,2*	58	*0,7*

Os resultados apresentados nas tabelas anteriores, numa perspetiva quantitativa, evidenciam que as operações de reformulação e a manifestação de posições metalinguísticas dos sujeitos ligadas às decisões e escolhas dos sujeitos ao escreverem um texto não diminuem. A progressão dá-se no sentido de reforçar essas dimensões, apesar da evolução no sentido da escrita de textos mais longos.

Em relação a aspetos específicos, quanto ao tipo de manifestações ou quanto aos domínios sobre que elas incidem, os resultados apresentados mostram a presença das categorias consideradas nos níveis de escolaridade em análise. Tal não significa que a componente de fundamentação metalinguística da atividade de escrita esteja integralmente adquirida e desenvolvida no início da aprendizagem da escrita. O sujeito tem acesso aos mecanismos que possibilitam a manifestação das suas posições em relação à escrita, seja em relação à execução da tarefa, seja em relação ao produto linguístico-textual e gráfico que se encontra a construir. Desde cedo na aprendizagem, o foco da sua atenção metalinguística também incide sobre diversas componentes, como as relativas à estrutura e nível discursivo, à seleção e construção linguístico-semiótica dos conteúdos expressos, à representação gráfica da escrita. Algumas destas componentes apresentam globalmente uma evolução que se pode apreender nos valores apresentados nas tabelas precedentes. É o caso das componentes relativas à caligrafia e à ortografia. Estas vertentes formais vão perdendo relevo com o avançar na escolaridade, mas isso não significa que deixem de ser consideradas e de estar presentes como foco da atenção metalinguística. Perante um problema ou uma dúvida com que o sujeito se depare nesses domínios, a reflexão metalinguística com vista à tomada de decisão emerge novamente. O facto de nos outros domínios não emergirem tendências regulares de progressão não significa que não haja progressão. Essa progressão deverá ser encontrada por dentro desses domínios, em relação à ativação de critérios específicos que alargam e aprofundam os fundamentos nesse domínio. A progressão do desenvolvimento em relação a esses critérios e fundamentos não é apreendida necessariamente por valores quantitativos globais, mas pode ser revelada por uma análise qualitativa focada na sua presença no processo de escrita em diferentes anos de escolaridade. Na continuação da análise, adotaremos essa perspetiva qualitativa para observar a emergência de alguns critérios e fundamentos metalinguísticos no percurso de desenvolvimento da escrita. Dirigiremos a atenção para os seguintes vetores de fundamentação que são salientes no processo de escolha ao longo desse percurso: a frequência da presença de determinada unidade ou do tratamento de determinado tópico e o investimento na linguagem por parte dos próprios alunos, ao escreverem os seus textos.

A frequência da presença de determinada unidade emerge, desde cedo, como um critério de decisão e escolha, sobretudo na vertente de repetição, ou seja, de frequência elevada, e acompanha o percurso de escolaridade. Esse critério manifesta-se no extrato (1), de um grupo do 2.º ano, em relação ao uso do conetor temporal "depois":

(1) [2.º ano, G2]
S11: **depois**/ ah!/ mas é sempre **depois**!
S12: pois é/ **a seguir**
S11: pois/ **a**/ **a seguir**!
S10: **de/pois**!/ eu já escrevi **de...**
S11: **a seguir**/ **a seguir**

Com o avanço nos níveis de escolaridade, o conjunto de conetores temporais disponíveis e em relação aos quais é realizada a escolha, alarga-se a "de seguida", "em seguida" e "após", este último atestado apenas no 8.º ano. Para além dos conetores temporais, a posição de rejeição da repetição por parte dos participantes estende-se também nos níveis mais avançados a outros paradigmas de recursos como "foram" *vs.* "dirigiram-se", "resolveram" vs. "decidiram", "viram" vs. "observaram" ou "repararam em".

No extrato (1), na fala de S10, encontra-se um argumento que é contraposto à anulação e que também é recorrente na escrita em interação: o facto de o sujeito já ter escrito a palavra em causa, o que obrigaria a apagar.

No sentido contrário da repetição, a ausência ou raridade de uma unidade linguística ou de tratamento de um tópico constitui argumento para a sua inclusão ou tratamento. Esse argumento é ativado em relação às cadeias referenciais no texto, como se observa nos extratos (2i) e (2ii), do 4.º e do 8.º anos, neste caso, relativamente à referência aos protagonistas pelo respetivo nome:

(2) i. [4.º ano, G14]
S41: agora vamos falar no nome deles/ só pusemos cá em cima.
ii. [8.º ano, G32]
S95: **os três jovens**/ não/ a gente/ **o Rui**/ agora vamos meter os nomes/ já não metemos os nomes/ os nomes há muito tempo

Para além das unidades linguísticas em si, o critério de diversidade ou não repetição também se aplica ao tratamento de um tópico, como se evidencia em (3), no 6.º ano, mas que se observa também nos outros níveis.

(3) [6.º ano, G17]
S49: **re/fres/co**/ ponto/ agora não podemos mais falar no mesmo
S50: pois!/ jardim acabou!// XXX/ **depois de terem descansado um bocado/ continuaram a sua caminhada**
S49: pois!/ isso!

O critério da não repetição não é o único a ser ativado para a fundamentação da escolha entre unidades e mecanismos linguísticos, para além da própria orientação dada pelo significado que se quer construir, pelo conteúdo que se quer veicular. Entre esses critérios encontra-se o investimento do próprio sujeito na linguagem, por meio precisamente do valor atribuído às unidades linguísticas escolhidas.

As escolhas lexicais constituem o campo em relação ao qual o investimento na linguagem se manifesta com maior frequência, embora a frase e os mecanismos discursivo-textuais também sejam alvo desta dimensão. Para expressar investimento, os participantes recorrem sobretudo à valoração. Esta é aprofundada para além do que seria a qualificação das unidades, na orientação ou vertente positiva, como ou estando "bem" ou sendo aceites. A qualificação é intensificada por meio do grau ("melhor", "ótima", etc.) ou de outros mecanismos de intensificação do valor da escolha, para o que contribuem a exclamação ("boa!") ou adjetivos como "giro", "espetacular", etc.

Nos excertos seguintes, evidencia-se a procura de valorização do texto, expressa por meio da atribuição de um valor positivo. Os excertos são retirados da interação do 2.º e do 8.º ano, mas a presença desta vertente ocorre na generalidade dos níveis. No nível correspondente ao segundo ano, a qualificação limita-se ao recurso a "giro" e "melhor", cuja presença se mantém nos níveis seguintes, mas que são complementados com um alargamento de recursos intensificadores avaliativos, como se pode observar no contraste entre (4) e os excertos (5), ou (7), mais adiante, na fala de S79:

(4) [2.º ano, G07]
S20: não/ estou a fazer um bocadinho [refere-se à forma das letras] / pra/ pra ficar mais giro/ **compras**

(5) [8.º ano, G27]
S79: **ao chegarmos**// **o que mais nos emocionou foi**// (…)
S81: **foi a vista de Leiria sobre o / sobre o topo do castelo**
S79: eh! boa! boa!/ tá ótimo!/ achou!/ **sobre o topo do castelo**
S80: **sobre o topo do castelo?**
S81: sim/ tá bom!

A apreciação também pode ser ativada na vertente negativa para rejeitar escolhas que desvalorizariam o texto, como se observa em (6).

(6) [8.º ano, G28]
S84: **passaram**/ não/ **passaram** é muito reles

Com a progressão na escolaridade, observa-se o alargamento das áreas em causa. Para além do léxico e da caligrafia, o investimento também se foca na frase como um todo (7), e estende-se aos mecanismos discursivo--textuais (8), nos excertos do 8.º ano de escolaridade:

(7) [8.º ano, G27]
S80: **ficámos admirados com**// a sua// **enorme**
[…]
S81: **beleza que dava alegria aquela toda/ aquela toda cidade**//
àquela toda// **que dava [alegria a toda aquela cidade]**
S79: essa/ essa frase tá espetacular!

No caso do excerto (8), procura-se uma valorização do texto por meio da criatividade e originalidade que possibilitem a diferenciação face ao que seria a solução linear habitual para o relato, mas que correria o risco de ser "chata" ou de "não ter piada nenhuma", por remeter para uma repetição em relação às diversas visitas realizadas na cidade. Em vez disso, estes alunos do 8.º ano já se propõem construir o seu texto adotando uma perspetiva prolética (situando os protagonistas no comboio, na viagem de ida, e imaginando o que irão visitar – na construção do texto, acabam por contar ao revisor o que irão visitar na cidade onde vivem os avós).

(8) [8.º ano, G29]
S85: não!/ ó pá!/ mas olha uma coisa/ ha:/ temos de saber/ olha/ se/ se nós fizermos que// 'tivermos a explicar o que é que/ a fazer no comboio e depois explicar o que é que fizeram em Leiria é muito chato porque nunca mais acaba
S86: pois é
S85: não tem piada nenhuma!/ é mais fácil se nós metêssemos lá// eles estavam no comboio e depois pensaram
S86: pois
S85: era mais fácil
S86: e depois vamos ver// escrevam
S85: e acabou-se tudo quando chegavam a Leiria/ por exemplo/ podia ser
S86: pois/ pa não tar sempre a dizer/ pa não ser tudo igual/ visitaram não sei quê/ ha:/ ha:/ acho que era melhor

5 – Conclusão e implicações

A interação recolhida durante a escrita colaborativa em interação revelou a presença de escolhas conscientes e intencionais no processo de escrita de um texto, por parte dos alunos. A análise confirmou e complementou, quanto a essa presença e quanto às potencialidades da escrita colaborativa para a investigação e para a aprendizagem da escrita, resultados evidenciados noutros estudos (Camps, 1994; Barbeiro, 1999, 2001, 2019; Camps et al., 2000; Sturm, 2016; Herder et al., 2018).

O facto de o presente estudo incidir sobre diversos níveis de escolaridade do ensino básico permite apreender que essa presença da dimensão de escolha se manifesta desde cedo no percurso de escolaridade e se reforça com o seu avanço. Em vez de um apagamento gradual que pudesse decorrer da automatização, não apenas de aspetos mecânicos e convencionais, mas também da construção linguístico-textual, encontramos a complexificação do processo trazida pelas operações que geram possibilidades e acarretam a necessidade de proceder a escolhas, que se pretendem orientadas para os objetivos a alcançar por meio do texto, como se salientou em Barbeiro (2019). A geração de possibilidades cobre as diferentes componentes da escrita e, em grande medida, o que o avanço na escolaridade traz é o alargamento dessas possibilidades, por meio do acesso a novos recursos linguístico-textuais. Perante essas possibilidades, os sujeitos são chamados a tomar posições, a avaliar os recursos linguísticos gerados e a proceder a decisões, ativando critérios que poderão explicitar em menor ou maior grau no âmbito do grupo.

Mesmo quando não está em causa, em si mesmo, o conteúdo ou significado que se pretende construir, as soluções não são todas iguais, não apresentam todas o mesmo valor, pelo que os sujeitos ativam critérios para realizar as suas escolhas. Um dos critérios ativados baseia-se na frequência da presença no texto da unidade ou mecanismo em causa. No género analisado, a repetição constitui um fundamento para a rejeição, sendo invocada desde cedo. Pelo contrário, a diversidade constitui um dos fatores para realização da escolha. O critério de decisão ativado não se limita a evitar as repetições: as escolhas podem corresponder a um investimento no texto, por meio do valor diferenciador que as próprias unidades e recursos podem trazer. Para além da força das escolhas lexicais, com a progressão na escolaridade, as escolhas associadas ao investimento no texto são reforçadas pelo alargamento a outros domínios, como o relativo aos mecanismos discursivos suscetíveis de serem adotados para a construção do texto.

Tendo em conta as progressões encontradas, o processo de ensino-aprendizagem deverá proporcionar o alargamento de recursos suscetíveis de serem utilizados pelos alunos na produção dos seus textos. A ação não se encontra limitada à criação de condições, por meio do enriquecimento do *input*, para promover a aquisição desses recursos. A estratégia a adotar no ensino-aprendizagem pode projetar para a escrita, de forma explícita, a diversidade de recursos linguístico-textuais, quer lexicais, quer de mecanismos discursivos. Essa estratégia está em relevo na perspetiva de base genológica (Rose, 2012, 2018; Rose & Martin, 2012) que propõe atividades que colocam em foco os recursos encontrados na leitura de textos do mesmo género e atividades de reescrita que promovem a sua apreensão e reutilização pelos alunos.

Como consequência das escolhas implicadas pela atividade de escrita e da procura de fundamentação para essas escolhas, uma outra implicação remete para a concretização da escrita colaborativa não apenas entre os alunos, mas também na modalidade em que os alunos contem com a orientação e com participação nos metadiálogos. Como se evidencia em Barbeiro e Barbeiro (2019) ou em Myhill et al. (2020), o professor pode incrementar a geração das possibilidades consideradas, quanto aos recursos linguísticos ativados, e orientar o processo de escolha e decisão entre essas possibilidades. Pode ainda, na própria dimensão metalinguística, conduzir um processo de aprofundamento da componente de avaliatividade em relação às propostas linguístico-textuais apresentadas e consideradas para a construção do texto. Esse aprofundamento levará à explicitação de apreciações e de fundamentos para as escolhas realizadas no processo.

REFERÊNCIAS

Asp, E. (2013). The twin paradoxes of unconscious choice and unintentional agents: what neurosciences say about choice and agency in action and language. In L. Fontaine, T. Bartlett, & G. O'Grady (Eds.), *Systemic functional linguistics: Exploring choice* (pp. 161–178). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139583077.011

Barbeiro, L. (2019). Escrita: Tecer e esculpir o texto. *Letras de Hoje, 54*(2), 221–230. https://doi.org/10.15448/1984-7726.2019.2.32354

Barbeiro, L. (2001). Profundidade do processo de escrita. *Educação & Comunicação, 5*, 64–76.

Barbeiro, L. F. (1999). *Os alunos e a expressão escrita: Consciência metalinguística e expressão escrita*. Lisboa: Fundação Calouste Gulbenkian.

Barbeiro, L. F., & Barbeiro, C. (2019). O discurso do professor na reescrita conjunta. In F. Caels, L. F. Barbeiro, & J. V. Santos (Orgs.), *Discurso académico: Uma área disciplinar em construção* (pp. 83–105). Coimbra e Leiria: CELGA-ILTEC/ESECS-IPL.

Calil, E. (2012). Rasuras orais em Madrasta e as duas irmãs: Processo de escritura de uma díade recém-alfabetizada. *Educação e Pesquisa, 38*(3), 589–602. https://doi.org/10.1590/S1517-97022012005000010

Calil, E. (2016). O sentido das palavras e como eles se relacionam com o texto em curso: estudo sobre comentários semânticos feitos por uma díade de alunas de 7 anos de idade. *Alfa, 60*(3), 531–555. https://doi.org/10.1590/1981-5794-1612-4

Camps, A. (1994). Projectes de llengua entre la teoria I la pràctica. *Articles de didàctica de llengua i la literatura, 2*, 7–20.

Camps, A., Guasch, O., Milian, M., & Ribas, T. (2000). Metalinguistic activity: The link between writing and learning to write. In A. Camps, & M. Milian (Eds.), *Metalinguistic activity in learning to write* (pp. 103–124). Amsterdam: Amsterdam University Press. https://doi.org/10.5117/9789053563410

Fontaine, L. (2013). Introduction: Choice in contemporary systemic functional theory. In L. Fontaine, T. Bartlett, & G. O'Grady (Eds.), *Systemic Functional Linguistics: Exploring choice* (pp. 1–12). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139583077.001

Gutierrez, X. (2008). What does metalinguistic activity in learners' interaction during a collaborative L2 writing task look like? *The Modern Language Journal*, *92*(4), 519–537.

Halliday, M. A. K. (1978). *Language as social semiotic: The social interpretation of language and meaning*. London: Arnold.

Halliday, M. A. K. (2013). Meaning as choice. In L. Fontaine, T. Bartlett, & G. O'Grady (Eds.), *Systemic functional linguistics: Exploring choice* (pp. 15–36). Cambridge: Cambridge University Press.

Halliday, M. A. K. (2014). *Halliday's introduction to functional grammar* (4th ed., Revised by Christian M.I.M. Matthiessen). London: Routledge. https://doi.org/10.4324/9780203783771

Herder, A., Berenst, J., Glopperb, K., & Koole (2018). Reflective practices in collaborative writing of primary school students. *International Journal of Educational Research, 90*, 160–174. https://doi.org/10.1016/j.ijer.2018.06.004

Martin, J. R., & White, P. R. R. (2005). *The language of evaluation: Appraisal in English*. Hampshire and New York: Palgrave Macmillan. https://doi.org/10.1057/9780230511910

Martin, J. R., & Rose, D. (2007). *Working with discourse: Meaning beyond the clause*. London, New York: Continuum.

Matthiessen, C., Teruya, K., & Lam, M. (2010). *Key terms in systemic functional linguistics*. London: Continuum.

Myhill, D. A., & Newman, R. (2016). Metatalk: Enabling metalinguistic discussion about writing. *International Journal of Education Research, 80*, 177–187. https://doi.org/10.1016/j.ijer.2016.07.007

Myhill, D., Newman, R., & Watson, A. (2020). Going meta: Dialogic talk in the writing classroom. *Australian Journal of Language and Literacy*, *43*(1), 5–16.

O'Donnell, M. (2013). A dynamic view of choice in writing: Composition as text evolution. In L. Fontaine, T. Bartlett, & G. O'Grady (Eds.), *Systemic functional linguistics: Exploring choice* (pp. 247–266). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139583077.016

Rose, D. (2012). *Reading to learn (Teacher training books and DVDs)*. Sydney: Reading to Learn.

Rose, D. (2018). Languages of schooling: Embedding literacy learning with genre-based pedagogy. *European Journal of Applied Linguistics, 6*(1), 59–9. https://doi.org/10.1515/eujal-2017-0008

Rose, D., & Martin, J. R. (2012). *Learning to write, reading to learn: Genre, knowledge and pedagogy in the Sydney School*. London: Equinox.

Sturm, A. (2016). Observing writing processes of struggling adult writers with collaborative writing. *Journal of Writing Research, 8*(2), 301–344. https://doi.org/10.17239/jowr-2016.08.02.05

Vygotsky, L. (1991a). *A formação social da mente: O desenvolvimento dos processos psicológicos superiores*. São Paulo: Martins Fontes.

Vygotsky, L. (1991b). *Pensamento e linguagem*. São Paulo: Martins Fontes.

VERBAL, MATHEMATICAL AND PICTORIAL MODES: TRANSDUCTION AND COMPLEMENTARITY IN THE FIELD OF DISTANCE EDUCATION IN BRAZIL

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ABSTRACT

This work focuses on how the mathematical, pictorial, and verbal modes are used as a didactic-pedagogical strategy in a distance education textbook of electronics for radio and TV assembly and maintenance that was published by Instituto Universal Brasileiro. Therefore, we analyze the experiential meaning of Ideational Metafunction which is represented intersemiotically via the three modalities focusing on the following phenomena: 1. The representations of the participants, processes, circumstances, and attributes with the deployment of the linguistic, mathematical and pictorial semiotic resources; 2. The intersemiotic aspects of these representations; 3. The phenomenon of intersemiosis among the three modes and its resulting expanded meanings. Our main aim is to provide an understanding of how multimodal texts can work in a distance education context.

KEYWORDS

Multimodality, complementarity, intersemiosis, distance education, Brazil

1 – Introduction

The objective of the present work is to study the phenomenon of Multimodality as a discursive strategy in a passage of a printed text of a distance education course in radio and TV electronics published by the IUB (Instituto Universal Brasileiro). This course is designed for people who have already graduated from high school and cannot attend regular classes of a technical course. The whole course is composed of thirty textbooks that were published in 2018. Each textbook has a different number of pages but none of them has more than thirty-five pages. Due to length constraints of this paper, we selected a small passage from the textbook of number three. This passage was selected because it is one of the short text excerpts from the IUB material that can best serve as an example of how mathematical, verbal and pictorial modes can work multimodally.

As a theoretical framework, we rely on studies of Lim (2002), O'Halloran (2005), Matthiessen (2007), Royce (2007), Rose and Martin (2012), and Newfield (2017) as a starting point for understanding the concepts of multimodal complementarity, intersemiosis, genre, SF-MDA (Systemic-Functional Multimodal Discourse Analysis), Space of Integration as well as some characteristics of mathematical, pictorial and verbal modes.

Throughout this paper, theoretical concepts such as complementarity, intersemiosis and genre are presented. Following the theoretical discussion, the text analysis is unveiled. At the end of this article, we draw some conclusions on how the phenomenon of multimodality can be applied in the form of discursive strategies with didactic-pedagogical aims in Brazilian distance education to reach the specific needs of a teaching process where students and teachers are distant in time and space not only from each other but also from the tools, equipment, and the proper laboratory that are necessary for a technical course.

2 – Complementarity and intersemiosis

The concept of intersemiotic complementarity (Royce, 2007) holds that different semiotic modes in a text do not work independently, there being no absolute hierarchy among them. Thus, focusing on the relationship between image and text, Royce (*Ibid.*) identifies a set of intersemiotic mechanisms through which language and image can build the experiential meanings. This set consists of the categories of intersemiotic repetition, synonymy, antonymy, meronymy, hyponymy, and collocation.

Following the same theoretical framework, Newfield (2017) states that four phenomena are related to the meaning-making of the signs which are: Transformation, Transduction, Semiotic Chain, and Transmodal Moment. She classifies these four phenomena as central to semiosis, in other words, to the production of meanings and she defines what type of process each one is specifically. Hence, we have:

1. **Transformation:** creative and agentive action of meaning-making which consists of the selection of available and adequate resources to represent and communicate the goals during an interaction.
2. **Transduction:** a process through which the meaning material goes from one sign to another also known as Transmodal Translation.
3. **Semiotic Chain:** resulting from Transduction when a meaning material is realized in a set of different signs of different semiotic modes.
4. **Transmodal Moment:** The intermediate moment between one realization and another of the same meaning material in different signs.

Another work that is focused on intersemiosis is O'Halloran's (2005). In this text, the researcher approaches the mathematical mode and discusses the relations among this mode, the verbal mode, and the pictorial one. In this study, the three semiotic modes are understood as having an expression plan, as well as lexical-grammatical and semantic-discursive strata. Hence, the author defines the process of intersemiosis in two types: macro-transition and micro-transition. The first one occurs when there are intersemiotic transitions at the rank of discourse while the second takes place at the rank of grammar. In addition to the intersemiotic cohesion mechanisms listed by Royce *(Ibid.),* O'Halloran (2005) adds the notions of Semiotic Metaphor (Parallel and Divergent).

3 – Genre

According to Rose and Martin (2012), human languages are semiotic systems whose main purpose is the fulfillment of some functions in society. Also, the human languages present phonetic and graphological, lexicogrammar, semantic-discursive, register, and cultural strata. Starting from below the clause, the phonetic/graphological stratum allows a given text to be performed in orality or writing. In the lexical-grammatical one, we have the possibilities in terms of morphological and syntactic rules, in addition to the lexicon available in the given language. The semantic stratum expresses the possible meanings in all discourses. Register is linked to the situation type. This way, register is most closely related to the genre. Since this genre is historically, culturally, and ideologically constituted, it is part of the context of culture along with the ideologies that permeate society.

Thus, in the register, the uses of language can be seen from the perspective of the represented experiences (field), the participants' relationships (tenor) as well as the language resources and arrangements that are applied in the textual structure (mode). These three aspects form the register in which genre is effectively applied. This genre is also a semiotic system. However, unlike the linguistic semiotic system, the genre is a connotative system because it does not have its semiotic resources. It "borrows" resources from other systems instead.

Following this perspective, Rose and Martin (2012) map the most frequently applied school genres in Australia's school context. We will describe this categorization because we consider it of great value for the discussions that we will develop ahead. Let us start by looking at Figure 1.

Figure 1 sets out the most common genres in the school experiences of primary and secondary students in Australia. The first level of classification highlights genres according to their primary purposes which can be engaging, informing, and evaluating. The genres whose primary purpose is engaging are related to stories. They are subdivided into five main types. In its turn, the genres whose primary objective is evaluating are also divided into five types with two subgroups each.

The genre whose primary purpose is informing has four subgroups with fourteen specific types of textual genres. Thus, we have chronicles (autobiographical recount, biographical recount, historical recount, and historical account); explanations (sequential, conditional, factorial, and consequential); reports (descriptive, classifying, and compositional) and procedural (procedure, protocol, and procedure recount). Since our analyses focus on a textual production whose classification is in the procedural subgroup, we need to make a brief description of it.

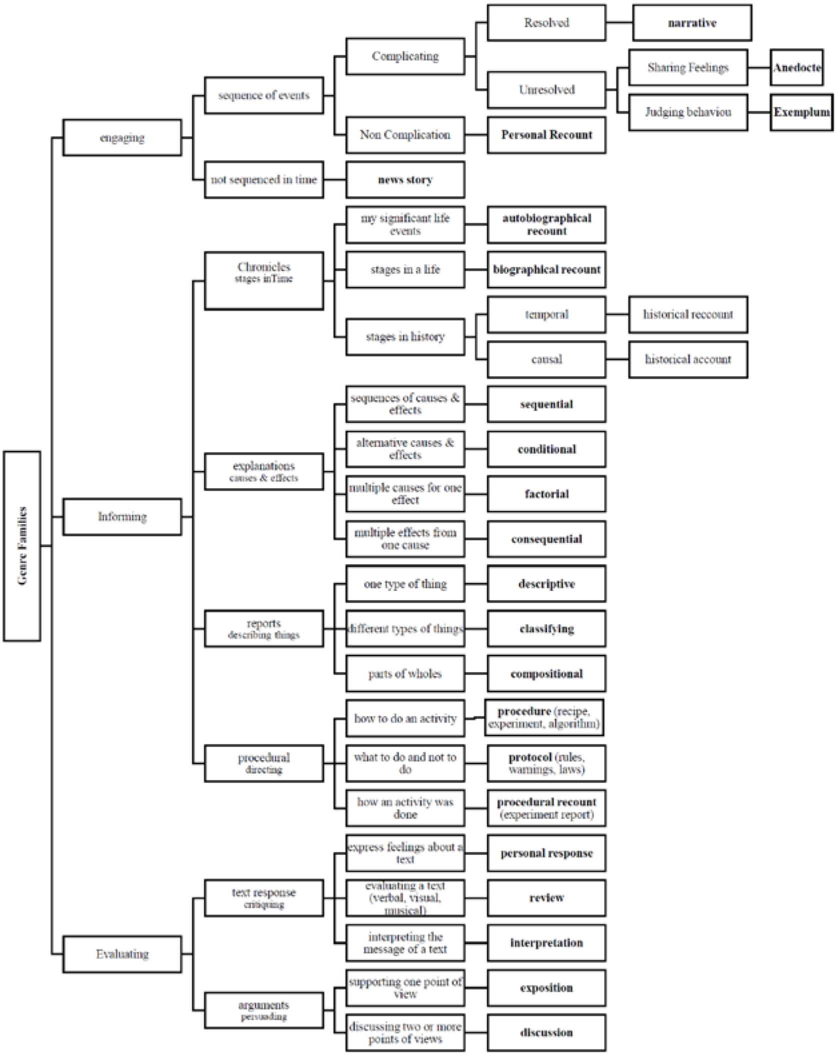


Figure 1 – **Most common genres in Australia's schools** (Rose & Martin, 2012, p. 128)

According to Martin and Rose (2012), the procedure genres is a subgroup with three specific types. The first one is the procedure whose main objective is teaching the step-by-step of a given activity. The second type is the protocol genre. It specifies what is or is not authorized to do under a given circumstance. Finally, the procedural recount genre aims to narrate how a given activity was carried out.

4 – The systemic functional multimodal discourse analyses (SF-MDA)

Other basic social semiotics concepts that we will adopt in our analysis are those of Matthiessen (2007) and Lim (2002). The former discussed the ways of approaching multimodal phenomena in the most varied texts. According to this work, the discursive meanings can be analyzed via three perspectives which are: from below the clause (bottom-up analysis); from above the clause (top-down analyses); and the third one, from within the content plan.

The bottom-up analysis can begin at the level of the expression plan going until the phenomena that can be manifested in the lexicogrammar. Hence, we study the possible functional meanings of these resources and processes in the clauses. In its turn, the top-down approach includes the context plan. It is the most appropriate one to understand how meanings are made in consequence of the interaction of the various semiotic modes that may be present in a text.

The third way of approaching textual phenomena, from within the content plan, consists in focusing on a semiotic resource, understanding its specific semiotic functions, and then analyzing the possible ways it interacts with resources of different modes which are in the text. This approach aims to realize **whether** and **how** each semiotic resource can contribute to total meaning-making. This is what Matthiessen (*Ibid.*, p. 4) calls "the synthesis of the thesis that the systems are distinct."

Also, this same view from within the content plan allows the researcher to observe **whether** and **how** the context influences the choices and consequent roles of each semiotic resource that might be in a text. In other words, the use of a specific sign and not another, the occurrence of intersemiosis between signs of mathematical and pictorial modes instead of an intersemiosis between signs of verbal and chromatic modes, for example, may be due to a need that is imposed either by genre, or by the register. This is what Matthiessen (*Ibid.,* p. 4) defines as "the antithesis that the systems function in a unified way."

In his turn, Lim (2002) works with Systemic-Functional Multimodal Discourse Analysis (SF-MDA) and proposes the Multisemiotic Integrative Mode (MIM). The basic assumption of MIM is that the concepts of SFL applied to verbal mode can be adapted to other semiotic systems. Lim *(Ibid.)* also proposes the idea of Space of Integration (EI). This consists of a typical process of a multimodal textual production from which different semiotic modes interact and, consequently, semantic expansion occurs. Such an interaction is conceptualized by Lim (*Ibid.*) as a Semantic Relationship. Thus, semantic relationships in Space of Integration are derived from the phenomenon of intersemiosis. Also, the semantic relationships can be of two types: A) Co-contextualization – when the context remains the same after a semiotic shift, B) Recontextualization – when the context varies after a semiotic shift.

5 – Textual analysis

In this part, we will analyze a short excerpt which was extracted from textbook number three of the distance education course in radio and TV electronics by the IUB. First, we will describe the text's genre and register. The next step will be an exposition that is focused on the structures and metafunctions of the lexicogrammatical stratum whose semantic aspects are manifest in the discourse semantics stratum. Finally, we will approach the relations of these grammatical and semantic aspects with the text's register and genre from which we selected the analyzed passage.

In this activity, we assume that: A) the different semiotic resources in the text are systemic choices. These systemic choices derive from different semiotic modes, B) each sign has its meaning potential, but it is the meaning material in the text that is the focus of our analyses, C) these same signs are now the genre's systemic resources. They are not of the original semiotic mode anymore. This makes the genre a connotative semiotic system (Rose

& Martin, 2012), D) these signs are on equal status, that is, there is not any semiotic resource which can be considered more important than the others (Royce, 2007), and E) that the signs, even from different semiotic systems, work altogether in the whole text's meaning-making (O'Halloran, 2005; Royce, 2007; Newfield, 2017).

After that, we will try to perceive which aspects related to the register and genre may be influencing the systemic choices for the text. In the case of the genre, we can understand how it influences a possible systemic choice. This way, we will follow Matthiessen's (2007) proposal, which considers, on the one hand, the individual contribution of the semiotic resources for the intersemiotic meaning-making and, on the other hand, the possibility of these same intersemiotic combinations being consequences of register and genre constraints. Figure 2 below shows all our planned steps.

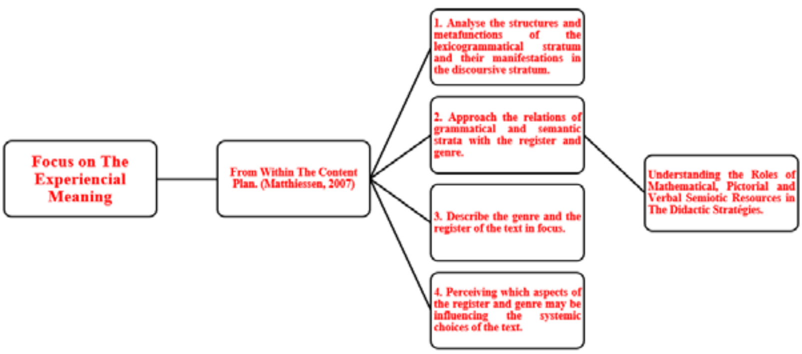


Figure 2 – **Steps to be followed during text analyzes**

The text in focus in this part of our work is a small passage that was taken from the application lesson that is named "Special Lesson" and is part of textbook number three. The small passage we selected is one of the exercises from the "Special Lesson." All the exercises in this lesson aim to improve students' knowledge of calculating the electrical resistance of a circuit component or device. The theoretical concepts and mathematical formula that are necessary for this calculation have already been taught in the previous part of the textbook (the conceptual lesson that is named "Theoretical Lesson"). Thus, all the "Special Lesson" in textbook number three presents exercises that are focused on making the student improve her/his knowledge of how to calculate the electrical resistance.

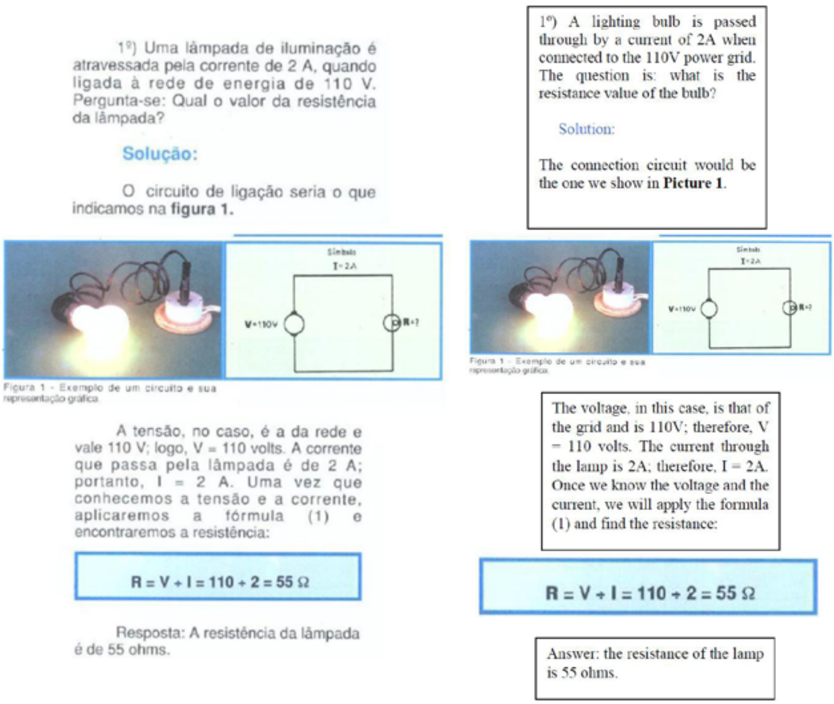
Each exercise presents a hypothetical context, hypothetical components or devices to be evaluated and visualized, as well as numerical values. It is a way of reproducing, in the printed text, a laboratory experience as well as practicing something that has been studied theoretically. It is worth mentioning that we are legally authorized to reproduce only small passages from IUB material. This is the reason we do not reproduce the whole page of the unit where the exercise can be found.

According to what we have already discussed, the register has field, mode, and tenor. Since our study is limited to experiential meanings, it is on the field that we will focus our attention. Thus, we will describe the actions represented in the selected text. The "Special Lesson" is the representation of a laboratory experience. Hence, there is a detailed description of the way the mathematical formula for the calculation of resistance is reached, as well as the aspects of the phenomenon of resistance itself and the equipment where this phenomenon can occur. The result is a social action with didactic-pedagogical purpose in the scientific area of physics. All taught concepts are applied to the professional practices of electronics technicians. This didactic-pedagogical action is carried on as if it were a scientific experiment in a school laboratory.

In addition to the representation of a practical laboratory class, there are a group of participants and phenomena from the world of physics and from the professional world of electronics technicians which are present as choices in the printed discourse. Hence, we find the description of lamps, wires, plugs, sockets, electrical circuits, resistances, among other items. Some elements of the world of physics are also represented as math variables like **R** (Resistance), **I** (Current), and **V** (Voltage). Their definitions are only quickly recalled because they have been widely discussed in previous classes.

Following the theoretical and methodological proposals that have been discussed in our work, we started with our focus on the parts of the text that are structured mainly with the verbal mode because it is with the verbal semiotic mode that the authors always begin to contextualize students about the purpose of the lesson, begin to introduce concepts or instructions, and start directing students on their reading paths. Besides, it is necessary to observe the semantics of the textual elements that are structured mainly by verbal mode to have a better condition of identifying the intersemiotic shifts in the text.

The excerpt to be analyzed is reproduced below in Picture 1 A (the original) and 1 B (a translation into English). Some of the clauses that we analyze are also structured using the mathematical semiotic mode. In these parts, we apply the perspective of O'Halloran (2005).



1º) Uma lâmpada de iluminação é atravessada pela corrente de 2 A, quando ligada à rede de energia de 110 V. Pergunta-se: Qual o valor da resistência da lâmpada?

Solução:

O circuito de ligação seria o que indicamos na **figura 1.**

Figura 1 - Exemplo de um circuito e sua representação gráfica

A tensão, no caso, é a da rede e vale 110 V; logo, V = 110 volts. A corrente que passa pela lâmpada é de 2 A; portanto, I = 2 A. Uma vez que conhecemos a tensão e a corrente, aplicaremos a fórmula (1) e encontraremos a resistência:

R = V ÷ I = 110 ÷ 2 = 55 Ω

Resposta: A resistência da lâmpada é de 55 ohms.

1º) A lighting bulb is passed through by a current of 2A when connected to the 110V power grid. The question is: what is the resistance value of the bulb?

Solution:

The connection circuit would be the one we show in **Picture 1**.

Figura 1 - Exemplo de um circuito e sua representação gráfica

The voltage, in this case, is that of the grid and is 110V; therefore, V = 110 volts. The current through the lamp is 2A; therefore, I = 2A. Once we know the voltage and the current, we will apply the formula (1) and find the resistance:

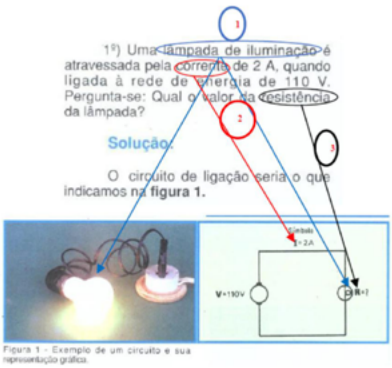
R = V ÷ I = 110 ÷ 2 = 55 Ω

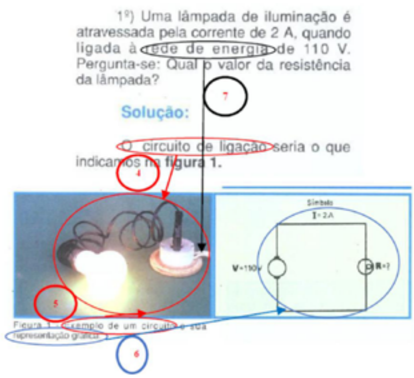
Answer: the resistance of the lamp is 55 ohms.

Picture 1 A – **The small passage to be analyzed**
Picture 1 B – **The small passage to be analyzed** (translation)

From the analyses focused on the passage that is mostly structured with the linguistic mode, we found 19 clauses. Of these clauses, seven are material processes, one is classified as verbal and eleven clauses represent relational processes. In the space of the page that is mainly of linguistic mode, there is an interesting representation of participants and their attributes. This can be identified in clause complex: "A lighting bulb is passed through by a current of 2 A when connected to the 110V electric grid." This representation occurs with mathematical symbols which are the numbers 2 and 110 and the signs A and V. There is not intersemiosis because the signs (110, 2, A and V) are from the same semiotic system. Later we will discuss this topic in more detail.

After exposing the data of the experiential representations in the space that is mainly structured with the verbal mode, we will analyze the representations of the experiential meanings which are intersemiotically made through the three modes (linguistic, mathematical, and pictorial). This first analytical approach is from within the content plan (Matthiessen, 2007). Consequently, we will make references to the grammatical stratum because it is in this one that we observe the systemic choices that are highlighted in the form of meanings in the semantic-discursive stratum. Also, we will divide the small text into two parts. The first is the proposition of the mathematical problem along with the beginning of its resolution and the second is the development and conclusion of the presented resolution.





Picture 2 – **Analysis of intersemiosis, focusing on the verbal, mathematical and pictorial representations of the participants light bulb, electric current and resistance**

Picture 3 – **Analysis of intersemiosis, focusing on the verbal and pictorial representations of the participants circuit and power grid**

Looking at Pictures 2 and 3[1], we see circles and lines that are used to highlight the intersemiosis which are classified by O'Halloran (2005) as macro-transitions. The circles are applied to point out participants or circumstances and their respective lexicons in each semiotic mode as well as to serve as simply numbered indexes so that we can guide which example of a semiotic shift we are referring to. We have repeated the same picture twice in order not to have a lot of circles and lines in only one picture which could make the reading of it harder.

[1] We decided to put some pictures side-by-side to make the reading of the lines easier. If we placed all the lines in only one picture, it would be quite difficult to realize to what specific semiotic shifts each line could be pointing.

In example 1 (Picture 2), we have two lines. On the top of the left one, we have a circle with the expression "lâmpada de iluminação" (light bulb)[2]. In this sign from the verbal mode, the circulated term has the experiential function of circumstantial adjunct because the bulb is the space where the material process of "passing through" occurs. Such a process has the electric current as the actor. At the end of the arrow, one can see the light bulb on and lighting a certain area. When the meaning "light bulb" shifts between the verbal and the pictorial signs, we can have two different understandings.

The first one is that, besides the circumstantial meaning, this bulb represents the material process of lighting. That way, the bulb is not only a circumstance but also becomes an actor. The second possible meaning is a relational process where the "light bulb" has certain characteristics and is made of certain elements. In this case, the lamp becomes a carrier. In both cases, we found a process of co-contextualization with a semiotic metaphor because, due to the shift from one semiotic mode to another, there was a functional change (O'Halloran, 2005). In the verbal mode alone it is a circumstance. However, after intersemiosis with the pictorial resources, the bulb can be either actor or carrier depending on the type of semantic process that is assumed as an understanding by the student.

If we consider the relation of the word with the pictorial signs, there is one more intersemiosis through macro-transitions. In this case, we have at one end of the right line the word "light bulb" and at the other end a schematic diagram, which in electronics is popularly known as scheme. In verbal mode, the word has the function of circumstance, while in the pictorial of the schematic diagram we have a relational process with the symbol of the lamp in the function of carrier and the internal symbols in the form of attributes. It may mean a statement like "the lamp has these internal components." The semiotic mechanisms, in this case, are co-contextualization with parallel semiotic metaphor, considering only the relation between word and the whole schematic representation. If one considers the parts of the bulb represented inside the symbol, it is possible to admit a meronym.

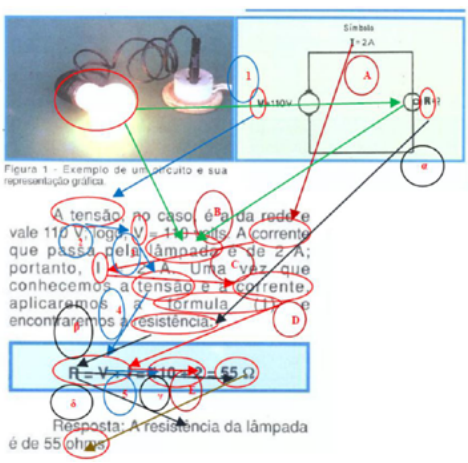
Example 2 presents an intersemiosis by macro-transition through which the meaning is intersemiotically represented in the verbal semiotic

[2] It is important to say that we understand intersemiotic shift as a two-way phenomenon, not as a semantic shift that is performed in only a single direction. However, we prefer to use lines with only one arrow for a better orientation of the possible readers of our work.

mode along with the mathematical mode, the sign "I," which symbolizes exactly the electric current that runs through the circuit of the bulb. In verbal mode alone, the word "current" is actor. In the case of the mathematical symbol, "I" is a carrier whose attribute is "2 A." In this case, we find a co-contextualization whose intersemiotic mechanism in operation is a parallel semiotic metaphor.

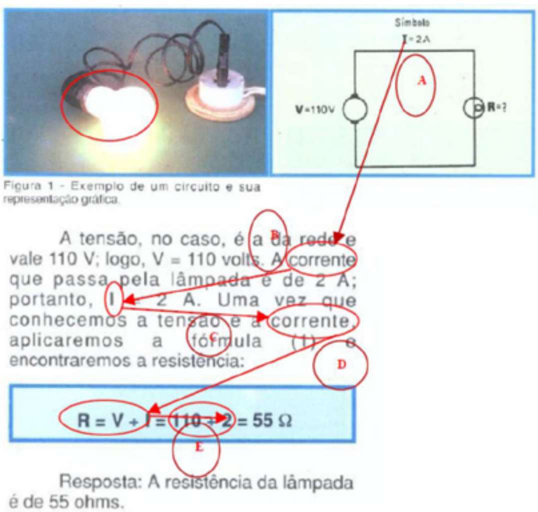
Example 3 is the same as 2. It presents an intersemiosis through macro-transition. The letter "R" symbolizes the resistance of the bulb. In the verbal mode, the word "resistance" is the carrier, the same way it is in the mathematical symbol "R." However the attribute of "R" is, in this textual passage, a question mark. In this case, we found a co-contextualization via the intersemiotic mechanism of synonymy.

In examples 4, 5, 6 and 7 (Picture 3), we observe macro-transitions. In the fourth and fifth processes we have, respectively, the expressions "circuito de ligação" (circuit) and "exemplo de um circuito" (example of a circuit) and in the sixth the term "representação gráfica" (graphic representation). In all three cases we find co-contextualization through the mechanisms of meronymy. Finally, example 7 is also another case of macro-transition with co-contextualization through a synonymy. This mechanism occurs when there is the verbal sign "rede de energia" (power grid) and the double wire representing in this specific case the meaning (power grid) pictorially.



Picture 4 – **Visualization of all the complex semiotic shifts**

In the second part[3], where there is the development and conclusion of the presented resolution to the mathematical problem, we have the mathematical and verbal modes being more frequently used compared to the pictorial one. Another detail is the fact that there is a greater emphasis on the three participants: voltage; current; and resistance. The reason for this is that a mathematical formula is applied. This time, the analyses will be carried out differently. We have five colors of lines (see Picture 4 for the visualization of all the complexity) to point to existing intersemiotic shifts. Thus, the blue line will distinguish the intersemiotic shifts of the meaning VOLTAGE, the red lines will indicate the shifts of the meaning CURRENT while the black lines will point out the meaning RESISTANCE, the green ones will be related to the meaning "light bulb," and an arrow in the color brown highlights an intersemiotic transition of the meaning OHMS.



Picture 5 – **Analysis of intersemiosis, focusing on the verbal and mathematical representations of the participant current**

As we turn our attention specifically to the meaning of CURRENT, we must observe Picture 5 (above). In it, we have the symbol "I" and a transition of meaning between the symbol and the verbal sign "Current." The mode alternates between mathematical semiotic resources and verbal re-

[3] We decided to show a picture with all the lines altogether for the reader to visualize and to have an idea of the complexity of all the intersemiotic shifts that are at work in this short passage.

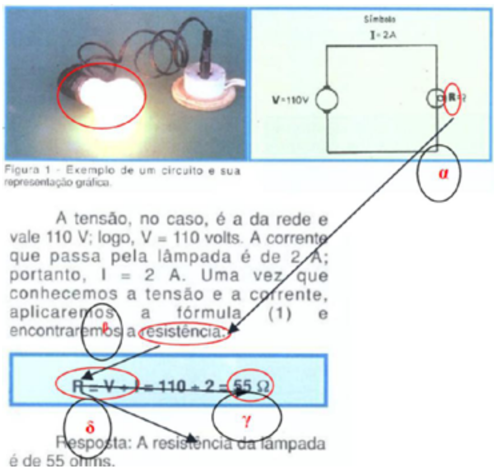
sources from line A to line D. In these lines, we find macro-transitions with co-contextualization through the mechanisms of synonymy. In E, there is no intersemiosis.

At this point of our analyses, we believe it is worth pointing out our understanding of the very nature of the semiotic signs. We understand semiotic signs from the perspective of Social Semiotics. Therefore, we see a semiotic sign as a phenomenon of production and reproduction of meanings. These meanings can be potential or material. Meaning Potential means a set of possible meanings that a sign can represent in different situations of use. In its turn, Meaning Material is the one that is expressed in and related to a specific social situation.

We refer to this theoretical perspective because we need to emphasize that we consider the hypothesis that symbols which were previously only alphabetic, are also mathematical nowadays. Hence, some signs are either of the mathematical or linguistic semiotic systems. This is due to the historical evolution of the mathematical semiotic mode which began with the use of verbal and pictorial semiotic resources. Later it was developed as an independent system (O'Halloran, 2005). Consequently, the Mathematical mode has many elements (resources) originally from the two other semiotic systems. A good way to understand this phenomenon is through the Peircean idea that the signs are usually formed from other signs (Peirce, 1932). This perspective allows us to ratify the idea that a semiotic system can have elements "borrowed" from other systems. The example of Mathematics is an emblematic one.

Therefore, the symbol "I" in the passage above, like any other letter in a mathematical operation is not a semiotic resource of the alphabetic system. It is a proper resource of the mathematical mode. This way, we understand such signs in terms of their Meaning Material when they are in a discourse with the mathematical operations as mathematical representation. Furthermore, the text's register itself and its genre leads to this understanding since there are contexts of situation and of tradition (a fundamental genre characteristic in the culture) in which there is the convention of this graphic element "I" as a Mathematical representation of the electric current.

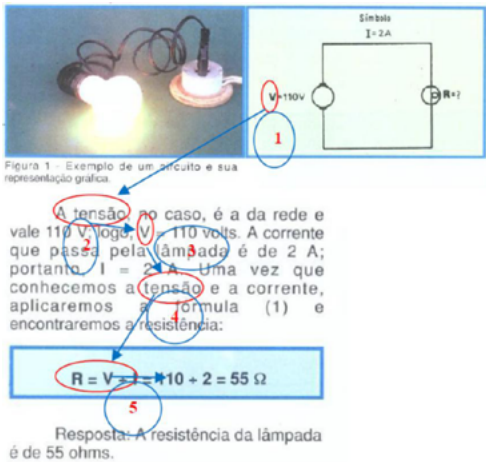
What we stated in the previous paragraphs justifies the fact that we classify the shift of meaning between the symbol "I" and the number "2" as one which is not a characteristic of intersemiosis. Such a conclusion arises from the fact that there is a relation between one sign and another sign of the same semiotic system. O'Halloran (2005) and Newfield (2007) only classify intersemiosis or transduction when there are shifts of meanings between signs of different systems. That is the reason we do not deal with the specific instance which is pointed out by line E as an example of intersemiosis.



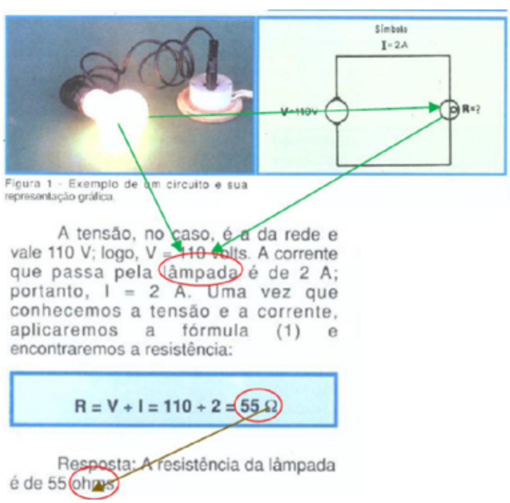
Picture 6 – **Analysis of intersemiosis, focusing on the verbal and mathematical representations of the participant resistance**

In the case of the transition of the experiential meaning "RESISTANCE" between signs of different semiotic systems (Picture 6), we have, in the lines labeled with the letters alpha, beta, and delta, macro-transition processes through the mechanisms of co-contextualization with synonymy between the mathematical symbol "R" and the word (a sign of the verbal mode) "Resistance." When we look at the line labeled with the letter gamma, we see that it is a process in which there is a shift of meaning, but between signs of the same mathematical semiotic system.

In the case of the intersemiosis of the meaning "VOLTAGE" in Picture 7, we observe that there is in the processes highlighted by lines one and two the macro-transition with co-contextualization through the mechanism of synonymy. On line three, we have a macro-transition with co-contextualization through the mechanism of parallel semiotic metaphor. This is because, at the top end of the line, the V sign is a carrier in a relational process. When we look at the bottom of the arrow, we have the linguistic sign in a mental process and the word "VOLTAGE" is a phenomenon that is experienced via this mental process. On line four, the process is of macro-transition with co-contextualization through the mechanism of parallel semiotic metaphor. It is the opposite of what has been described in line 3. In the process of number five, there is no intersemiosis.



Picture 7 – **Analysis of intersemiosis, focusing on the verbal and mathematical representations of the participant voltage**



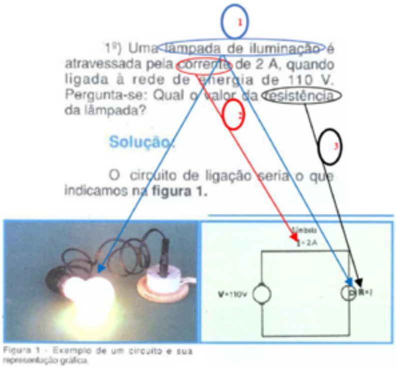
Picture 8 – **Analysis of intersemiosis, focusing on the verbal, mathematical and pictorial representations of the participants light bulb and Ohms**

To sum up this part, we need to analyze the processes shown by the green lines and the brown line (Picture 8). In the example of the green lines, intersemiosis occurs in the shift among the images and the word "light bulb." There is then macro-transition with co-contextualization through the mechanism of synonymy. The last case to be discussed is the one pointed out by the line in brown. There is also an intersemiosis by macro-transition with co-contextualization through a synonymy.

Considering Matthiessen's proposal (2007) that has been adopted in this work, our next attempt is to observe in deeper detail the values of these intersemiotic relations that are realized at the semantic-discursive stratum. This means that we will refer to the **EI** (**Space of Integration**) proposed in the MIM (**Multisemiotic Integrative Model**) by Lim (2002). Such Space of Integration is of cognitive aspect, being the very process of meaning-making between different semiotic modes. The resulting phenomenon of this process is the "semiotic expansion." That is, the meaning after shifting between different semiotic modes in a text tends to present a semantic expansion, resulting in what Lim (*Ibid.*) named as the multiplication of meaning.

To do so, we will need to get back to the excerpt under analysis. However, before we begin, it is necessary to point out that the expanded meanings described here will be assumed as possible ones. This is because we are discourse analysts, not students of the distance course from which we have taken the passage for our analyses. Thus, it is our scientific-based reading of Linguistics and Social Semiotics at work that may not coincide with the understandings of the students for whom the text was designed.

Back to the first part of the passage (Pictures 9 and 10), we see that the intersemiotic process in the space of integration which is pointed out in number one results in a semantic expansion whose possible meaning is: "*the light bulb is connected to the electrical circuit with the use of a specific type of wire. This bulb has internal components and phenomena. One of these phenomena is the resistance. Resistance is related to voltage and electric current.*" From the intersemiotic process of number two, one can get a possible expanded meaning which is: "*the current is mathematically represented by the symbol I. Also, this current can be valued, or even quantified, by the Amperes symbol. This same current is present in the circuit along with the voltage and resistance.*"



Picture 9 – **Analysis focusing on semiotic expansion after intersemiosis among the verbal, mathematical and pictorial representations of the participants light bulb, resistance and current**

Picture 10 – **Analysis focusing on semiotic expansion after intersemiosis among the verbal, mathematical and pictorial representations of the participants circuit and electrical power**

In the space of integration in process three, we have the possibility of an expanded meaning from which it is understood that resistance is mathematically represented by the symbol **R** and that such phenomenon has a specific location within the light bulb. In four (Picture 10), a possible expanded meaning is that a graphical representation of an electrical circuit is formed not only by the lines but also by geometric figures such as circles and that at certain points of this graphic representation values can be assigned.

In the space of integration of number five, there is the possibility of resulting the following expanded meaning: "*an electrical circuit is physically constituted by objects such as wires, sockets, plugs and a wooden base to affix the outlet.*" In number six, there is an expanded meaning related to the possibility of approaching the circuit as an abstraction. The intersemiotic process of number seven can result in an expanded meaning that represents one of the ways of connecting the electrical power to a circuit. By viewing the photo, one can conclude that this way of connecting is with the use of a double wire.

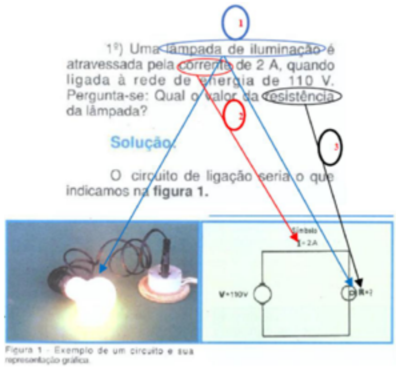
In the second part, the semiotic relations show intersemiotic processes between the verbal mode and the mathematical mode. In these processes, the most frequent expanded meanings are that of the perception of electricity phenomena as those that can be quantified, valued, and even passive of abstraction in such a way that these entities of the concrete world (VOLTAGE, CURRENT, and RESSISTENCE) can be mathematical and equation-forming variables. The main consequence of this is the understanding that the three physical phenomena can be manipulated. In other words, that human beings can have control over them.

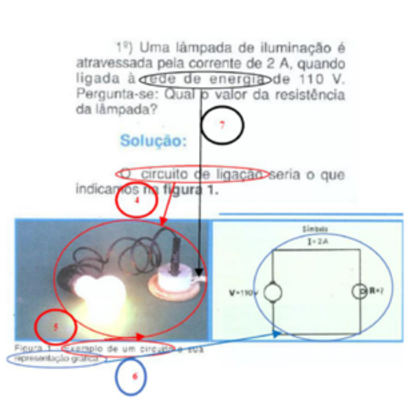
In the case of intersemiotic relations with shifts between verbal and pictorial modes, there is a clear expansion of meaning when, in addition to meanings that are represented only through the printed words, there is the possibility that a student can develop the knowledge of the external and internal parts of an electrical circuit as well as the perception of how a circuit such as that in the photo can be connected to the domestic electric grid.

After observing some semiotic elements from their functions and how each of them contributes grammatically and lexically in combination with each other, i.e., after we have done what Matthiessen (2007, p. 4) has named: "a synthesis of the thesis that the systems are distinct (derived from below)," we need to observe the multimodal processes in the opposite direction. This means that we will, from this point on, conduct more detailed scrutiny of intersemiotic phenomena in terms of the interface with the register and the genre. Or in Matthiessen's words (*Ibid.*, p. 4): "the antithesis that the systems function in a unified way (derived from above)."

This means that we will observe the same intersemiotic processes focusing on the identification of the elements and phenomena of the field that are multimodally represented in the selected textual passage as well as focusing on the genre as a model that is the outcome of a cultural tradition and that may be manifested in the form of constraints in the semiotic shift processes which have been analyzed in our work.

An interesting phenomenon that we have identified concerns the fact that the text we have analyzed presents two registers. The first one is of a class where one tries to demonstrate some phenomena of electronics in addition to ways of calculating and manipulating them. If it were a regular class, this would be in a properly equipped laboratory. The teacher's actions would be demonstrating the equipment, its internal and external constituting parts, the calculations, and the operation of the electrical resistance. The objects for this specific interaction would be shown, touched, and visualized in their respective operations.





Picture 11 – **Analysis of intersemiosis, focusing on the identification of the elements and phenomena of the field**

Picture 12 – **Analysis of intersemiosis, focusing on the identification of the elements and phenomena of the field**

An interesting phenomenon that we have identified concerns the fact that the text we have analyzed presents two registers. The first one is of a class where one tries to demonstrate some phenomena of electronics in addition to ways of calculating and manipulating them. If it were a regular class, this would be in a properly equipped laboratory. The teacher's actions would be demonstrating the equipment, its internal and external constituting parts, the calculations, and the operation of the electrical resistance. The objects for this specific interaction would be shown, touched, and visualized in their respective operations.

However, the text under analysis is part of a distance education class. There is neither face-to-face contact between students and teachers, nor direct contact between students and teachers with the instruments, tools, and objects of a laboratory. Thus, this is a register of a class in which it is intended to represent a "laboratory practice" of some previously studied theories. This way, it performs a type of action and social process whose main challenge is dealing with the teachers' and students' absences, as well as the absence of the laboratory itself.

By directing our attention to discursive processes, we can realize that aspects of this represented register can be perceived in the text. The first and one of the most representative of these traits can be found in the first part of the analyzed text (Pictures 11 and 12). In them, there is a sentence that says: "The connection circuit would be what we **indicated** in Picture 1." We can observe the representation of the participant, the teacher, by the choice of pronoun **We** as well as the material phenomenon of indicating. These selections attempt to reproduce a regular class process in printed material of distance education. Moreover, “Picture 1” itself is also a feature of the distance lesson register. This picture is a representation of instruments and equipment, in another clear attempt to deal with the absence of the school laboratory tools. Other discursive examples of the class register are the constructions: “**One asks**: What is the value of resistance?” and “**Answer**: The resistance of the lamp is 55 ohms.” These statements are attempts to place participants and the phenomena of making questions and finding the answers in the interaction of a regular class.

There is a second register. It is the studied phenomenon. This is represented through hypothetical scenarios due to the absences we have already discussed. We will name it the hypothetical register. Thus, strategies are established to introduce, as much as possible, the processes and participants of the phenomena that are focused on during the class. In this register, it is created a hypothetical resistance of a hypothetical lighting bulb. Thus, it is necessary to show this bulb, identify it in terms of how it is its internal and external structure, how it works, and the appropriate way to make it work, as well as calculating the phenomenon of resistance that can be found in the lighting bulb.

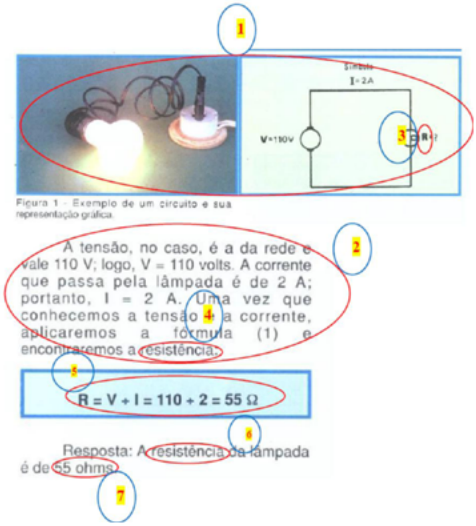
Hence, we have the intersemiotic representations with the pictorial, mathematical and linguistic modes. In these representations, the pictorial mode identifies physical forms and the components’ positions, the ways of making a bulb work through its installation in an electrical circuit, and the position of each item in that circuit. Following O’Halloran (2005) who categorizes the grammar of verbal and mathematical modes, we could see that the mathematical mode more frequently tends to represent the experiences of the world, symbolically demonstrate them in writing, and abstractly show the possible alternations of participants in the space of the circuit. In its turn, the verbal mode tends to be employed to give instructions on what to do in mathematical operations, narrate or describe the phenomena and even name them. Consequently, we have the linguistic mode with the most markedly typological function, the pictorial mode acting topologically while the mathematical one alternates between the typological and the topological representations.

The result is that the intersemiotic semantic interaction among the signs results in expanded meanings. Consequently, we have a text that represents/establishes a context of situation of an electronics class while focusing on a phenomenon of physics, discusses this phenomenon, shows where it can occur, what the roles of the different participants are, their possible distributions in space, the means of manipulating them, etc. as well as how to put into practice all this knowledge in the professional field. By doing this, another context of situation, one of the studied phenomena, is also represented/established. This is possible through the intersemiotic shifts and their respective expanded meanings.

Because we have two registers, we also find two fields. The first field is that of the class. It consists of social action with a didactic-pedagogical purpose in which it is sought to teach practical knowledge. However, this action occurs in the absence of face-to-face interaction between students and teachers and without direct access to the instruments which are traditionally used for such demonstration. Thus, the most appropriate strategy found is the reference to a hypothetical register (the second one) whose field is characterized by a technical action of calculating the value of resistance. This action can be practiced in the student´s professional life.

Based on Rose and Martin (2012) the text's genre can be classified as procedure genre whose specific objective is teaching the step-by-step of a given activity. However, in face of the characteristics we have found, we should add to this classification the expression "**in distance education.**" Thus, it is Procedural Genre in Distance Education. The main characteristic of this genre is having intersemiotic relations that represent/establishes participants and processes of a technical class, participants and processes of hypothetical phenomena as well as teaching the step-by-step of possible activities in the student's future professional life.

Just to conclude what we have said, in the text's second part (Picture 13 next), there are intersemiotic processes between signs of the verbal and the mathematical modes along with intersemiosis between the verbal and pictorial modes. Let us leave aside the processes that occurred between linguistic and imagery modes and focus our attention on the intersemiosis between the verbal and the mathematical ones. This time, we consider the aspects of the registers and the genre that can be manifested in this part of the studied excerpt.



Picture 13 – **Analysis of intersemiosis, focusing on the alternating sequence from verbal mode to mathematical mode that reveals a genre's characteristic**

The alternating sequence from verbal mode to mathematical mode reveals a genre's characteristic. Since the genre has as one of its main characteristics the objective of teaching the step by step of a given activity in distance education, there is a need for the discourse to be detailed and even a little repetitive at some points.

Consequently, we find this back-and-forth of the meaning from one sign to another of the two different modes because there is a description of the phenomenon of resistance (field in the hypothetical register), but there is also a didactic-pedagogical action (field in the class register). The result is the intersemiotic discursive strategy in the passage of the text which is realized by the following sequence: overviewing the phenomenon of the world in mathematical mode (number 1 in Picture 13), naming each step of the analysis of the phenomenon with verbal mode (example 2), representing resistance mathematically and naming it verbally (examples 3 and 4), calculating the values of the phenomenon with mathematical mode (example 5), demonstrating the name of the phenomenon verbally (example 6) and demonstrating the value of the phenomenon (example 7).

All the sequence ends up as an expanded meaning from which the student's learning process can be evolved. If this same discourse were directed to an expert, there would not be so many semantic shifts from mathematical to verbal modes. This would be because the specialist would only observe the phenomenon (through mathematical mode) and could easily understand what its name is and the phases of its development. In other words, only the mathematical formula and its development would be enough. But, of course, the genre would not be the same.

6 – Conclusion

The present work aimed to observe the multimodality and its discursive manifestation in a small passage from a distance education text. Throughout our study, we have noticed that multimodality is manifested by discursive strategies in a non-face-to-face classroom context to teach a certain phenomenon of physics that can be useful for the student's professional practice. Our focus on semiotic resources of mathematical, pictorial, and verbal modes allowed us to identify how they can operate altogether not only to create this necessary class context for a student of distance education, but also to represent the studied physics phenomenon. The consequence of these multimodal discursive strategies is the representation of two registers with their respective fields. In addition to these characteristics, we could also observe how the two registers and the genre influence the semiotic choices that are present in the printed material we used to apply our analyses.

From our study, we were able to identify the potentialities of multimodal resources as discursive strategies to reach didactic-pedagogical needs in distance education as a whole and more specifically in technical distance education. The use of different semiotic systems resulted in an elaborated text with the possibility of representing a complex set of meanings. Moreover, we could perceive that the phenomenon of Multimodality can be particularly important for the teaching processes of technicians in contexts in which they cannot be present in regular classrooms and laboratories either due to student's social-economic issues or the absence of structured spaces for technical education, a situation that is a reality in many Brazilian cities. The study we have presented here is only part of a work that aims to be a contribution from Linguistics and Social Semiotics in the field of distance education by providing teachers from different technical areas some knowledge about the way they can understand multimodality as an important discourse phenomenon for their pedagogical practices.

REFERENCES

Halliday, M. A. K., & Matthiessen, Christian M. I. M. (2014). *Halliday's introduction to functional grammar* (4th ed.). London and New York: Routledge.

Lim, F. V. (2002). *The analysis of language and visual images – An integrative multisemiotic approach* (A Dissertation Submitted for The Degree of Master of Arts [English Language], Department of English Language and Literature). National University of Singapore, Singapore.

Matthiessen, C. M. I. M. (2007), The Multimodal page: A sistematic functional exploration, In. T. D. Royce, & W. L. Bowcher (Ed.), *New directions in the analysis of multimodal discourse* (Chap. 1, pp. 1–62). London: Routledge.

Newfield, D. (2017). Transformation, transduction and the transmodal moment. In C. Jewitt (Ed.), *The Routledge handbook of multimodal analysis* (Chap. 7, pp. 100–113). London: Routledge.

O'Halloran, K. L. (2005). *Mathematical discourse: Language, symbolism, and visual images*. London: Continuum.

Peirce, C. S. (1932). In C. Hartsborne, & P. Weiss (Eds.), *Collected papers of Charles Sanders Peirce*, *Vol 2.* Cambridge, MA: Harvard University Press.

Rose, D., & Martin, J. R. (2012). *Learning to write, reading to learn: Genre, knowledge and pedagogy in the Sydney school*. Sheffield: Equinox Publishing.

Royce, Terry D. (2007). Intersemiotic complementarity: A framework for multimodal discourse analysis. In T. D. Royce, & W. L. Bowcher (Ed.), *New directions in the analysis of multimodal discourse* (Chap. 2, pp. 63–110). London: Routledge.

A MEDIA(TIZA)ÇÃO DE UM MOMENTO DE PRÁTICA E RESPETIVAS REPRESENTAÇÕES NO DISCURSO DA MARCA – O CASO CR7 / CRISTIANO RONALDO

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RESUMO

A marca CR7 / Cristiano Ronaldo é indissociável da pessoa "Cristiano Ronaldo" e, por conseguinte, absorve e reflete o sucesso ou insucesso deste. Há, com efeito, um nexo de causalidade entre o valor da pessoa e o da marca CR7, uma vez que a marca não está dissociada da pessoa, isto é, a marca não tem a sua própria identidade, confundindo-se – marca e pessoa.

Tendo em conta a informação apresentada pela *Der Spiegel* da alegada violação sexual a Kathryn Mayorga por Cristiano Ronaldo, em Las Vegas, em junho de 2009, pretendemos analisar um momento de prática através das representações construídas pela imprensa e as respetivas implicações na marca. Cabe frisar que não é nosso propósito analisar a existência ou não de violação, que terá de ser analisada em sede própria, mas apenas trazer à evidência as implicações e efeitos do julgamento social, e respetiva punição, no valor da marca.

A partir de um *corpus* identificado pela imprensa eletrónica americana (jornal *The New York Times*) e portuguesa (jornal *Público*), de setembro a dezembro de 2018, o artigo discute um momento de prática, focando a análise no papel da mediação, usando o campo semântico do Julgamento do sistema de Avaliatividade de Martin e White (2005) e adicionalmente o estudo dos atores sociais de Van Leeuwen (1996).

PALAVRAS-CHAVE

Mediação, representações, discurso da marca, CR7, momento de prática

1 – Introdução

O caso *Football Leaks* trouxe o jovem português Rui Pinto para junto de nomes como Julian Assange e Edward Snowden. Conhecidos globalmente, estes nomes são identificados como "piratas informáticos", por alguns, e reconhecidos como "ativistas anticorrupção", por outros. Em maio de 2019, a revista *The New Yorker* publica uma extensa reportagem sobre o caso que tem vindo a abalar o futebol mundial ("How football leaks is exposing corruption in european soccer"). A *The New Yorker* relata a forma como o jornalista Rafael Buschmann, da revista alemã *Der Spiegel*, teve acesso a informação secreta sobre o futebol. Em 2016, Rui Pinto encontrou-se com o repórter alemão em Bucareste e entregou-lhe mais de quatro *terabytes* de informação (milhares de documentos), muitos dos quais estão na posse da justiça francesa e portuguesa. Por meio da referida informação, o caso da alegada violação sexual a Kathryn Mayorga por Cristiano Ronaldo, em junho de 2009, nos Estados Unidos, veio a público mediado pela *Der Spiegel*, a 28 de setembro de 2018, embora a história tenha sido anteriormente revelada em 2017 em documentos difundidos pela plataforma digital *Football Leaks*. O processo judicial de Kathryn Mayorga contra Cristiano Ronaldo foi retirado do tribunal do Nevada em maio de 2019, mas, de acordo com a imprensa, o caso deu entrada no tribunal federal.

Apresentada esta contextualização, cabe frisar que não é nosso propósito analisar no presente trabalho a existência ou não de violação de Kathryn Mayorga por Cristiano Ronaldo, que sempre terá de ser analisada em sede própria e com recurso a conhecimentos técnicos na área do direito penal, mas apenas trazer à evidência as implicações e os efeitos reais que uma acusação deste âmbito, independentemente da existência de condenação ou sequer julgamento judicial, acarretam para as esferas pessoal, social e profissional do visado. Neste caso em particular, o predito julgamento social pode implicar prejuízos avultados, além do mais, na marca CR7. É, pois, nosso propósito circunscrever o artigo à análise da marca CR7, trazendo para a discussão a importância de as marcas se preocuparem com todos os seus elementos constitutivos (Silvestre & Marques, 2012) como é o exemplo de uma prática, ou melhor – um momento de prática – e as implicações deste para a construção discursiva da identidade da marca ou, por outro lado, para a sua degradação. Estamos, assim, perante um estudo de caso no âmbito da marca pessoal, todavia, este entendimento pode ser aplicado a qualquer outra marca, qualquer que seja a sua natureza (produto, empresa, serviço, cidade, região, país), para a projeção da sua imagem (positiva ou negativa) perante os *stakeholders*. Para tal, analisamos a mediação da ocorrência pela imprensa americana e portuguesa, em particular da versão *online* do jornal *The New York Times*, e do jornal *Público*, em finais de 2018, e identificamos evidências do respetivo impacto que esta tem na marca, através de uma abordagem transdisciplinar (Fairclough, 2003), que visa reunir, pelo diálogo, diferentes disciplinas e abordagens sobre o tema de pesquisa. Deste modo, a Linguística Aplicada, o *Branding* e o Direito são aqui chamados a dialogar por meio de abordagem qualitativa, na qual se cruza a abordagem de natureza interpretativa do Direito com a análise da Marca, seguindo a abordagem sócio discursiva que nos permite descrevê-la, analisá-la e explicá-la. Para tal, recorremos ao estudo da mediação do momento de prática supra descrito, veiculada pelos *media*, com base nos princípios da Linguística Sistémico-Funcional (LSF) (Halliday, 2014), descrevendo a forma como as principais entidades envolvidas – Cristiano Ronaldo e Kathryn Mayorga – são realizadas no texto e usando como instrumento de análise a Teoria da Avaliatividade (Martin & Rose, 2003; Martin & White, 2005). Tal permite-nos identificar, interpretar e explicar, em particular, formas de Julgamento, inscritas no sistema de Avaliatividade de Martin e White (2005), que serão descritas no ponto 3.1. do presente artigo. São formas instanciadas pelos fraseados, trazendo para a análise os significados avaliativos através dos quais os produtores de texto expressam os seus pontos de vista (positivos ou negativos), configurando sistemas de representação através dos quais a marca CR7 fica agregada. A Avaliatividade é, como referido anteriormente, um sistema que, situando-se no enquadramento teórico da LSF, pode ser localizado como um sistema interpessoal ao nível da semântica do discurso e que, simultaneamente, se articula com o sistema da Negociação e com o sistema do Envolvimento.

O artigo encontra-se estruturado em cinco partes fundamentais. Na primeira parte, apresentamos uma breve contextualização do caso, bem como o propósito geral do estudo, referindo a metodologia usada. Na segunda parte, trazemos à discussão o enquadramento jurídico subjacente à mediação e mediatização do caso. Na terceira parte, abordamos o enquadramento teórico-metodológico da marca. Na quarta parte, procedemos ao estudo de caso, mediado pela imprensa digital, com especial incidência na análise das representações e na reflexão sobre as implicações das mesmas na marca pessoal. Por fim, apresentamos as considerações finais sobre as reflexões relativas aos *media*, o Direito e a Justiça, os resultados da análise e a importância da abordagem usada para o estuda da marca.

2 – Aproximação ao objeto de estudo

A projeção social que o caso em análise assumiu pode pôr em crise alguns dos valores basilares de qualquer Estado de Direito Democrático. Valerá a pena, para melhor ilustrar o referido, trazer à colação alguns dos direitos consagrados na *Constituição da República Portuguesa* (CRP). Neste sentido, veja-se que o artigo 26.º da CRP consagra, ademais, o reconhecimento dos direitos ao bom nome e reputação e à reserva da intimidade da vida privada. Bem sabemos que a vida privada de personalidades públicas, como sucede neste caso, será menos privada do que a do comum cidadão e temos presenciado que o direito à reserva da vida privada se vai desvanecendo de forma proporcional à intensificação da notoriedade e do estatuto social da pessoa, porém jamais poderá ser anulado. A par destes direitos, consagra igualmente a CRP, nos artigos 37.º e 38.º respetivamente, o direito à liberdade de expressão e informação e o direito à liberdade de imprensa. No âmbito da liberdade de expressão e informação, consagra-se que "todos têm o direito de exprimir e divulgar livremente o seu pensamento pela palavra, pela imagem ou por qualquer outro modo, bem como o direito de informar, de se informar e de ser informados, sem impedimentos nem discriminações". Estes direitos, que não podem ser limitados sob pena de deixarem de cumprir a função que servem, não podem, naturalmente, violar os direitos daqueles que são objeto da notícia e devem procurar que haja direito de resposta estando inclusivamente obrigados a retificar notícias incorretas, a indemnizar eventuais danos que provoquem e, bem assim, a sanções de natureza criminal ou contraordenacional sempre que, em nome do exercício do direito de liberdade de expressão e informação, incorrem em infrações legais. A liberdade de imprensa é garantida no artigo 38.º da CRP que declara, igualmente, a independência dos órgãos de comunicação social. Importa, porém, reforçar que o exercício destes direitos tem de respeitar sempre os direitos, as liberdades e as garantias pessoais de todos os indivíduos. De facto, como refere Martins (2013, p. 141), "o direito de informar não pode ser confundido com o mero sensacionalismo, o voyeurismo e outros fenómenos semelhantes, como o dos títulos de capa e das notícias que não têm qualquer suporte no conteúdo das mesmas e, às vezes, até são desmentidas por estas".

Dos valores e princípios plasmados no *Código Deontológico de Jornalistas português* e no *Código Internacional* (IFJ – *Declaration of Principles on the Conduct of Journalists*) e, bem assim, no *Estatuto do Jornalista*, aprovado pela Lei n.º 1/99, de 1 de janeiro, resulta claro que o jornalista não deve veicular opiniões como se fossem factos, não deve beliscar a presunção de inocência nem devassar a vida privada. O relacionamento entre os *media* e a justiça não é, no entanto, pacífico. Como referem Machado e Santos (2009, p. 16) "os encontros entre os media e a justiça criam novas realidades, nomeadamente os "julgamentos mediáticos" e os "dramas públicos" que, na sua dinâmica de desenvolvimento e racionalidades específicas, acabam por projetar novas morais e novas visões do mundo". Estamos, por conseguinte, perante dois domínios de atividade com especificidades, por vezes, inconciliáveis em termos de comunicação. O domínio jurídico caracteriza-se por um modo de comunicação pobre em contexto, em comparação com o domínio do jornalismo, no qual a comunicação é mais próxima das transações correntes de natureza informal (rico em contexto) (Hall, 1996). Acresce a esta questão a dimensão tempo como princípio organizador de cada uma dessas atividades ser divergente nos respetivos campos; o direito valoriza o ´tempo longo´ enquanto o jornalismo tem por base o imediato, a atualidade. O tempo é fundamental na vida cultural, social e pessoal do indivíduo, sendo, por conseguinte, dimensionado num quadro temporal diferenciado para constituir um fator determinante de conflitualidade nos diferentes domínios. Nesta arena de conflitualidade, é sabido que as figuras públicas são, na verdade, o melhor campo do sensacionalismo e, por isso, nesta situação, podem prevalecer desvalores associados à ambição do aumento de audiências.

É, por conseguinte, neste enquadramento que o termo "media(tiza)**ção**" foi usado para o título do presente trabalho, privilegiando o enfoque da nossa atenção primordialmente para o termo "mediação", que evidencia que as práticas sociais são mediadas pelo discurso, através do qual as identidades e a realidade social são construídas.

Centrando-nos no caso em análise, para a marca e para o valor imediato que esta produz não importa, pois, se Cristiano Ronaldo violou ou não Kathryn Mayorga, nem quais são as conclusões jurídicas do caso. Importa apenas a suspeição e o facto de a imagem daí resultante poder não corresponder aos valores que profetiza. E tudo isto porque há uma coincidência entre o valor da pessoa e o da marca CR7/Cristiano Ronaldo. A marca CR7/Cristiano Ronaldo é indissociável da pessoa "Cristiano Ronaldo" e, por isso, absorve e reflete o sucesso e o insucesso desta. Há, com efeito, um evidente nexo de causalidade entre o valor da pessoa e o da marca CR7/Cristiano Ronaldo já que esta não se autonomizou daquela, não apresenta identidade própria, confundindo-se, na verdade, marca e pessoa. Trata-se de uma marca internacional, registada em inúmeros países, qualificada como marca de prestígio, que colhe, em termos jurídicos, uma proteção especial, impedindo registos de marcas iguais ou confundíveis para apor em qualquer produto ou serviço. A notoriedade que ostenta e que, em princípio, a sustenta, é o fio condutor para transferir para a marca os fracassos que incidirem sobre a pessoa "Cristiano Ronaldo".

Importa, por conseguinte, refletir e analisar este caso, para trazer à evidência a importância que a disrupção de um elemento constitutivo da marca, qualquer que seja a sua natureza tangível ou intangível, pode trazer à coerência e coesão da identidade da marca nos seus diferentes momentos de vida.

3 – Enquadramento teórico-metodológico da marca

Considerando o campo de estudo em análise, centramo-nos na marca pessoal, ou melhor, no *branding* pessoal como a prática de marketização de pessoas e as suas carreiras como marcas. O termo 'personal branding' foi cunhado por Tom Peters em 1997, nos Estados Unidos da América. No Brasil, por exemplo, Arthur Bender lançou o conceito em 2001 (Bender, 2009). A partir do artigo de Tom Peters, uma nova área do *Branding* emerge e a bibliografia floresce fundamentalmente na área do Marketing, da Publicidade e da Comunicação, marcando o início da era do *personal branding*.

A marca CR7 foi criada em 2006 (para vestuário, sapatos e chapelaria), mas antes dessa data, Cristiano Ronaldo já era uma marca pois usa o seu *status* social para apoiar organizações para obtenção de ganhos sociais ou financeiros. Esta marca é, com efeito, um exemplo de marca pessoal porque reconhecemos que (i) o sujeito ideal(izado) é focado, adaptável e autoconfiante na tomada de iniciativa para o seu autodesenvolvimento e autorrealização; (ii) é um empreendedor de si mesmo; (iii) força os seus próprios limites, transpondo-os independentemente dos constrangimentos que possam surgir para atingir os objetivos e realizações; (iv) é um homem entusiástico, com atitude e envolvimento emocional à medida que empreende um caminho previamente delineado; (v) é munido de satisfação e camaradagem alavancando a sensação de bem-estar; (vi) é o modelo de sujeito neoliberal ideal – com poder; (vii) em suma, esta pessoa, que proveio da pobreza e se tornou multimilionária, representa o discurso neoliberal de autorrealização – uma construção do discurso de marca pessoal.

Cristiano Ronaldo é um exemplo de marca pessoal. No entanto, a marca CR7, como qualquer outra marca, está sujeita a todos os fracassos, sucessos ou insucessos ao longo da sua existência. A análise da marca CR7 – uma marca pessoal – serve aqui o propósito maior de expandir o estudo do *Branding* e de trazer à evidência a necessidade de considerarmos todos os elementos constitutivos da marca nos inúmeros momentos de prática de uma marca, seja esta pessoal, produto, serviço ou outro. Por conseguinte, estudamos a marca, de uma forma abrangente, seguindo a abordagem sócio discursiva que permite descrevê-la, analisá-la e explicá-la na sua complexidade, inscrita no quadro teórico da Linguística-Sistémico-Funcional (LSF). Partimos do pressuposto de que a marca é um organismo vivo e, desse modo, entendemo-la como uma metáfora ontológica: a marca é um ser vivo (Lakoff & Johnson, 1980). Assim, podemos melhor compreender os seus processos de construção, consolidação, avaliação e reconstrução (Silvestre & Marques, 2012, 2015, 2017).

3.1 – O Sistema de Avaliatividade como instrumento analítico – o Julgamento

A forma como o produtor de texto se posiciona em relação ao seu interlocutor e a forma como julga o mundo interno e externo mediado pelo texto traz à tona diferentes tipos de avaliação. Martin e White (2005) propõem o Sistema da Avaliatividade (*Appraisal*), no âmbito dos significados interpessoais, como um dos principais recursos semânticos do discurso que os constroem (a par da Negociação e do Envolvimento). Este sistema é constituído por três subsistemas principais: A **Atitude**, o **Comprometimento** e a **Gradação**. A Atitude abarca três campos semânticos: o **Afeto** (recursos utilizados para expressar emoção), o **Julgamento** (recursos utilizados para julgar o caráter/comportamento) e a **Apreciação** (recursos utilizados para atribuir valor às coisas) (Martin & Rose, 2003).

O Julgamento, campo semântico selecionado como instrumento analítico para o propósito aqui identificado, justifica-se pelo facto de pretendermos analisar as avaliações do comportamento das pessoas envolvidas, nomeadamente de Cristiano Ronaldo, bem como do caso em análise, em termos de moralidade, legalidade, capacidade e normalidade, determinadas por aspetos de cultura, expectativas, pretensões e crenças individuais. O Julgamento pode-se manifestar de forma explícita (inscrita), implícita e sinalizada (provocada). No implícito, ao contrário do explícito, aparentemente não existem termos atitudinais explícitos, mas observa-se uma interpretação avaliativa pela conjunção do discurso e do contexto. O Julgamento sinalizado é um julgamento que se manifesta pela existência de elementos de pendor atitudinal. Ikeda (2010, p. 167) explicita que, seguindo Martin (2000), a avaliação implícita ou provocada pode ser realizada através de *tokens* de Julgamento, descrições sem o uso de elementos expressamente avaliativos. Tal implica determinado conhecimento por parte do leitor pela sua posição social, cultural e ideológica, isto é, pelo seu sistema de valores. Só pelo conhecimento de determinadas normas partilhadas, como as sociais, o leitor/ouvinte identificará marcas de julgamento que não sejam explícitas.

Figura 1 – **Campo semântico do Julgamento**
Fonte: adaptado de Martin (2000)

A Estima Social está relacionada com: a Normalidade (até que ponto se é especial, normal ou estranho), com a Capacidade (quão capaz/competente se é), com a Tenacidade (quão determinado se é). São avaliações que positiva ou negativamente não têm implicações legais ou morais, mas conduzem a que se seja elevado como elemento de referência de uma comunidade ou, pelo contrário, que seja considerado disfuncional ou diminuído.

A Sanção Social relaciona-se com a Veracidade (quão honesto se é) e com a Propriedade (quão ético se é). Envolve, pois, valores de respeito pelas leis e pela moralidade, honra e religiosidade, isto é, pelas instituições como o governo e a igreja e o sistema jurídico. Por não se cumprirem as regras, corre-se o risco de se ser punido.

3.2 – Os corpora da amostra

Os *corpora* são constituídos por uma amostra da imprensa *online* americana no período decorrente entre setembro e dezembro de 2018. A escolha deste período justifica-se pelo impacto internacional da notícia, através da revista alemã *Der Spiegel*, a 28 de setembro, sendo analisadas as notícias até ao final do ano de 2018. Da imprensa americana, foi selecionado o *The New York Times*, um jornal diário norte-americano, de referência nacional e cuja versão impressa tem uma vasta circulação. Da imprensa portuguesa, foi selecionado o jornal *Público* (versão *online*), um jornal diário português, de referência em Portugal. Salientamos que foram analisados todos os artigos publicados no período em questão, por ambos os jornais, na modalidade *online*. O *corpus* do jornal americano totaliza 2099 palavras (2 artigos), como se observa no quadro seguinte (Quadro 1a):

Quadro 1a – ***Corpus* do jornal *The New York Times***

The New York Times		
Data	**Título**	**N.º de palavras** 2099
01.10.2018 (texto 1)	Las Vegas Police Reopen Investigation Into Sexual Assault Claim Said to Involve Ronaldo	804
23.10.2018 (texto 2)	Cristiano Ronaldo, Amid a Cloud of Allegations, Basks in Adulation	1295

O *corpus* do jornal português (6 textos) totaliza um total de 2347 palavras, conforme ilustrado no quadro abaixo (Quadro 1b):

Quadro 1b – ***Corpus* do jornal *Público***

Público		
Data	**Título**	**N.º de palavras** 2347
28.09.2018 (texto 1)	Norte-americana acusa Ronaldo de violação	262
02.10.2018 (texto 2)	Quem é Kathryn Mayorga, a mulher que acusa Ronaldo de violação?	534
03.10.2018 (texto 3)	Cristiano Ronaldo: "A violação é um crime abjecto"	214
05.10.2018 (texto 4)	Foto de Ronaldo retirada do site da dona do video-jogo FIFA	719
08.10.2018 (texto 5)	Revista alemã divulga acordo com mulher que acusa Ronaldo de violação	416
11.10.2018 (texto 6)	Caso Ronaldo: Real Madrid processa *Correio da Manhã* por difamação	202

Apresentados os *corpora* em estudo, passamos, no ponto 3.3, à descrição dos procedimentos de análise.

3.3 – Procedimentos

Descrita a informação fundamental sobre a Atitude, e considerando a abordagem de natureza qualitativa levada a cabo no presente trabalho, realizamos uma análise manual dos textos, identificando inicialmente as ocorrências nas diferentes manifestações de Julgamento, passando posteriormente à apresentação de resultados com a respetiva classificação em termos de estima ou sanção social, pela descrição e explicação de resultados através de quadros, inscritos na secção seguinte.

Neste sentido, procuramos analisar essas escolhas, seguindo o trabalho desenvolvido por diversos autores no quadro teórico da Linguística Sistémico-Funcional (como, por exemplo, Eggins & Slade, 1997; Hunston & Thompson, 2000; Martin, 2000, 2002, 2003, 2004; Martin & Rose, 2003;

Martin & White, 2005, e White, 2004, no português, Vian, 2009; Ikeda, 2010, entre outros), a um nível semântico-discursivo, focando a análise no papel da mediação, usando mais especificamente o campo semântico do Julgamento do sistema de Avaliatividade de Martin e White (2005).

Para a contagem de ocorrências, foi considerado o sistema atitudinal (Martin & White, 2005) do jornalista em cada um dos textos, responsável pela avaliação filtrada na sua narrativa, bem como a projeção (Halliday, 2004) nas falas dos participantes principais, e inscritas nos quadros na secção seguinte. No enfoque das entidades envolvidas, recorremos pontualmente ao inventário dos atores sociais de van Leeuwen (1996).

4 – A mediação de um momento de prática: Análise e resultados

As marcas são constituídas por inúmeros elementos constitutivos, quer ao nível das representações, como, por exemplo, as veiculadas pelos *media*, quer das interações, como uma negociação, ou dos textos, entendidos estes na aceção hallidaiana do termo, nas suas diferentes formas, como seja, por exemplo, os tangíveis, como um edifício – a empresa. Para o estudo das representações, formulámos a seguinte pergunta de pesquisa:

(i) Na mediação do caso, que representações são construídas sobre as principais entidades – Cristiano Ronaldo e Kathryn Mayorga – envolvidas no caso?

Para responder à questão, apresentamos, num primeiro momento, o estudo sobre as entidades envolvidas nos jornais selecionados para amostra e, num segundo momento, apresentamos o estudo do Julgamento sobre essas entidades. Num terceiro momento, formulámos a segunda pergunta de pesquisa:

(ii) Como resultado da mediação da notícia, que prejuízos tangíveis resultaram em termos de Ativos na marca CR7?

Para responder a esta questão, elencamos no ponto 4.3 alguns dados divulgados pela imprensa à data como reação às notícias dos *media*.

4.1 – Enfoque nas entidades envolvidas

A forma como as entidades envolvidas são realizadas no texto, como são classificadas, descritas e identificadas, realizam escolhas dos produtores de texto. Constatamos algumas desigualdades na construção discursiva dessas entidades, quer relativamente a Cristiano Ronaldo, quer relativamente a Kathryn Mayorga, seja através de pronomes *he*, *she*, nomes *Cristiano*, *Kathryn* ou outros recursos.

No quadro 2a, apresentamos os principais participantes envolvidos no texto 1 do jornal americano.

Quadro 2a – **Principais participantes no *The New York Times* (texto 1)**

Cristiano Ronaldo	Kathryn Mayorga	Outros
Ronaldo (9)	Mayorga (10)	lawyers (10)
Cristiano Ronaldo (4)	she (10)	police (5)
the soccer star (2)	woman (3)	
attacker (1)	Kathryn Mayorga (1)	
suspect (1)	her (1)	
the Portuguese star (1)	the victim (1)	
him (1)		
the person (1)		
the wealthy and famous (1)		

No quadro 2a, podemos ver que Kathryn Mayorga é referida predominantemente através do seu apelido (10 ocorrências), em termos da cultura americana, esta nomeação é realizada por formalização (van Leeuwen, 1996) e do pronome pessoal “she” (10 ocorrências), pronominalização, que reforça alguma distância/ impessoalidade. É referida de uma forma não marcada através de: “a woman” (determinante indefinido + nome comum), “the woman” (determinante definido + nome comum). Observa-se também uma ocorrência de natureza Sanção social negativa na referência “the victim”, no qual o determinante definido a remete para o papel de vítima.

Por outro lado, a entidade Cristiano Ronaldo é referida maioritariamente pelo seu nome próprio (Cristiano ou Cristiano Ronaldo), nomeação realizada por informalização, mas também por funcionalização com atributos determinantes para o identificar e integrar num papel dentro de um determinado grupo privilegiado da sociedade, como “the soccer star”, “the Portuguese star who plays for the Italian club Juventus”, e categorizado por avaliação como “the wealthy and famous”. Como referência negativa, aparece classificado de “the attacker” e “suspect”. Para compararmos a diferença entre estas duas entidades podemos ver também a disparidade de ocorrências no uso do pronome pessoal existente quando referido a Kathryn “she”, com 10 ocorrências, e “he” referido a Ronaldo, com 0 ocorrências. Estas desigualdades manifestam-se a dois níveis: (i) nas referências integradas na Estima social positiva, materializadas no uso de recursos como classe e qualidades de forma a identificá-lo num posicionamento privilegiado; e (ii) nas referências integradas na Sanção social, materializadas de forma negativa por um vocabulário inscrito no âmbito legal como “the attacker” e “suspect”. Os outros participantes são representados por genericização, constituídos por dois grupos: os advogados (os advogados do jogador são representados com maior número de ocorrência, num total de 7, e o advogado de Kathryn Mayorga num total de 3) e a polícia de Las Vegas (5 ocorrências).

O texto 2 do *New York Times*, de 1430 palavras, uma parte substancial do texto é sobre o jogador, como profissional, e dos seus fãs. As restantes 571 palavras, reportam à ocorrência de Las Vegas. Considerando que o campo da notícia incide fundamentalmente sobre Ronaldo e a sua *performance* enquanto profissional e sobre os seus fãs, não se estranha o elevado número de referências nem a desigualdade de referências.

Quadro 2b – **Principais participantes no *The New York Times* (texto 2)**

Cristiano Ronaldo	Kathryn Mayorga	Outros
he (18)	she (3)	fans (7) the Las Vegas Police Department (1)
Ronaldo (15)	Kathryn Mayorga (1)	
Cristiano Ronaldo (3)		
the magnificent No. 7 (1)		

Neste seguimento, uma leitura sobre as entidades aqui construídas, quando comparadas com o texto 1, permite-nos dizer que o texto apresenta predominantemente referências não marcadas para as duas entidades. As entidades são referidas pelo nome próprio "Cristiano Ronaldo" (informalização) e "Kathryn Mayorga" (semiformalização) e pelos pronomes pessoais "he" e "she". Realce-se também o elevado número de ocorrências do pronome pessoal "he" (18 vezes) para referir Ronaldo, contrariamente ao texto 1.

Efetivamente, quando falamos de alguém, começamos por nomeá-lo, mas depois identificamos frequentemente a pessoa pelo uso do pronome pessoal, como no texto 2. Para além destas formas encontradas no texto, há uma ocorrência para identificar Ronaldo como "the magnificent No. 7", no qual o determinante definido "the" é usado na assunção de que a restante parte é reconhecida pelos leitores "magnificent No. 7", número através do qual é reconhecido mundialmente, e presente no seu logótipo CR7. A entidade é, assim, referida no texto na sua forma de Estima social positiva.

Para procedermos a uma comparação com o universo português, passamos a apresentar os resultados do *corpus* em estudo. No quadro 3a, apresentamos as ocorrências relativas a Cristiano Ronaldo e a Kathryn Mayorga e no quadro 3b outros participantes. As ocorrências são apresentadas com indicação do texto, seguida do número de ocorrências (p. ex.: t1:6) e o total entre parênteses. No caso de existirem ocorrências do mesmo participante em mais do que um texto, estas são apresentadas por ordem decrescente de numeração atribuída ao texto (p. ex.: t4: 6; t3:3). O total de ocorrências está indicado entre parênteses.

As elipses não foram consideradas devido ao facto de estas serem indicadas pela desinência verbal frequente no português, o que não acontece no inglês.

Quadro 3a – **Principais participantes no *Público***

Referência	Texto/Ocorrências	Referência	Texto/Ocorrências
Ronaldo	t1:5; t5:4; t6:3; t2:2; t4:2; t3:1 (17)	Kathryn Mayorga	t5:3; t1:2; t2: 2; t6:2; t3:1; t4:1 (11)
Cristiano Ronaldo	t4: 6; t3:3; t6:3; t2:2; t1:1; t5:1; (16)	Mayorga	t1:6; t2:1; t6:1 (8)
Jogador	t4: 5; t5:4; t1:2; t3:2 (13)	Kathryn	t2:3; t5:3 (6)
Futebolista	t1:2; t4:1 (3)	Mulher	t1:2; t5: 2; t3:1 (5)
Português	t4:2 (2)	norte-americana	t1:2; t3:1; t5:1 (4)
atacante português	t4:2 (2)	Filha	t2:2 (2)
Deus do futebol	t2:1 (1)	Ela	t2: 1; t5:1 (2)
Internacional	t4:1 (1)	a então aspirante a modelo	t3:1 (1)
marca CR7	t4:1 (1)	senhora P	t5:1 (1)
marca "Cristiano Ronaldo"	t4:1 (1)	Cliente	t5:1 (1)
marca portuguesa	t4:1 (1)	alguém a querer ganhar fama	t5:1 (1)
'produto' nacional	t4:1 (1)		
identidade do visado	t6:1 (1)		
identidade do aggressor	t6:1 (1)		

Quando se faz referência a Cristiano Ronaldo como ator social, a mesma é materializada principalmente por nomeação (nome), com 33 ocorrências, e funcionalização (a referência é feita em termos da sua atividade – jogador de futebol), com 18 ocorrências, ou como marca, com 3 ocorrências. Por outro lado, a referência a Kathryn Mayorga é feita por nomeação, com 25 ocorrências, mas também com uma elevada classificação generalizada como "mulher", com 5 ocorrências; nacionalidade "norte-americana", com 4 ocorrências; identificação relacional "filha", com 2 ocorrências, e classe "a então aspirante a modelo".

Relativamente aos outros participantes, apresentados no quadro infra (Quadro 3.b), remetem para campos distintos, de acordo com as diferentes vozes e textos, embora estes não constem como foco principal da análise.

Quadro 3b – **Outros participantes no *Público***

Outros	Texto/Ocorrências
marcas	t4: 12 (12)
Der Spiegel	t1:4; t2:4: t5:4 (12)
clubes de futebol	t6:7; t4:4 (11)
familiares de K. [pais e namorado, terapeuta]	t2:7 (7)
advogados	t5:3; t6:2 (5)
Correio da Manhã	t6:4 (4)
Polícia de Las Vegas	t5:3 (3)
Deus	t2:2 (2)
pessoal medico	t5:2 (2)
Fãs	t4:2 (2)

Na categoria de outros participantes, salientamos as principais ocorrências: a referência às marcas e à revista *Der Spiegel,* ambas com 12 ocorrências, aos clubes de futebol Juventus e Real Madrid, com 11 ocorrências, e aos familiares de Kathryn Mayorga, com 7 ocorrências. No texto 1, os principais participantes são Cristiano Ronaldo e Kathryn Mayorga, sendo de salientar a voz de acusação desta última e o número de ocorrências da revista alemã que divulgou a notícia *Der Spiegel* (t1:4). No texto 2, esse participante (a revista) ocorre com o mesmo número (t2:4), e, tal como o texto 1, centra-se na projeção da voz de Kathryn. Surge como referência de "filha" (t2:2), daí decorrendo ocorrências de participantes próximos de Kathryn (pai, mãe (t2:6) e terapeuta (t2:1)) e como voz que acusa Ronaldo.

O texto 3, à semelhança do texto 1, tem como principais participantes Cristiano Ronaldo e Kathryn Mayorga, mas, neste *corpus*, é a vez da voz do jogador que refuta as acusações. O texto 4 centra-se em Cristiano Ronaldo, na sua marca e nas marcas associadas ao jogador (EA Sports, com 7 ocorrências, Nike com 4 ocorrências e outras enumeradas numa ocorrência), havendo também referência ao Clube da Juventus (t4:4) e aos fãs ("Seguidores de Cristiano Ronaldo" t4:2). Para além de Kathryn e de Ronaldo, no texto 5, os participantes do texto 5 repartem-se fundamentalmente entre a categoria de advogados (de Cristiano Ronaldo (t5:2) e de Kathryn Mayorga (t5:1), pessoal médico (t5:2) e a polícia de Las Vegas (t5:3) e a revista *der Spiegel* (t5:4) que divulgou o acordo. Finalmente, o texto 6, que tem como título "Caso Ronaldo: Real Madrid processa *Correio da Manhã* por difamação", tem, para além de Kathryn e de Ronaldo, como participantes o clube Real Madrid (t6:7) e o jornal (t6:4), os advogados de Cristiano Ronaldo (t6:2) e do Real Madrid (t6:1) porque a notícia do jornal, de acordo com a qual o clube obriga Ronaldo a pagar a Kathryn, denigre a imagem do clube.

De realçar a diferença de variedade e quantidade de ocorrências com outros participantes no *The New York Times* e no *Público*. Com efeito, não obstante existir um conjunto de participantes que são incluídos em ambos os jornais, quer pela sua atuação direta no caso (do universo jurídico e de autoridade policial), quer decorrente da projeção de Ronaldo (fãs), verificamos, nos textos portugueses, a inclusão de um maior número de participantes. Esta representação da realidade permite aferir que não se trata unicamente de um caso mediado pela imprensa a ser tratado no universo jurídico, mas de um caso cuja dimensão perpassa para a imagem do jogador junto das marcas com as quais mantém contratos e para o universo dos clubes de futebol.

4.2 – Análise do Julgamento

A partir da análise efetuada sobre o Julgamento, foram elaborados dois quadros (Quadro 4a e Quadro 4b), que se repartem entre Sanção Social e a Estima Social, por sua vez, subdividas, com a identificação, para cada texto, do número de ocorrências (positivas e negativas).

Salientam-se, em geral, no texto 1, as ocorrências em termos de Propriedade Negativa (Sanção Social), no texto 2, as ocorrências em termos de Capacidade Positiva (Estima Social) e, no texto 3, as ocorrências em termos de Propriedade Negativa (Sanção Social) e de Capacidade Positiva (Estima Social).

Quadro 4a – **Distribuição do Julgamento no *The New York Times***

	Sanção Social				Estima Social					
	Veracidade		Propriedade		Normalidade		Capacidade		Tenacidade	
Polaridade	+	-	+	-	+	-	+	-	+	-
Texto 1	1	4	-	14	1	-	3	1	1	-
Texto 2	-	-	2	6	7	-	13	-	4	-
Total	1	4	2	20	8	-	16	1	5	-

Os resultados apresentados revelam que, no texto 1, a principal avaliação em termos de Sanção Social – Propriedade Negativa – se prende com a acusação contra Cristiano Ronaldo (p. ex.: The Las Vegas police are investigating sexual allegations against him.), com referências materializadas de forma negativa por um vocabulário inscrito no âmbito legal como "the attacker" e "suspect" de Kathryn Mayorga. As ocorrências no âmbito da Veracidade-Negativa relacionam-se, em número equivalente, por um lado, ao facto de se tratar de uma notícia alegadamente falsa (p. ex.: "Ronaldo called it "fake news" in an Instagram vídeo.") e, por outro, de as respostas de Ronaldo e dos seus amigos ao inquérito apresentarem incongruências (p. ex.: "According to Der Spiegel, there were multiple versions of answers to the questionnaire." Na Estima Social, o destaque, apesar de ocorrer em número reduzido, centra-se na Capacidade em termos positivos. As referências integradas na Estima Social positiva são materializadas no uso de recursos como classe e qualidades de forma a identificar Ronaldo num posicionamento privilegiado, na classe dos ricos, famosos e bem-sucedidos.

Relativamente aos resultados da análise do texto 2, observamos que a maior parte do artigo (as primeiras 758 palavras) não se debruça sobre o caso da alegada violação. É um artigo centrado essencialmente na Estima Social, com polaridade positiva. As ocorrências são positivas, em maior número, como Capacidade Positiva (p. ex.: "Ronaldo won three consecutive Champions League titles, and four in total, at Real Madrid, streaking away as the competition's top scorer ever in the process."). Ronaldo é construído positivamente como sendo tenaz (p. ex.: "the triumph of self-improvement"), acima do mortal comum e mais capaz, para além do número de ocorrências relacionadas com a sua atitude para com os fãs (Propriedade-

-positiva). Na parte do artigo referente ao caso, mantém-se a construção positiva de Ronaldo em termos de Estima Social, mas acrescenta-se a Sanção Social – Propriedade negativa, relacionada com a acusação de que é alvo (p. ex.: "Since then, the German magazine Der Spiegel has published the account of Kathryn Mayorga, who has said that Ronaldo raped her in a Las Vegas hotel in June 2009.").

Relativamente aos artigos publicados no *Público*, o Julgamento reparte-se do seguinte modo:

Quadro 4b – **Distribuição do Julgamento no *Público***

	Sanção Social				Estima Social					
Polaridade	**Veracidade**		**Propriedade**		**Normalidade**		**Capacidade**		**Tenacidade**	
	+	-	+	-	+	-	+	-	+	-
Texto 1	-	-	-	10	-	2	-	-	-	-
Texto 2	2	-	-	6	3	3	3	7	1	-
Texto 3	3	1	-	6	-	-	-	-	1	-
Texto 4	-	1	-	5	3	-	6	-	1	-
Texto 5	-	1	-	8	-		-	-	-	-
Texto 6	1	3	-	4	-	-	-	-	-	-
Total	6	6	-	39	6	5	9	7	3	

A Sanção Social permeia todas as notícias portuguesas recorrentemente de forma explícita, sendo claro o elevado número de ocorrências no âmbito da Propriedade Negativa.

No texto 1, a Propriedade Negativa destaca-se pelo uso de processos (p. ex.: acusar; denunciar; questionar), em que o principal participante é Mayorga ("A mulher de 34 anos denunciou **publicamente** o caso que remonta a 2009."), mas também pelo recurso a nominalizações (p. ex.: violação; queixa; acusação). As restantes ocorrências surgem em número reduzido (2 ocorrências), integram-se na Estima Social – Normalidade Negativa e prendem-se com uma construção negativa de Ronaldo projetada pela voz de Kathryn após a alegada violação (p. ex.: "Mayorga diz ainda que Ronaldo lhe disse que era 'um bom rapaz 99% das vezes e que não sabia de onde vinha o 1%.'").

A notícia 2 é a que apresenta características mais distintas de Julgamento. Tal deve-se essencialmente à projeção na voz de Kathryn. Para além da Sanção Social como a acima referida, é aqui construída uma Sanção Social projetada que tem como fonte a justiça divina "Deus" (p. ex.: "O que pensará Deus do que fizeste?!"). Em relação à Estima Social, descreve-se o percurso escolar de Kathryn (p. ex.: "Contou que a escola lhe foi difícil porque sofre de défice de atenção e tinha dificuldades de aprendizagem" – Capacidade negativa – com dificuldades), com superação ("Ainda assim, conseguiu licenciar-se em jornalismo na Universidade do Nevada" – Tenacidade positiva), da sua vida antes de Ronaldo (p. ex.: "Trabalhava todos os dias, comia comida vegetariana e fazia muita coisa como modelo" – Normalidade positiva), após Ronaldo (p. ex.: "À revista, alegou ainda que teve de abandonar o seu trabalho como modelo porque não conseguia sequer aproximar-se do hotel onde fora violentada" – Capacidade negativa) e no momento da queixa (Capacidade negativa), existindo referências de que não se trata de uma questão de dinheiro "(…) nunca lhe interessou o dinheiro mas que se fizesse justiça." – Veracidade positiva explícita, mas também implícita: "Mayorga voltou para casa dos pais, num dos melhores bairros de Las Vegas, com piscina e vistas sobre a cidade"-–-Ronaldo surge como Estima Social positiva, "Deus do futebol", mas associado à Sanção negativa.

Na notícia 3, a Sanção Social, pela Propriedade Negativa (maior número de ocorrências) repete-se relativamente ao anteriormente descrito, pelo uso do mesmo léxico de acusação. As ocorrências de Veracidade, quer positiva, quer negativa, prendem-se com a manifestação da inocência de Ronaldo (p. ex.: "(…) jogador de futebol garante que nada lhe pesa na consciência."; p. ex.: "Não vou alimentar o espetáculo mediático montado por quem se quer promover à minha custa").

A Propriedade Negativa também faz parte da notícia 4, porém, são integrados outros participantes que reagem à alegada violação e cujo impacto é significativo considerando tratar-se de reputadas marcas com as quais Ronaldo tem contratos. Por outro lado, o maior número de ocorrências relaciona-se com a Estima Social, sobretudo pela Capacidade Positiva que se relaciona com a sua vida profissional no futebol, mas principalmente pela sua expansão como marca (p. ex.: "O português tem ou teve igualmente contratos com a marca de relógios Tag Heuer, com a multinacional da nutrição Herbalife, com os laboratórios Abbott, com a empresa que produz o champô Linic, com a companhia aérea Emirates e com a empresa de tecnologia Samsung.")

Nas notícias 5 e 6, reitera-se o Julgamento como Sanção Social e Propriedade Negativa, nos mesmos termos dos descritos nas notícias portuguesas. Acrescenta-se ainda que, na notícia 6, duas ocorrências neste âmbito remetem para uma situação de entre o clube Real Madrid e um jornal português relativa ao caso em estudo (p. ex.: "Real Madrid processa *Correio da Manhã* **por difamação.**". As ocorrências de Veracidade apresentada na sua forma negativa (p. ex.: notícia 5: o jogador alegou que se tratava apenas de alguém a querer ganhar fama à custa do seu nome").

Em traços gerais, quantificado o número de ocorrências, verifica-se que, no *corpus* americano não há diferenças significativas em termos de ocorrências entre a Sanção Social e a Estima Social. Destaca-se, na Sanção Social, a Propriedade negativa, que se prende com a acusação contra Cristiano Ronaldo e, na Estima Social, a Capacidade positiva resultante da sua prestação profissional. Quanto ao *corpus* português, constata-se um predomínio da Sanção Social relativamente à Estima Social, em particular da Propriedade negativa, com 34 ocorrências enquanto a Estima Social – Capacidade positiva tem um número reduzido, com 9 ocorrências.

Considerando a nossa abordagem sócio discursiva para o estudo da marca, recordamos a importância destas representações pois, também elas, são elementos constitutivos da marca.

Os elementos de pendor atitudinal, no âmbito do Julgamento, representam a realidade de forma distinta já que o jornal *Público*, para além do predomínio da Sanção Social, recorre a uma estratégia de inclusão de um maior número de vozes para validar um maior julgamento social.

4.3 – Implicações no Ativo tangível

A informação apresentada pela *Der Spiegel* da alegada violação sexual a Kathryn Mayorga por Cristiano Ronaldo, em Las Vegas em 2009, teve impacto internacional e a divulgação desse momento de prática atingiu a pessoa Cristiano Ronaldo e a sua imagem e, consequentemente, a marca que detém. Por conseguinte, após identificadas as representações veiculadas pela imprensa – materialização de prejuízos intangíveis – procedemos à identificação das respetivas implicações ao nível do Ativo tangível da marca CR7. Para o efeito, formulámos a segunda pergunta de pesquisa:

(ii) Como resultado da mediação da notícia, que prejuízos tangíveis resultaram em termos de Ativos na marca CR7?

A marca de Cristiano Ronaldo vale, como é amplamente divulgado, milhões, sendo apontados valores na ordem dos 186 milhões, em 2018. A marca aumenta o seu valor em virtude do crescimento do mercado internacional, em particular, para a Ásia, das *performances* das equipas onde Cristiano Ronaldo tem jogado, para além da seleção portuguesa, e pelo facto de ter sido considerado o melhor jogador do mundo nos últimos anos.

Os prejuízos que se verificaram na marca imediatamente a pós a publicitação desta notícia foram notórios. Recorde-se que, à data, a "EA Sports" retirou a imagem de Cristiano Ronaldo da sua *homepage*, em concreto, do separador que encaminhava para o mundialmente conhecido jogo "FIFA 19". Justificaram, para tanto, que "estamos a monitorizar a situação, pois esperamos que os atletas que patrocinamos e embaixadores se comportem de uma forma condizente com os valores da EA") (*Jornal de Negócios*, 5 de outubro de 2018). Também a *Nike*, cujos contratos de publicidade com Cristiano Ronaldo atingem, segundo noticiado, verbas na ordem dos 2 mil milhões de dólares, se manifestou, em comunicado à *Associated Press*: "estamos profundamente preocupados com estas alegações perturbadoras e continuaremos a monitorizar de perto a situação" (*Diário de Notícias,* 4 de outubro de 2018).

O enfoque da notícia 4 recai fundamentalmente sobre a marca CR7, conforme os exemplos seguintes: "A imagem do jogador de futebol Cristiano Ronaldo foi esta sexta-feira retirada de *site* da empresa EA Sports, que produz o videojogo FIFA e cuja capa é uma fotografia do jogador; "Acções da Juventus caíram hoje quase 10%". Esta notícia distingue-se pelo facto de a Sanção Social aqui associada às marcas com as quais Ronaldo tem negócios. No entanto, para além desse impacto por parte das marcas com as quais Ronaldo tem, salienta-se o Julgamento de Estima Social positiva relativamente a Ronaldo. A Normalidade, a Capacidade e a Tenacidade são reiteradas em diferentes aspetos da vida profissional do jogador, para além da expansão da sua marca (p. ex.: "O último acordo assinado pelo internacional de 33 anos foi em 2016, um contrato vitalício [com a Nike] que, segundo a Forbes, vale até mil milhões de dólares (cerca de 890 milhões de euros)"; "O jogador lançou também a marca CR7 que começou pela roupa interior, mas já se alargou ao calçado e até a um grupo de hotéis com aquele nome.").

A repercussão do caso estendeu-se a várias marcas e à ONG *Save The Children* da qual o jogador é embaixador, tendo um porta-voz comunicado ao jornal *The Independent* estar a organização desmoralizada com as informações divulgadas e que procuraria reunir mais informação (*The Independent,* 02 de outubro de 2018). Por seu lado, a *Jeep*, patrocinadora do clube Juventus não incluiu Ronaldo numa campanha de promoção com jogadores da equipa. Outras marcas, como a *Toyota, Emirates, American Tourister; Panzerglass* não comentaram o caso, mas a *Yammamay*, marca de roupa interior italiana, manifestou apoio ao jogador, afirmando que se deve preservar a presunção de inocência.

5 – Considerações finais

Atualmente, a velocidade e o alcance que as notícias veiculadas pelos *media* atingem podem fazer perigar direitos fundamentais, como o reconhecimento dos direitos ao bom nome e reputação e à reserva da intimidade da vida privada sobretudo porque raramente haverá contraditório dirigido a quem leu a notícia. De referir ainda que a sede de sensacionalismo deturpa, muitas vezes, a veracidade dos factos. Os títulos das notícias, recorrendo a palavras como "vítima", "atacante" ou "estrela", conduzem a um julgamento imediato mesmo daqueles que nada mais leem. Estamos em crer que atualmente o relacionamento entre os *media* e o Direito e a Justiça não é o desejável. Basta, com efeito, atentarmos nos dizeres do n.º 2 do artigo 32.º da CRP que consagra, para além de um direito fundamental, uma garantia de Justiça a todos os cidadãos, ao garantir que "todo o arguido se presume inocente até ao trânsito em julgado da sentença de condenação, devendo ser julgado no mais curto prazo compatível com as garantias de defesa" e, no n.º 5, que todos os atos instrutórios estão subordinados ao princípio do contraditório. Este princípio garante o direito de defesa em sede judicial e não é respeitado nos julgamentos sociais.

Ressalvadas estas reflexões jurídicas colocadas na secção dois, e mesmo considerando que seria improvável não ser feita cobertura noticiosa do caso, é consensual que as notícias nos jornais devem evitar expressar julgamentos explícitos acerca do comportamento das pessoas na defesa de um jornalismo objetivo e rigoroso, na senda da Declaração dos Princípios de Conduta do Jornalista. Também Martin e White (2005, pp. 170–173) defendem que o jornalismo de qualidade (*hard news stories*) normalmente evitam julgamentos. Não obstante, quando analisamos uma ocorrência, aqui estudada como um momento de prática, sobre o qual os *media* produzem uma certa realidade sem o julgamento judicial, identificamos a ocorrência de julgamento social protagonizado pelo jornalista pela avaliação filtrada na sua narrativa e também de uma forma projetada relativamente às entidades principais nos textos, i.e., Cristiano Ronaldo e Kathryn Mayorga. Em suma, a Sanção Social permeia todas as notícias portuguesas e americanas recorrentemente de forma explícita. No *corpus* americano, verifica-se um maior equilíbrio entre a Sanção Social e a Estima Social enquanto no *corpus* português se constata uma maior discrepância entre os campos do Julgamento: a Sanção Social tem uma ocorrência significativa no que respeita à Propriedade negativa relativa à acusação contra Ronaldo.

A Avaliatividade no campo semântico do Julgamento revela-se um instrumento analítico fundamental para o estudo das marcas, pois a LSF com uma teoria de língua/linguagem como prática social, na qual os grupos sociais/ falantes se manifestam multimodalmente, traz ao escrutínio as relações entre linguagem e sociedade nas suas relações interna e dialética.

No caso particular das marcas, o julgamento social pode ser tão duro ou até mais sancionatório que o julgamento judicial. Para tal, evocamos a importância de as marcas se preocuparem com a sua coerência e coesão, no sentido hallidaiano do termo (Halliday & Hasan, 1976). A marca, como uma entidade complexa, requer preocupação com todos os elementos constitutivos, como se fossem parte integrante da sua anatomia, personalidade e os definem como identidade da marca. Qualquer disrupção, qualquer que seja a prática social, seja esta ao nível das representações, das interações ou dos textos, por outras palavras, qualquer disrupção ao nível dos Ativos tangíveis ou intangíveis, causa prejuízos à marca. Deste modo, e reiterando a nossa abordagem, a marca carece de ser entendida numa perspetiva holística e sistémico-funcional, afastando-se de abordagens alicerçadas no pensamento de Descartes, com a distinção dualista de corpo (parte atuante) e mente (parte pensante).

REFERÊNCIAS

Bender, A. (2009). *Personal branding – Construindo sua marca pessoal*. São Paulo: Integrare Editora.

Eggins, S., & Slade, D. (1997). *Analysing casual conversation*. London: Cassell.

Fairclough, N. (2003). *Analysing discourse: Textual analysis for social research*. Londres/ Nova York: Routledge.

Hall, E. T. (1996). *A dança da vida – A outra dimensão do tempo*. Lisboa: Relógio D'Água Editores.

Halliday, M. A. K. (2014). *An introduction to functional grammar* (4.ª ed.). Oxford/ Londres: Edward Arnold.

Halliday, M. A. K. (1994). *An introduction to functional grammar* (2.ª ed.). London: Edward Arnold.

Halliday, M. A. K., & Hasan, R. (1976). *Cohesion in English*. London/ New York: Longman.

Hunston, S., & Thompson, G. (Eds.) (2000). *Evaluation in text*. Oxford: Oxford University Press.

Ikeda, S. N. (2010). O julgamento na argumentação de um editorial. In J. R. Vian, A. Souza, & F. Almeida. *A linguagem de avaliação em língua portuguesa: Estudos sistêmico-funcionais com base no Sistema de Avaliatividade.* São Carlos: Pedro e João Editores.

Knight, S. (27.05.2019). How football leaks is exposing corruption in European soccer. *The New Yorker*. https://www.newyorker.com/magazine/2019/06/03/how-football-leaks-is-exposing-corruption-in-european-soccer

Jornal de Negócios (5 de outubro de 2018). Nike "profundamente preocupada" com acusações de violação de Ronaldo. *Jornal de Negócios.* https://www.jornaldenegocios.pt/empresas/detalhe/nike-profundamente-preocupada-com-acusacoes-de-violacao-de-ronaldo?out

Lakoff, G., & Jonhson, M. (1980). *Metaphors we live by*. Chicago: Chicago University Press.

Lovett, S. (02 de outubro de 2018). Save the Children 'disheartened' by rape allegation made against ambassador Cristiano Ronaldo. https://www.independent.co.uk/sport/football/news-and-comment/cristiano-ronaldo-rape-allegation-kathryn-mayorga-accusation-las-vegas-a8565501.html

Machado, H., & Santos, F. (2009). *A moral da justiça e a moral dos media: Julgamentos mediáticos e dramas públicos* (Oficina do CES n.º 333). Coimbra: CES.

Marques, G., & Silvestre, C. (2015). Mediating brand(ing) through two different identities: The process of evaluation. *BrandTrends Journal,* 8(8), 30–36.

Martin, J. R. (2000). Beyond exchange: Appraisal systems in English. In S. Hunston, & G. Thompson (Eds.), *Evaluation in text* (pp. 142–175). Oxford: Oxford University Press.

Martin, J. R., & Rose, D. (2003). *Working with discourse: Meaning beyond the clause*. London: Continuum.

Martin, J. R., & White, P. (2005). *The language of evaluation: Appraisal in English*. New York: Palgrave.

Martins, A. (2013), *Justiça e comunicação – O diálogo (im)possível*, Imprensa da Universidade de Coimbra.

Peters, T. (1997). The brand called you. *Fast Company Magazine*. https://www.fastcompany.com/28905/brand-called-you

Silvestre, C., & Marques, G. (2017). A narrativa publicitária: Enfoque na textura e relações coesivas num vídeo da Coca-Cola. *RedCen - Revista Discurso em Cena 1*(1), 1–18.

Silvestre, C., & Marques, G. (2012). Discurso multimodal da marca: Contributos para o estudo da representação da marca. *BrandTrends Journal 1*(2): 66–78.

van Leeuwen, T. (1996). The representation of social actors. In C. R. Caldas-Coulthard, & M. Coulthard (Eds.), *Texts and practices: Readings in critical discourse analysis* (pp. 32–70). London: Routledge.

Vian, O. (2009). O sistema de avaliatividade e os recursos para gradação em Língua Portuguesa: Questões terminológicas e de instanciação, *DELTA*, *25*(1), 99–129.

Vian, O., Souza, A., & Almeida, F. (Eds.) (2010). *A linguagem da avaliação em língua portuguesa: Estudos sistêmico-funcionais com base no sistema de avaliatividade*. São Carlos SP: Pedro & João Editores.

White, P. R. R. (2004). Valoração: A linguagem da avaliação e da perspectiva, *Linguagem em (Dis)Curso*, *4,* 178–205.

EXPLORAÇÃO SISTÉMICA FUNCIONAL: A CONSTRUÇÃO DOS SIGNIFICADOS DAS METAFUNÇÕES DA LINGUAGEM NA CRÓNICA[1]

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RESUMO

O presente estudo enquadra-se no quadro da investigação da Linguística Sistémico-Funcional (LSF) desenvolvida por Halliday e por outros autores como Hasan (1984); Eggins (1994); Thompson (1996); Martin e Rose (2003); Rose e Martin (2012) a partir das décadas de 1960 e 1970. Este estudo configura-se como uma análise funcional à crónica de Mia Couto com base no seu contexto de cultura e situação. O objetivo do trabalho consistiu em identificar a(s) estratégia(s) linguística(s) utilizada(s) pelo autor na construção de significados das metafunções ideacional, interpessoal e textual no seu texto. Para o efeito, com base numa pesquisa de natureza exploratória e explicativa, analisámos qualitativamente 55 orações do texto *A morte nascida do guardador de estradas*, em que cruzámos conhecimentos linguísticos baseados na LSF e literários para explicar as escolhas do autor, dada a área que permeia o género do texto selecionado para a efetivação da investigação. Da análise feita, concluiu-se que os significados das metafunções da linguagem em Mia Couto são construídos, sobretudo, por meio de mecanismos morfológicos que estão ao serviço da metafunção interpessoal, os quais só podem ser depreendidos com base no seu contexto de cultura, uma vez que constituem pistas estruturais ligadas a informações contextuais, culturais e, quiçá, conhecimento partilhado que permitem a compreensão do seu significado.

PALAVRAS-CHAVE

Metafunções da linguagem, contexto de cultura e situação, crónica

1 – Introdução

Os estudos que têm sido desenvolvidos ao nível da Linguística Sistémico-Funcional têm contribuído sobremaneira para a compreensão de como a linguagem funciona em seus diversos contextos de uso, tendo em conta o seu papel social, pelo que, inspirados nesta linha teórica, propomo-nos fazer uma análise funcional ao texto *A morte nascida do guardador de estradas*, da autoria de Mia Couto, com vista a identificação da(s) estratégia(s) linguística(s) utilizada(s) pelo autor na construção de significados das metafunções da linguagem no seu texto.

Mia Couto é pseudónimo de António Emílio Leite Couto, uma figura que se tem revelado bastante versátil no universo das letras: é escritor, poeta, biólogo e jornalista moçambicano. Couto dedica-se, sobretudo, ao ramo da escrita, pelo que já tem publicadas muitas obras entre poesias, contos, romances e crónicas, dentre as quais se destacam *Cada Homem é Uma Raça* (1990), *Cronicando* (1991), *Raízes de Orvalho e Outros Poemas* (1999), *Mar Me Quer* (2000) (Laranjeira, 2001, p. 193).

A morte nascida do guardador de estradas, nosso objeto de estudo, dá título a uma crónica endereçada aos puristas da língua, conforme o autor sugere abaixo do título entre parênteses[1]. Trata-se do 43º texto de *Cronicando*, uma coletânea de 49 crónicas com que o autor colaborou com a imprensa de Moçambique durante os dois últimos anos da década de 80, o qual lhe valeu o Prémio Anual de Jornalismo Areosa Pena, atribuído pela Organização de Jornalistas de Moçambique em 1989, publicada em 1991[2]. O texto conta a história de um homem que guardava uma estrada, cuja missão consistia em evitar o nascimento de *carreirinhos*. A estrada é apresentada de forma personificada como sendo muito comprida e que, segundo o texto, *sofria constantes tentativas de criar atalhos que teimavam em nascer pelos trilhos*. Todavia, o seu guardião, conforme Couto refere ironicamente, mais a si guardava do que a estrada. Ele indignava-se com o facto de os homens desordenarem paisagens, mas, ainda assim, acreditando que a estrada deveria ser única, mesmo dormindo, ele prosseguia o seu mandato, até que numa noite a estrada desapareceu. Receoso de que ninguém acreditaria na sua versão, o guarda decidiu desaparecer também.

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2 Vide o texto completo em anexo.
2 Couto (1991) (contracapa).

2 – Enquadramento teórico

2.1 – (Alguns) Pressupostos da Linguística Sistémico-Funcional

Uma vez que o presente trabalho se enquadra no quadro da pesquisa da Linguística Sistémico-Funcional, doravante LSF, julgamos pertinente a apresentação de alguns pressupostos teóricos básicos desta teoria linguística desenvolvida por Halliday e por outros autores como Hasan (1984); Eggins (1994); Thompson (2003); Martin e Rose (2003); Martin e White (2005), a partir das décadas de 1960 e 1970[3].

A LSF é caracterizada como uma teoria social, uma vez que parte da sociedade e da situação de uso para o estudo da linguagem. Ela caracteriza-se também como uma teoria semiótica, pois preocupa-se com a linguagem em todas as suas manifestações, não se limitando a identificar categorias linguísticas e procura determinar as funções das mesmas (Gouveia, 2008, p. 194; Bárbara & Macedo, 2009, p. 90).

Considerando que esta abordagem assume o texto como ponto de partida, em oposição à oração, e o facto de colocar em interação a língua, a linguagem e a sociedade, a LSF surge como um conceito que privilegia a comunicação humana (o uso da língua como ferramenta de comunicação interpessoal), diferentemente d o conceito que tradicionalmente é dado à Linguística, que enfatiza a norma gramatical, baseada no ensino das estruturas da língua.

Contudo, não significa que a LSF seja alheia ao estudo da estrutura da língua, pelo contrário:

> o estudo da estrutura é necessário para se entender o significado das mensagens geradas na linguagem. Porém, de acordo com essa teoria, o significado é determinador da forma. Conforme as necessidades específicas, são as escolhas no que tange às formas que expressam os significados desejados. Componentes fundamentais do significado na linguagem são, portanto, componentes funcionais.
>
> (Bárbara & Macedo, 2009)

Sobre este aspeto, Halliday e Matthiessen (2004, p. 23) explicam que uma língua é um recurso para a produção de significado, e o significado reside

[3] cf. Santos (2014, p. 165)

nos padrões sistémicos de escolha, por isso consideram que todas as línguas organizam-se em tipos fundamentais de significado as quais designaram por metafunções da linguagem que interagem na construção do texto conferindo-lhes um caráter multifuncional, refletem-se na estrutura da oração e relacionam-se, diretamente, com a léxico-gramática de uma língua, são elas a *metafunção ideacional*, a *metafunção interpessoal* e a *metafunção textual*[4].

Os significados ideacionais são significados sobre como representamos a nossa vivência e experiência do mundo na linguagem, visto que estamos sempre a falar sobre alguma coisa ou a fazer alguma coisa. Portanto, permite-nos codificar significados da nossa experiência, ou seja, significados ideacionais. Os significados interpessoais correspondem às relações sociais estabelecidas entre os interlocutores e às atitudes expressas por eles na linguagem, já que estamos sempre a expressar atitudes e a desempenhar papéis ao usar a língua. E os significados textuais servem para organizarmos a nossa informação enquanto mensagem, ou seja, ajuda-nos a organizar os nossos significados ideacionais e interpessoais num todo linear e coerente (Butt et al., 1994, p. 39).

Para depreendermos os significados do texto de Mia Couto, afigura-se necessário olharmos para dois aspetos indispensáveis: por um lado, o Contexto de cultura que o circunda, referente às formas como diferentes culturas utilizam a língua. No texto em estudo, iremos destacar o contexto histórico da cultura moçambicana e dos participantes envolvidos na interação linguística. Por outro, o Contexto da situação correspondente às características extralinguísticas dos textos que se realizam a partir dos padrões utilizados pelos falantes, consciente ou inconscientemente, para construir textos nas diferentes variedades (Butt et al., 1994, p. 4).

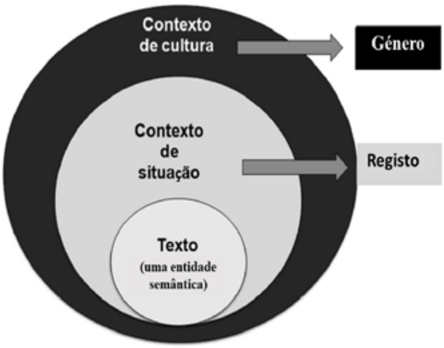

Figura 1 – **A influência do contexto no texto** (adaptado de Butt et al., 1994, p. 4)

[4] Grifo nosso.

No que diz respeito ao Contexto de cultura, considerando o ano da publicação do livro, o texto *A morte nascida do guardador de estradas* enquadra-se no período histórico do Pós-independência. De acordo com Laranjeira (2001, p. 195), Mia Couto surge, na década da 80, como um renovador da literatura moçambicana, em que o processo literário de Moçambique, de maneira decisiva, se desenvolve, alarga e estabiliza como sistema literário institucionalizado e reconhecido, tanto interna como internacionalmente. Laranjeira acrescenta que a partir de então, pode-se falar em estado adulto da literatura moçambicana, no sentido de que, não sendo o Estado nação ainda uma formação político-social adulta (conceptualmente adquirida, generalizada e estabilizada), aquela o é enquanto formação cultural e ideológica na qual se resolvem provisoriamente as contradições entre o analfabetismo, a confrontação militar da pós-independência (Estado *vs* Renamo) e a vontade de estabilização político-cultural.

Posto isto, iremos considerar igualmente (i) o Campo (*field*), realizado através da metafunção ideacional, correspondente ao evento que está a ocorrer, à natureza da ação social, seus objetivos a longo e curto prazo. (ii) as Relações (*tenor*), realizadas através da metafunção interpessoal, que dizem respeito à natureza dos participantes, seu *status*, papéis e a forma como estão imbricados (falante e ouvinte, escritor e leitor). O último, o Modo (*mode*), realizado através do sistema Tema-Rema, da metafunção textual, referente ao papel da linguagem e organização do texto, não merecerá a nossa atenção, uma vez que, para os propósitos deste estudo, a sua ocorrência não sobressai no texto em apreço.

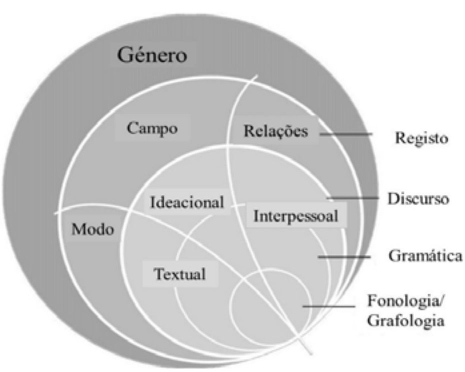

Figura 2 – **Linguagem em contextos sociais** (adaptado de Rose & Martin, 2012, p. 311)

Esta relação entre os elementos contextuais, as metafunções da linguagem e os sistemas de representação está esquematizada da seguinte maneira:

Elemento de contexto	Metafunção da linguagem	Sistema de representação
Campo	Ideacional/Experiencial	Transitividade
Relações	Interpessoal	Modo
Modo	Textual	Tema-Rema

Figura 3 – **Relação entre o elemento do contexto, metafunção da linguagem e sistema de representação**

A transitividade constitui um sistema da oração que afeta todos os seus elementos: processos, participantes e circunstâncias. Com base na teorização de Halliday, trata-se de um sistema que fornece os recursos lexicogramáticos para a construção de um *quantum* de mudança no fluxo de eventos como uma configuração de elementos centrados em um processo.

> Our most powerful impression of experience is that it consists of a flow of events, or 'goings-on'. This flow of events is chunked into quanta of change by the grammar of the clause: each quantum of change is modelled as a figure – a figure of happening, doing, sensing, saying, being or having (see Halliday & Matthiessen, 1999). All figures consist of a process unfolding through time and of participants being directly involved in this process in some way; and in addition there may be circumstances of time, space, cause, manner or one of a few other types [...]
>
> (Halliday, 2014, p. 213)

Neste contexto, os processos são interpretados em um conjunto de tipos de processo. Cada tipo de processo constitui um modelo ou esquema distinto para interpretar um determinado domínio de experiência. São eles os processos materiais, os comportamentais, os mentais, os verbais, os relacionais e os existenciais (Halliday, 2014, p. 213), conforme ilustra a gramática da experiência na figura 4.

Halliday (2014, pp. 214–215) explica, de forma bastante sucinta, cada um dos processos acima representado na figura 4.

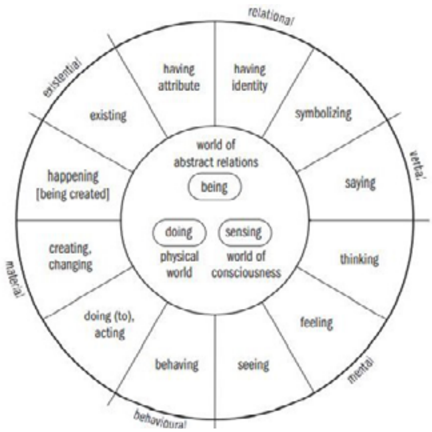

Figura 4 – **Tipos de processos** (Halliday, 2014, p. 216)

Os *processos materiais* cobrem eventos, atividades e ações que envolvem Atores animados e inanimados. As orações materiais constroem figuras do "fazer" e do "acontecer" ("doing-&-happening") e podem ser transitivas ou intransitivas. O Participante é o que faz acontecer o desenrolar do processo através do tempo. Ou seja, quando o resultado da ação recai sobre o Ator, há apenas um participante inerente ao processo – o Ator, conforme o exemplo (17) *Os homens **nasceram*** (Couto, 1991). Neste exemplo, a oração material representa um acontecimento e caracteriza-se por ser intransitiva. Entretanto, quando o desenrolar do processo se estende a outro participante, a que se designa por Meta, o resultado recai sobre esse participante (e não sobre o Ator). Assim sendo, a oração representa um fazer e é transitiva, como no exemplo *(47) O guarda **esfregou** o olhar* (Couto, 1991).

No que diz respeito aos *processos existenciais*, estes representam fenómenos de todos os tipos são simplesmente reconhecidos como "ser" – existir ou acontecer (processos meteorológicos) como, a título de exemplo: *(11) **Há** que sair do caminho*, portanto, casos limites de uma oração de processo material.

Os *processos mentais* codificam o mundo interno do pensamento, da perceção e do sentimento (cognição, perceção, afeto, desejo). Os rótulos dos Participantes refletem a função desses elementos nos processos mentais. Os papéis dos participantes são normalmente o de Experienciador, realizado por um participante humano ou consciente, que tem a mente na qual o processo ocorre. O Fenómeno é realizado por um grupo nominal ou uma oração encaixada que resume aquilo que é pensado, desejado, percebido, gostado ou não: pessoa, objeto concreto, fato; tal como mostra o exemplo *(10) A gente* ***conhece*** *mais o dentro que o fora* (Couto, 1991)**.**

As *orações relacionais* servem para caracterizar e identificar. Numa oração relacional, uma coisa, um ato ou fato construído como participante é configurado como outro participante do mesmo domínio ou da natureza da configuração do ser, em que existem duas partes. As orações relacionais constroem a experiência do mundo físico e a experiência do mundo da consciência como "ser", em vez de "fazer" e "sentir", conforme o exemplo *(21) O fim da viagem* ***é*** *iniciar outra viagem?* (Couto, 1991).

Os *processos verbais* representam relações simbólicas construídas na consciência humana e decretado na forma de linguagem, como dizer e significar (por exemplo, a oração "verbal" que dizemos, apresentando um relatório do que foi dito. Como exemplo, tomamos a oração *(19) O guarda* ***concluía*** *os viventes se apuram é como anarquitectos* (Couto, 1991).

Por último, os *processos comportamentais* são aqueles que representam as manifestações externas de trabalhos internos, a atuação de processos de consciência (por exemplo, as pessoas estão rindo) e estados fisiológicos (por exemplo, eles estavam dormindo). Exemplo: *(26) Ele* ***se sentava*** *no empenho* (Couto, 1991).

Posto isto, de um modo geral, relativamente ao Contexto de situação do texto, podemos afirmar que a nível do campo, *A morte nascida do guardador de estradas* debruça-se sobre a situação linguística em Moçambique. Recorde-se que Moçambique é um país cuja língua oficial é o português, entretanto, para a esmagadora maioria constitui segunda língua, daí que o seu domínio deixe muito a desejar, em contraste com as línguas moçambicanas que coabitam com a língua portuguesa e que são do domínio quase geral, constituindo para os seus falantes língua materna.

A nível da Relação, Mia couto dirige-se a um público adulto, representado pelo povo moçambicano dividido entre puristas da língua, por um lado, e ao falante (rural) da língua portuguesa, por outro. Ao longo deste trabalho, veremos que o autor estabelece um dialogismo entre si e os leitores, marcado, sobretudo, por frequentes interrogativas retóricas e por um discurso coloquial que é muito peculiar nas suas obras, estratégias através das quais confere ao texto um cunho pessoal, em que apresenta uma visão totalmente pessoal sobre a realidade moçambicana.

2.2 – A crónica

A seguir, faz-se também necessário apresentar a sistematização de géneros, seus objetivos sociocomunicativos, etapas e fases proposta por Rose e Martin (2012) para que possamos compreender a forma como as escolhas lexicogramaticais feitas por Mia Couto se articulam com as práticas sociais numa relação dialética.

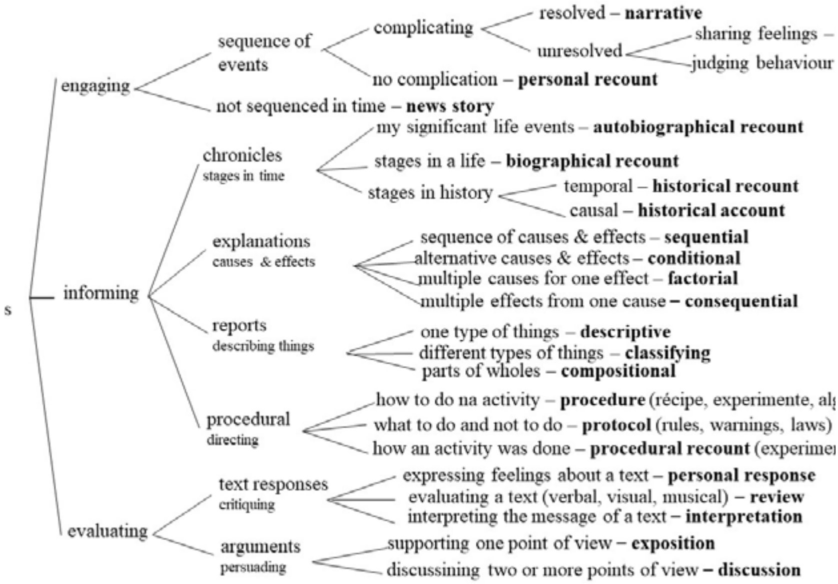

Figura 5 – **Mapeamento de géneros escolares** (Rose & Martin, 2012, p. 128)

De acordo com Butt et al. (1994), os géneros expressam significados de acordo com os seus amplos objetivos sociais – envolver e entreter, informar e avaliar textos ou pontos de vista, pelo que, no geral, a escolha dos géneros que normalmente utilizamos quando lemos e escrevemos nas nossas práticas sociais e discursivas ocorre entre estórias, textos factuais e textos avaliativos. Vale, por isso, afirmar que qualquer texto tem vários propósitos e, assim sendo, é o seu principal objetivo que molda sua encenação e a família de géneros a que pertence.

No quadro da Escola de Sydney, o conjunto de géneros agrupados como *crónicas* inclui (i) relatos autobiográficos, nos quais o produtor textual relata os principais eventos da sua vida; (ii) relatos biográficos em que conta as etapas da vida de uma pessoa; e (iii) recontos e contos históricos que cobrem, por um lado, as etapas de um período da história; e, por outro, as etapas que estão conectadas temporalmente em recontos, mas causalmente em contos (Rose & Martin, 2012, p. 128).

No texto *A morte nascida do guardador de estradas*, tendo em conta o quadro social que se desenhava na época da publicação do texto em análise, podemos considerar que o contexto de cultura influenciou sobremaneira Couto na escolha do género. Veja-se que logo no princípio do texto, o autor nos apresenta o seu destinatário «*(aos puristas)*», a quem dedica o texto e, mais adiante, ficou clara a sua intenção e a sua visão crítica, em que critica os que considera "puristas" da língua, tidos como aqueles que desejavam policiar a criatividade e a liberdade da escrita. Este facto leva-nos a acreditar que, quanto ao género, se trate de uma crónica em que Couto opta por cruzar o reconto histórico com o conto histórico. Através de um conto sobre uma estrada, retrata um período histórico do povo moçambicano que, de forma peculiarmente estratégica, se cruza com um conto histórico sobre o quotidiano moçambicano, revelando, as múltiplas facetas do autor. Arriscamo-nos a afirmar que tal escolha testemunha inequivocamente a sua ligação com o jornalismo e com a literatura, já que faz confluir num mesmo texto factos reais (reconto histórico) com a ficção (conto histórico).

3 – Metodologia

No presente trabalho, pretendemos estudar as metafunções da linguagem na perspetiva da LSF que vê a gramática como potencial de significação, a qual se organiza como instrumental de uso que explica o sistema e a estrutura da língua por conexão do texto, o que produzimos sempre que falamos com o propósito social e o seu contexto motivador (Gouveia, 2008, p. 194).

Para o efeito, com base numa pesquisa de natureza exploratória e explicativa, propomo-nos fazer uma análise quantitativa e qualitativa a partir de 55 orações do texto *A morte nascida do guardador de estradas*, em que nos socorreremos de conhecimentos linguísticos baseados na LSF para explicar as escolhas do autor. O texto foi fragmentado em orações que o compõem, as quais foram de seguida enumeradas com vista a facilitar a sua análise e identificação.

4 – Análise e discussão dos dados

A análise do *corpus* composto por 55 orações consistirá na classificação dos elementos que constituem cada oração para, desta feita, identificarmos a(s) estratégia(s) linguística(s) utilizada(s) por Mia Couto na construção de significados, a partir das metafunções que instancia(m).

4.1 – Construção dos significados da metafunção ideacional

Em termos gerais, num universo de 55 orações do texto em análise, predominam, a nível da transitividade, processos materiais com 18 ocorrências correspondentes a 33% processos relacionais com 14 ocorrências correspondentes a 25%.

TRANSITIVIDADE	
Processos	
Processo material	18
Processo relacional	14
Processo comportamental	8
Processo mental	7
Processo verbal	5
Processo existencial	3

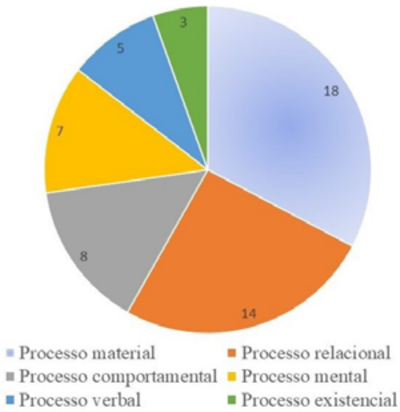

Figura 6 – **Identificação dos significados da metafunção ideacional**

Logo na oração introdutória, através de um processo existencial, Mia Couto apresenta o campo do texto, sugerindo uma história sobre dois participantes principais: a estrada e o guarda, uma conotação à situação linguística em Moçambique, *uma estrada* (controlada por um homem = puristas). Nesse retrato, Couto conta a história, socorrendo-se de várias estratégias linguísticas tais como o resgate de práticas orais com origem de base rural, cuja sintaxe revela-se estranha à norma-padrão europeia e a utilização de diferentes modos de retrabalhar o léxico, alguns dos quais passamos a apresentar, seguidos dos respetivos exemplos.

• O uso do pronome clítico dativo *lhe* com valor de objeto direto na passagem *que lhe guardava*, ao invés do pronome clítico acusativo (= que a guardava), de acordo com a norma-padrão europeia.

(1) *Era uma vez uma estrada e um homem que lhe guardava.*

	Era	**uma vez**	**uma estrada e um homem que lhe guardava**
Transitividade	Processo existencial	Circunstância de tempo	Existente

• A criação de neologismos por meio da sufixação em *se compridava*, processo material da oração em (2), referência ao processo de expansão da língua portuguesa ao longo do tempo.

(2) *A estrada se compridava com o tempo.*

	A estrada	**se compridava**	**com o tempo**
Transitividade	Ator	Processo material transformativo	Circunstância de tempo

• O mesmo processo de criação de neologismos por meio da prefixação em (7) *endormitar*, referência ao rigor pelo qual os puristas primavam para evitar o surgimento de outras variedades linguísticas.

(7) *(Nem o guarda podia endormitar,*

	Nem	**o guarda**	**Podia**	**Endormitar**
Transitividade	Portador		Processo relacional atributivo	Atributo

• A combinação da sintaxe coloquial com a tendência para a elisão e o sintetismo em (40), com o intuito de descrever a plasticidade da língua portuguesa vista negativamente como desvio à norma-padrão. Note-se a ausência do pronome relativo "que" em *ruído (-) parecia vindo das vísceras da terra*, estrutura bastante comum no Português de Moçambique, designada por estratégia cortadora (Chimbutane, 1998, p. 115), referente a casos em que na formação de orações relativas ocorre um processo de elisão de preposições, subcategorizadas por itens lexicais ou previstas em certos contextos sintáticos, como os casos de relativização de sintagmas preposicionais adjuntos, locativos, espaciais ou temporais.

(40) Despertou com um ruído parecia vindo das vísceras da terra.

	(o guardião)	**Despertou**	**com um ruído parecia vindo das vísceras da terra**
Transitividade	Ator	Processo material	Circunstância de maneira

- A aglutinação em (19) *anarquitectos*, remetendo-nos para os transgressores da norma linguística por "negação da autoridade" do guarda (*puristas*).

(19) E o guarda (…) concluía: os viventes se apuram é como anarquitectos.

	o guarda	**Concluía**	**os viventes se apuram é como anarquitectos**
Transitividade	Dizente	Processo verbal	Verbiagem

A partir de processos maioritariamente materiais, Mia Couto enfatiza as ações que têm como principal ator o guardião da estrada, a quem se dirige no texto.

4.2 – Construção dos significados da metafunção interpessoal

Quanto à metafunção interpessoal, as Relações (*tenor*) serão analisadas tendo em conta o finito, a voz, a polaridade e a modalidade.

INTERPESSSOAL	
Finito	
Presente	19
Pretérito-imperfeito	17
Pretérito- perfeito	16
Futuro perfeito	2
Pretérito-mais-que-perfeito	1
Voz	
Ativa	51
Passiva	4
Polaridade	
Positiva	48
Negativa	7
Modalidade	
Epistémica	10
Deôntica	3

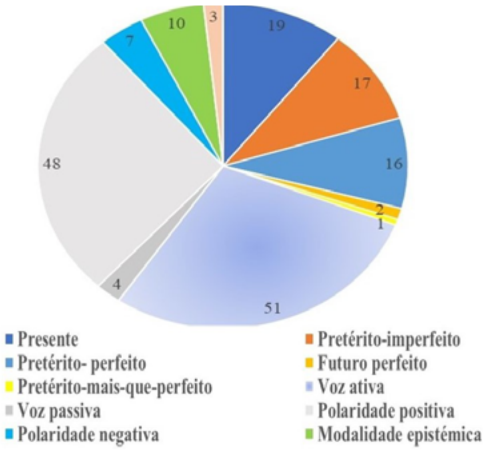

Figura 7 – **Identificação dos significados da metafunção ideacional**

Com base no texto, constatámos que pelo finito, o autor sinaliza as orações que se encontram predominantemente no tempo presente, como estratégia de negociar com o leitor a validade das suas proposições, conforme ilustram os exemplos a seguir.

(9) Quem sabe da estrada não sabe do mundo.

<table>
<tr><th></th><th>Quem sabe da estrada</th><th colspan="2">não sabe</th><th>do mundo</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Sujeito</td><td>Finito: Presente do indicativo</td><td>Predicador: saber</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade negativa</td></tr>
<tr><td colspan="2">Modalidade: epistêmica</td></tr>
<tr><td colspan="3">Modo</td><td>Resíduo</td></tr>
</table>

(11) Há que sair do caminho (…).

<table>
<tr><th></th><th colspan="2">Há</th><th>que sair do caminho</th></tr>
<tr><td rowspan="6">Interpessoal</td><td>Finito: Presente do indicativo</td><td>Predicador: haver</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: necessidade epistémica</td></tr>
<tr><td colspan="3">Modo</td></tr>
<tr><td colspan="2">Tema marcado/ Tema tópico</td><td>Rema</td></tr>
</table>

Para além do tempo presente, que no texto aparece associado aos processos relacionais, verifica-se, igualmente, a ocorrência do pretérito-imperfeito e o pretérito-perfeito relacionados com os processos materiais (5) e (39) e comportamentais em (26) e (32); duas ocorrências do futuro perfeito em (46) e (48), associadas às interrogativas retóricas que o autor levanta para a reflexão (futura) do leitor.

(5) e ele o reconduzia ao devido nada.

<table>
<tr><th></th><th>Ele</th><th colspan="2">Reconduzia</th><th>-o</th><th>ao devido nada</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Sujeito</td><td>Finito: Pretérito imperfeito do indicativo</td><td>Predicador: reconduzir</td><td rowspan="3">Complemento</td><td rowspan="4">Adjunto circunstancial de lugar</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: não ocorre</td><td></td></tr>
<tr><td colspan="4">Modo</td><td>Resíduo</td></tr>
</table>

(26) E (…) ele prosseguia o seu mandato.

<table>
<tr><th></th><th>Ele</th><th colspan="2">Prosseguia</th><th>o seu mandato</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Sujeito</td><td>Finito: Pretérito imperfeito do indicativo</td><td>Predicador: prosseguir</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: não ocorre</td></tr>
<tr><td colspan="3">Modo</td><td>Resíduo</td></tr>
</table>

(32) Dessa verdade ele se abstinha.

<table>
<tr><th></th><th>Dessa verdade</th><th>ele</th><th colspan="2">se abstinha</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Complemento</td><td rowspan="4">Sujeito</td><td>Finito: Pretérito imperfeito do indicativo</td><td>Predicador: abster-se</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: não ocorre</td></tr>
<tr><td>Resíduo</td><td colspan="3">Modo</td></tr>
</table>

(46) Quem acreditaria na sua versão, o súbito desaparecimento da eterna estrada?

<table>
<tr><th></th><th>Quem</th><th colspan="2">Acreditaria</th><th>na sua versão, o súbito desaparecimento da eterna estrada?</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Sujeito</td><td>Finito: Futuro do pretérito do indicativo</td><td>Predicador: Acreditar</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: não ocorre</td></tr>
<tr><td colspan="3">Modo</td><td>Resíduo</td></tr>
</table>

Decorrendo do que já foi dito anteriormente, nestas interrogativas retóricas que o autor levanta nas orações (45) e (46), Couto interage com os leitores, convidando-os a refletirem sobre as suas proposições, exigindo informações e comentários (48). Ou seja, por meio destas interrogativas retóricas, o autor estabelece um dialogismo entre si e os leitores levando-os a refletir sobre a situação linguística no país (Moçambique) e criticando, de forma (in)direta, os tais "puristas" da língua.

(45) O velho guarda se afligiu: como responderia ele por aquela ausência?

<table>
<tr><th></th><th>O velho guarda</th><th colspan="2">se afligiu</th><th>como responderia ele por aquela ausência?</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Sujeito</td><td>Finito: Pretérito perfeito do indicativo</td><td>Predicador: Afligir</td><td rowspan="4">Oração projetada</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: não ocorre</td></tr>
<tr><td>Modo</td><td colspan="2"></td><td>Resíduo</td></tr>
</table>

Note-se a ocorrência do pretérito-mais-que-perfeito na oração (52), provavelmente utilizado para expressar com alguma ênfase o momento de reflexão do guarda, marcado por dúvidas.

(52) A dúvida, essa toupeira, penetrara o chão da sua alma.

<table>
<tr><th></th><th>A dúvida, essa toupeira</th><th colspan="2">Penetrara</th><th>o chão da sua alma</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Sujeito</td><td>Finito: Pretérito-mais-que-perfeito do indicativo</td><td>Predicador: penetrar</td><td rowspan="3">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: não ocorre</td><td>Metáfora</td></tr>
<tr><td colspan="3">Modo</td><td>Resíduo</td></tr>
</table>

No que diz respeito à polaridade, a validade das proposições é, sobretudo, positiva, com um total de 48 ocorrências, correspondentes a 87%. Tendo em conta que a história que o autor conta tem, na sua essência, um teor negativo, parece-nos que o autor consegue contá-la com uma polaridade positiva recorrendo à ficção e não contando explicitamente os factos que marcam/marcaram a história de Moçambique.

(49) Tentou acertar o pensamento.

<table>
<tr><th></th><th>(ele)</th><th colspan="2">Tentou</th><th>acertar o pensamento</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Sujeito</td><td>Finito: Pretérito perfeito do indicativo</td><td>Predicador: tentar</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: não ocorre</td></tr>
<tr><td colspan="3">Modo</td><td>Resíduo</td></tr>
</table>

Em relação à modalidade, foi possível identificar no texto a modalidade epistémica com uma percentagem de 18%, em que o autor faz apreciações sobre o conteúdo enunciativo, representando valores de possibilidade expressos, a título ilustrativo, na oração (7) anteriormente analisada e (12) que a seguir apresentamos; assim como valores de certeza em (9), (13), (14), (15) e de necessidade em (11).

(11) *Há que sair do caminho (...).*

<table>
<tr><th></th><th colspan="2">Há</th><th>que sair do caminho</th></tr>
<tr><td rowspan="5">Interpessoal</td><td>Finito: Presente do indicativo</td><td>Predicador: haver</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: necessidade epistémica</td></tr>
<tr><td colspan="3">Modo</td></tr>
</table>

(12) *Talvez por isso o guarda via-se a braços.*

<table>
<tr><th></th><th>Talvez</th><th>por isso</th><th>o guarda</th><th colspan="2">via-se</th><th>a braços</th></tr>
<tr><td rowspan="5">Interpessoal</td><td colspan="2" rowspan="3">Adjuntos de comentário e de causa</td><td rowspan="4">Sujeito</td><td>Finito: Pretérito imperfeito</td><td>Predicador: ver</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: possibilidade epistémica</td><td colspan="2">Modalidade: não ocorre</td></tr>
<tr><td colspan="2">Resíduo</td><td colspan="4">Modo</td></tr>
</table>

(9) *Quem sabe da estrada não sabe do mundo.*

<table>
<tr><th></th><th>Quem sabe da estrada</th><th colspan="2">não sabe</th><th>do mundo</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Sujeito</td><td>Finito: Presente do indicativo</td><td>Predicador: saber</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade negativa</td></tr>
<tr><td colspan="2">Modalidade: epistêmica</td></tr>
<tr><td colspan="3">Modo</td><td>Resíduo</td></tr>
</table>

(13) *Nem a estrada concebia o necessário daquela vigília.*

<table>
<tr><th></th><th>Nem</th><th>a estrada</th><th colspan="2">Concebia</th><th>o necessário daquela vigília</th></tr>
<tr><td rowspan="6">Interpessoal</td><td>Modificador nominal</td><td></td><td>Finito: Pretérito imperfeito do Indicativo</td><td>Predicador: conceber</td><td rowspan="5">Complemento</td></tr>
<tr><td colspan="2" rowspan="4">Sujeito</td><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade negativa</td></tr>
<tr><td colspan="2">Modalidade: epistémica (Personificação)</td></tr>
<tr></tr>
<tr><td colspan="4">Modo</td><td>Resíduo</td></tr>
</table>

(14) *Acontece que o mundo é sempre grávido de imenso.*

<table>
<tr><th></th><th>Acontece que</th><th>o mundo</th><th colspan="2">É</th><th>sempre</th><th>grávido de imenso</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="3">Adjunto de comentário</td><td rowspan="4">Sujeito</td><td>Finito: Presente do indicativo</td><td>Predicador: ser</td><td rowspan="3">Adjunto de tempo</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td>Modalidade: epistémica</td><td colspan="3">Modalidade: epistémica</td></tr>
<tr><td colspan="5">Modo</td><td>Resíduo</td></tr>
</table>

(15) *E os homens, moradores de infinitos, não têm olhos a medir.*

<table>
<tr><th></th><th>Os homens, moradores de infinitos,</th><th colspan="2">não têm</th><th>olhos a medir</th></tr>
<tr><td rowspan="4">Interpessoal</td><td rowspan="3">Sujeito</td><td>Finito: Presente do indicativo</td><td>Predicador: ter</td><td rowspan="2">Complemento</td></tr>
<tr><td colspan="2">Polaridade negativa</td></tr>
<tr><td colspan="3">Modalidade: epistémica</td></tr>
<tr><td colspan="3">Modo</td><td>Resíduo</td></tr>
</table>

Através de processos com valor modal, ocorre a modalidade deôntica em (6), expressando a proibição do surgimento de outras variedades do português em que *carreirinho*, pequeno caminho de terra, é aqui equiparado aos desvios à norma-padrão.

(6) *À margem da estrada nenhum carreirinho estava autorizado a nascer.*

<table>
<tr><th></th><th>À margem da estrada</th><th>nenhum carreirinho</th><th colspan="2">estava autorizado</th><th>a nascer</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Adjunto de lugar</td><td rowspan="4">Sujeito</td><td>Finito: Pretérito imperfeito do indicativo</td><td>Predicador: autorizar</td><td rowspan="3">Complemento</td></tr>
<tr><td colspan="2">Voz passiva</td></tr>
<tr><td colspan="2">Polaridade negativa</td></tr>
<tr><td colspan="2">Modalidade: deôntica</td><td></td></tr>
<tr><td>Resíduo</td><td colspan="3">Modo</td><td>Resíduo</td></tr>
</table>

Em (28) e (29), ocorre igualmente a modalidade deôntica em que Mia Couto expressa a autoridade dos "puristas" da língua ao imporem o uso exclusivo da norma-padrão (*uma só via*) e a anulação de outras variedades dialetais emergentes (*as poeiras*).

(28) *Cumpra-se uma só via,*

<table>
<tr><th></th><th colspan="2">Cumpra</th><th>-se</th><th>uma só via</th></tr>
<tr><td rowspan="5">Interpessoal</td><td>Finito: Presente simples do imperativo</td><td>Predicador: cumprir</td><td>Sujeito (indeterminado)</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="3">Voz passiva</td></tr>
<tr><td colspan="3">Polaridade positiva</td></tr>
<tr><td colspan="3">Modalidade: deôntica (obrigação)</td></tr>
<tr><td colspan="3">Modo</td><td>Resíduo</td></tr>
</table>

(29) *anulem-se as poeiras que este mundo já está mais que completo, com atestado e registo.*

<table>
<tr><th></th><th colspan="2">Anulem</th><th>-se</th><th>as poeiras</th><th>que este mundo já está mais que completo</th><th>com atestado e registo</th></tr>
<tr><td rowspan="5">Interpessoal</td><td>Finito: Presente simples do imperativo</td><td>Predicador: Anular</td><td>Sujeito</td><td colspan="2" rowspan="4">Complemento</td><td rowspan="4">Adjunto circunstancial</td></tr>
<tr><td colspan="3">Voz ativa</td></tr>
<tr><td colspan="3">Polaridade positiva</td></tr>
<tr><td colspan="3">Modalidade: deôntica (obrigação)</td></tr>
<tr><td colspan="5">Modo</td><td>Resíduo</td></tr>
</table>

Em paralelo, ocorrem muitos traços de avaliação, sobretudo por atitude, em que encontramos julgamento em (8) e (25) e apreciação em (46), (54).

(8) *tantos eram os atalhos com incorrigível mania de nascer.*

<table>
<tr><th></th><th>Tantos</th><th colspan="2">Eram</th><th>os atalhos</th><th>com incorrigível mania</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="4">Complemento</td><td>Finito: Pretérito imperfeito do indicativo</td><td>Predicador: ser</td><td rowspan="4">Sujeito</td><td rowspan="3"></td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td colspan="2">Modalidade: não ocorre</td><td>Avaliação: atitude (julgamento)</td></tr>
<tr><td colspan="4">Modo</td><td>Resíduo</td></tr>
</table>

(25) *Mas se há estrada, ela deve ser única, teimava o guarda.*

<table>
<tr><th></th><th>Mas se há estrada, ela deve ser única</th><th colspan="2">teimava[5]</th><th>o guarda</th></tr>
<tr><td rowspan="5">Interpessoalidade</td><td rowspan="4">Complemento</td><td>Finito: Pretérito imperfeito do indicativo</td><td>Predicador: teimar</td><td rowspan="4">Sujeito</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td>Modalidade: não ocorre</td><td>Avaliação: atitude (julgamento)</td></tr>
<tr><td>Resíduo</td><td colspan="3">Modo</td></tr>
</table>

(46) *Mais que a vista, esfregou o olhar.*

<table>
<tr><th></th><th>Mais que a vista</th><th>(o guarda)</th><th colspan="2">esfregou</th><th>o olhar</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="3">Adjunto modal</td><td rowspan="4">Sujeito omisso</td><td>Finito: Pretérito perfeito do indicativo</td><td>Predicador: Esfregar</td><td rowspan="4">Complemento</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td>Avaliação: atitude (apreciação)</td><td colspan="2">Modalidade: não ocorre</td></tr>
<tr><td>Resíduo</td><td colspan="4">Modo</td></tr>
</table>

5 No contexto em que a palavra ocorre, entendemos "teimar" como um processo verbal, uma vez que a teimosia se manifesta através da palavra.

(54) E sem espanto, levantou-se nos ares, em voo mais errante que a própria estrada.

<table>
<tr><th></th><th>sem espanto</th><th>(ele)</th><th colspan="2">levantou-se</th><th>nos ares,</th><th>em voo mais errante que a própria estrada</th></tr>
<tr><td rowspan="5">Interpessoal</td><td rowspan="3">Adjunto modal</td><td rowspan="3">Sujeito omisso</td><td>Finito: Pretérito perfeito do indicativo</td><td>Predicador: Levantar-se</td><td rowspan="4">Adjunto circunstancial</td><td rowspan="3">Adjunto modal</td></tr>
<tr><td colspan="2">Voz ativa</td></tr>
<tr><td colspan="2">Polaridade positiva</td></tr>
<tr><td>Avaliação: atitude (apreciação)</td><td></td><td colspan="2">Modalidade: não ocorre</td><td>Avaliação: atitude (apreciação)</td></tr>
<tr><td>Resíduo</td><td colspan="3">Modo</td><td colspan="2">Resíduo</td></tr>
</table>

Podemos, assim, afirmar que, através, sobretudo, da modalidade e das perguntas retóricas, Couto expressa julgamentos pessoais e atitudes relativamente à situação linguística no seu país; assim como as relações que estabelece entre si próprio e os leitores, todos eles constituem recursos linguísticos que serviram para organizar e expressar tanto o seu mundo interno como também o seu mundo externo.

De um modo geral, parece-nos que Mia Couto constrói o texto a partir do seu *framing*, pelo que as suas escolhas lexicogramaticais permitem estabelecer um conhecimento compartilhado sobre a situação descrita. O autor introduz os significados experienciais com um grupo ou oração, cuja função permite conectar a mensagem ao texto anterior, estabelecendo, dessa forma, um texto coeso com conexões bem sinalizadas entre as mensagens. Ou seja, o texto foi construído a partir de significados ideacionais, fortemente secundadas pelas observações interpessoais, a partir de representações das vivências e experiências da realidade moçambicana na linguagem.

5 – Considerações finais

O texto *A morte nascida do guardador de estradas* constitui uma metáfora da situação do português falado em Moçambique, uma variedade não nativa, em geral, adquirida como Língua Segunda num contexto em que os falantes moçambicanos não estão expostos à norma-padrão europeia e que, nalguns casos, possuem mais do que uma Língua Materna, daí se desencadearem várias realizações que se distanciam da norma, consideradas como sendo desviantes pelos que zelam pela correção linguística – os puristas.

O texto ora selecionado para a averiguação de como Mia Couto constrói os significados das metafunções da linguagem revelou-se deveras desafiante, dada a complexidade linguístico-discursiva que o carateriza., daí termos procurado olhar para o Contexto de cultura que o circunda e ao Contexto da situação, na sua relação com as metafunções da linguagem.

Da análise feita, vimos que a partir da confluência do conto e reconto históricos (*stages in history*), Mia Couto produziu uma crónica (*stage in time*) com um cunho pessoal, apresentando uma visão totalmente pessoal sobre a situação descrita no texto, socorrendo-se de elementos modais, de processos mentais, do seu estilo inovador e peculiar que se caracteriza, sobretudo, pelo resgate das práticas orais com origem de base rural.

Aqui chegados, concluímos que os significados das metafunções da linguagem em Mia Couto são construídos, sobretudo, por meio de mecanismos morfológicos que estão ao serviço da metafunção interpessoal. Trata-se de um texto de difícil decifração, uma vez que o autor se socorre de estratégias que o permitem fazer uma condensação semântica que vai além dos significados previsíveis, os quais só podem ser depreendidos com base no contexto em que os fenómenos linguísticos que exemplificámos no corpo do trabalho ocorrem, uma vez que constituem pistas estruturais ligadas a informações contextuais, culturais e/ou conhecimento partilhado, que permitem a compreensão do seu significado.

REFERÊNCIAS

Bárbara, L., & Macedo, C. (2009). *Linguística sistémico funcional para a análise de discurso: Um panorama introdutório*. Universidade Federal do Pará – UFPA.

Butt, D., Rhondda Fahey, Feez, R., & Sue Spinks, S. (1994). *Using functional grammar: An explorer's guide*. Sydney: National Centre for English Language Teaching and Research, Macquarie University.

Chimbutane, F. (1998). As estratégias resumptiva e cortadora na formação de orações relativas do português de Moçambique. In P. Gonçalves (Org.), *Mudanças do português em Moçambique: Aquisição e formato de estruturas de subordinação* (pp. 111–181). Maputo: Universidade Eduardo Mondlane e Livraria Universitária.

Couto, M. (1991). *Cronicando*. Lisboa: Editorial Caminho.

Dicionário Priberam. Acesso em 11.01.2019. https://dicionario.priberam.org/

Eggins, S. (2004). *An introduction to systemic functional linguistics* (2nd ed). New York and London: Continuum.

Gouveia, C. A. M. (2008). Gramática: Produzir significados na escrita. *Colóquio Gramática, História, Teorias, Aplicação*. Faculdade de Letras da Universidade de Lisboa: Instituto de linguística Teórica e Computacional.

Halliday, M. A. M. (2004). *An introduction to functional grammar* (3rd ed.). London: Hodder Arnold.

Hasan, R. (1984). The nursery tale as a genre. *Nottingham Linguistic Circular*, *13* (Special Issue on Systemic Linguistics), 71–100.

Laranjeira, J. P. (2001). Mia Couto e as literaturas africanas de língua portuguesa. *Revista de Filologia Românica II*, 185–205.

Martin, J. R., & Rose, D. (2003). *Working with discourse: Meaning beyond the clause*. London & New York: Continuum.

Rose, D., & Martin, J. R. (2012). *Learning to write, reading to learn*: *Genre, knowledge and pedagogy in the Sydney School*. London: Equinox.

Thompson, G. (1996). *Introducing functional grammar* (3rd ed.). New York & London: Routledge.

Anexo

A morte nascida do guardador de estradas
(aos puristas)

(1) Era uma vez uma estrada e um homem que lhe guardava. (2) A estrada se compridava com o tempo. (3) O guardião dela se vigiava: (4) o mínimo trilho espontava e (5) ele o reconduzia ao devido nada. (6) À margem da estrada nenhum carreirinho estava autorizado a nascer. (7) Nem o guarda podia endormitar, (8) tantos eram os atalhos com incorrigível mania de nascer.

(9) Quem sabe da estrada não sabe do mundo.

Por causa que a estrada é uma casa errante: (10) no final dela, a gente conhece mais o dentro que o fora. (11) Há que sair do caminho para se conhecer o destino.

(12) Talvez por isso o guarda via-se a braços. Supondo, como o triste caracol, que ele é que defende a concha.

(13) Nem a estrada concebia o necessário daquela vigília. Ou fosse que o vigilante, mais que a estrada, a si mesmo se guardasse. E sucessivamente.

(14) Acontece que o mundo é sempre grávido de imenso. (15) E os homens, moradores de infinitos, não têm olhos a medir. (16) Seus sonhos vão à frente de seus passos. (17) Os homens nasceram para desobedecer aos mapas e desinventar bússolas. (18) Sua vocação é a de desordenar paisagens. (19) E o guarda, aflito, concluía: os viventes se apuram é como anarquitectos.

(20) Ou será, se perguntava ele, que toda a paisagem é um arredor do homem? Sim, porque daqueles todos desvios nem se descortinava intenção. (21) O fim da viagem é iniciar outra viagem? (22) Que gosto é esse de, eternamente, trocar destino por partida?

(23) Ai, a gente!, queixumava o defensor. Doentes por terem deuses, enfermos por os perderem. (24) Afinal, tudo para eles é uma janela dando para a vida.

(25) Mas se há estrada ela deve ser única, teimava o guarda. (26) Cada vez mais ele se sentava no empenho. (27) E mesmo dormindo ele prosseguia o seu mandato. (28) Cumpra-se uma só via, (29) anulem-se as poeiras que este mundo já mais de completo, com atestado e registo. (30) O trilhozinho é de serviço cheio, destinado a encurtar distância ou a embelezar as cercanias? (31) Pouco

importava, para ele. (32) Que toda a estrada foi outrora um carreiro descalço? (33) Dessa verdade ele se abstinha.

(34) O que ele não via era o seguinte: é que o pé, posto em viagem, anula a condição terrestre. (35) Em troca, o chão se vai desnudando: na alma humana surgem as pegadas do planeta. (36) Afinal, os carreiros, esses teimosos surgentes, não servem apenas para levar os viajantes. (37) Eles próprios se movem junto com a travessia. (38) Deste modo, os lugares se visitam entre si, recordando-se do tempo em que o universo estava todo no ventre de uma gotinha.

Até uma noite. (39) O guardião se revolvia nas insónias. (40) Despertou com um ruído parecia vindo das vísceras da terra. (41) Olhou no escuro (42) e viu a estrada levantar-se do seu sítio e esvoar no espaço, igual uma ave gigantíssima. Ou fosse uma serpente alada, prateando-se nos céus. (43) O guarda nem sabia sentir-se. (44) A estrada se envolava, disparada no firmamento. (45) O velho guarda se afligiu: como responderia ele por aquela ausência? (46) Quem acreditaria na sua versão, o súbito desaparecimento da eterna estrada?

(47) Mais que a vista, esfregou o olhar. (48) Estaria ele contaminado dos vadios desejos dos demais? (49) Tentou acertar o pensamento, (50) voltou a focar a realidade. (51) Mas o sol olhado de frente só traz escuridão. (52) A dúvida, essa toupeira, penetrara o chão da sua alma. (53) E ele, sentado sobre seu desespero, em cuidadoso abandono, soprou: quem me dera ser ave, eu também. (54) Com a crença só de brincar, com essa fé a que chamam infantilidade, ele bateu os braços, feito um pássaro. (55) E sem espanto, levantou-se nos ares, em voo mais errante que a própria estrada.

Couto (1991, p. 167)

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