

Issues of textual hybridity in a major academic genre: PhD dissertations vs. research articles¹

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PALAVRAS-CHAVE:
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RESUMO: O trabalho apresenta as propriedades partilhadas pelos planos de texto de *teses de doutoramento* e de *artigos científicos*. A análise combina conceitos do Interacionismo Socio-discursivo (Bronckart, 1996) e da Teoria do Texto – parâmetro de género, mecanismo de realização textual e marcador de género (Coutinho e Miranda 2009). No *corpus* de 130 teses da Universidade de Coimbra (2003-2012) foram identificados quatro tipos de planos de texto: estruturação por tópicos, IMRDC, (Introdução–Metodologia–Resultados–Discussão–Conclusão), antológico e misto (Swales, 2004; Santos e Silva, accepted). Os textos evidenciam dois tipos de hibridismo: mistura e encaixe de géneros (Mäntynen & Shore, 2014). As teses de ciências sociais e humanas partilham a estruturação por tópicos com os artigos dessas áreas disciplinares. Nas teses de ciências de base experimental predominam planos IMRDC (idênticos aos dos artigos dessas áreas) e antológicos (que incluem os artigos já publicados/submetidos), evidenciando-se no segundo caso uma dupla relação de hibridismo. Consequentemente, questiona-se a delimitação entre os dois géneros, e conclui-se que os objetivos, o contexto institucional, a extensão e a etiquetagem metatextual poderão ser os únicos critérios distintivos entre a *tese* e o *artigo científico*.

KEYWORDS:
academic discourse;
genre;
PhD dissertation;
research article;
hybridity.

ABSTRACT: The paper presents a study on properties shared by text plans of PhD dissertations and research articles. The analysis combines concepts from the *Interactionnisme Socio-discursif* (Bronckart, 1996), and Text Theory - genre parameter, textual realization device and genre marker (Coutinho & Miranda, 2009). In the 130 University of Coimbra PhD dissertations (2003–2012) corpus, there are four types of text plans: topic-based, IMRDC (Introduction – Methods – Results – Discussion – Conclusion), anthology and mixed plans (Swales, 2004; Santos & Silva, accepted). Texts show two types of hybridity: genre blending and genre embed-

ding (Mäntynen & Shore, 2014). In Social Sciences and Humanities, topic-based plans share the typical structure of these areas research articles. IMRDC are dominant in Sciences PhD dissertations, as in these areas research articles. There are also anthology plans, which sustain a double relationship with research articles by repeating already published, accepted or submitted texts. These hybridity issues challenge the separation between genres. Pragmatic aims, institutional context, text length and metatextual genre label may thus be the only parameters that separate both genres.

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1. INTRODUCTION

In recent years, there has been a growing interest in academic discourse both within Anglophone and non-Anglophone communities. Seminal works about supposedly well-defined genres such as the PhD dissertation (PhD), the research article (RA) and the abstract have identified their typical properties through comprehensive and comparative textual analyses (see Swales, 2004; Devitt, 2004; Martín Martín, 2005; Hyland, 2009; Bondi & Lorès Sanz, 2014, *i.a.*). Theoretical proposals from different disciplines and different frameworks have also contributed to increase knowledge on genres and to provide accurate concepts for text and genre analysis (Adam, 2001; Adam & Heidmann, 2007; Coutinho & Miranda, 2009). Furthermore, several authors have put forward distinguishing aspects of these very specific or other minor academic genres, which are critical for understanding academic communities' socio-discursive practices. It is clearly the case of rhetorical structure, an unquestionably defining dimension for all of these genres (Swales, 1990; Bunton, 2002; Paltridge, 2002; Hyland, 2004; Bennett, 2011; 2014).

However, despite the fact that at least PhDs, RAs and abstracts have been substantially analysed in several academic discourse communities, they have not yet been the focus of a systematic research in Portugal. It remains unclear, for instance, whether international academic communicative paradigms are being adopted by Portuguese researchers or if, depending on the area of knowledge, these paradigms are being adapted or simply rejected in favour of idiosyncratic or culturally-indexed criteria. It also remains to be seen whether academic communities in Portugal clearly differentiate genres through rhetorical structures easily recognized in accordance to consensual guidelines of other academic communities.

In order to help bridging the gap, this article presents a comparative analysis of hybridity issues in 130 University of Coimbra's PhDs, taking into account archetypal text plans of RAs. The results are part of an ongoing research project about academic genres that also includes Master theses, abstracts and students' texts in academic contexts. The project aims to describe and to analyse written academic communication practices, according to the hypothesis that there

may currently exist a standardization process on the discourse practices within Portuguese academic contexts (Bennett, 2011, 2014). Notwithstanding this standardization widespread range, specific research areas may be more susceptible to the influence of internationally accepted and promoted textual paradigms (Swales, 1997; Tardy, 2004; Yakhontova, 2006; Bennett, 2011; Hyland, 2012; Burgess, 2014; Burgess *et al.*, 2014).

Textual paradigms are favoured or imposed by social agents – in this case, Universities, through their norms and regulations, and supervisors of PhDs, through their advice and evaluation. Their selection and choices promote a growing institutionalization of discourse practices among academic individuals in different disciplinary communities. Their guidelines have decisive consequences on researchers' text production, specifically in academic genres' models. Since novice researchers aim to be accepted or confirmed as full members of a community, they replicate in their texts properties already adopted by other members of the same community. By doing so, they reinforce the typical discourse practices in each academic genre.

Therefore, the assumption of collective standards that overlap the authors' individual preferences (Santos & Silva, 2016) may boost the above mentioned standardization process. As a result, academic authors within specific research areas may change or adapt their texts' rhetorical structure, especially if a highly-successful model is available and pointed out as acceptable or even preferred. For instance, a researcher may adopt a text plan archetype which is shared by other researchers in the same community and which has been acknowledged through acceptance in a peer-reviewed international publication. This may result in hybrid texts in several ways, especially within well-known and widely cultivated genres like PhDs and RAs. For the same reason, several other properties such as sentence structures and lexical choices may reflect genre hybridity. Accordingly, a systematic analysis of academic texts written in Portugal will help to identify their properties, as well as the underlying typified discourse practices. Such a research will help to understand how Portuguese academic communities *do* research and how authors *communicate* research results.

The article's main purpose is to identify issues of hybridity between two major genres and to disclose their influence on the ongoing standardization. As PhDs and RAs already share relevant properties, this may lead to the establishment of a new set of boundaries between them.

The paper will present the theoretical framework and foregrounding concepts such as text plan and *hybridity* (see 2. and 3.). It will then present and discuss data on PhDs' text plans under a contrastive perspective (see 4.). Finally, it will present in the main conclusions different ways through which academic texts materialize hybridity phenomena.

2. THEORETICAL FRAMEWORK AND METHODOLOGY

According to *Interactionnisme Sociodiscursif* (ISD), texts are communicative events that instantiate social practices and occur within specific frames of social and professional activities. Individuals that perform tasks and take social roles within the same social activity (such as the press, politics, religion, advertising, etc.) belong to the same discourse community (or *formation sociodiscursive*; Bronckart, 1996: 140-141). Furthermore,

en fonction de leurs objectifs, intérêts et enjeux spécifiques, ces formations élaborent différentes sortes de textes, qui présentent chacune des caractéristiques relativement stables (justifiant qu'on les qualifie de genres de texte) [...]. (Bronckart, 1996: 137)

Such a perspective follows Bakhtin's (1986: 60) conception: "each sphere in which language is used develops its own *relatively stable types* of [...] utterances. These we may call *speech genres*". Thus, as text models, genres are devices that allow individuals to perform situated actions through language (*i.e.*, to produce texts) and to participate in different social activities. Every new text is necessarily shaped by one genre (or more than one) that guide(s) speakers and writers both in text producing and processing. In other words, speakers and writers simultaneously adopt and adapt the typical properties of a genre to generate and to process new texts.

Each discourse community has its own genre repertoires. These help individuals to perform tasks and to achieve their goals. Academic communities, for instance, use written genres – such

as a PhD dissertation, a Master thesis or a research article –, as well as oral genres – such as a lesson, a conference or a viva. As a genre, a PhD is thus a communicative device historically and culturally embedded in a specific discourse community. It functions as a text model that allows individuals within a precise social and communicative status to achieve their main goal – ultimately, to obtain a doctoral degree.

Textual analyses are mainly concerned with the ways by which language units are linked in order to form larger segments, such as sequences and whole texts. In this article, the ISD top-down approach, which focuses on the influence of external factors on language practices, is combined with a Text Linguistics' bottom-up approach, which focuses on textual properties (Adam, 2002; 2008; 2011).

All genre properties are classified according to Adam's (2001) eight components, which include external and internal properties.² The present study is mainly concerned with the compositional component, as it includes genre properties that are subsumed in text plans, *i.e.*, contents' organization and rhetorical moves. Text plans' properties, though, can only be fully understood if external factors are also considered, at least the authors' discourse community, their social role and their communicative goals.

Therefore, the adopted methodology merges these complementary approaches: first, textual properties of PhDs are identified through the analysis of each text. Then, these properties are organized and situated within the context of distinct discourse communities, namely by determining each text's area of knowledge. Finally, the results are compared with previous studies and theoretical proposals, both on PhDs and on RAs (see 2.2.).

Since genres are abstract classes, properties can only be described through the analysis of empirical texts. In order to overcome this theoretical and methodological difficulty, Coutinho & Miranda (2009) have proposed a model of analysis which includes three key concepts. *Genre parameters* refer to the typical properties of a genre. In other words, they are predictable external and internal features that set up a genre's identity and help to distinguish it from other

2. Adam's (2001: 40-41) eight components of genre criteria include the following categories: enunciative (social and professional areas of activity, social roles of participants), pragmatic (communicative goals), compositional (text plans), semantic (contents), stylistic (lexical-grammatical choices), material (text medium and extension, page layout), peritextual (textual borders) and metatextual (reflections on the text's genre and self-mentions).

genres. *Textual realization devices* (or *mechanisms*) refer to the empirical properties that materialize genre parameters, either internal (textual) properties or external factors that influence text production. When these devices are recurrent within texts of a specific genre, they instantiate genre parameters. Some of these devices are *genre markers*, *i.e.*, textual realization devices with a distinctive value. As they point to empirical properties that occur exclusively in texts of a specific genre, they allow readers and listeners to identify the text's genre. Genre markers are inferential when they implicitly indicate the genre that the text belongs to. For example, the occurrence of "once upon a time" at the beginning of a text implicitly allows identification of a fictional short story. On the other hand, genre markers may also be self-referential if they explicitly indicate the genre that the text belongs to. It is the case of tags such as "a novel", "PhD dissertation" or the incipit expression "This paper presents (...)".

To sum up, by adopting the concepts of genre parameters and textual realization devices, the analysis clearly acknowledges the abstract nature of genres as opposed to the empirical nature of texts.

3. FOREGROUNDING CONCEPTS

3.1. PHDS TEXT PLANS

A text plan is, broadly speaking, a structural compositional device for ordering semantic contents. According to Swales (1990; 2004), there are 3 main types of text plans in PhDs. *Traditional* text plans are organized in different chapters that occur in a fixed order and present not only the same type of contents but also the same tags. These chapters correspond to sections such as Introduction, Method(s), Results, Discussion and an optional chapter – Conclusions. It is currently known under the acronym IMRD(C). *Complex* text plans include an Introduction, a Literature Review, an optional Methodology chapter and a series of several articles that were previously published, accepted for publication or submitted to journals. Each of these articles presents an IMRD(C) text plan and the final chapter lists the main conclusions. *Topic-based* text plans are less predictable in their structure, as chapters' titles are not fixed. Typically, these

plans include an Introduction, a Literature Review chapter, a Theoretical Framework chapter and a Methods chapter. Each chapter contents depend on the subject and on the research itself. Therefore, tag and number of chapters cannot be previously stipulated, for each topic may be the central subject of a chapter. This text plan also ends with the Conclusions (see table 1).

However, this taxonomy may need some adjustments, according to the results of a recent study on 130 University of Coimbra's PhDs (Santos & Silva, accepted). Firstly, Swales (1990, 2004) has proposed the label *traditional* for text plans that exhibit an IMRDC structure. In the analysed *corpus*, these text plans clearly prevail in scientific areas such as Biology and Chemistry, but not in Humanities' areas. Furthermore, a topic-based text plan seems to be older and more widespread across the different research areas.³ As topic-based contents organization is probably the most traditional PhD dissertations' text plan in Portugal, the association between IMRDC plans and the label *traditional* is not appropriate, at least within the University of Coimbra.

Secondly, in Swales' proposal, a *complex* model is a collection of IMRDC RAs. However, the analysis of the University of Coimbra's PhDs has shown other possibilities of general organization whenever a series of RAs already published, accepted for publication or submitted to a journal were the main core of a PhD. In order to include this diversity, a collection of different research articles was labelled *anthology*, irrespective of different text plans either globally and/or in each chapter.

Thirdly, *topic-based* text plans display very heterogeneous patterns.⁴ This is probably due to the fact that they are adopted in different research areas, which may focus on very different subjects, apply distinct theoretical frameworks and (mostly non-experimental) methods. Also, in several Humanities' areas (such as Literature, Philosophy, Sociology, and History) each research process may be a singular one. This singularity is reflected in the PhD text plan.

Finally, the *corpus* includes many PhDs organized in mixed text plans. These combine in different ways several properties of the other three classes (IMRDC, anthology and topic-based). Table 1 shows a comparison of both proposals:

3. A preliminary survey on older PhD dissertations that are included in *Estudo Geral* has shown that topic-based text plans are more frequent in previous years.

4. This idea was already pointed out by Swales (2004: 109).

Swales (2004)		Santos & Silva (accepted)	
Traditional (IMRDC)	<ul style="list-style-type: none"> - Introduction - Literature Review / Survey - Methods (Materials/Procedures) - Results - Discussion - Conclusions (Implications/Recommendations) 	IMRD(C)	<ul style="list-style-type: none"> - Introduction - Methods - Results - Discussion - Conclusions (optional)
Complex (IMRDC) ¹⁻ⁿ	<ul style="list-style-type: none"> - Introduction (definitions, justification, aims) - Literature Review (sometimes included in the Introduction) - General Methods (<i>optional</i>) - IMRD ¹⁻ⁿ - Conclusions 	Anthology (Set of research articles)	<ul style="list-style-type: none"> - General Introduction - Objectives - Article 1 (IMRDC model or another model) - Article ¹⁻ⁿ - General Conclusions
Topic-based	<ul style="list-style-type: none"> - Introduction - Literature Review - Theoretical Framework - Method - Topic: Analysis-Discussion ¹⁻ⁿ - Conclusions 	Topic-based	<ul style="list-style-type: none"> - Introduction - Literature Review - Theory or model - Topic ¹⁻ⁿ - Conclusions
		Mixed	<ul style="list-style-type: none"> - Topics + IMRDC - Anthology + IMRDC - Macro-IMRDC + parts I(M)R(D)(C) - ...

Table 1 – Text plans typologies

According to this data, it is assumed in the present study that there are 4 types of text plans in PhDs, instead of the original 3 categories proposed by Swales (1990; 2004). It is also assumed that a text plan in any of these four types is a genre parameter, because it is inevitably a property of every PhD, and also because it has set-up patterns in terms of this genre's social and discourse practices.

3.2. HYBRIDITY

In a given area of activity, with its own social and discursive practices (see 2.), archetypal text plans are available and may be suitable for different genres. However, under the influence of a “genericity effect” (or *effet de généricité*; Adam & Heidmann, 2007), authors adapt in various ways these archetypal text plans to a given situation, taking into account their own social and professional area, academic community, widespread discourse practices, their social and communicative status and communicative goals (Hyland, 2012; Tardy, 2004). Broadly speaking, these adaptations take the form of assigning to texts a variable set of genre properties, so that they may be identified as belonging to a specific genre, without compromising individual variation. Therefore, genres are not rigidly fixed or unchangeable, but “stabilized for now” textual classes (Schryer, 2002⁵, apud Bawarshi & Reiff, 2010: 60).

This oscillating background becomes a contextual matrix for *genre hybridity* in the sense of an ongoing process through which “[parts of] a text representing one genre can be incorporated into another text representing another genre or mix of genres” (Mäntynen & Shore, 2014: 742). It has already been established that PhDs in the University of Coimbra *corpus* do not follow text plans exactly as described in table 1 (see previous section). This means that each author adopts and/or adapts one or more genre parameters in content organization and overall structure. As a consequence, their texts become hybrids because they absorb these adaptations and transferences, albeit in very different ways. Also, each PhD text plan may be placed according to a *continuum* between two poles – a conventional and an occasional one (Santos & Silva, accepted). It may thus become very close or very distant from the selected archetypal text plan.

5. Schyer, C. 2002, Genre and power: a chronotopic analysis. In Coe, R., Lingard, L. & Teslenko, T. (Eds.) *The Rethoric and Ideology of Genre: Strategies for Stability and Change*. Cresskill: Hampton Press, pp, 73-102.

Several factors may boost genre hybridity. In the case of academic genres, authors usually conduct their research on the same subjects, at the same time and they may be asked to produce texts of different genres simultaneously. For instance, a PhD student may also present a paper to a conference and submit an article to a journal. These texts may share topics, contents, even a theoretical framework, methods and results with the PhD dissertation, since previous work is the same. Furthermore, purposes are usually very similar. Even if a PhD is ultimately associated with a doctoral degree, it shares another goal with the paper and the RA – the goal of acceptance in a tribe, *i.e.*, of acceptance in the disciplinary community of fellow researchers. Finally, research internationalization and its consequences in standardization may result in transfer and sharing of text plans. This set of circumstances clearly favours different types of hybridity at several textual levels (compositional, stylistic, etc.; see again Adam, 2001).

Genre hybridity covers, in fact, different phenomena. Research on University of Coimbra's PhDs has detected at least two kinds. Some PhDs show genre *blending* because they reproduce RAs' text plans. This kind of hybridity occurs whenever properties of two or more genres are shared and, as a result, the boundaries between these genres become blurred (Mäntynen & Shore, 2014: 748). There is also genre *embedding* in PhDs that are collections of research articles. This occurs when a whole text is inserted in another text that belongs to a different genre (Mäntynen & Shore, 2014: 745).

Bearing all these issues in mind, it is not surprising that two academic genres – the PhD and the RA – are especially prone to hybridity. This will be shown in the next section, which will discuss random sample analyses.

4. ANALYSIS AND DISCUSSION OF RESULTS

Topic-based plans are more frequent in Social Sciences, Humanities and Art Studies disciplinary areas, where PhD index entries match very exclusive research topics, as explained above. This exclusivity fosters the author's creativity in index entries with particular stylistic effects. A neologism such as *paganitas* or a metaphor such as “Estado da arte | Decifrar a paisagem”

(“State of the art | Deciphering the landscape”, our underlining), which appear in an Architecture PhD index⁶, need an explanation either in the index itself, like the former, or in the text, like the latter. They are unique in the sense that they belong to that particular research, but also in the sense that they are literary-flavoured structures issued from their author’s subjectivity. They are understandably very common in Literature PhDs, like in the following entries: “O «contrabando de ideias» e o «credo» político-literário do porta-voz da Jovem Alemanha” / “Smuggling of ideas and political belief of Young Germany’s speaker”, “«Traficância», ficcionalização e tendência ensaística: o conceito de novela do jovem Gutzkow” / “Trafficking, fictionalization and essay tendency: young Gutzkow’s concept of novel”, “Ideias novas em trajes clássicos: os conceitos gutzkowianos de drama e de tragédia” / “New ideas in classical clothes: gutzkowian concepts of drama and tragedy”⁷ (low commas from the author, our underlining and translation).

Indexes such as these reflect text plans that no other author could possibly replicate. They also translate a unique research path, where results are progressively built by the act of writing itself. Accordingly, their rhetorical structure is also independent and progressive, even if it follows a traditional path with a theoretical hypothesis built upon successive logical arguments, or a classic thesis-antithesis-synthesis plan.

Whenever PhDs and RAs share these two properties – exclusive text plans and stylistic choices for index entries – they become examples of genre blending. This is the first hybridity issue that narrows the gap between PhDs and RAs, at least in Social Sciences, Humanities and Art Studies disciplinary areas. In both genres, writing style and compositional plans undoubtedly follow the structure of an argumentative and partially literary essay, in which research work and text writing are inseparable.

By contrast, IMRDC classic plans are encouraged in most PhDs from disciplinary areas with an experimental background such as Biology, Biochemistry, Engineering, Medicine and Pharmacy, amongst others. This choice highlights the research apparent “objectivity”, since it

6. Cardielos, J.P. (2009) *A construção de uma arquitectura da paisagem*. PhD Dissertation in Architecture presented to the Faculty of Sciences and Technology of the University of Coimbra, p. v. Accessed on June 3, 2016 at <http://hdl.handle.net/10316/11490>.

7. Madeira, R.P.C. (2010). *Ficção e História: a figura de Uriel da Costa na obra de Karl Gutzkow*. PhD Dissertation in Modern Languages and Literatures – German Literature, presented to the Faculty of Arts of the University of Coimbra, p. xii (Accessed on June 3, 2016 at <http://hdl.handle.net/10316/12165>).

8. Several departments issue norms and regulations for PhD dissertations formats. For instance, the Life Sciences Department regulations state that “There is not a clearly defined model for organising a dissertation. A “classic” (sic) format (General Introduction, Materials and Methods, Results, Discussion, Conclusions, References) or a compilation of works / articles (General Introduction, Chapters with different works, General Conclusions, References) are acceptable.” (Accessed on June 3, 2016 at <http://www.uc.pt/fctuc/dcv/documentos/normas1>, our translation). In a more authoritative way, the Informatics Engineering Department provides a PhD index template in English, which stipulates each entry and section contents (Accessed on June 3, 2016 at http://www.uc.pt/en/fctuc/dei/ensino/doctoral_program/documentos_phd).

9. Baptista, A.M.C. (2006) *Misturas Betuminosas Recicladas a Quente em Central - Contribuição para o seu estudo e aplicação*. PhD Dissertation in Civil Engineering presented to the Faculty of Sciences and Technology of the University of Coimbra, p. ix-xiii (Accessed on June 3, 2016 at <http://hdl.handle.net/10316/7372>).

reflects a traditional scientific procedure. It is also an epistemic textual device that enhances independent, foregrounding and undisputable evidence. Not surprisingly, it is also recommended in order to increase the research project’s international impact.⁸ Indexes from PhDs in these areas are organised in an identical sequence of chapters with pre-determined contents – *Introduction, Methodologies, Results, Discussion, Conclusion* (Swales, 2004: 107) that could be reproduced in any other scientific work. Contents are thus very often repeated or paraphrased like in the following example (our underlining):

- “1 INTRODUÇÃO (...)
- 2 TÉCNICAS DE RECICLAGEM DE MISTURAS BETUMINOSAS (...)
- 3 FORMULAÇÃO DE MISTURAS BETUMINOSAS RECICLADAS A QUENTE (...)
- 4 TRABALHOS EXPERIMENTAIS (...)
- 5 ANÁLISE DE RESULTADOS (...)
- 6 ORIENTAÇÕES PARA A RECICLAGEM A QUENTE EM CENTRAL (...)
- 7 CONCLUSÕES GERAIS E DESENVOLVIMENTOS FUTUROS (...)”⁹

The only deviation from this structure found in data is in a way a Columbus egg solution for Swales’ problem about empirical evidence. One single section devoted to results becomes “an unwieldy and out-of-balance monster chapter in the middle of the text” (Swales 2004: 108), like in an Anthropology PhD, where in a total of 233 pages, 119 are devoted to chapter 3 – “Results”¹⁰. In order to avoid this “monster chapter”, results are sometimes divided into several chapters, like in the following example (our underlining):

- “CHAPTER 3 - Results: Characterization hESC apoptosis
- 3.1- hESC exhibit classic apoptotic features
(...)
- 3.9- Altered expression of key apoptosis regulators upon etoposide and gamma irradiation-induced apoptosis in hESC

3.10- Discussion

CHAPTER 4 - **Results:** Lentiviral-mediated RNAi to explore the role of p53 in hESC

4.1- p53 is required for etoposide-induced apoptosis

4.2- p53 is required for spontaneous apoptosis

(...)

4.8- Role of p53 hESC in teratoma formation

4.9- Discussion”¹¹

Sharing of properties with a RA is more striking in this case, since texts present the “formula” that follows the implicit *diktat* of empirical evidence, as opposed to the mainly theoretical discussion of Social Sciences, Humanities and Art Studies. Therefore, it is probably the case that internal links pertaining to each researcher’s disciplinary community strengthen the similarity between a PhD dissertation and a research article, *i.e.*, between different academic genres. As a result, texts belonging to the same genre in different disciplinary areas – a PhD in Literature and a PhD in Engineering, for instance – may be more dissimilar, whereas a RA and a PhD within the same disciplinary area present an almost identical rhetorical structure.

If hybridity is indeed the result of sharing structural properties between genres, then it follows that a diachronic evolution along these guidelines may occur and foster new standardization processes. According to Mäntynen & Shore (2014: 748), “genre blending [...] results not only in texts that combine features of two or more genres, but it generally results in texts with an ambivalent generic status and/or it results in the development of new genres”. In a way, IMRDC-compositional plans of PhD dissertations do not follow a pre-existent model that would be determined by the genre. Rather, they are guided by an archetypal plan with minor or major variations in different texts, irrespective of a particular genre. At least within academic discourse, it seems that texts of different genres such as a RA, a PhD and possibly a Master

10. Gonçalves, D.M.S. (2011) *Cre-mains. The Value of Quantitative Analysis for the Bioanthropology Research of Burned Human Skeletal Remains*. PhD Dissertation in Biological Anthropology presented to the Faculty of Sciences and Technology of the University of Coimbra, p. xii-xiv (Accessed on June 3, 2016 at <http://hdl.handle.net/10316/18213>).

11. Grandela, A.M.M. *Regulation of Apoptosis and Differentiation by p53 in Human Embryonic Stem Cells*, PhD Dissertation in Molecular Biology presented to the Faculty of Sciences and Technology of the University of Coimbra, p. xi (Accessed on June 3, 2016 at <http://hdl.handle.net/10316/9620>).

12. Supervisors often suggest as informal advice to novice writers that they write their MA thesis exactly like a paper or a RA (c.p.).

13. The *corpus* has 58 Biology PhD dissertations that were presented in a 10-year period. Fourteen texts were randomly selected, and 11 have an anthology plan. (Santos & Silva, accepted).

14. Chelinho, S. (2011). *Novel approaches for pesticide effects assessment in warm temperate and tropical regions*. PhD Dissertation in Biology – Ecology, presented to the Faculty of Sciences and Technology of the University of Coimbra, p. 55 (Accessed on June 3, 2016 at <http://hdl.handle.net/10316/19901>).

15. The fact that several authors have worked together in a PhD “chapter” may challenge to a certain extent the dissertation status as a major work that presents an author’s individual research project aimed at obtaining a PhD grade. As this does not affect hybridity but authorial voice (Silva & Santos, submitted), the issue will not be discussed here.

16. Chelinho, S. *ibidem*, pp. 59 e 121, our underlining.

thesis may follow this archetype according to the socio-discursive practices of a particular disciplinary area.¹² This plan adaptation also challenges the separation of genres in the sense that the compositional structure may not be as distinctive as metatextual labelling, enunciation contexts or pragmatic aims (see section 5.).

Sharing of textual properties may be even more striking in PhDs that adopt anthology text plans, which are again more frequent in experimental sciences, especially in Biology.¹³ Indexes in anthology PhDs exhibit two chapters, one at the beginning and another at the end. The first is introductory, the last is conclusive. They are not intended for publication, but they frame several other chapters (between two and five) and function as metatextual markers *a quo* and *ad quem*. Intermediate chapters are RAs already published, accepted, or at least submitted to international peer-reviewed journals. Metatextual and peritextual markers explicitly confirm this property in initial separators (our underlining):

“Chapter 2

Based on the following manuscript:

Chelinho S, Moreira-Santos M, Lima D, Silva C, Viana P, André S, Lopes I, Ribeiro R, Fialho AM, Viegas CA, Sousa JP. 2010. Cleanup of atrazinecontaminated soils: ecotoxicological study on the efficacy of a bioremediation tool with *Pseudomonas* sp. ADP. *Journal of Soils and Sediments* 10: 568-578.¹⁴

All “chapters / articles”¹⁵ have several authors and may follow an IMRDC model. They also present several repetitions in introductory or methodology sections, due to the fact that previous research used the same references, materials and methods. This is clearly seen in the following quotations of first sentences, both taken from the introductory section within each chapter (our underlining):

[Chapter 2] “The herbicide atrazine (2-chloro-4-ethylamino-6-isopropyl-amino-1-striazine) has been widely used in pre-and post-emergence weed control in several crops (Solomon et al, 1996). Because atrazine is somewhat persistent in soil, (...).”

[Chapter 4] “Atrazine is one of the most intensively used herbicides worldwide and due to its moderate to high persistence in the environment, it has been detected

above legislation limits and its toxic effects (especially for aquatic organisms) have been extensively reported (...).¹⁶

Intermediate chapters from anthology PhDs are independent, since they must survive in a completely different context, *i.e.*, the peer-reviewed journal. This is enhanced by the fact that they have their own references and appendixes or annexes, despite institutional stipulations.¹⁷

As the very same text is metatextually indexed to two different genres, with socio-discursive contexts that are also different, this raises a second hybridity issue between PhDs and RAs. In other words, “an entire text is incorporated as a clearly distinguishable part of another text” (Mäntynen & Shore, 2014: 745). This hybridity process is clearly *genre embedding*. The concept of “included genre” (Rastier 1991) may also be useful to explain this double belonging.

In this kind of hybridity, texts from peer-reviewed journals belong to the autonomous genre *research article*, but they may become part of an included genre whenever they are transferred to a *PhD dissertation*. The double belonging is also reinforced through their pragmatic dimension, since the texts’ aims are not exactly coincident in both contexts. As a chapter included in a PhD, the text reflects the socio-discursive practices that will allow its author to obtain a doctoral degree and to access a particular academic community. As an autonomous RA, it reflects other socio-discursive practices that confirm the author’s social and professional status and his or her affiliation to the disciplinary community via international recognition in a global publishing forum. In this case, each RA included in a PhD also serves another goal.

This genre embedding typically involves a new contextualization. A PhD thus belongs to an academic genre, but it also belongs to a didactic genre in the sense that it is required by an educational tertiary institution in order to confer a degree. On the other hand, it belongs to a scientific genre, in the sense that it confirms his or her author’s international status as a research member of a disciplinary international community. According to Swales (2004: 106), “the somewhat Janus-like double objective of producing a chapter and producing an article is [...] becoming increasingly the norm [in the sciences and in certain social sciences such as economics]”. Through the issue of an included genre, anthology plans may therefore reflect the

17. Regulations from Life Sciences Department stipulate that “Although a PhD dissertation with works / articles is acceptable, uniformity in formatting and the possibility of linear reading are required. Chapters should not be mere copies of published journal articles. They should not have the structure of a submitted research article (with images at the end, for instance). Global references are required at the end of the dissertation, not at the end of each chapter.” (Accessed on June 3, 2016 at <http://www.uc.pt/fctuc/dcv/documentos/normas1>, our translation). As a rule, in anthology PhDs, these recommendations are not followed, partly because jury members prefer to have clear evidence that the chapters / articles were actually published, accepted, or, at least, submitted (p.c.). Incidentally, the quotation is very similar to other universities’ regulations (cf. Michigan’s *Dissertation Handbook*, apud Swales, 2004: 105).

foundation of academic genre hybridity itself, embedded in the socio-discursive practices of given communities.

The last plan to be considered is “mixed” and may exhibit compositional properties from the three other plans (Santos & Silva, accepted). Some structures may present an anthology that is an IMRDC macro-plan, *i.e.*, an extensive RA of several hundred pages, where each chapter is a new IMRDC autonomous text, following a *mise en abyme* process.¹⁸ It is the case of the following dissertation, which has an overall IMRDC plan and an explicit anthology metatextual marker:

18. As there are many other possibilities, this mixed plan is not considered “complex” or “complex-traditional” as in Swales (2004: 108) and Hyland (2009: 141). For instance, plans include topic-based macro-structures with IMRDC-structures in chapters, or anthologies of IMRDC chapters, amongst others. Ongoing research has not yet succeeded in establishing distinctive sub-categories.

“1. Introductory Remarks	1
2. Introduction	4
(...)	
2.2. The Methods	23
(...)	
2.3. References	79
(...)	
3. Procedures	89
(...)	
3.4. References	102
4. Results	105
(...)	
5. General Conclusions	209
(...)	
6. Future Prospects	215”

The comparison between these main entries in the general index and specific entries in

chapter 4 detailed index highlights the process:

“[Chapter] 4. Results	105
4.A Bioactive Chromone Derivatives – Structural Diversity	105
4.B Conformational Behaviour of (...)	121
4.C A Conformational Study of Flavones and Isoflavones (...)	137
4.D Chromone-3-carboxylic Acid (...)	177
4.E Dietary Chromones as Antioxidant agents (...)	187
4.F The Autooxidation Process (...)	197” ¹⁹

In a very significant way, each section of chapter 4 from 4.A to 4.F has its own formatting devices, those of the peer-reviewed international journal in which it has been or would be published. The only exception lies on texts still in preparation, which follow the formatting devices of both the introductory and conclusive framing chapters. Section 4.B even presents all markers of an online peer-reviewed RA published by Elsevier, complete with journal name and red and grey-coloured editor’s logo.

This similarity thus includes material devices, but is mainly sustained by the fact that it combines in various ways topic-based, IMRDC or anthology plans. If all these plans allow for hybridity between PhD and RAs, as already shown, it is logical that all mixed plans may exhibit hybridity through the same properties, *i.e.*, by presenting a preferred plan within a given disciplinary area (genre blending), and/or by reproducing texts belonging to another genre (genre embedding).

5. CONCLUSIONS

The present paper proposes an analysis of 130 UC PhD dissertations’ text plans, taking into account archetypal research articles compositional structures of different disciplinary areas. Following a swalesian typology (Swales, 2004) revised by Santos & Silva (accepted), it is assumed that a text plan is a central genre parameter, especially in the case of “major” academic

19. Machado, N. (2012). *Chromone derivatives as antioxidant agents: the structural variable*. PhD Dissertation in Biochemistry – Molecular Biophysics presented to the Faculty of Sciences and Technology of the University of Coimbra, pp. xxii and xxiii (Accessed on June 3, 2016 at <http://hdl.handle.net/10316/23600>).

genres such as PhD dissertations and research articles. It is also assumed that there are four types of text plans: topic-based, IMRDC, anthology and mixed (see table 1 in 3.1.). Each new PhD dissertation instantiate a text plan that is gradually either close or distant from text plans previously identified in other PhDs and research articles. While reproducing what it is likely to be an accepted and recommended text plan formula for research articles, PhD dissertations somehow erase a compositional distinctive factor between these two genres.

Textual data from indexes also shows two hybridity processes: *genre blending* and *genre embedding*. Genre blending was detected in PhD dissertations organized in topic-based text plans and in IMRDC text plans, as a compositional genre parameter shared by PhDs and research articles. In disciplinary areas such as Humanities and Social Sciences, these two major genres mainly adopt a topic-based text plan. Other sciences typically follow the IMRDC plan (Swales, 2004: 110, 217-240). Therefore, each of these major domains of academic knowledge follows a distinct highly-valued reference model– *i.e.*, an archetypal text plan – in PhD dissertations and in research articles. Even if this model is not the only one that is available within each disciplinary community, it is clearly the favourite.

This type of genre blending was also detected in PhD dissertations that adopt anthology text plans or mixed text plans, since they globally adopt (and adapt) a research article archetypal text plan. On the other hand, PhDs with an anthology and a mixed text plan exhibit genre embedding as well. Full texts that belong to a different genre (the research article) are used as parts of a larger text that belongs to another genre (the PhD dissertation). These included articles were previously published, accepted for publication or submitted to peer-reviewed academic journals and they are reused as chapters within the PhD dissertation. They do not show uniform formatting devices, as the font type and the graphic spot they present (among other graphic properties) are in accordance with the layout properties of the journals in which they were published or to which they were submitted. Their bibliographic references also follow the journals' guidelines. Thus, the layout and the references of these chapters/included articles differ from both the other chapters' layout and the PhD dissertation's consolidated bibliography.

Therefore, PhDs with anthology text plans (as well as PhDs with mixed text plans that include already published, accepted or submitted articles) exhibit both genre blending and embedding.

These hybridity issues are becoming a usual feature among PhD dissertations and research articles, at least with regard to text plans. Although genre blending and genre embedding are distinct processes that affect differently text plans (in accordance with the discourse community in which they emerge), they are rapidly becoming widespread procedures among academic researchers. This means that these two distinct and major academic genres may be structurally organized in very similar ways.

As a result, a PhD dissertation and a research article can only be identified and distinguished using other criteria than their text plans. These include a metatextual self-referential marker, a self-identification device that points to the genre the text belongs to: for instance, the tag “PhD dissertation” on the cover. PhD dissertations with anthology text plans also present a peritextual and inferential genre marker in contrast with the research article genre text plans: a general Introduction and general Conclusions frame the collection of research articles that occurs in the middle. Finally, there is a partial difference in enunciative contexts and pragmatic goals of each genre. Although PhD dissertations and research articles share common goals such as accomplishing and communicating research results to peer-readers, and accessing or confirming allegiance to a particular disciplinary community, they are distinct in two self-referential genre markers. In fact, only PhDs grant a doctoral degree and require a public examination.

Future research on these topics may focus on how hybridity processes reflect standardization processes or, on the contrary, growing divisions among academic discourse communities (namely among knowledge areas such as Sciences and Humanities), since different ways of *communicating* research processes and results also reflect different ways of *doing* research. For the present, however, genre blending and genre embedding between the PhD dissertation and the research article point to widespread hybridity within two major academic genres.

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