ABRIDGED ABSTRACTS: RUSHING THE RESEARCH RACE?

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Abstract

Through manual and electronic corpus analysis, I explore the rhetorical structure and discursive features of abridged abstracts in two distinct fields: Applied Linguistics and Electronic, Telecommunications and Computer Engineering. My goal is to discuss whether shortened abstracts, which do include some apparently superfluous elements, are truly informative, and to compare trends in the two broad fields mentioned. According to my findings, abridged abstracts withstand a tension between two opposing forces: rhetorical economy on the one hand, and meta-reference and self-promotion on the other. My claim is that, although dispensable, meta-reference and self-promotion fulfil important beaconing functions that facilitate text production and accelerate research screening.

Key words: ESP, EAP, genre analysis, abridged abstracts, meta-reference, promotional language.

Resumen

Mediante un análisis de corpus manual y electrónico exploro la estructura retórica y los rasgos discursivos de los resúmenes abreviados en dos campos diferentes: la Lingüística Aplicada y la Ingeniería Electrónica, Informática, y de Telecomunicaciones. Mi objetivo es analizar hasta qué punto estos resúmenes abreviados, que curiosamente incluyen elementos en apariencia superfluos, son informativos. Según mis hallazgos, este tipo de resumen soporta una tensión entre dos fuerzas opuestas: economía retórica por una parte, y meta-referencia y autopromoción, por otra. Mi conclusión es que estos dos últimos elementos, aunque prescindibles, balizan contenidos específicos, facilitando con ello la escritura y agilizando la criba de información.

Palabras clave: IFE, IFA, análisis del género, resúmenes abreviados, meta-referencia, lenguaje promocional.

In this globalized world, where science has become a commodity and leading-edge technologies succeed one another vertiginously, the screening of research is ever faster. Added to textual practices such as structured and graphical abstracts, keywords and research highlights, is the need to incorporate verbal 'summaries of summaries' in conference programmes and certain highly-cited journals, with the

purpose of providing core information graspable at a glance and facilitating indexation. Yet a number of inevitable questions arise: How 'informative' can these abridged abstract versions be? Are they rhetorically complete, including the whole IPMRD/C[1] sequence proposed by Swales (*Genre*) and Bhatia? Could we speak of specific patterns in these textual practices? Do they differ from the disciplinary full-abstract 'snapshots' given by Hyland and Swales (Afterword)? In this paper I will try to find answers to these questions and outline the direction abridged abstracts are taking nowadays in two distinct disciplines and contexts: an engineering journal and the programme of a well-known and crowded conference event in Applied Linguistics.

1. INTRODUCTION: TRACING THE EVOLUTION OF THE ABSTRACT GENRE

The objective of abstracts, according to Swales and Feak (*Abstracts* 1) is to summarize longer texts with "maximum efficiency, clarity, and economy," which is feasible within their average length of 250-350 words and in the more extended format of the doctoral dissertation variant, in general up to 500 words. However, the compressed space of abridged versions (normally of 50 words or less) may compromise clarity and efficiency for the sake of economy, unless the target readership is a very specific community of practice (Wenger), an orientation counter to the current trend of inter-disciplinary collaboration in scholarly circles. Berkenkotter and Huckin's study on high-rated humanities conference abstracts concludes that successful gatekeeping descriptors are a clearly-defined problem, some marker of novelty, special or 'buzzy' terminology, explicit or implicit references to specialized literature in the field, and a topic of interest to the experienced members of the community. This list could be perfectly well applied to abstracts in any academic situation, but there is hardly room for all of the items in an abridged abstract, at least in an overt manner. Topical interest or 'newsworthiness', novelty, and problematization are for example inherent in Engineering and therefore usually taken for granted, although not in other disciplines. As for scholarly references, they seem to be a requisite of conferences only: Huckin defines the abstract as a "stand-alone mini-text" that summarizes the topic, methodology and main findings of an investigation and offers a "road-map" to the full article or presentation. The inclusion of references to the literature would in principle clash with this necessary condition of "independent text."

From a diachronic perspective, discourse analysts have drawn attention towards the evolving patterns that have emerged in conventional unabridged abstracts in the past decades. Hyland, for example, underlined their growing length

[1] Introduction>purpose>method>results/product/outcome>discussion/conclusion.This sequence reflects the habitual structure of the research article and was originally proposed by Swales (*genre*) without the 'purpose' move, which he subsumed in the introduction. It was Bhatia (*analizing*) who gave it prominence as a separate move.

and informativeness, as well as the increased length of the results/product/outcome move and the expansive inclusion of discussions/conclusions in the hard sciences, Philosophy and Marketing between 1980 and 1997. More recently, Swales (Afterword) has noted four major cross-disciplinary trends: an increasing use of hedges and boosters, of locational metatext (e.g. "In this paper/study...") accompanying promotional items, a stricter move structure, especially in structured abstracts, and a decline in the incidence of evaluative adjectives. Studying rhetorical variation under a disciplinary lens, Hyland detected a low proportion (21%) of conclusions in all types of sciences —soft and hard— and interpreted this fact pragmatically as a writer's "tact act" to avoid imposing views on readers. Two other telling findings derived from his corpus study were that introductions are much more frequent in the soft disciplines (oriented at defining and discussing issues rather than at establishing empirical truths), whereas methods tend to be specified in the hard fields (in more than 60% of samples), especially in Physics and Engineering. The few hard-knowledge introductions (only 30% of cases) usually consisted in appeals to novelty and benefit, while those in Marketing, Applied Linguistics and Sociology, were more numerous (over 60%) and largely emphasized the centrality of the investigation.

In some research areas, though, abstract standardization has been low over the last forty years even with electronic publication: according to Okamura and Shaw, features like length, move sequences, discourse style and format have barely changed across disciplines such as Marketing, Economics and Cell Biology in highly-ranked journals, but collective authorship, as evidenced in first-person plural pronouns and adjectives, is becoming more common. In what follows I will examine the picture presented by abridged Engineering and Applied Linguistics abstracts, comparing it with these discoursal tendencies and snapshots.

1.1. The Contexts of Abridged Abstracts

In Swales and Feak's (*English* 63) words, abridged abstracts not only "convey the main points of the paper" but also "function as advertisements to attract an audience." Contrary to what might be expected, word reduction does not exclude the promotional component, which might be deemed superfluous for a maximum length of 50 words. If this promotion is not only expressed by means of evaluative adjectives and adverbs (e.g. "accurate," "efficiently") or with signalling nouns and verbs (e.g. "optimize," "applicability") but makes use of longer emphatic structures such as cleft and pseudo-cleft sentences, gradable intensifiers, or syntactic inversions, it is then very unlikely that all the rhetorical moves in the IPMRD/C sequence are explicit within the constraints of the word limit. And implicitness reinforces the barriers of the community of practice, whose members must be experienced experts capable of deducing tacit information.

1.1.1. IEEE Abridgments: Front Matter Visibility

With over 400,000 members and an active ongoing dissemination of knowledge across the five continents, the Institute of Electrical and Electronics Engineers (IEEE for short) is one of the largest associations of technical professionals worldwide. Its corporate office and operations centre are based respectively in New York City and New Jersey, and its mission statement, as stated online on its website (see <http://www.ieee.org/about/vision_mission.html>), consists in "fostering technological innovation" to benefit the "global community" it inspires. To this end, since its formation in 1963, the IEEE has been organizing professional and educational activities and establishing technology standards for the fields of Electrical, Electronic and Computer Engineering, Telecommunications and allied disciplines, publishing over 1,200 conference proceedings every year. One of its most emblematic and frequently-cited high impact journals, *Proceedings of the IEEE,* is published monthly and may contain more than 20 articles per issue. It advances the contents of its articles with abridged abstracts (hereafter AAs) that appear on the cover page in the table of contents and whose mean length was 27.5 words in 2013, not counting titles, the names of authors and the status of the paper—"invited" or "contributed."

The superficial examination of any cover of the journal will bear witness to the fact that its AAs are *highly meta-referential* and *syntactically simple:* expressions of the type "this paper/study" (labelled "abstract rhetors" by Thompson and Thetela) and its adjunct variant as complement of a preposition (called "locational metatext" by Swales, Afterword) frequently introduce the purpose of the investigation, succinctly described either by a long qualifying structure within the sentence (Example 1), or by one or more coordinated clauses (2). Subordination is rare.

(1) The Impact of Offshore Wind Farms on Marine Ecosystems: A Review Taking an Ecosystem Services Perspective by S. C. Mangi

| INVITED PAPER | This paper reviews the impacts of offshore wind farms on the ecosystem services delivered by marine environments.
Proceedings of the IEEE 101.4 (April 2013). Special Issue on Marine Energy Technology.

(2) Overview of Beyond-CMOS Devices and a Uniform Methodology for Their Benchmarking by D. E. Nikonov and I. A. Young

|CONTRIBUTED PAPER| This paper studies beyond-CMOS devices in detail and proposes a uniform methodology for their benchmarking.
Proceedings of the IEEE 101.12 (December 2013).

Surprisingly, these two AA examples are no more informative than their corresponding paper titles, and this redundancy makes one wonder whether representative titles would suffice to summarize full abstracts in the front matter of periodic publications. As purpose-marker adjunct, locational

metatext may also open or close passive sentences (3), in a construction that syntactically resembles a certain model of patent abstract abundant on the website of the U.S. Patent and Trademark Office (USPTO) but which does not always include locative elements (4, my emphasis).

(3) Wedge Optics in Flat Panel Displays by A.R.L. Travis, T.A. Large, N. Emerton, and S.N. Bathiche

| INVITED PAPER | Wedge optics in flat panel displays that can be applied to 3-D viewing are described in this paper.
Proceedings of the IEEE 101.1 (January 2013).

(4) System, Method, and Computer Program Product for Preventing Access to Data with Respect to a Data Access Attempt Associated with a Remote Data Sharing Session

United States Patent Application 20140283145
Kind Code A1
Chebiyyam; Gopi; et al. September 18, 2014

Abstract
A system, method, and computer program product *are provided* for preventing access to data associated with a data access attempt. In use, a data access attempt associated with a remote data sharing session *is identified*. Further, access to the data *is prevented*.

As can be seen in (5), patent locatives ("the present invention/application"), by contrast, are less common and not inserted as adjuncts in passive structures, but fulfil the role of active inanimate subjects—abstract rhetors—that signpost purpose in a de-personalized way to hedge authorial responsibility.

(5) Lockout-Tagout and Safety Compliance Systems and Methods

United States Patent Application 20140283008
Kind Code A1
Daino; Franco F.; et al. September 18, 2014

Abstract

The present application discloses systems and methods for systems and methods of creating, administrating, assigning, and managing lockout-tagout (LOTO) procedures and other safety compliance procedures.

1.1.2. AAAL Synopses: Relative Visibility and Personalized Variety

The American Association for Applied Linguistics (AAAL) was founded in 1977 to promote multidisciplinarity among the scholars in the field. Today it comprises over 50 country members worldwide, brings together multiple theoretical frameworks and approaches, encourages professional networking, sponsors and disseminates publications, and hosts a four-day annual conference which constitutes its primary activity and has a reputation for the massive attendance of international scholars and the high scientific standard of its paper sessions, colloquia and plenary talks. According to its mission statement online (see <http://www.aaal.org/content.asp?contentid=133>), the ultimate goal of the association's activities is "to improve the lives of individuals and conditions in society" by facilitating "the advancement and dissemination of knowledge and understanding" regarding a myriad of language-related issues.

In the AAAL's 2013 conference programme (198 pages), the visibility of AAs, 48.2 words long on average, is less conspicuous than it is in the IEEE journal because they do not appear in the booklet's front matter. The summaries of paper sessions cannot be found until page 57, after a detailed introduction of the conference event: the year's topic, messages from the organizers, some notes on the host institution, lists of committees and linguistic strands, registration procedures, acknowledgements to abstract readers and conference volunteers, instructions for chairing, sponsors, panoramic schedules and venue maps, publishers' advertising, a timetable of plenary sessions, the biodata of the plenary speakers and synopses of their talks, more advertising of new books and titles on the market, and overviews of invited colloquia.

A visual inspection of the AAAL corpus reveals on the whole more personalization and a wider variety of syntactic structures, locative metatext and abstract rhetors. The first person pronoun "I," absent in the IEEE corpus, occurs here four times to introduce purpose ("I + will present/analyze/illustrate") or recapitulate results ("I + demonstrate"), while the possessive "my," which is not used by IEEE writers, collocates with "data" and "findings" to introduce the results section and yields two hits in the AAAL texts. The exclusive plural "we," which appears twice in the IEEE samples to indicate purpose ("we provide") or mark results ("we are better at..."), is much used among linguists (19 cases) to signal purpose (collocated with the verbs "report," "discuss," "study," "investigate," "examine" and "attempt at"), results (in collocation with "argue," "found" and "predict"), and in two instances, method ("we + have built/augment").

Syntactic variety becomes especially salient in opening sentences, most often specifying the method employed in the study. The method functions as a "verbal springboard" either leading to the overall purpose of the paper, detailed by verbs of speech and intellectual activity or action such as "examine," "explore," "analyze," "investigate," "trace," "compare," "illustrate," "report," "construct," and "create," or directly to the results (a more infrequent option), marked with verbs of action (e.g. "show," "reveal") or perception (e.g. "find"). The range of structures comprises these constructions (my emphases):

- Adjectival pre-modifier + abstract rhetor + purpose verb

(6) **This corpus-based study examines** linguistic characteristics of interactions between nurses and patients, focusing on (...) *Linguistic Characteristics of Nurse-Patient Interactions: A Corpus-Based Comparison of Native and Non-native English Speaking Nurses*
(Shelley Staples, Northern Arizona University)

- Past participle pre-modifier + abstract rhetor + purpose verb

(7) **Based on** authentic data from a variety of language tests, **this study compares** the impact of (...) *Comparing treatment options for missing data in language research*
(Francois Pichette, Universite du Quebec, Sébastien Béland, Université du Québec à Montréal, Shahab Jolani, Utrecht University)

- Abstract rhetor + verb "use" + method + purpose verb

(8) **This presentation uses** Martin's Appraisal Theory (Martin and White, 2005) **to trace** the language use of teachers of science in (...)
A Systemic Functional Linguistic Analysis of Teacher Language Use in an Urban Middle School
(Jessica Braine, University of Cincinnati)

- Complex sentence with "using"/"focusing on"+ method + abstract rhetor + purpose verb

(9) **Using** the framework of conversation analysis, **this paper analyzes** (...)
The use of Extreme Case Formulations for upgrades in ordinary conversations
(Kiyomi Kawakami, University of Iowa)

- Prepositional adjunct of method (e.g. "through/by means of"/"in") + abstract rhetor + purpose verb

(10) **Through** a mixture of classroom observations, semi-structured interviews and stimulated recalls, **this investigation examines** (...)
The True Complexity of Language Learner Silence in Japan: A Mixed-methods Investigation
(Jim King, University of Leicester)

(11) **In a combined linguistic landscape** and nexus analysis, **this paper examines** (...)
Signage in a German Bilingual Program: A Combined Linguistic Landscape and Nexus Analysis
(Roswita Dressler, University of Calgary)

- Deverbal noun as abstract rhetor + result or purpose verb

(12) **Analysis of** multilingual Singaporean students' use of language during peer learning tasks **found that** students demonstrated pragmatic and hybrid competence in (...)

Hybrid Competence: An Analysis of Peer Language Use With Multilingual Learners
(Wendy Bokhorst-Heng, Crandall University, Rita Silver, National Institute of Education, Singapore)

- Narratives of method (followed by results or not)

(13) **Ten learners of L2 Spanish completed a** formal contextualized reading task and an informal hint giving/question asking interactive game designed to investigate their L2 intonation. Stylistic variation and L1 transfer **were shown to** be important factors in (...)

Stylistic Variation in L2 Spanish Intonation
(John C. Trimble, University of Minnesota)

Of particular interest is the unique finding of a "negative method description" in the AAAL corpus: it is said what the method "is not" to highlight a break with tradition and hence the novelty of the research. This strategy is not used in the IEEE corpus:

(14) **Rather than categorizing** interlocutors in intercultural interactions simply as the binary notion, Self and Others**, this study employs** the concept of (...)

An Exploration of EFL Learners' Symbolic Competence
(Tsui-Chun Hu, SUNY Buffalo)

In the IEEE samples methods do not open any abstracts. The signalling word "method" (8 cases) never appears in initial position, nor do its indicators "based on," "-based," "through," "using," or "uses," which may be found, if prominent, in the title (15). The ample syntactic catalogue of constructions for expressing method in the AAAL texts (examples 6-13) neutralizes the need to use the signaling noun "method," which is found only three times. With respect to metatextual terms such as "analysis" (a single occurrence—see example 16), they tend to link directly with the results or outcome of the study rather than with its purpose, a strategy widely resorted to by AAAL writers.

(15) Tunneling Transitions Based on Graphene and 2-D Crystals by D. Jena *Proceedings of the IEEE* 101.7 (July 2013).

(16) Multistream Recognition of Speech: Dealing With Unknown Unknowns by H. Hermansky

| INVITED PAPER | Analysis of data on human auditory processing suggests machine recognition paradigm, in which parallel processing streams interact to deal with unexpected input signals.
Proceedings of the IEEE Vol. 101, No. 5, May 2013

An obvious difference between the two corpora is their use of abstract rhetors (and occasionally of the same items as locative metatext): IEEE abstracts display a "clonal" opening structure consisting of THIS PAPER + PURPOSE VERB, whereas AAAL abstracts broaden the paradigmatic set of options considerably. Their incidences, quantified with the aid of a concordancer, are shown in Table 1 below.

TABLE 1: INCIDENCE OF ABSTRACT RHETORS AND LOCATIVE METATEXT IN BOTH CORPORA (RAW COUNTS).

Rhetor / Locative	IEEE corpus	AAAL corpus
Paper	125	31
Study	0	56
Research	0	1
Investigation	0	2
Survey	0	0
Analysis	1	2
Project	0	3
Session	0	1
Presentation	0	15

AAAL writers qualify their work in a more varied fashion and take into account the channel of transmission and the communicative context (e.g. "session," "presentation"), although in a very low proportion. There is also a specification of the intellectual activity entailed by the work in question (e.g. "study," "research," "investigation," "project," "analysis") that is not found in the IEEE corpus. This could lead us to think that either IEEE texts discard dispensable information more successfully than do the AAAL texts (which would explain their shorter average length), or that engineers understand their research outcomes with a "patent mentality": a stance that is more practical than speculative, critical, or analytical —as mere periodic communications of technical improvements, solutions, problems, or challenge.

2. METHODOLOGY

To complement and refine manual scrutiny, I compiled two electronic corpora: one containing all the abridged abstracts published by the *Proceedings of the IEEE* journal throughout 2013, and another gathering a representative number

of shortened abstracts of paper sessions (not of plenary talks, colloquia or round tables) from the 2013 AAAL Proceedings. The IEEE corpus was composed of 154 samples and totalled 7,809 word tokens and 2,389 word types. The AAAL corpus comprised 160 samples and its size was 11,136 word tokens, 3,413 of which were of different types. I selected the first ten AAs in order of appearance within each conference strand, which were these:

Assessment and Evaluation (ASE)
Bilingual, Immersion, Heritage, and Language Minority Education (BIH)
Language and Cognition (COG)
Corpus Linguistics (COR)
Analysis of Discourse and Interaction (DIS)
Educational Linguistics (EDU)
Language and Ideology (LID)
Language, Culture, and Socialization (LCS)
Language Planning and Policy (LPP)
Second and Foreign Language Pedagogy (PED)
Pragmatics (PRG)
Reading, Writing, and Literacy (RWL)
Second Language Acquisition, Language Acquisition and Attrition (SLA)
Sociolinguistics (SOC)
Language and Technology (TEC)
Text Analysis (written discourse) (TXT)

First manually, and then electronically with the concordance program *AntConc 3.2.1w* (Anthony), I examined my corpora samples to determine their *rhetorical structure* (i.e. genre moves, among which I included that of "purpose" following Bhatia, 1993) and to compare it with that of full abstracts in similar fields described by Hyland. I quantified the incidence of the introduction, method and discussion/conclusion sections in both corpora and made a distinction between minor and major move sequences, the latter present in at least two samples of each corpus. In passing I confronted rhetorical move economy with meta-referential traits (i.e. third person mentions, locative metatext and abstract rhetors), and next I conducted a quick Word List search of the most common 100 words in each corpus, to see the frequency and distribution of promotional items, supposedly also superfluous. Then I went on to analyze, once again manually and automatically, the weight of different promotional features in the two contexts wich were the object of study.

To do so I refined the promotional categories proposed by Hyland (2000/2004), replacing two of them ("benefit" and "interest") by two other more specific ("efficacy" and "applicability") and adding another two ("broad scope" and "reliability") to the existing categories of "importance" and "novelty." Finally, and once more combining manual and electronic analysis, I looked for the most frequent markers within each promotional category in each corpus.

3. FINDINGS AND DISCUSSION: SPOTTING THE SUPERFLUOUS

Close manual analysis revealed a striking fact: unlike in Hyland's study, methods did not constitute a "minority move" in the soft disciplines. The Hyland corpus had yielded the respective percentages of 60% and 30% for the presence of the methods move in the hard and the soft sciences, but my data showed a glaring predominance of methods in the AAAL corpus (84.%) and a much lower count (48%) for IEEE texts (see Figure 1). Two simultaneous trends may account for this result: first and foremost, Applied Linguistics is becoming more interdisciplinary and empirical. It has diversified notably in recent times, both theoretically and practically, which has involved importing methods and procedures from other areas of knowledge. Indeed many of the strands and subfields embraced by the AAAL conferences call for a specification of methodologies and perspectives, be they theoretical frameworks within Linguistics (e.g. Systemic Functional Grammar, Positioning Theory, Cognitive and Corpus Linguistics, Socio- and Psycholinguistics, Conversation and Discourse Analysis, Genre Theory, Metadiscursive approach, ESP, etc.) or outside it (e.g. Anthropology, Gender Studies, Semiotics, Narratology, Sociology, Psychology, Chaos Theory, etc.). These inner and outer frameworks may inter-combine and include quantitative and qualitative techniques for data-handling. Secondly, there is the issue of implicitness: in 21% of IEEE samples the move sequence is dubious, a common cause being the confusion between method, purpose and result. Without "method beacons" such as the signalling nouns "method(ology)," "procedure" or "manner," verbs like "use" or "employ," and prepositional phrases such as "through" or "by means of," it is extremely difficult to discriminate the methods move, which may be implicit in long pre-modifiers describing the outcome/product offered by the paper (17):

(17) Ultrahigh-Resolution Panoramic Imaging for Format-Agnostic Video Production by O. Schreer, I. Feldmann, C. Weissig, P. Kauff, and R. Schäfer | INVITED PAPER | Ultrahigh-resolution panoramic imaging for format-agnostic video production is discussed in this paper; the system has flexibility applied to many video systems.
Proceedings of the IEEE 101.1 (January 2013).

In this example, the reporting verb "discuss," together with the locative "in this paper" are evident markers of purpose. Now, does the adjectival cluster "ultra-high resolution panoramic" denote a method, or just inherent properties of the imaging? What about the qualifier "for format–agnostic video production"? Is the imaging described an outcome/result or a method? Only expert informants from the community of practice can truly discern these move boundaries.

Another noteworthy unexpected finding is that there are many more introductions in the IEEE samples, although these are typical of the soft fields. In his cross-disciplinary study, Hyland discovered a symmetrical reversal of the proportions

of methods and introductions in hard and soft domains, the latter move occurring at over 60% in the social sciences and the humanities. Curiously enough, in my corpora (Figure 1) only 17% of the AAAL abstracts contain introductions, while 45% of IEEE texts include them and with a frequency very similar to that of the methods move (48%). To explain this, it can be argued that Electrical Engineering and Electronics are two research areas in continuous cutting-edge innovation, where the differences between papers may be minimal and consist in details and small variations in methodology, improvements of devices and systems, or in problems of several sorts (e.g. derived from needs or gaps, technological advances, and, of course, ramifications from existing problems). Consequently, introductory research contextualizations (and mostly through problematization) appear more necessary than in other branches of engineering. Introductions may be also justified to promote the research outcome, following the engineer's "patent mentality": around 85% of the IEEE samples contain promotional items that underscore the novelty, benefits, and especially the importance (to which problematization is cardinal) of such an outcome. We must not forget, in addition, that since the 1980s the hard sciences have been gradually increasing their use of introductions and discussions/conclusions. Time will tell whether we are witnessing a bidirectional trend: a "softening" of hard-science abstracts and a "hardening" of soft-discipline ones, as they might be evolving in opposite directions.

Likewise, the tendencies in the use of discussions/conclusions are somewhat different from the ones observed by Hyland, although their impact is also low. In Hyland's corpus this move was present in just 21% of the samples (principally from Biology and Marketing), which he attributed to the "optional" nature of the move due to politeness reasons[2]: its omission can be taken as a "tact act" that avoids imposing the writer's interpretation of data on the reader. In 24% of the IEEE abstracts there are discussions/conclusions (the percentage is similar to Hyland's global figure), whereas barely 2.5% of the AAAL samples use them (Figure 1). In explanation we may adduce once more that promotion, a usual component of both the introduction and the discussion/conclusion moves, is needed in relatively young disciplines to justify research, especially in prolific fields with high publication rates. Electrical Engineering and Electronics are clear exponents of such a case.

Concerning move sequences, IEEE texts do not diverge much from Hyland's rhetorical snapshot of unabridged Engineering and Physics abstracts: here too the preferred patterns are PMR (purpose + method + results/outcome) and its "promissory variant" with no result/outcome, but proportions in the two studies are dissimilar. Hyland found 60% of PMRs in the said two disciplines, whereas in my IEEE corpus, owing to its great dispersion of moves, the samples that follow a PMR progression do not even amount to one fourth of Hyland's percentage. As can be seen in Figure 2, what is particularly striking is the encroachment of the PM(R) pattern on the AAAL

[2] In actual fact, all rhetorical moves but the purpose are "optional" and may be omitted in an abstract, although some may be "more omissible than others." which depends on the disciplinary culture. The legend in Figure 1 reminds of this observation.

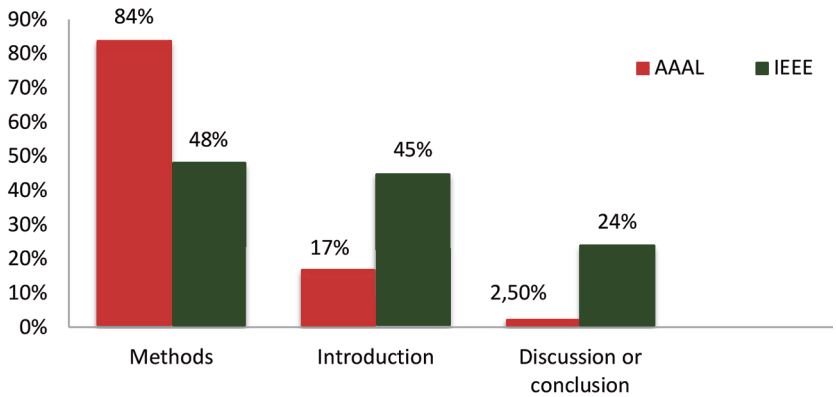

Figure 1. Use of non-obligatory moves in the AAAL and IEEE corpora.

texts, where what we might have expected is the corroboration Hyland's finding that the IPR sequence runs through 75% of full abstracts in the social sciences and the humanities—I have already commented on the recent shift towards empiricism occurring in Applied Linguistics. No less telling are the small number of four-move and three-move sequences (PMR, IPM and MRD) that have some weight among all the possible combinations. It is important to note that the graph displays sequences present in at least two samples in each corpus, while Table 2 enlists the proportions of the most "significant" minor combinations (the majority of which contain three moves) below that threshold number of occurrences. In light of all this, predictably, AAs seem to save words by economizing moves. Note, for example, that in Table 2 the complete IPMRD pattern is virtually absent, occurring in only a single IEEE case.

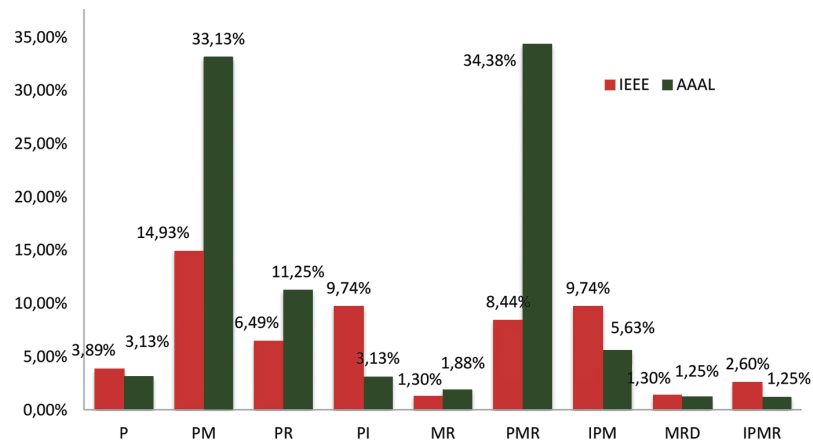

Figure 2. Moves sequences most resorted to in both corpora.

Move economy coexists nonetheless with abstract rhetors and locative metatext, which are superfluous elements because they contribute redundant information: it goes without saying that the information advanced in the abstract is that contained in the current text, so expressions such as "(in) this/the present paper" could easily be eliminated. But oddly, only 18.2% of IEEE samples are free of rhetors and locatives, and in the AAAL corpus the percentage of AAAL texts not including them is only slightly higher—30.6%. Equally counter-intuitive is the distribution of unnecessary third-person references such as "the author(s)" (20 IEEE cases and one in AAAL). There is mention of the "presenter(s)" in AAAL (5 instances) but in none of the corpora do words such as "writer(s)," "researcher(s)," "engineer(s)" or "linguist(s)" appear and neither does "speaker" as a synonym for "presenter" in the AAAL samples.

TABLE 2. MINOR MOVES COUNTS IN BOTH CORPORA (RAW COUNTS AND %).

Minor moves sequence	IEEE corpus	AAAL corpus
RD	3 (1.9%)	1 (0.6%)
IPR	1 (0.6%)	1 (0.6%)
IMR	8 (5.2%)	1 (0.6%)
PRD	9 (5.8%)	0
PMRD	3 (1.9%)	1 (0.6%)
IPMRD	1 (0.6%)	0

A last element that could be regarded as superfluous is the promotion of the research activity or of its outcome, as community insiders and informed readers should be able to deduce the value of the paper by themselves, without much explicitness. Promotional items (955 instances) only represent 5% of the total number of words of my global corpus (AAAL + IEEE), but the patterns they exhibit certainly deserve attention. A quick Word List search of the most frequent 100 words in each context shows that the "promotional tinge" appears earlier and is more frequent, varied and specific in the IEEE corpus. General items such as "based," "applications," "overview," "future," "resolution," "large" or "performance," which refer to the novelty of a method, the versatility of a product, the broad coverage of a review of the state of the art, improvements in service, potential applicability and importance or impact scope can be spotted from rank 31, whereas in the AAAL corpus the only three generic items ("implications," "development" and "results") are not encountered until rank 71. Specific disciplinary "buzzwords" are also more numerous and can be detected earlier on the IEEE list: "graphene," "wireless," "transistors," and "speech" show where the field is heading for and appear as early as rank 33. In the AAAL corpus the "trendy" items are fewer and pop up a little later (rank 43): they are "Chinese," "Spanish," and "Japanese," which points to the prime importance of studies on second language acquisition and pedagogy or

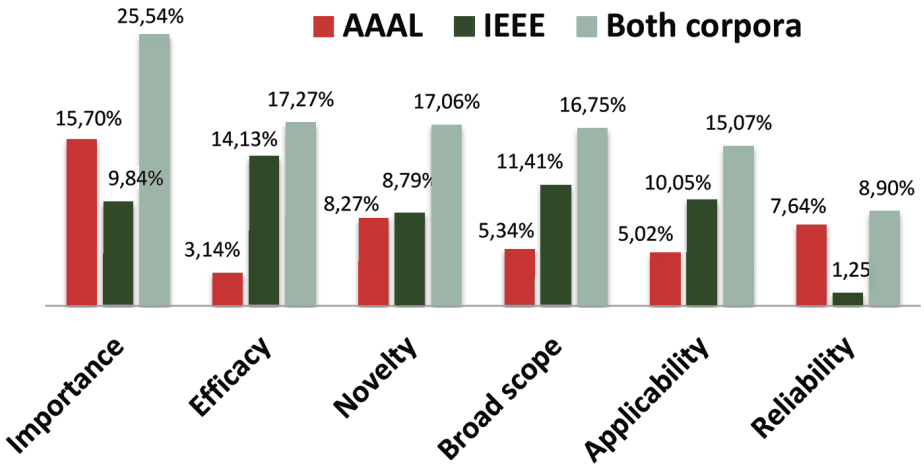

Figure 3. Percentages of promotional items per field and in both corpora.

on intercultural interactions to satisfy the needs of those vast geographical areas, some of them emergent.

In his study, Hyland glossed promotional appeals as "benefit," "novelty," "importance" and "interest," and found that statements overtly claiming the interest value of the work reported—what he calls "brute promotion" (77)—were surprisingly rare in all fields and that, if they occurred at all, it was mainly in non-academic disciplines with a very high practical, applied or industrial orientation, such as Mechanical and Electronic Engineering. For the rest of disciplines, he concluded, it is "too crude a strategy" (77). These two engineering specialties concentrated twice as many promotional items as any other discipline and almost five times as many as Philosophy.

For my cross-corpora comparison I broke down the superordinate appeal "benefit," which is too vague in the context of engineering, into the more precise subcategories of "efficacy," "broad scope," "applicability" and "reliability." I understand both "benefit" and "interest" as pervading across all these subdivisions and therefore did not select them as independent features. Globally speaking, and as Figure 3 reveals, the IEEE samples are far more promotional than the AAAL ones except in two categories: reliability and importance. The reason is quite simple: in Engineering it is a given that the research outcome (i.e. a device, mechanism, method, design, overview, criticism, etc.) stems from calculations that follow a set of established laws and principles, controls a limited number of variables in (normally) replicable natural or technological situations, and under these circumstances it is empirically tested.

The outcomes of Applied Linguistics, in contrast, are mostly research methods and pedagogical plans seldom devised on mathematical grounds and which have to deal with unique communicative situations comprising multiple human

intentions and idiosyncrasies--thus the need for explicit praise of their validity and consistency. Importance, although higher in the soft knowledge samples, manifests itself differently in each corpus: overt relevance markers were few but slightly more frequent in the AAAL texts (e.g. "fundamental," "essential," "crucial," "key," "important," "importance," "relevant," "relevance," "paramount," "significant," "valuable," "strategic," etc.), and IEEE writers resort more to problematization (e.g. "problem," "solution," "challenge," "solve," "unknowns," etc.). This alternative is not much exploited by AAAL authors, who do not pose problems but identify "risks," "necessities," "inequalities" and "deficits" and try to mitigate them by offering "remedies," "guidelines" and "prompts." They speak of "pervasive" phenomena and most often of the "implications" of their work.

Novelty, efficacy (that is, quality performance) and applicability are at the core of the engineering culture and constitute its reasons for being. The statement of novelty value is perhaps the feature most directly expressed, with items such as "novel," "new," "current," "modern," "future," "discovery," "competing," "advances," "emerging," "recent," "trends," "replace," "change," "insights," or "next generation," and more assertive (somewhat arrogant) terms, such as "seminal," "pioneer(ing)," or "groundbreaking" were not found. Notable differences were also patent within the efficacy category: the nouns "resolution," "advantage," and "high-performance," the adjectives "efficient," "effective," "better," "appropriate," "direct," "rapid," "fast," "accurate," "lossless," "powerful," "realistic," "detailed," "economical," "low" (usually collocated with "cost"), "easy," "systematic," "functional," "smart," "independent," "automatic," or the verbs "optimize," "improve," "minimize," "catalyze" were typical of the IEEE repertoire and contrast with the AAAL hits, which were either broader, more conservative, or less frontal: "suited," "successful," "well-," "beneficial" or "consistent" among the adjectives, "benefit" or "enhancement" for nouns, and verbs like "enhance" or "maintain." This trend echoes the nature of soft disciplines, not so much intended to solve problems as to discuss them and trace their origin and possible repercussions.

The notion of applicability merges the idea of usefulness/utility and versatility/adaptability, overlapping the feature of "broad scope," which also entails considering universality and diversity. The vocabulary of applicability characteristic of the IEEE corpus is formed by the nouns "application," "variability," "flexibility," "potential," "utility," by the adjectives "scalable," "generic," "adapted," "usable," "flexible," "potential," "useful" or "general/generic," by determiners of the type "many," "several" and "various," and by verbs such as "enable," "allow," "permit," and the modals "can," "could" and "may." This lexis is substantially less frequent in the AAAL samples, which stress the usefulness and resourcefulness of research products and processes. Lastly, broad scope is marked by adjectives such as "comprehensive," "full," "unified," "exhaustive," heterogeneous," "wide," "generic," "large-scale," "specific," by the nouns "overview," "review," "perspective," "theory and practice," verbs like "summarize," "integrate," and linkers such as "also" and "as well as." All these terms hint at the central role played simultaneously by specificity and comprehensiveness in engineering publications, which must focus on solving particular problems with the aid of complete and updated re-/over-views of all the tools and procedures available. These periodic summaries are not so necessary in

applied linguistics, where the specification (in the introduction) of the theoretical framework adopted involves tracking its evolution and providing an update with which to relate the present research and prove its currency. Distinctive markers in the AAAL corpus are "further" and "moreover" to signal additional aspects tackled by the research (usually in the introduction, when stating the research purpose), and items such as "rich" and "enrich," detectable in introductions and discussions but more often in the latter, as a final evaluation of the paper's contribution.

To conclude I will note that, because of their signposting versatility, the signalling nouns "findings" and "results" acquire a special status as markers of novelty (they introduce new research outcomes), reliability (they imply that the investigation has followed standard empirical procedures), and ultimately, importance (the sole fact that they are reported means that they are interesting and worthy of dissemination). These two nouns are, respectively, 7 and 25 times more numerous in the AAAL corpus than in the IEEE one, which indicates a stronger need in the soft disciplines to show empirical rigour. Their frequently attached verbs "indicate" and "reveal," and the noun "evidence" appear exclusively in the AAAL samples, and the presence of the collocates "suggest," "show," and "demonstrate" in this corpus outnumbers that of the same items in the IEEE texts, which are more akin to the USPTO patent abstracts as far as linguistic economy and syntactic variation are concerned.

4. CONCLUSION: IS AAS' INFORMATIVENESS REALLY OPTIMIZED?

So far we have seen that the AAs of the AAAL corpus are much longer, more personal, less visible and syntactically more varied than those of the IEEE collection. We have also learnt two counter-intuitive facts: that the methods section is included in Applied Linguistics more often than in Engineering, and that this hard-knowledge field provides the most introductions and discussions. We have found some IEEE abstracts to be less informative than their titles and observed, in every corpus, a discursive tension between a tendency towards *rhetorical economy* (i.e. a predominance of two-move sequences and a recourse to implicitness, especially of methods within statements of purpose and descriptions of IEEE research outcomes) and *superfluous elements* (i.e. promotional items and the meta-reference of locative metatext, abstract rhetors and third-person mentions). Furthermore, data have revealed that for both fields "importance" is the most outstanding promotional feature and "reliability" the least vital one, with the rest of categories (i.e. "efficacy," "novelty," broad scope" and "applicability") occupying an intermediate band with very similar percentages. Individual disciplinary patterns, however, vary, and thus AAAL abstracts are more inclined to showing importance and reliability (which might mirror an intense process of "empiricalization" of the discipline), while IEEE samples prioritize efficacy and applicability. Novelty stands in a no-man's land between the two corpora, predominating very slightly in the IEEE texts.

How are we to interpret all this? To "optimize" the informativeness of AAs would mean, according to the entry from the Merriam Webster dictionary online,

making texts "as effective or functional as possible," which theoretically demands doing away with redundancy and any word surplus. Why keep, then, meta-reference and promotion? The avalanche of competing technologies differing in minimal details justifies (brute) promotion, but the reasons for using locatives, rhetors and mentions to the authors/presenters is not so obvious. A possible motivation may simply consist in a mixture of habit and comfort: superfluous wording could be acting as a frame for comfortable templates to introduce a purpose statement. In the AAAL context, the salience recently acquired by the methods section often causes its placement in a fronted opening position (e.g. "Using/By means of..., this study/paper..."), which at the same time defines a template to easily state purpose with a continuing rhetor subject. This would maximize writing and reading speed while working as a politeness device that bridges the gap between the expert in-group and the lay out-group, something that does not happen in the "verbless" USPTO abstracts, for example.

A second plausible explanation (which might combine with the former) is reader-considerateness in the form of metadiscursive engagement: a conscious signalling of moves ("purpose" in this case, and "research outcome" whenever the omissible signalling nouns "results," "findings" or "data" are used) to minimize reading effort and therefore maximize processing speed and reduce screening time, even though the principle of linguistic economy (Grice's quantity maxim) is flouted. This interpretation is in line with Hyland and Tse's conclusions regarding the evaluative function of completive "that" in research abstracts: though perfectly omissible, it marks writer stance, foregrounding many evaluative aspects and subcategories. It is another instance of "superfluous" item maintained out of sociopragmatic reasons and which paradoxically proves that sometimes "more" is "less" in terms of cost. In the case of AAs, nevertheless, it remains to be investigated (by means of questionnaires and interviews with the writers) whether the "optimization through superfluousness" reported here is a planned strategy intrinsic to this clipped variant of the research abstract genre.

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WORKS CITED

AAAL 2013 Conference Programme. 29 Oct. 2014. Web. <https://app.box.com/s/tjlaya889y3x6b1k5luh>.

Anthony, L. *AntConc 3.2.1w*. 2007. 22 Oct. 2010. Web. <http://www.antlab.sci.waseda.ac.jp/software.html>.

Berkenkotter, C. and T.N. Huckin. *Genre Knowledge in Disciplinary Communication: Cognition/Culture/Power.* Hillsdale: Lawrence Erlbaum, 1995. Print.

Bhatia, V.K. *Analyzing Genre: Language Use in Professional Settings.* London: Longman, 1993. Print.

Huckin, T.N. "Abstracting from Abstracts." *Academic Writing in Context*. Ed. M. Hewings. Birmingham: U of Birmingham P, 2001. 93-103. Print.

Hyland, K. *Disciplinary Discourses: Social Interactions in Academic Writing.* Ann Arbor: The U of Michigan P, 2004. Print.

Hyland , K. and P. Tse. "Evaluative That Constructions: Signaling Stance in Research Abstracts." *Functions of Language* 12.1 (2005): 39-63. Print.

Merriam Webster online. 16 Oct. 2014. Web. <http://www.merriam-webster.com/dictionary/optimize>.

Okamura, A. and P. Shaw. "Development of Academic Journal Abstracts in Relation to the Demands of Stakeholders." *Abstracts in Academic Discourse*. Ed. M. Bondi and R. Lorés Sanz. Bern: Peter Lang, 2014. 287-318. Print.

Proceedings of the IEEE. 9 Sept. 2014. Web. <http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=5>.

Swales, J.M. Afterword. *Abstracts in Academic Discourse*. Ed. M. Bondi and R. Lorés Sanz. Bern: Peter Lang, 2014. 319-323. Print.

———.*Genre Analysis: English in Academic and Research Settings.* Cambridge: Cambridge UP, 1990. Print.

Swales, J.M. and C.B. Feak. *Abstracts and the Writing of Abstracts.* Ann Arbor: The U of Michigan P, 2009. Print.

———.*English in Today's Research World: A Writing Guide.* Ann Arbor: The U of Michigan P, 2000. Print.

Thompson, G. and P. Thetela. "The Sound of One Hand Clapping: The Management of Interaction in Academic Discourse." *Text* 15.1 (1995): 103-127.

United States Patent and Trademark Office: Patent Application Full Text and Image Database. 21 Sept. 2014. Web. <http://patft.uspto.gov/netahtml/PTO/search-bool.html>.

Wenger, E. *Communities of Practice: Learning, Meaning, and Identity.* Cambridge: Cambridge UP, 1998. Print.

GENRE EVOLUTION IN RESEARCH COMMUNICATION IN ENGLISH

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Abstract

Academic genres in research are exposed to, and also emerge from a constant evolution. The aim of this article is to identify potential problems when studying, analysing, and ultimately, describing and accepting new (knowledge dissemination) electronic genres in research communication. It reviews recent studies on evolving and digital genres and how/when they can be considered as newcomer-genres in research communication. Finally, ways to study, and hence, accept new electronic genres in research communication in English are proposed.

Key words: Evolving genres, electronic genres, knowledge dissemination.

Resumen

Los géneros académicos de investigación están expuestos, y también emergen, de una evolución constante. El objetivo de este artículo es identificar los posibles problemas con los que nos encontramos a la hora de estudiar, describir y aceptar nuevos géneros electrónicos de divulgación del conocimiento. Este trabajo repasa los estudios recientes sobre la evolución de los géneros digitales y cómo y dónde pueden ser considerados como un género "recién llegado" a la comunicación de la investigación. Por último, se proponen también nuevos enfoques para estudiar y, por lo tanto, aceptar estos nuevos géneros electrónicos de divulgación del conocimiento.

Palabras clave: Géneros en evolución, géneros electrónicos, divulgación del conocimiento.

EVOLVING GENRES AND EVOLVING THEORIES

Genres in research communication are in constant evolution—unlike the canonical perception of academic genres. New rhetorical and lexico-grammatical features are gradually being introduced into these traditional academic genres (see for instance: Bazerman, *Shaping* or Berkenkotter and Huckin, *Genre*). Berkenkotter and Huckin adopted the paradigm of *dynamic evolving genres* as the main principle when describing their concept of genre ("Rethinking" 500). In their studies on genre, linguists do not overlook the fact that almost every written genre is evolving due to societal needs—or convenience. Kamberelis states that "neither old nor new com-

munity members never learn genres once and for all; rather, they must continually learn the generic ways of making meaning with texts that evolve within the ongoing socio-rhetorical activity of the communities" (150). Changes in our social contexts are motivating even changes in the conceptualising of the term *genre*.

One of the best examples of how social changes affect the emergence and evolution of genres is the increasing use of online communication and studies about electronic genres (see for instance Wise; Myers, *Discourse*; Luzón-Marco, "Bloggers'"; Campagna et al. or Herrando-Rodrigo). Hallin studied how this rapid rise in the number of Internet users has also shaped electronic genres. For instance, news articles are short texts that are sometimes reduced to a headline in electronic publications. Thurman justifies the layout of electronic genres by stating that concretely, online newspapers engage readers for very short periods of time. Many studies (Bateman et al.; Knox, "Visual-verbal," "Online"; Bateman) have been conducted on how social processes, in this case related to mass media, have affected the evolution of certain genres.

There are of course certain genres that are witnessing slight and slow changes. It is well known that genres such as the scientific research article (RA) genre has a priority as such, which is disseminating knowledge claims and is therefore intended to be accepted by the target audience of peers, that is the RA discourse community. Berkenkotter and Huckin in line with earlier studies such as Bazerman's (*Shaping*) stated:

> Genre features of the RA are therefore evolving in the direction of a more reader-based schema. However, this has been taking place gradually, as there is a notable opposing pressure to retain the traditional writer-based schema. The reason is that the primary role of the scientific RA, even more than conveying new knowledge claims, is the certification or validation of those claims. (*Genre* 40)

From Eggins' early approach to genre: "[...] genre is a purposeful cultural event that is realised through schematic structure and realisational patterns" (36)—and subsequent works that stress the simultaneous clashing of discourse analysis, genre analysis and discourse communities' roles when approaching genre analysis (Dudley-Evans)—its conceptualisation has become more flexible. Swales' (*Genre*) seminal work on a new path of research into genre structure and genre evolution opened a Pandora's box full of possibilities, realities and academic situations. A lot of research has been carried out during these years. However, the focus is now on the potentiality of this genre flexibility concept, which will later be related to the influence of emerging electronic genres.

Bhatia reflects on the concept of genre, questioning whether genre analysis somehow contributed to its taming in a fictional way to make it fit into teaching syllabuses for classroom environments:

> Genre analysis can be viewed from two different perspectives: it may be seen as a reflection of the complex realities of the world of institutionalised communication, or it may be seen as a pedagogically effective and convenient tool for the design

> of language teaching programmes, often situated within simulated contexts of classroom activities. ("Generic" 2)

Bhatia, like many other researchers, has highlighted that nowadays the issue of genre is not just crucial for linguists but it has also gained interest among members of other disciplines such as scientists, due to their increasing need to disseminate their research. However, there are certainly variations and conflicts between some academic genres among disciplines. Different perspectives, nomenclatures or even interpretations—sometimes contradictory—can be found among members of the same discipline, as Bhatia ("John") states in agreement with researchers such as Candlin and Hyland.

Approaches to genre analysis should therefore be based on dynamic perspectives of real life situations, because nowadays texts are also varied in their communicative purposes. It is true that, although we mainly distinguish genres due to certain characteristics (Berkenkotter and Huckin, *Genre*), these genres are in constant evolution. Moreover, expert discourse community members may also make use of divergent patterns exploiting the genre conventions (Berkenkotter and Huckin, *Genre*; Bhatia, *Analysing*, *Worlds*)—some experts have launched different patterns based on these original patterns in order to disseminate their work in other types of publications. Bhatia agrees with this idea when stating that there are genres that are also used to transmit the particular intentions of the researcher (*Analysing*). In real life situations genres are focused on their usage context and therefore they may be seen as hybrid genres embedded in different categorisations. This constant and dynamic feature could be supported by Bhatia's idea of genre versatility:

> [a]lthough genre analysis is seen as applied in concern, and as such puts a heavy premium on conventional use of language, it is versatile and dynamic in nature, essentially explanatory rather than purely descriptive, narrow in focus, but broad on vision, and has a natural propensity for innovation and exploitation. ("Generic" 6)

It could be concluded that not every text is a pure instance of a particular genre. Chimombo and Rosebery stated that texts could also be combined in structure and discourse depending on their communicative purpose.

This innovative view of genre analysis could be directly applied to the emergence of new types of texts such as electronic popularizations or, as cited at the beginning of this section, to online news that have evolved due to certain social and professional demands. These types of texts appeared with the emergence of new technologies. Fortanet et al. described this situation in the following terms:

> A drastic change was brought about in the mid-90s when, along with an enormous—almost uncontrolled—expansion of the network, the commercial possibilities in both economic exchange and advertising products have completely altered the initial concept of an academic Internet. This transformation has had a rippling effect in the way genres—originally designed for a different context and situation—are being reproduced on the net. (94)

In line with Bhatia (*Worlds*, "Genre," "Interdiscursivity"), it will be argued here that genres are versatile and are constantly creating and developing new patterns. Genres cut across disciplinary boundaries and yet they show disciplinary variations. This so called genre hybridity is a result of the bending of conventions that triggers us to do something else. In other words, it is the result of genres mixing or crossbreeding. All the above, along with the external expectations from the potential audience, is the background from which new knowledge dissemination electronic genres dealing with the latest R&D, wellness or health issues findings have been conceived and therefore, have been crafted and launched.

DIGITAL OR ELECTRONIC GENRES

The advent of new ways of communication and specifically of the Internet has allowed many genres to be disseminated among their discourse communities in a faster and more accessible way. In fact, the Internet has also influenced, and in some ways constrained, some genres' conventional features. The purpose of this section is to reflect on how the Internet can shape knowledge dissemination electronic genres by reviewing previous studies on electronic genres, also called digital genres, usually drawn from previously existing written genres. This electronic or digital framework may have introduced drawbacks, constraints or advantages in specific genres. I aim to review some of the scenarios of what is known as digital or electronic media to later discuss whether these genres are shaped by this circumstance, that is, being disseminated on the Internet. Specific linguistic features resulting from the process of genre adaptation to the channel of publication have been studied by scholars such as Crystal, however, I do not focus on this issue but on previous studies on web-mediated texts such as: Yates and Orlikowski, "Genres"; Orlikowski and Yates; Shepherd and Watters; Crowston and Williams; Giltrow and Dieter; Berkenkotter or Luzón-Marco.

In line with Crowston and Williams, it will be argued here that several significant current discussions about electronic or digital genres are: i) whether these genres are new or emerging communication media, ii) whether these genres are embedded to form new patterns of communication, iii) whether these genres are being considered new genres because they are just composed of web-mediated texts and therefore can be approached from traditional genre theories although the Internet as a medium of communication has intrinsic and unique features or iv) whether we can define such a broad, international and varied readership or whether it is more realistic to describe just the presupposed role of these electronic genres' discourse communities.

i) Are Electronic or Digital Genres New or Emerging Communication Media?

Crowston and Williams state that from the point view of communication the World Wide Web is growing so quickly that new types of communication are subsequently being created. These scholars examine this phenomenon in order to observe

whether some old genres are adapted to take advantage of the linking and interactivity of this new communication medium or whether they are emerging communication genres. As the Internet has rapidly evolved thanks to this last decade of open access, the Web has become not only successful but also essential for our daily life. This means any type of user or Internet consumer can have access to the Internet and its endless possibilities. For instance, a wide range of different organisations and institutions have made the most of this varied and broad potential audience and have tried to reach diverse groups of Internet consumers by creating new communication genres (see for instance Miller, "Genre"). We must consider the Web as a social phenomenon that supports diverse communicative practices:

> Communicative genre is defined generally as accepted types of communication sharing common form, content or purpose, such as an inquiry, letter, memo or meeting. Note that genre is not simply the medium of communication -a memo genre may be realized on paper or in an electronic mail message (two different media), while the electronic mail medium may be used to deliver memos and inquiries (two different genres). (Crowston and Williams 30)

Therefore, it can be seen that the medium in which different communicative practices take place does influence genres. Like these authors, one may wonder how the adoption of a new communication medium—in the case of the Internet—might be leading to the adaptation of existing genres and the emergence of new ones. It could be suggested that Internet users may socially categorise different communicative genres available on the Internet by their communicative action, their purpose and their form.

Some users may identify a genre by its form and other users by its linguistic features. However, Crowston and Williams argue that most genres imply a combination of purpose and form, such as a newsletter, which communicates the news of the day, including multiple short articles that are distributed periodically to subscribers or members of an organisation as seems to be the case, for instance, of medical electronic popularizations. New genres born from the wider use of the Internet as a means of communication, as is the case with e-mails, lead us to wonder if they are simply adaptations embedded in a different pattern of communication as the following section discusses.

ii) Are Electronic or Digital Genres Embedded to Form New Patterns of Communication?

This section reflects on how genres can be embedded to form more complex patterns of communication. They can for instance be recognisable by a pattern comprising a genre system (Bazerman, "Systems") or they can be a set of genres or a repertoire used within a community with different frequencies and for different communicative practices (Orlikowski and Yates). From a discourse community perspective, it should be considered that any genre may be hard to understand for someone outside a community. Freedman and Medway suggest that the capacity to

recognise a particular genre is one sign of membership of a particular community. Therefore, it could be concluded that incomprehensible genres may even be used deliberately to defend positions of privilege. As mentioned above, Orlikowski and Yates suggest that in a new situation individuals will draw on their existing genre repertoires, reproducing genres they have experienced as members of their community. According to Crowston and Williams, if these changes become repeatedly used, they may become accepted and used together with or instead of existing genres, extending or even altering the genre repertoire. However, it seems rather difficult to define the exact point at which a new genre emerges from an old one. As mentioned above, the key issues regarding the definition of genre rely on social acceptance, which may take years. Like Crowston and Williams, I consider that after a period of coexistence, the new combination of form and purpose may become generally recognised and named as a separate genre, as could be the case with medical research articles, printed medical popularizations and medical electronic popularizations. Genres may also be accepted in different communities at different rates. Therefore, the emergence of new genres could be one sign of the formation of a new community with new communicative practices. Yates Orlikowski, and Okamura suggested that these new genres are most likely derived from earlier genres that might have seemed appropriate to the situation. Crowston and Williams also conclude that the genres they found and classified on 100 web pages are reproduced in or adapted to the new media. They strongly recommend that web designers be aware of users' expectations of a genre. Most of the websites are public and easily available but their management is not centralised or rule-related. In other words, there is not an institution or shared framework that establishes a common basis to publish or communicate with their potential communities. As Orlikowski and Yates see it, the leader of every website is the website developer rather than the recipient of communication. Crowston and Williams add that as the audience is unpredictable, there is no clear separation of communities into different channels of communication as seems to be the case with knowledge dissemination electronic genres. However, the issue of genres on the Internet may seem understudied due to the rapid development of new genres of communication, the media and the experimentation of the potential genres.

iii) Can Electronic or Digital Genres Be Approached from Traditional Genre Theories Although the Internet as a Medium of Communication Has Intrinsic and Unique Features?

Having observed the general idea of the Internet as a genre medium, this section traces its theoretical review back to Askehave and Nielsenand their specific approach to traditional genre theories applied to digital genres as non-linear multimodal web-mediated documents. Taking as a point of departure Swalesian genre theory based on the relationship between discourse and social practices in academic settings, they try to validate the incorporation of media elements into the concept of *genre*, taking into account particular characteristics of the digital setting such as the browsing and reading elements of web mediated genres. Since the 80s

many insightful approaches to the definition of genre and genre studies in English for Specific Purposes (ESP) have been developed (cf. Swales, *Genre*; Martin; Bhatia, *Analysing*; Eggins; Miller, "Rhetorical"; Bazerman, "Systems", etc.). All these studies were conducted in speech or print formats. In the last decade, the role of the Internet as web-mediated communication in our everyday life has aroused interest (Dickey; Myers, *Discourse*; Luzón-Marco, "Bloggers'," "Comments"; etc.). Like Askehave and Nielsen, this paper does not explore how or where these electronic genres are used, but seeks to validate these genres as research objects.

The concept of *medium* is intrinsic in the definition of digital genres. According to Askehave and Nielsen the Internet as a medium has several features which significantly influence and contribute to "the way the web-mediated genres look and are used" (121). Electronic genres could be conceptualised as goal-oriented (Swales 1990). The communicative purpose therefore constitutes the rationale for the genre. This fact, which encourages particular text structures, enhances the use of conventionalised lexico-grammatical and rhetorical strategies. Following Swales' three-level genre model (*Genre*), Askehave and Nielsen study one single homepage, focusing on three constituents of a genre: the communicative purpose, the move structure and the rhetorical strategies. They conclude that the communicative purpose of the homepage under study could not be approached as a single text in isolation. They state that to analyse these digital genres we should use the context of the homepage and its discourse community. The move structure of digital genres is graphically arranged according to the communicative purposes of those genres. Generally speaking these genres leave room for rhetorical variation depending on the genre model. It could also be argued that establishing moves in a digital text could increase ambiguity. There is a certain degree of disagreement regarding which criteria should be used for identifying move structure (cf. Paltridge). Whereas Swales recommends focusing on lexis, grammar and rhetorical functions to establish moves (*Genre*), Eggins relies merely on lexis and grammar, Martin relies on the layout of a text—headings, subtitles, etc.—and Bhatia believes that "the ultimate criteria for assigning discourse values to various moves is functional rather than formal" ((*Analysing* 87)

iv) What Is the Role of Discourse Communities in Electronic Genres or Digital Genres?

It is essential for the global understanding of the nature of knowledge dissemination electronic genres to reflect on the role of the potential readership as recipients and electronic information consumers. Therefore, it should be considered here that web-mediated genres, such as homepages, are documents which introduce the user to the general content of the site and also function "as the official gateway of a web site as it enables the reader to access and navigate the site by providing navigational tools or links that branch off into the web site as a whole" (Askehave and Nielsen 124). Content can be accessed from the main website or it can also be reached for instance by *secondary paths* such as "Googling" pieces of information that

readers wish to find out or read about. Homepages, as hosts of digital or electronic genres, could be compared to newspapers since they have front pages, promotional news, eye-catching headings, etc. Homepages, however, can go beyond traditional existing genres due to their multimodal properties. They have visual aids, sound, flash images etc. Homepages present a selection of topics which are governed by what the authors believe will satisfy the immediate information need of readers when they consult the web page. The primary communicative purpose of the homepage may seem to present a reading mode as a social practice. The choice of information, design and layout of the homepage is centred on the recipient, although the sender has a crucial image-creating role. This idea could be illustrated with the genre of medical electronic popularizations (Herrando-Rodrigo). Medical electronic popularizations are medical research articles combination of form and content, which aim to meet the readers' expectations on the net offering trustworthy medical information to a wide range of readers.

As a whole the homepage, as a navigating option, mainly provides access to the website content through different frames and different spaces or moves—greeting, identifying the sender, indicating content structure etc. A sequence of moves is created through which the reader could take his/her own path. According to Askehave and Nielsen, there is a vague tendency towards a preferred text organisation which is similar to that of newspaper front pages: the most important information first and the least important last.

There are further features that characterise web-mediated genres. For instance, it could be considered as McLuhan states, that the medium of digital genres is the message itself. This medium encourages the reader to self-navigate throughout the World Wide Web thanks to the presence of hypertexts or hyperlinks. They are presented as *clickable objects*—underlined words or icons that allow the reader and navigator to read further and to go from one website to another website. The functional value of links is concerned with the relationship established between the chunks of information being connected. These hyperlinks may present forced reading, due to so many potentially required reading stops. The flow of meaning is not interrupted by hyperlinks, on the contrary they enliven them.Some knowledge dissemination electronic genres, such as patients' self-care webs, exploit the multimedia potential generated by the WWW portrayed in music, video, animation etc. inviting the reader to participate actively in assigning meaning in the process of text consumption (Landow; Bolter). Knowledge dissemination electronic genres, as for instance medical electronic popularizations, present non-linear texts. Their sender-oriented texts include hypertexts that are electronically linked to some text items. This network of texts (Landow; Fritz; Bolter) is a non-sequential text system, which is recipient-oriented to facilitate explanations and further readings on potentially difficult aspects of the text contents.

From an analytical viewpoint, scholars such as Landow, Bolter or Askehave and Nielsen point out that there is no clear distinction between text production and text reception on the Internet. Above all, the most remarkable aspect is that readers can choose where to begin their reading and where to end it. They choose their own path and create their own hypertext system, becoming a kind of web-author.

Therefore, as mentioned above, one of the most remarkable features of web-mediated texts is the effect of hypertexts on web-users. Sosnoski argues that the existence of hypertexts linked to some chunks of information "places certain constraints on the reading pattern" which lead the reader to over-read (135). Hyper-reading also reduces any potential linearity regarding the traditional reading comprehension of a text. However, many readers have been taught how to filter, skim and scan texts in their academic education to improve their reading skills by disregarding the existence of hyperlinks and hypertexts. Finnemann states that the existence of non-linear texts is not due to the recent appearance of hypertexts and web-mediated texts:

> In ordinary text you are supposed to move from chapter 1 to chapter 2 while in a hypertext you are supposed to choose your own serial order at various stages on the journey. But even so, you still have to choose, you have to determine the order in which you will read the text and this order will always have to be sequential. The optional freedom in hypertext systems is not a freedom from sequentialized linearity, since the user cannot make more than one choice at a time. (Hypertext and the representational capacities of the Binary alphabet, 25)

Finnemann highlights the fact that a hypertext is a text system which has the ability to activate at least two modal shifts in the reading process: the *reading-as-such mode* and the *navigating mode*. The first reading deals with the traditional reader position with sequential and guided reading, and the second process allows the reader to navigate the site and actively construct his/her own reading path through several windows or sites. Askehave and Nielsen state that when consuming web texts, the web user employs two different cognitive capacities and demonstrates two different types of behaviour when s/he shifts from the reading to the navigating mode and vice versa. The concept of *modal shift* in hypertext reading offers an interesting perspective on web genres and is a key distinction in the traditional genre analysis model. The analysis of web genres should be centred around the two models: "[w]hat we need then is an extension of the genre model to account for the fact that a web text also functions in the navigating mode where the text, due to its media constraints, becomes an interactive medium, used actively to navigate the web site" (Askehave and Nielsen 127). The genre model has been widely proven to be useful for describing the characteristics of one-dimensional genres. However, since hypertexts are essential in web-mediated genres, the image of a two-dimensional genre model is inherently necessary. Askehave and Nielsen's solution is to "reconsider the genre model; keep the basic premises of the model (the three-level analysis of the communication purpose, move structure and rhetorical strategies), but add the hypertextual mode (Finnemann's concept of navigating mode) to all levels of analysis, thus producing a two-dimensional genre model" (127). Figure 1 visually represents this two-dimensional genre model:

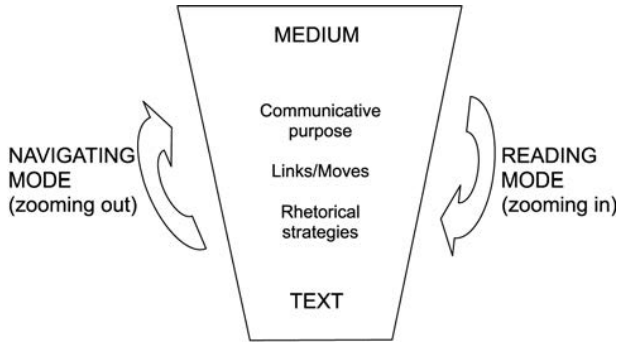

Figure 1. Askehave and Nielsen's model (127).

This model then visually represents that: i) Users of web documents carry out modal shifts—shifts between acting as a reader and acting as a navigator; ii) Shifts are circular—there is a constant change between reading and navigating; iii) When in the reading mode, the reader zooms in on the text and uses the web document as if it was a printed text (basically reads the texts); iv) When in the navigating mode, the navigator zooms out of the text and uses the web document as a medium (exploiting its navigation possibilities); v) An account of the generic properties of genres on the web involves a three-level analysis of both modes:

a) In the reading mode, the text must be characterised in terms of its communicative purpose, moves, links and rhetorical strategies.
b) In the navigating mode, the medium must be characterised in terms of its communicative purpose, links and rhetorical strategies. This two-dimensional model considers the functional properties of the text and the medium from the point of view of the text producer. Bhatia (*Analysing*) and Swales' (*Genre*) genre analysis model was based on a sender-oriented view and on the communicative and functional purposes of the genre. The roles of the recipient may seem to be unexplored. However, the study of the roles of the recipients opens a broad and complex research field.

As shown throughout this section, the interplay between medium and genre is a key feature of the web-mediated genre as is also the purpose, which may also influence the form as discussed above. Although Yates, Orlikowski, and Okamura claim that "[i]t is the genres enacted within a medium that establish the communicative purpose of the interaction, not the medium" (100), they later recognise that the medium may play a role in both the recurring situation and the form of a genre. They also admit that when studying web-mediated genres, the researcher is faced with genres which are more than "traditional genres transferred to the net"; in fact web-mediated genres may be substantially different from printed genres because the web genre often exploits the characteristics of the hypertext medium.

One of the strongest arguments Askehave and Nielsen put forward to state that the medium forms an integral part of the genre and therefore should be included in a genre analysis model of web-mediated genres is that hypertexts become severely "handicapped" when printed out onto paper and removed from their medium. As a result, web genres cannot be characterised as genres in isolation from their medium. Although the distinction between *genre* and *medium* may seem to be clear, the boundaries between these two concepts still remain invisible.

TOWARDS A GENRE MODEL ANALYSIS OF KNOWLEDGE DISSEMINATION ELECTRONIC GENRES IN RESEARCH COMMUNICATION

As regards genre relations, knowledge dissemination electronic genres and their corresponding former academic genres, that is the genres they usually draw upon —as is for instance the case in medical research articles and their ensuing electronic popularizations— show different conditions of production and consumption and therefore the communicative purpose of both genres, their writers and readers do necessarily differ. Nonetheless, the consultation of sources regarding genre relations (Devitt; Bazerman, "Systems"; Orlikowski and Yates; Crowston and Williams; Tardy; Swales, *Research*; Bhatia, *Worlds*; Berkenkotter; Campagna et al.; Gotti) led me to observe that these newly-born genres should be understood as adaptations or reformulations of former field-specific genres that disseminate scientific knowledge to mainly non-specialised audiences so as to respond these readers' urge to know, that is, a reliable answer to social need.

Knowledge dissemination electronic genres are popular dissemination texts commonly written by "entrepreneurs of science" (as Myers, "Social," and Adams-Smith pointed out) that linguistically mediate between academic and technical genres and the lay audience or recipients. In addition, these knowledge dissemination electronic genres writers seek neutrality and objectivity using an information structure that meets the Internet consumers' expectations in a journalistic format.

Although the interaction between researchers/writers with readers is one-way, these electronic genres, which disseminate scientific findings outside the scientific community, are socially constrained. In other words, knowledge dissemination electronic genres are socially constructed but not affected by the social interaction of its discourse community members, since there is no interaction between all the members of the discourse community. The nature of these genres, and thus, the communicative purpose of these electronic dissemination texts (disseminate trustworthy and accessible scientific information outside the scientific community) shape the form and content of these emerging genres, which are lately raising awareness in research communication in the field of applied linguistics.

This review article raises concern about the validity of traditional genre models for the analysis, study and definition of these newly born genres. Turning to Crowston and Williams, Yates and Orlikowski ("Genre"), Askehave and Nielsen, Giltrow and Stein for the exploration of electronic genres should cast light upon

any future study of this nature. Inspired by Swales (*Genre*), these studies base their methodology on the observation of three factors: the communicative purpose, the moves and rhetorical strategies. However, there are some aspects that, to my knowledge, should also be taken into consideration since they govern the manufacturing process of knowledge dissemination electronic genres as final products. These two key elements are: 1) the Internet as channel of information dissemination and 2) the potential "unstable" audience or readership, directly affect, and thus, craft these knowledge dissemination electronic genres. Therefore, a multimodal approach to the analysis of these genres should be carried out together with a reflection on the amalgam of potential electronic information consumers, who surf the net in search of trustworthy and reliable information all over the world —and who may be educated readers that are able to discern the form and content of these pieces of field-specific information. In such a way, an appropriate and accurate conceptualisation of these emerging genres in research communication in English could be obtained.

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WORKS CITED

Adams-Smith, Diana E. "Variation in Field-related Genres." *ELR Journal* 1 (1987): 10-32. Print.

Askehave, Inger and Anne Ellerup Nielsen. "Digital Genres: A Challenge to Traditional Genre Theory." *Information, Technology & People* 18 (2005): 120-141. Print.

Bateman, John A. *Multimodality and Genre: A Foundation for the Systematic Analysis of Multimodal Documents*. Hampshire: Palgrave Macmillan, 2008. Print.

Bateman, John A, Judith Deli, and Renatte Henschel. "Mapping the Multimodal Genres of Traditional and Electronic Newspapers." *New Directions in the Analysis of Multimodal Discourse*. Ed. Terry D. Royce and Wendy L. Bowcher. Mahwah: Lawrence Erlbaum, 2006. 66-110. Print.

Bazerman, Charles. *Shaping Written Genre: The Genre and Activity of the Experimental Article in Science*. Madison: The U of Wisconsin P, 1988. Print.

——."Systems of Genres and the Enactment of Social Relationships." *Genre and the New Rhetoric*. Ed. Aviva Freedman and Peter Medway. London: Taylor and Francis, 1994. 79-101. Print.

Berkenkotter, Carol. "Genre Change in the Digital Age." *Insights into Academic Genres*. Ed. Carol Berkenkotter, Vijay K. Bhatia, and Maurizio Gotti. Bern: Peter Lang, 2012. 31-45. Print.

Berkenkotter, Carol and Thomas N. Huckin. *Genre Knowledge in Disciplinary Communication*. Hillsdale: Erlbaum, 1995. Print.

——."Rethinking Genre from a Sociocognitive Perspective." *Written Communication* 10 (1993): 475-509. Print.

Bhatia, Vijay K. *Analysing Genre: Language Use in Professional Settings*. London: Longman, 1993. Print.

——."A Generic View of Academic Discourse." *Academic Discourse.* Ed. John Flowerdew. Harlow: Pearson Education, 2002. 21-39. Print.

——. "Genre Analysis, ESP and Professional Practice." *English for Specific Purposes* 27 (2008): 161-174. Print.

——. "Interdiscursivity in Academic Genres." Genre Variation in English Academic Communication: Emerging Trends and Disciplinary Insights. An International Conference Hosted by CERLIS. University of Bergamo, Italy. 23-25 June 2011.

——. "Integrating Products, Processes and Practices in Professional Writing." *Writing: Texts, Processes and Practices*. Ed. Christopher Candlin and Ken Hyland. London: Longman, 1999. 21-39. Print.

——. "John Swales: Some Personal Reminiscences." *English for Specific Purposes* 15 (1998): 87-90. Print.

——.*Worlds of Written Discourse: A Genre-based View*. London: Continuum, 2004. Print.

Bolter, Jay David. *Writing Space: Computers, Hypertext and the Remediation of Print*. Hillsdale: Lawrence Erlbaum, 2001. Print.

Campagna, Sandra, Giulana Garzone, Cornelia Ilie, and Elizabeth Rowley-Jolivet, eds. *Evolving Genres in Web-mediated Communication*. Bern: Peter Lang, 2012. Print.

Candlin, Christopher and Ken Hyland, eds. *Writing: Texts, Processes and Practices*. London: Longman, 1999. Print.

Chimombo, Moira and Robert Roseberry. *The Power of Discourse: An Introduction to Discourse Analysis.* Mahwah: Lawrence Erlbaum, 1998. Print.

Crowston, Kevin and Marie Williams. "Reproduced and Emergent Genres of Communication on the World Wide Web." *The Information Society* 16 (2000): 201-216. Print.

Crystal, David. *Language and the Internet.* Cambridge: Cambridge UP, 2001. Print.

Devitt, Amy. "Intertextuality in Tax Accounting: Generic, Referential, and Functional." *Textual Dynamics of the Professions: Historical and Contemporary Studies of Writing in Professional Communities*. Ed. Charles Bazerman and James Paradis. Madison: U of Wisconsin P, 1991. 336-355. Print.

Dickey, M. Daniel. "The Impact of Web-Logs (Blogs) on Student Perceptions of Isolation and Alienation in a Web-Based Distance-Learning Environment." *Open Learning* 19 (2004): 279-291. Print.

Dudley-Evans, Tony. "Genre Analysis: An Investigation of the Introduction and Discussion Sections of MSC Dissertations." *Talking about Text: Studies Presented to David Brazil on His Retirement*. Discourse Analysis Monographs No. 13. Ed. Malcolm Coulthard. Birmingham: The University of Birmingham, English Language Research, 1986. Print.

Eggins, Susan. *An Introduction to Systemic Functional Linguistics*. London: Pinter, 1994. Print.

Finnemann, Niels Ole. "Hypertext and the representational capacities of the Binary alphabet." 1999. www.hum.au.dk/ckulturf/pages/publications/nof/hypertext.html.

Fortanet, Inmaculada, Juan Carlos Palmer-Silveira, and Santiago Posteguillo-Gómez. "The Emergence of a New Genre: Advertising on the Internet (Netvertising)." *Hermes: Journal of Linguistics* 23 (1999): 93-113. Print.

Freedman, Aviva and Peter Medway. *Genre and the New Rhetoric*. London: Taylor and Francis, 1994. Print.

Fritz, Gerd. "Coherence in Hypertext." *Coherence in Spoken and Written Discourse: How to Create It and How to Describe It*. Ed. Wolfram Bublit, Uta Lenk, and Eija Ventola. Amsterdam: John Benjamins, 1998. 221-233. Print.

Giltrow, Janet and Dieter Stein. "Genres in the Internet: Innovation, Evolution and Genre Theory." *Genres in the Internet*. Ed. Janet Giltrow and Dieter Stein. Amsterdam: John Benjamins, 2009. 1-26. Print.

Gotti, Muarizio. "Reformulation and Recontextualization in Popularization Discourse." *Ibérica* (2014): 15-14. Print.

Hallin, Daniel C. "Sound Bite News: Television Coverage of Elections." *Do the Media Govern? Politicians, Voters and Reporters in America*. Ed. Shanto Iyengar and Richard Reeves. Thousand Oaks: Sage, 1997. Print.

Herrando-Rodrigo, Isabel. "Blurred Genres: Hybrid Functions in the Medical Field." *Insights into Academic Genres*. Ed. Carol Berkenkotter, Vijay K. Bhatia and Maurizio Gotti. Bern: Peter Lang, 2012. 257-279. Print.

Kamberelis, George. "Genre as Institutionally Informed Social Practice." *Journal of Contemporary Legal Issues* 6 (1995): 115-171. Print.

Knox, John S. "Online Newspapers: Evolving Genres and Evolving Theory." *Applied Linguistics Methods: A Reader*. Ed. Caroline Coffin, Theresa Lillis, and Kieran O´Halloran. London: Routledge, 2010. 33-52. Print.

——."Visual-verbal Communication on Online Newspaper Home Pages." *Visual Communication* 6 (2007): 19-53. Print.

Landow, George. *Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology*. Baltimore: The Johns Hopkins UP, 1997. Print.

Luzón-Marco, María José. "Bloggers' Status and Social Presence in Academic Weblogs." *Constructing Interpersonality: Multiple Perspectives on Written Academic Genres*. Ed. Rosa Lores-Sanz, Pilar Mur-Dueñas, and Enrique Lafuente-Millán. Cambridge: Cambridge Scholars, 2010. 295-311. Print.

——."Comments in Academic Blogs as a New Form of Scholarly Interaction." *Insights into Academic Genre*. Ed. Carol Berkenkotter, Vijay K. Bhatia, and Maurizio Gotti. Bern: Peter Lang, 2012. 281-300. Print.

Martin, James R. *English Text: System and Structure*. Amsterdam: John Benjamins, 1992. Print.

McLuhan, Marshall. *The Gutenberg Galaxy: The Making of Typographic Man*. London: Routledge & Kegan Paul, 1962. Print.

Miller, Carolyn. "Genre as Social Action." *Quarterly Journal of Speech* 70 (1984): 151-167. Print.

——."Rhetorical Community: The Cultural Basis of Genre." *Genre and the New Rhetoric*. Ed. Aviva Freedman and Peter Medway. Bristol: Taylor and Francis, 1994. 67-78. Print.

Myers, Greg. *Discourse of Blogs and Wikis*. London: Continuum, 2010. Print.

——."The Social Construction of Popular Science: The Narrative of Science and the Narrative of Nature." *Writing Biology: Texts in the Social Construction of Science*. Ed. Greg Myers. Madison: U of Wisconsin P, 1986. Print.

Orlikowski, Wanda and Joanne Yates. "Genre Repertoire: The Structuring of Communicative Practices in Organizations." *Administrative Science Quarterly* 39 (1994): 541-574. Print.

Paltridge, Brian. "Genre Analysis and the Identification of Textual Boundaries." *Applied Linguistics* 15 (1994): 288-99. Print.

Shepherd, Michael and Carolyn Watters. "The Functionality Attribute of Cybergenres." *HICSS '99 Proceedings of the Thirty-second Annual Hawaii International Conference on System Sciences*. Vol. 2. Washington, DC: IEEE Computer Society, 1999. 2007. PDF. < doi:10.1109/HICSS.1999.772650>.

Sosnosky, James. "Configuring as a Mode of Rhetorical Analysis." *Doing Internet Research*. Ed. Steve Jones. London: Sage, 1999. Print.

Swales, John M. *Genre Analysis: English in Academic and Research Settings.* Cambridge: Cambridge UP, 1990. Print.

——. *Research Genres.* Cambridge: Cambridge UP, 2004. Print.

Tardy, Christine. "A Genre System View of the Funding of Academic Research." *Written Communication* 20 (2003): 7-36. Print.

Thurman, Neil. "The Globalization of Journalism Online: A Transatlantic Study of News Websites and Their International Readers." *Journalism* 8 (2007): 285-307. Print.

Wise, Lisa "*Blogs* versus discussion forums in postraguate on line continuing medical education." *BlogTalk conference paper*. Sydney, 2005. <http://incsub.org/blogtalk/?page_id=106>

Yates, Joanne and Wanda Orlikowski. "Genres of Organizational Communication: A Structurational Approach to Studying Communication and Media." *Academy of Management Review* 17 (1992): 299-326. Print.

——."Genre Systems: Structuring Interaction through Communicative Norms." *Journal of Business Communication* 39 (2002): 13-35. Print.

Yates, Joanne, Wanda Orlikowski, and Kazuo Okamura. "Explicit and Implicit Structuring of Genres in Electronic Communication: Reinforcement and Change in Social Interaction." *Organisation Science* 10 (1999): 83-117. Print.

EVALUATING AUTHORSHIP VARIATION PATTERNS IN ENGLISH-MEDIUM ASTROPHYSICS RESEARCH PAPERS: AN ACROSS JOURNAL AND DIACHRONIC STUDY (1998-2012)[1]

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Abstract

This paper explores authorship practices from a diachronic perspective in a corpus of 300 randomly selected research papers published in the most prestigious Astrophysics English-medium journals. Our main results show that 21 variants were recorded in the number of authors in the whole sample and that multi-authored research papers far outnumber single-authored ones. They also reveal a growth not only in the number of authors, but also in the number of multi-authored research papers over time, mainly in those contributed by more than seven authors. From a specific diachronic perspective, each journal has its own authorship variation patterns and variants, which are analysed and explained in relation to their specific scope and to the socio-economic and political situation in each geographic context (European countries and the USA).

Key words: astrophysics, authorship, research papers, English, diachronic, comparative.

Resumen

En este artículo hemos analizado las prácticas autoriales en una muestra seleccionada al azar compuesta por 300 artículos de investigación publicados en tres periodos diferentes (1998, 2004 y 2012) en las más prestigiosas revistas de Astrofísica publicadas en inglés en Europa y Estados Unidos de Norteamérica. Hemos hallado una gama de 21 variantes en el número de autores en toda la muestra analizada. También hemos apreciado que los artículos de investigación con autoría colectiva son muchos más numerosos que los de autoría individual. Asimismo, hemos observado que no sólo ha ido creciendo el número de autores, sino también el número de artículos con autoría colectiva, principalmente en aquellos redactados por más de siete autores. En términos diacrónicos específicos, hemos comprobado que cada revista posee sus propias variantes y patrones de variación autoriales,

que hemos explicado en relación a su ámbito específico y a la situación socio-económica y política en ambos contextos geográficos (países europeos y EE.UU.).

Palabras clave: astrofísica, autoría, artículos de investigación, inglés, diacrónico, comparativo.

1. INTRODUCTION

Science is an increasingly global enterprise occurring in more and more places than ever before. In Castells' parlance: "Scientific research in our time is either global or ceases to be scientific" (qtd. Cronin, *Hand* 18). As a consequence, the scientific world is becoming increasingly interconnected, and many areas of research are growing more multidisciplinary and team-oriented (Gordon; Gibbons et al.).

According to the Royal Society Report on scientific collaboration in the 21st century released in March 2011, today there are over seven million researchers around the world, drawing on a combined international research and development spending of over US$ 1.000 billion (a 45% increase since 2002), and reading and publishing in around 25,000 scholarly journals per year. These scholars, mostly drawn by their motivation to work with the very best people and facilities in the world, collaborate with each other in order to seek new knowledge, and to tackle and attempt to solve, *inter alia*, global problems, such as climate change, water, food supply, loss of biodiversity, health, economic growth, etc. Authorship in scientific papers has been extensively studied from the sociological and the bibliometric points of view, as well as by research in science policy and ethics (Beaver; Biagioli; Birnholtz; Chompalov et al.; Glänzel and Schubert; Wuchty et al., among others). Its growth has now been documented to the point that it was the topic of a conference held at the University of Valencia (Spain) in November 2013 (González Alcaide et al.). An international network the aim of which is to facilitate collaboration in scientometrics, infometrics and webometrics should also be mentioned here: it is the COLLNET network which, since 2000, organizes an international meeting on a yearly basis.[3]

Collaboration, understood as the specific scientific activities (research and observation, experimentation, data collection, and publication) conducted by scientists working together on a common research project, is the "staple food" of academic life (Shapin 359). There are various motivating factors that underpin collaboration. When scientific motives drive the research, shared interest in the research problem is the leading reason for collaboration, but scientists are likely to collaborate with their

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[3] For more information, see <http://www.collnet.de> and <http://www.tu-ilmenau.de/collnet2014/>.

international counterparts for reasons that go beyond mere scientific compatibility and complementarity. Geographic proximity (Sugimoto and Cronin), historical linkages (less influential in the 1990s than in the past, according to Wagner and Leydesdorff), a shared language, specific problems and issues, economic factors, expertise, productivity, and the presence of particular research equipment, databases and/or laboratories are factors that also encourage collaboration (Harsanyi; Wagner et al.; Royal Society Report).

As regards the benefits of joint authorship, these consist of both measurable (e.g. increased citation impact and access to new markets) and less easily quantifiable outputs, such as broadening research horizons. These benefits also depend on the type of collaboration (Leimu and Koricheva), whether it is domestic in-house, domestic institutional or international. However, collaboration benefits are discipline-dependent, as Cronin et al. demonstrated. For example, the effects of collaboration on scientific impact are stronger in the 'hard sciences' (e.g., Physics and Astronomy) than in the "soft sciences," such as Sociology or Social Sciences (Stack; Marshakova-Shaikevich).

The methods used by scientists to create new knowledge have changed over time. The frequency and ease of travel as well as the development of new information and communication technologies, for example, have been influential in increasing the dynamism of knowledge sharing, and this has led to more robust networks of scientists. When asked about the medium for exchanging information, the scientists Wagner et al. reported that the Internet has become the central mechanism for communication and information exchange, although they also stress its limitations. Indeed, in many cases, the Internet does not substitute for face-to-face interaction, a key element in many capacity building activities and in the building of trust and confidence.

All in all, then, the growth of collaboration in science and technology is reflected in an increasing number of authors per publication, which is generally justified by the development of a growing number of multicentre trials and the increasing complexity of scientific research, thus requiring greater interdisciplinary work (Vincent-Lancrin; Royal Society Report). Since the increase in the mean number of authors per article is well documented (Laband and Tollison; Glänzel and Schubert; Cronin, *Hand*, "Collaboration"; Cronin et al.; Burton; Salager-Meyer et al., among others), the "publish or perish" motto has given rise to a new concept "publish together or perish" (Baethge; Levsky et al.).

The abundant literature on scientific collaboration also showed that co-authorship intensity varies by discipline (Subramanyan; Cronin et al.; Cronin, *Hand*; Lewis et al.), the most dramatic rise in multi-authored papers being seen in, for example, High-Energy Physics and Biomedicine (Cronin, *Hand*), a phenomenon described by Cronin as "hyperauthorship" ("Hyperauthorship" 560).

The growth of scientific collaboration has also been analysed in the field of Astrophysics. For example, Burton presented a very interesting account of some statistics (number of papers published per year and number of pages and authors per paper) recorded between 1990 and 2006 regarding *The Astrophysical Journal* by drawing comparisons with other principal international journals in the field of Astrophysics.

This study, which is part of a larger project focused on research papers published in Astrophysics journals, complements and enriches a previous article on the linguistic analysis of titles in the same type of academic documents (Méndez et al. 2014).

2. CORPUS AND METHODOLOGY

2.1. Source Journal Selection

The source journals had to fulfill the following criteria: 1) be the most authoritative journals in the field of Astrophysics, 2) publish papers on observational data and/or theoretical analyses, and 3) be freely accessible on line.

Taking these three criteria into account, the following four journals were selected: *The Astrophysical Journal* (ApJ) and *The Astronomical Journal* (AJ), which are both US-based and published on behalf of the American Astronomical Society, and *Monthly Notices of the Royal Astronomical Society* (MNRAS) and *Astronomy and Astrophysics* (A&A), which are based in Europe. MNRAS is published on behalf of the Royal Astronomical Society and is often the journal of choice for astronomers from the United Kingdom and the Commonwealth.

ApJ (impact factor: 6.733) has a more theoretical trend and publishes papers in Astronomy and Astrophysics. MNRAS (impact factor: 5.521) covers research on Astronomy and Astrophysics. A&A (impact factor: 5.084) is a European journal that publishes papers on theoretical, observational, and instrumental Astronomy and Astrophysics. AJ (impact factor: 4.965) publishes papers on astronomical research. [4]

Since these four journals became freely accessible on-line in 1998, that year was chosen as our starting point for our analysis.

2.2. Research Paper Selection

We randomly selected 300 research papers (RPs) from three different time periods comprising 100 RPs each: Block A (1998), Block B (2004), and Block C (2012). In other words, the 100 RPs per Block comprise 25 RPs per journal, i.e. 75 RPs per journal.

[4] All impact factors refer to the year 2012. The information was obtained from each journal's home page.

2.3. Authorship Data Recording Analysis

The number of authors per RP was recorded manually in each RP, and the quantitative data obtained were compared with the Student's *t*-test. The alpha value was set at 0.05.

3. RESULTS

3.1. Number of Authors (Table 1 and Graph 1)

TABLE 1. NUMBER OF AUTHORS PER JOURNAL AND PERIOD.

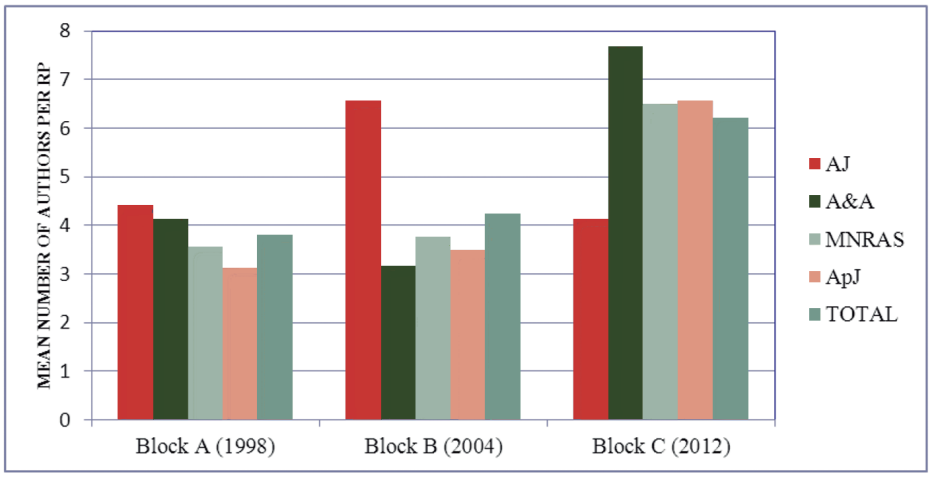
Journal	Block A (1998)	Block B (2004)	Block C (2012)	Total
AJ	110	164	103	377
A&A	103	79	192	374
MNRAS	89	94	162	345
ApJ	78	87	164	329
Total	380	424	621	1.425

As can be seen in Table 1, 1,425 authors were recorded in the RP bylines in the whole corpus. The mean number of authors per RP in the whole sample was 4.75. Table 1 also reveals that the number of authors varies from one journal to another, AJ and A&A containing the highest number of authors (26.5% and 26.2%, respectively) and MNRAS and ApJ the lowest ones (24.2% and 23.1%, respectively).

From a general diachronic standpoint, Table 1 also shows that the great majority of the number of authors (43.6%) appears in Block C, whereas the total number of authors recorded in Blocks A and B accounts for 26.7% and 29.8%, respectively (the sum of the three percentages is slightly greater than 100% because of rounding). This means that there is a large increase (1.63) in the total number of authors from Block A to Block C, and that the mean number of authors per RP rises from 3.8 in Block A to 6.2 in Block C (p=0.0002).

From a specific diachronic perspective, each journal has its own peculiarities. The number of authors rises steadily from Block A to Block C both in MNRAS and in ApJ, but in AJ it increases in Block B and decreases in Block C, and in A&A it falls in Block B and rises in Block C. Table 1 also shows that the greatest number of authors in Block C was recorded in A&A (30.9%), and the lowest in AJ (16.6%), MNRAS and ApJ accounting for 26.4% and 26.1%, respectively.

The behaviour patterns related to the mean number of authors per RP, journal and period are plotted in Graph 1. Both ApJ and MNRAS show an increase in the mean number of authors per RP from Block A to Block C: from 3.1 to 6.6 for ApJ (p=0.016) and from 3.56 to 6.5 for MNRAS (p=0.006). By contrast, the mean number of authors per RP in AJ increases from 4.4 in Block A to 6.6 in Block B



Graph 1. Mean number of authors per RP, journal and period.

(although this increase is not statistically significant) and decreases to 4.12 in Block C (p=0.029), whereas the mean number of authors per RP in A&A shows the opposite pattern: a fall from 4.1 in Block A to 3.2 in Block B (p=0.027) followed by a rise in Block C to 7.7 (p=0.002).

3.2. Number of Single- and Multi-authored RPs (Table 2 And Table 3)

TABLE 2. AUTHORSHIP VARIANTS PER JOURNAL.

No. of authors	AJ (15 variants)	A&A (14 variants)	MNRAS (13 variants)	ApJ (12 variants)	Total no. of RPs
1 author	11	5	10	4	30
2 authors	12	17	14	23	66
3 authors	11	11	16	18	56
4 authors	11	14	9	13	47
5 authors	8	8	5	5	26
6 authors	9	8	2	1	20
7 authors	3	4	7	3	17
8 authors	1	1	3	2	7
9 authors	-	-	5	-	5
10 authors	1	2	1	2	6
12 authors	1	-	-	-	1
13 authors	3	-	1	-	4

15 authors	-	1	-	-	1
16 authors	-	-	-	2	2
18 authors	1	-	-	-	1
19 authors	1	-	-	-	1
20 authors	1	1	-	-	2
21 authors	-	1	1	1	3
22 authors	-	1	-	-	1
24 authors	1	1	1	-	3
32 authors	-	-	-	1	1
Total	75	75	75	75	300

Table 2 shows that 21 variants were recorded in the number of authors, and that multi-authored RPs represent 90% of the whole sample, i.e. they far outnumber single-authored RPs, which account for only 10%. Two-, three- and four-authored RPs account for 56.4% (22%, 18.7% and 15.7%, respectively) of the whole sample, whereas the three variants from five- to seven-authored RPs account for 21.1% (8.7%, 6.7% and 5.7%, respectively) and the remaining 14 variants from eight to 32-authored RPs occurred much less frequently (12.7%).

Table 2 also illustrates that the highest number of single-authored RPs was recorded in AJ (36.7%) and in MNRAS (33.3%), and the lowest in A&A (16.7%) and in ApJ (13.3%). It also shows that that the highest number of two-authored RPs was found in ApJ (34.9%), followed by A&A (25.8%), MNRAS (21.2%) and AJ (18.2%). The sum of the three percentages is again slightly greater than 100% because of rounding. The greatest number of more than four-authored RPs was recorded in AJ (29.7%) and A&A (27.7%), followed by MNRAS (25.7%) and ApJ (16.8%). In this case, the sum of the three percentages is slightly lower than 100% because of rounding. The 24-authored variant is not found in ApJ which, by contrast, is the only journal that contains a 32-author RP.

Table 3 shows the evolution of the number of authors in our sample. A steady decrease in the number of single, three-, and four-authored papers can be observed from Block A to Block C. Conversely, the frequency of two- and six-authored RPs increases from Block A to Block B and decreases from Block B to Block C, and that of five- and seven-authored RPs decreases in Block B and increases in Block C.

TABLE 3. AUTHORSHIP VARIANTS PER PERIOD.

No. of authors	Block A (11 variants)	Block B (12 variants)	Block C (19 variants)	Total
1 author	14	9	7	30
2 authors	17	27	22	66
3 authors	26	18	12	56

4 authors	20	16	11	47
5 authors	8	6	12	26
6 authors	4	10	6	20
7 authors	5	4	8	17
8 authors	-	4	3	7
9 authors	2	-	3	5
10 authors	2	1	3	6
12 authors	-	-	1	1
13 authors	-	3	1	4
15 authors	-	-	1	1
16 authors	-	-	2	2
18 authors	1	-	-	1
19 authors	1	-	-	1
20 authors	-	1	1	2
21 authors			3	3
22 authors			1	1
24 authors	-	1	2	3
32 authors	-	-	1	1
Total	100	100	100	300

Worth pointing out is the steady increase in the number of author variants from Block A (11) to Block C (19) and in the total number of RPs signed by more than seven authors in the same time span (from 6% to 22%).

4. DISCUSSION

4.1. Number of Authors

Our findings (Table 1 and Graph 1) reveal a growth in the number of authors from Block A to Block C. In this sense, our results are in line with previous studies not only in Astrophysics, but also in many other fields (see Introduction section). Furthermore, the scope of each journal may be responsible for the differences observed in the mean number of authors per RP. The highest mean number of authors per RP in AJ may be attributed to the fact that this journal focuses primarily on observational research (the most experimental part of Astrophysics) that requires complex instrumentation (telescopes, detection devices, space missions, etc.) and multidisciplinary teams.

Although the numbers of authors per RP have increased from Block A to Block C, the authorship variation patterns differ from one journal to another since

each of them has its own peculiarities. In MNRAS and ApJ, the number of authors increased steadily from Block A to Block C. Conversely, AJ and A&A are characterized by an erratic pattern of increases and decreases. The fall in the number of authors in Block C in AJ may be accounted for, in our opinion, by the worldwide economic crisis that started in the USA in 2006. The substantial funding allocated for astronomical research, which had been steadily increasing, was reduced as a consequence of the crisis to the point that less money was devoted to research. This meant that new projects were smaller and fewer scientists were needed, hence the lower number of authors in Block C. Due to its more general scope, i.e. not so observationally-oriented, authorship at ApJ may not have reflected the economic crisis to the same extent as AJ.

As for A&A, another economic crisis should also be mentioned, i.e. the crisis that started at the beginning of the year 2000, mainly in Germany. After German reunification, the country had to face an excessive deficit and huge economic problems to the point that it was known as "the sick man of Europe" until the year 2005, when its economy began to recover. This may explain why research was very scarce during the period 2000-2004 and why only small projects involving few researchers were carried out, as reflected in the decrease in the mean number of authors per RP in Block B in A&A. Once the crisis was over, so-called "Big Science" returned, which involved team work requiring more personnel and financial support for research. This resulted in the increase observed in Block C. Contrary to what happened in Germany, the research published in MNRAS was not affected by this economic crisis, hence the mean number of authors per RP in this journal does not differ significantly between Block A and Block B.

Finally, it is also worth pointing out that an identical pattern of variation in the mean number of authors and the average title length (see Méndez et al. 2014) is found both in AJ and MNRAS. In ApJ and A&A, the pattern is also similar except in Block B. Multiple authorship in scientific papers has also been associated with title length (Yitzhaki, "Relation of Title"), and paper length (Yitzhaki, "Relation of the Title"). This should come as no surprise because when a greater variety of specialties and of authors is involved in research, RP titles tend to be longer as do the RPs themselves in terms of number of pages.

Apart from the varying expertise—a cause that may be considered intrinsic to the science being performed—another reason why more authors are mentioned in the RP bylines may also be of a more sociological nature, namely that names of scientists who might have been previously included in the acknowledgement sections are now more likely to appear as authors (Burton).

4.2. Number of Single- and Multi-authored RPs

If we consider that the field of Astrophysics usually involves teams of researchers working together, the high frequency of multi-authored RPs found in our sample (Table 2) is quite predictable. This result does not mean that single-authored RPs have become extinct since some are still found, mainly in AJ and MNRAS.

In this respect, our results do not appear to corroborate de Solla Price's prediction (1963) that if the proportion of multi-authored papers continued to accelerate at the same rate, by 1980 single-authored papers would have become extinct. Indeed, our results are more in line with Gordon (1980), who found that the numbers of single-authored papers had not declined so dramatically.

Focusing on each journal, although AJ RPs have the highest mean number of authors, this journal also has the highest number of single-authored RPs (Table 2). This apparent contradiction disappears if we consider that AJ also has the highest number of more than four-authored RPs. ApJ, on the other hand, publishes the highest number of two-authored RPs and the lowest number of more than four-authored RPs, which may be due to its tendency to publish RPs that are closer to popularized science texts.[5] A similar publishing policy characterizes MNRAS, in which the number of more than four-authored RPs is lower than in AJ. The number of more than four-authored RPs is also greater in A&A than in MNRAS and ApJ, a fact which may be explained in light of its combined (both observational and theoretical) aims and scope.

When examined diachronically (Table 3), multi-authored RPs are a distinctive feature of Block C. With time, not only has the number of authors increased, but also the number of multi-authored RPs. These changes can be attributed to the universal tendencies of globalization, the birth and development of "Big Science", the degree of progress in particular disciplines (Gordon 1980), and the professionalization and growing specialization of science. A consequence of this last process is that researchers less frequently work on their own and more frequently participate in diverse teams of specialists and travel to research centres all over the world. These effects together are likely influencing collaboration practices.

5. CONCLUSION

In this diachronic study of different journals, we have explored authorship in English-written RPs published in the principal scholarly journals in Astrophysics.

Our main results show that 21 variants were recorded in the number of authors in the whole sample, and that multi-authored RPs far outnumber single-authored RPs. They also reveal growth not only in the number of authors, but also in the number of multi-authored RPs with time, mainly in RPs with more than seven authors. From a specific diachronic perspective, each journal has its own authorship variation patterns and variants. The peculiar behaviour observed in each journal has been related to their specific scope and to the socio-economic and political situation in two geographic contexts (European countries and the USA). In terms of global evolution, and for all four journals studied, the distribution of the mean number

[5] This kind of texts are usually characterized by short titles (Méndez et al.) that make them look like editorials and/or oral communications.

of authors is identical to the distribution of the average title length reported in a previous study of the same corpus.

A special case worth pointing out is AJ, a US-based journal which can be considered the most experimentally-oriented one in our sample. From a diachronic perspective, AJ shows an identical pattern of variation in the mean number of authors per RP and in the average title length. Furthermore, it is the journal with the highest number of authors, of single-authored RPs, and of more than four-authored RPs. Conversely, it is the journal with the lowest number of two-authored RPs.

The results obtained in this study should be completed with a further analysis of the different collaboration and mobility practices of authors of RPs published in the field of Astrophysics. Such research would likely provide deeper insight into a more comprehensive understanding of the changes and transformation of science in general and Astrophysics in particular.

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WORKS CITED

Baethge, Christopher. "Publish Together or Perish." *Dtsch Arztebl International* 105.20 (2008): 380-383. Print.

Biagioli, Mario. "Aporias of Scientific Authorship: Credit and Responsibility in Contemporary Biomedicine." *The Sciences Studies Reader*. Ed. Mario Bagioli. New York: Routledge, 1999. 12-31. Print.

Beaver, Donald deB. "Reflections on Scientific Collaboration (and Its Study): Past, Present, and Future." *Scientometrics* 52.3 (2001): 365-377. Print.

Birnholtz, Jeremy. "What Does It Mean to Be an Author? The Instersection of Credit, Contribution and Collaboration in Science." *Journal of the American Society for Information Science and Technology* 57 (2006): 1758-1770. Print.

Burton, William Butler. "Some Statistics Regarding the *Astrophysical Journal* as Published between 1990 and 2006, Including Comparisons with Sister Journals." *Future Professional Communication in Astronomy*. Ed. André Heck and Leo Houziaux. Brussels: Mémoires de l'Académie Royale de Belgique, 2007. 31-59. Print.

Chompalov, Ivan, Joel Genuth, and Wesley Sschrum. "The Organization of Scientific Collaboration." *Research Policy* 31 (2002): 749-767. Print.

Cronin, Blaise. "Collaboration in Art and in Science: Approaches to Attribution, Authorship and Acknowledgment." *Information and Culture* 47.1 (2012): 18-37. Print.

——.*The Hand of Science: Academic Writing and Its Reward*. Lanham: The Scarecrow, 2005. Print.

——."Hyperauthorship: A Postmodern Perversion or Evidence of a Structural Shift in Scholarly Communication Practices." *Journal of the American Society for Information Science and Technology* 57.2 (2001): 558-569. Print.

Cronin, Blaise, Debora Shaw, and Kathryn La Barre. "A Cast of Thousands: Co-authorship and Sub-authorship Collaboration in the 20th century as Manifested in the Scholarly Journal Literature of Psychology and Philosophy." *Journal of the American Society for Information Science and Technology* 54.9 (2003): 855-871. Print.

Gibbons, Michael, Camille Limoges, Helga Nowotny, Simon Schwartzman, Peter Scott, and Martin Trow. *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*. London: Sage, 1994. Print.

Glänzel, Wolfgang and András Schubert. "Analyzing Scientific Networks through Co-authorship." *Handbook of Quantitative Science and Technology Research: The Use of Publication and Patent Statistics in Studies of S&T Systems*. Ed. Henk F. Moed, Wolfgang Glänzel, and Ulrich Smoch. Dordrecht: Kluwer Academic, 2004. 257-276. Print.

González Alcaide, Gregorio, Javier Gómez Ferri, and Victor Agulló Calatayud, eds. *La colaboración científica: una aproximación multidisciplinaria*. Valencia: Nau Llibres/Edicions Culturals Valencianes, 2013. Print.

Gordon, Michael D. "A Critical Reassessment of Inferred Relations between Multiple Authorship, Scientific Collaboration: The Production of Papers and Their Acceptance for Publication." *Scientometrics* 2.3 (1980): 193-201. Print.

Harsanyi, Martha A. "Multiple Authors, Multiple Problems, Bibliometrics and the Study of Scholarly Collaboration: A Literature Review." *Library and Information Science Research* 15.4 (1993): 325-354. Print.

Laband, David N. and Robert D. Tollison. "Intellectual Collaboration." *Journal of Political Economy* 108.3 (2000): 632-662. Print.

Leimu, Roosa and Julia Koricheva. "Does Scientific Collaboration Increase the Impact of Ecological Articles?" *Bio Science* 55 (2005): 438-443. Print.

Levsky M., A. Rosin, T. Coon, W. Enslow, and M. Miller. "Descriptive Analysis of Authorship within Medical Journals, 1995-2005." *South Medical Journal* 100.4 (2007): 371-375. Print.

Lewis, Jenny, Sandy Ross, and Thomas Holden. "The How and Why of Academic Collaboration: Disciplinary Differences and Policy Implications." *Higher Education* 64 (2012): 693-708. Print.

Marshakova-Shaikevich, Irina. "Scientific Collaboration of New 10 EU Countries in the Field of Social Sciences." *Information Processing and Management* 42 (2006): 1592–1598. Print.

Méndez, David I., M. Ángeles Alcaraz, and Françoise Salager-Meyer. "Titles in English-medium Astrophysics Research Articles." *Scientometrics* 98.3 (2014): 2331-2351. Print.

Price, Derek J. De Solla. *Little Science, Big Science*. New York: Columbia UP, 1963. Print.

Royal Society Report. *Knowledge, Networks and Nations: Global Scientific Collaboration in the 21st Century*. London: The Royal Society, 2011. Print.

Salager-Meyer, Françoise, M. Ángeles Alcaraz Ariza, and Marianela Luzardo Briceño. "Titling and Authorship Practices in Medical Case Reports: A Diachronic Approach." *Communication and Medicine* 10.1 (2013): 63-80. Print.

Shapin, Steven. *A Social History of Truth: Civility and Science in Seventeenth-Century England*. Chicago: U of Chicago P, 1995. Print.

Stack, Steven. "Gender and Scholarly Productivity: The Case of Criminal Justice." *Journal of Criminal Justice* 30.3 (2002): 175-182. Print.

Subramanyam, Karthigeyan. "Bibliometric Studies of Research Collaboration: A Review." *Journal of Information Science* 6 (1983): 33-38. Print.

Sugimoto, Cassidy R. and Blaise Cronin. "Bio-bibliometric Profiling: An Examination of Multifaceted Approaches to Scholarship." *Journal of the American Society for Information Science and Technology* 63.3 (2012): 450-468. Print.

Vincent-Lancrin, Stephan. "What Is Changing in Academic Research? Trends and Future Scenarios." *European Journal of Education* 41.2 (2006): 169-202. Print.

Wagner, Caroline, Irene Brahmakulam, Brian Jackson, Anny Wong, and Yoda Tatsuro. *Science and Technology Collaboration: Building Capacity in Developing Countries*. Santa Monica: RAND, 2001. Print.

Wagner, Caroline and Loet Leydesdorff. "Mapping Global Science Using International Co-authorships: A Comparison of 1990 and 2000." *International Journal of Technology and Globalization* 1 (2005): 185-208. Print.

Wuchty, Stefan, Benjamin F. Jones, and Brian Uzzi. "The Increasing Dominance of Teams in Production of Knowledge." *Science* 316.5827 (2007): 1036-1039. Print.

Yitzhaki, Moshe. "Relation of Title Length of Journal Articles to Number of Authors." *Scientometrics* 30 (1994): 321-332. Print.

——."Relation of the Title Length of a Journal Article to the Length of the Article." *Scientometrics* 54.3 (2002): 435-447. Print.

THE PROJECTION OF CRITICAL ATTITUDE IN RESEARCH ARTICLE INTRODUCTIONS BY ANGLO-AMERICAN AND SPANISH AUTHORS

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Abstract

RA writers need to use evaluative language in their texts to highlight the newsworthiness and pre-eminence of their work. Research indicates that the way they use evaluation may depend on their own cultural norms and expectations. The present paper adopts a clause-level and functional perspective to investigate cross-cultural differences in the use of evaluative features in article introductions from RAs published internationally by Spanish and Anglo-saxon authors. In order to map out and compute evaluative acts accurately a number of different aspects are examined, such as their position within the move structure, the entity evaluated or the type of value conveyed. The results reveal important differences in the way evaluation is used in the two corpora, which could be linked to the writers' different cultural norms and expectations.

Key words: Evaluation, functional perspective, article introductions, cross-cultural research.

Resumen

El autor de un artículo de investigación necesita emplear lenguaje evaluativo para destacar la importancia y el valor de su trabajo y establecer que merece ser publicado. Existe evidencia de que las normas y valores propios de la cultura de un autor influyen en la forma en que usa estrategias retóricas en el texto. Este estudio adopta una perspectiva funcional para investigar las diferencias culturales en el uso de recursos evaluativos en dos corpus de introducciones de artículos escritos respectivamente por autores españoles y anglosajones. Para identificar y describir los actos evaluativos con precisión se examinan diferentes aspectos como su posición dentro de la estructura retórica del texto, la entidad evaluada o el tipo de evaluación expresada. Los resultados muestran importantes diferencias en el empleo de la evaluación en los dos corpus que pueden ser debidas a las normas y expectativas que imperan en cada cultura.

Palabras clave: Evaluación, perspectiva funcional, introducciones de artículos, estudios interculturales.

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INTRODUCTION

Academic and professional recognition is the primary force which drives scientific and academic endeavour (Becher). Scholars obtain this recognition mainly by disseminating their research through publication in high-impact research journals. However, in the competitive world of academia getting one's work published internationally has become increasingly difficult and has been shown to depend not only on the consistency and quality of the work presented, but also on the dexterous deployment of rhetorical strategies. In particular, to facilitate the publication of their work research writers need to highlight the newsworthiness, significance or even pre-eminence of their work in relation to existing research by using the appropriate evaluative or *critical attitude* (Moreno and Suárez).

Research has shown that disciplinary norms and expectations significantly constrain the overall rhetorical practices of disciplinary members (e.g. Hyland, *Disciplinary*, *Metadiscourse*; Varttala; Lafuente Millán, "Epistemic," "Extending"; Afros and Schryer) and, more particularly, determine the way evaluative language is used (e.g. Sullivan; Burgess and Fagan; Stotesbury). Much research has also focused on the role which cultural aspects play in the use of these and other rhetorical resources in research genres (e.g. Valero-Garcés; Burgess and Fagan; Yakhontova; Martín Martín and Burgess; Lorés Sanz; Fløttum, Dahl, and Kinn; Mur Dueñas, "I/we," "Attitude"; Moreno and Suárez; Lafuente Millán, "Reader").

Evaluation is a rhetorical aspect which has received wide attention in the literature. A considerable amount of research has been devoted to the study of the persuasive and interpersonal potential of evaluative features in different academic genres, including research articles (see for example Thetela; Hyland, *Metadiscourse*; Shaw; Afros and Schryer; Mur Dueñas, "Attitude,"; Lafuente Millán, "A Contrastive") and research article abstracts (Stotesbury; Martín-Martín and Burgess), referee reports (Fortanet Gómez), book reviews (Moreno and Suárez; Itakura and Tsui; Alcaraz Ariza) and oral academic discourse (Swales and Burke; Crawford Camiciottoli; Querol Julián and Fortanet Gómez).

Despite the abundant literature on evaluation, research has usually focused on word-level features. Moreover, the use of evaluative features across different sections and moves of the research article has also been left largely unexplored, thus failing to provide a contextualised account of the use of these strategic features. The aim of the present study is to establish whether there are cross-cultural differences in the projection of attitudinal evaluation in the key rhetorical moves of a research article introduction. In addition, the present research will try to determine the nature of these hypothesized differences in the evaluative or critical attitude of the writers, as well as the extent to which they are related to the different native language and cultural backgrounds of the authors. In doing so, I hope to help clarify the extent and the reasons why non-native researchers hoping to set foot in the international publishing arena may find it difficult to adapt to the different rhetorical expectations of an international discourse community.

To achieve these research objectives, a contrastive corpus-based analysis will be undertaken to examine possible differences in the use of evaluation in research

article introductions written by Spanish and Anglo-American writers. More particularly, this study will focus on the amount and types of critical acts present and on the rhetorical functions for which evaluative language is used in the different subcorpora.

THE CONCEPT OF EVALUATION

Researchers have highlighted the need for a homogeneous descriptive model of analysis (Silver; Hyland, *Metadiscourse*) that can account for the expression of attitude and evaluation in discourse. Some of the existing approaches to the analysis of these aspects have been criticised for their lack of systematicity and for being unable to embrace the whole array of resources writers use to signal their attitude to the discourse, to their audience and to themselves. The absence of an integrated and widely accepted model may however be explained by the evidence that evaluation and attitude are elusive concepts, which take form in a myriad of linguistic exponents and which fulfil different interrelated and overlapping functions.

Several concepts including *attitude*, *evaluation*, *stance*, *appraisal* or *affect* have been proposed in the literature to designate different, although roughly related aspects such as the writers' personal response, attitude or value judgement of the entities they are referring to. In one of the earliest definitions, Hunston described evaluation as "anything which indicates the writer's attitude to the value of an entity in the text" ("Evaluation and Ideology" 58). Nevertheless, evaluation has often been defined as a composite of different interpersonal and pragmatic meanings such as *epistemic modality* ((Hunston, "Evaluation and Ideology"; Thetela; Thompson and Hunston), *moral judgement* (Martin; Martin and Rose), *expectedness* (Thompson and Hunston) or *self-mention* (Hyland, *Metadiscourse*). In the present study, evaluation will be defined more narrowly to refer only to the expressions conveying the writer's personal attitudes or feelings about the entities that she is talking about, which entails that outside evaluation, i.e. attitudes expressed by people other than the writer, will be left out. This definition roughly matches Conrad and Biber's notion of attitudinal stance, comprising both the emotional response and the value judgements of the writer, but does not include expressions of epistemic stance. Moreover, my analysis will focus only on expressions of value judgement referring to two parameters or types of evaluation, notably value and relevance.

EVALUATION IN RESEARCH ARTICLES: IDENTIFICATION, QUANTIFICATION AND DESCRIPTION

Evaluation is an elusive concept, which takes form in a myriad of linguistic exponents and which fulfils different interrelated and overlapping functions. As a result, the analysis of evaluative expressions in written texts requires an appropriate frame for the identification, quantification, description and classification of evaluative phenomena. For some authors evaluation tends to add the writer's own personal

voice to the propositional content (Stotesbury), which might then be taken as an indication that evaluation is present in a text. Other scholars have claimed that evaluation in academic texts tends to be implicit (Hunston, "Evaluation and Ideology," "Evaluation and Organization,") and that there may be a lack of consensus about which lexical items can count as personal evaluation (Thetela), which makes identification of evaluative features very difficult. Nevertheless, it is now generally accepted that the expression of value in scientific writing operates along different good-bad scales and that the perception of goodness or badness of an activity depends on the goals of that activity (Hunston, "Evaluation and Ideology"). These goals may not be explicit in the text, but they can be inferred through familiarity with the ideology and value system of the academic community.

Different approaches have been taken for quantifying evaluation in academic texts. A word-level or lexical approach has been adopted in most studies of evaluative features (Thetela; Stotesbury; Soler; Swales and Burke; Swales; Hyland. *Metadiscourse*; Lafuente Millán, "A Contrastive"). This methodology allows for the statistical treatment of the data and is easily applicable for contrastive analyses, yet it does not comprise evaluative meanings expressed implicitly along stretches of discourse larger than the word or the clause. In addition, it fails to account for the fact that two or more lexical items may appear together in a sentence to perform a single evaluative act. In contrast, the qualitative approach to evaluation implemented by Hunston ("Evaluation and Ideology," "Evaluation and Organization,"), Thompson and Hunston or Afros and Schryer overcomes these limitations producing a context-bound and composite account of evaluation, but presents obvious problems for quantitative and contrastive analyses. More recently, a frame for contrasting evaluative resources across languages and cultures at the level of propositions has been suggested by Moreno and Suárez. The authors focus their analysis on propositions which are comparable from a functional point of view, adopting the concept of *critical act*, as their unit of analysis.

The frame proposed by Moreno and Suárez is designed to allow the contrastive study of critical acts in comparable texts (book reviews), where evaluation is exclusively directed at a well defined entity: the book under review. However, evaluation in research articles has less definite boundaries, as it involves different categories or scales of value, refers to different entities and performs different interpersonal and strategic functions. As a result, it needs to be defined more closely using a set of parameters which can ensure that the evaluative phenomena analysed is comparable in terms of function. For this study, several key parameters have been used in order to describe and classify evaluative acts, including context (section and section move), category of evaluative meaning (significance, assessment or emotion), the polarity of this evaluation (positive or negative), the entity receiving the evaluation (see Thetela) and the source of the evaluation (the writer of the article or another person).

METHODS

A comparative corpus of article introductions drawn from the SERAC corpus (InterLAE research group, University of Zaragoza) was compiled for this study. To ensure comparability, all the article introductions were selected from experimental reports written in English and published recently (from 2002 to 2006) in high impact international journals in the same area: Business Management. Only titles, subheadings and body of texts were included. The texts were divided into two subcorpora: the ENG corpus, including texts written by scholars affiliated to an English or American University, and the SPENG corpus, comprising texts written by Spanish scholars affiliated to Spanish universities. Even though it could not be unequivocally established that the authors were native speakers of one or the other language, it was assumed that the authors of the RAs were familiar with and acculturated into the Anglo-Saxon or the Spanish culture.

Each of the texts in the corpora was manually read and carefully analysed to establish its move structure. The move analysis was carried out using Swales's revised CARS model for research article introductions (see appendix 1), and following the steps recommended by Kanoksilapatham (34). The manual reading revealed that most introductions contained a lengthy theoretical review which was left out of the analysis, as it was considered that it was not part of the 3-move CARS structure described by Swales.

A second manual reading of the text was done so as to compile a list of evaluative markers used in the corpus. This list was complemented with lists found in previous research (Lafuente Millán, "A Contrastive") to form a total inventory of close to 250 evaluative items. Electronic analysis using Wordsmith Tools 5 was performed in order produce concordance output which was then exported to a Microsoft Excel file including the whole clause in which the evaluative token was inserted. Excel Autofilter and Advanced Filter tools were used to sort all the concordances based on their source file number (ENG 1, ENG 2, etc.) and their word number. This procedure enabled a linear reading of each text and the possibility to quickly return to the source text in order to retrieve context.

Once sorted, the concordance output was manually analysed and categorised in terms of four different parameters: (1) the entity under analysis (e.g. research methods; findings and results; products, companies or institutions in the real world), (2) the type of value assigned (e.g. importance, novelty, usefulness), (3) the author's perception of that value as positive or negative, and (4) the agent or source of the evaluation (the author or another researcher or disciplinary participant). To improve the reliability of the analysis, two rubrics were designed which established clear criteria for reference during the identification of the entities evaluated (Appendix 2), as well as for the identification and sorting of value categories (Appendix 3). Moreover, two coders were used to allow triangulation of the analysis.

RESULTS AND DISCUSSION

Move Analysis

The initial move analysis of the introductions in the two subcorpora revealed some interesting preliminary insights on the use of the CARS structure by Anglo-Saxon and Spanish authors. As table 1 shows, while all three moves were performed in the introductions written by Anglo-American scholars, Move 2 was omitted in 1/3 of the introductions in the SPENG subcorpus. In contrast Moves 1 and 3 were present in almost all the SPENG articles. Moreover, table 2 shows that, even though the average length of the three move structure was considerably longer in the articles by Spanish authors, the length of the second move (indicating a gap or adding to what is already known) in those articles was considerably shorter than in the articles from the ENG corpus.

TABLE 1: PRESENCE OF THE THREE MOVES ACROSS THE TWO SUBCORPORA (IN %).

	Move 1	Move 2	Move 3
ENG corpus	100.0%	100.0%	100.0%
SPENG corpus	95.8%	66.7%	100.0%

TABLE 2: AVERAGE NUMBER OF WORDS PER TEXT OF EACH OF THE THREE MOVES IN THE CARS STRUCTURE.

	ENG	SPENG
Move 1	205.0	340.7
Move 2	112.0	67.0
Move 3	206.7	381.6
Moves 1-3	523.6	789.3

Instead of performing this move, Spanish authors sometimes preferred to use more self-effacing strategies such as stressing the importance of obtaining this kind of knowledge (example 1) or pointing to the lack of consensus or agreement on the topic (example 2).

1. From a policy point of view, governments seeking to attract international technology must be concerned about the factors that enhance or hinder foreign direct investment and licensing, which are leading channels through which technology moves across borders. This paper focuses on... (SPENG17)
2. However, there is no consensus with respect to the different propositions put forward with respect to intra- and between-strategic groups rivalry (see the next section). (SPENG22)

The omission or extreme conciseness of move 2 in the articles from the SPENG corpus may indicate that Spanish scholars seem to be less conscious of the importance of the second move of the CARS structure (Swales 2004). This hypothesis will be explored in the next section, which will provide a more precise account of the evaluative acts performed in the introductions of the two corpora.

Evaluation Oriented to Research Entities (ROE) Vs Real World Entities (TOE)

Much of the previous research dealing with evaluation both from a word-level and from a sentence-level perspective has focused mainly on the identification and classification of evaluative language and on the potential for constructing evaluative meaning. Nevertheless, existing research has often minimised or overlooked entirely the correlation between the entity being evaluated and the interpersonal potential of evaluative acts, thus offering a somewhat imprecise account of evaluative acts.

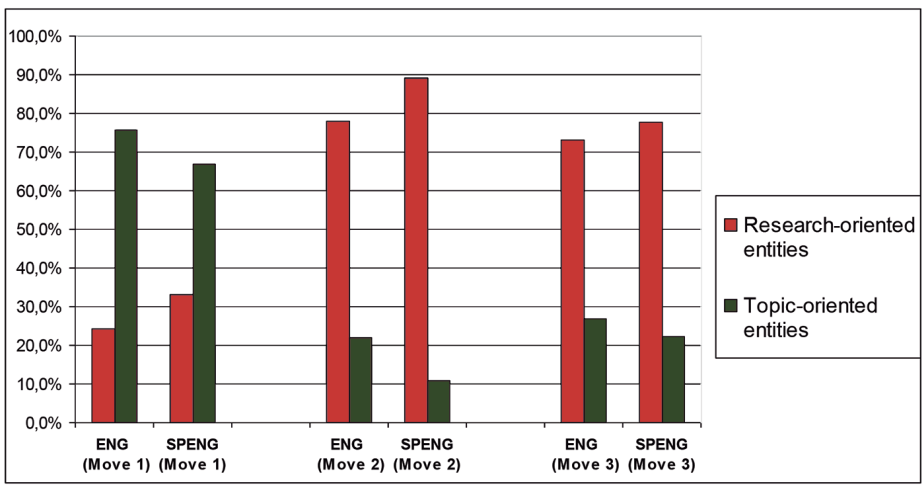
Thetela proposes a straightforward criterion for the classification of evaluative language which may be used to define evaluative acts in more exact and functionally comparable terms. As Thetela argues, when examining evaluation in academic writing, we need to take into account not only the values ascribed to the recipient of the evaluation but also the entity which is being evaluated. Following this premise, she divides evaluative language into research-oriented evaluation (ROE) and topic-oriented evaluation (TOE), where the term "topic" refers to the area which is under investigation in the real world sphere, instead of the investigation itself. This distinction is significant insofar as, while in ROE the writer and the reader engage into interpersonal negotiation about the merits of different entities related to the sphere of research and knowledge construction (research methods, hypotheses, findings, etc.), TOE works at a much more localised level and often does not represent the type of strategic dialogue which comes to mind when discussing evaluation. The distinction made here between research-oriented and topic-oriented evaluation is exemplified in the two examples below, where the entity under evaluation is underlined and the evaluative acts are in bold type.

3. Their work **helped establish some support** for the construct, but it **called for more comprehensive attempts** to fully explore the content domain of political skill and consider its potential multidimensional implications. (ENG12)
4. In these contexts, firms often operate with **new and unproven** business models and compete against many rival start-ups, all jockeying for early market dominance. . (ENG18)

As we can see above, in example 3 the author of the article performs a positive evaluation of other researchers' work, but goes on to perform a negative evaluative act of that same work, when she highlights the need for more comprehensive studies. In example 4, the author negatively evaluates a business model, which is a

theoretical construct that relates to the world of business, not to the research sphere to which the author belongs.

The data reveal some interesting patterns in the distribution of research-oriented evaluation and topic-oriented evaluation across the three moves in the introductions and across the two corpora (see graph 1). As might be expected, topic-oriented evaluation is predominant within move 1 (establishing a territory), where the authors are expected to make generalizations about the topic of increasing specificity (Swales 2004). Conversely, in move 2 (establishing a niche) there is a clear preference for research-oriented evaluation, which represents close to 90% of all evaluative acts within this move in the ENG corpus and 78% in the SPENG corpus. This is due to the fact that in move 2 article writers need to indicate a gap in previous research or to add to what is already known (Swales 2004), which requires reference to the work of other researchers. Finally, in move 3 (presenting the present work) authors must introduce their research descriptively, summarising their methods, announcing outcomes and stating the value of the research they present. All of these steps necessitate a skilful and strategic use of evaluative language, as a means to highlighting the newsworthiness, the strength and the usefulness of the study being introduced, and therefore having a potentially important persuasive effect in the way the article will be perceived by publication gatekeepers.



Graph 1. Relative % of evaluative acts in each rhetorical move referring to Research Oriented and Topic-Oriented entities

As discussed above, in order to accurately portray the strategic and interpersonal potential of evaluative acts, as well as to identify areas of cross-cultural variation with precision, we need to describe and quantify this rhetorical strategy

taking into account both the entity evaluated and the type of value this entity is assigned. Following a rubric designed for this purpose (see appendix 2), my analysis yielded quantitative data on the different entities evaluated and on the distribution of these evaluative acts across the three moves of the introduction (table 3).

TABLE 3: NUMBER OF EVALUATIVE ACTS FOR EACH OF THE ENTITIES EVALUATED ACROSS THE TWO CORPORA (MOVES 1, 2 & 3).

ENTITY	Move 1		Move 2		Move 3	
	ENG	SPENG	ENG	SPENG	ENG	SPENG
M	3	5	4	6	2	9
M1	0	1	0	0	13	73
M2	2	5	2	6	2	4
RX	10	35	56	28	13	26
R1	0	0	0	0	45	95
R2	12	5	20	25	10	8
TOTAL ROE	27	51	82	65	85	215
T1	3	7	0	0	0	7
T2	43	43	4	2	4	24
T3	0	5	0	0	0	5
T4	38	48	19	6	27	26
TOTAL TOE	84	103	23	8	31	62

The data presented reveal quite relevant differences in the way evaluation is used across the two corpora, as well as in the frequency of some key types of evaluative acts. As we can see above (table 2), Spanish researchers made a more frequent use of research-oriented evaluative acts in move 1. Possibly the most notable difference is the much higher occurrence of evaluative acts addressed to issues, explanations or definitions commonly accepted by the disciplinary community (coded as Rx) in the SPENG sub-corpus. With these evaluative acts, the researcher establishes the territory and projects a knowledgeable and competent persona. At the same time, since evaluation is fundamentally directed at disciplinary concepts (Rx), business procedures (T2) or issues and concepts in the sphere of business (T4), the writer minimises interpersonal risk. Interestingly, Spanish writers tend to avoid judging the hypotheses, results and conclusions of other researchers (R2) in this move, a type of evaluation which is however more frequent (12 instances) in the ENG corpus.

The quantitative results obtained in move 2 (establishing a niche) also reveal some differences. In this move Spanish researchers and Anglo-Saxon researchers perform a similar number of evaluative acts aimed at the work of other researchers

(R2), which suggests they are equally aware of the need to find gaps in previous research. Nevertheless, Spanish researchers were found to evaluate key issues or concepts within the disciplinary community (Rx) less often. These findings are similar to those obtained by Burgess and Fagan, who found a clear omission in the Spanish papers of the introductory move where critical comment is realised. In their study the lower incidence of critical comments in these articles was partly accounted for by the different size and nature of the audience, as Spanish researchers often published in local journals. Despite the possible influence of this variable, the authors also speculated on the writers' insufficient proficiency in the use of Academic English as well as their lack of intercultural awareness as other possible explanations for the results found.

Finally, in move 3 we witness a surprising increase in the number of evaluative acts within the texts from SPENG corpus. Spanish researchers use over twice as many evaluative acts (both ROE and TOE) as the Anglo-Saxon researchers. This discrepancy, however, is largely caused by the notable propensity of Spanish scholars to evaluate their own methods (M1) and their own research hypotheses, findings and conclusions (R1), while they tend to avoid passing judgement on their disciplinary community.

Value Categories across the Two Corpora

The last part of this analysis focuses on the types of values the authors most frequently assign to the entities evaluated across the three moves of the introduction sections. To improve the reliability of this procedure, I used the rubric included in appendix 3. As we can see below (table 4), there are few notable differences in the type of categories of value which are targeted by Anglo-Saxon and Spanish scholars in move 1 of the introduction. Not surprisingly, the two types of evaluative acts which were found most often in both sub-corpora were those expressing value in terms of importance and usefulness.

TABLE 4: NUMBER OF EVALUATIVE ACTS FOR EACH OF THE ENTITIES EVALUATED ACROSS THE TWO CORPORA (MOVES 1, 2, AND 3).

	Move 1		Move 2		Move 3	
Evaluation category	ENG Corpus	SPENG Corpus	ENG Corpus	SPENG Corpus	ENG Corpus	SPENG Corpus
EMOTION	1	0	1	1	0	0
ATTENTION	12	15	14	15	2	7
IMPORTANCE	37	44	0	9	21	51
NOVELTY	4	4	1	2	0	2
TOTAL SIGNIFICANCE	53	63	15	26	23	60

AGREEMENT	2	8	7	7	10	9
COMPREHENSIVE	0	2	13	15	25	31
KNOWLEDGE	0	0	9	5	9	3
SIMPLICITY	6	7	1	4	3	12
STRENGTH	10	18	11	6	12	20
USE	38	56	4	9	33	94
TOTAL ASSESSMENT	56	91	45	46	92	169
TOTAL EVALUATIVE ACTS	109	154	61	73	115	229

In move 2 we find an obvious preference for evaluation in terms of attention and in terms of comprehensiveness, which is consistent with the function of this rhetorical move, where researches need to assess the attention which a specific aspect has received and to indicate a research gap or niche which has not been covered in the previous literature. Evaluation in terms of attention and in terms of comprehensiveness was usually expressed in both sub-corpora as negative evaluations (i.e. lack of attention or coverage), except in the case of concessive structures (example 5) where authors first highlighted the degree of attention that an aspect had received, only to prepare the ground for indicating a limitation or gap in the next clause.

5. Despite the **great number of papers devoted** to providing empirical answers to the controversy between the adaptive and the inert views, the **evidence remains inconclusive**. (SPENG 5)

A much greater discrepancy in the types of value assigned was found in move 3 (presenting your work). As pointed out before, Spanish researchers repeatedly performed evaluative acts directed at their own methodology and their own research (including their hypotheses, data, results and conclusions). The data suggests that these researchers went out of their way to highlight the importance and especially the usefulness of their work. By contrasting the data derived from the analysis of evaluation categories against the entity involved in that evaluation (table 5) we find that while Spanish researchers positively evaluated the usefulness of their own research methods 27 times and of their own research no less than 35 times, Anglo-Saxon researchers only evaluated those same aspects 4 and 10 times respectively. Similar differences across the two sub-corpora are also found in the use of evaluative acts stressing the importance of the methods and of the research presented.

TABLE 5: NUMBER OF EVALUATIVE ACTS EVALUATING THE IMPORTANCE AND USEFULNESS OF THE AUTHOR'S METHODS AND RESEARCH.

	(+) IMPORTANCE		(+) USEFULNESS	
Entity evaluated	ENG	SPENG	ENG	SPENG
M1	0	6	4	27
R1	4	10	10	35
RX	3	10	1	0

CONCLUSION

The research presented here has revealed that there exist important cross-cultural differences in the frequency and the type of evaluation used in the different moves of article introductions published in Business Management. The results indicate that Spanish researchers writing for international English-medium journals display a number of idiosyncratic features which can be attributed to their different narrative and interpersonal style. This style may in turn be affected by the different norms and expectations prevalent in Spanish culture, and can lead them to avoid certain evaluative acts which they perceive as potentially face-threatening, thus preventing them from exploiting the full interpersonal and persuasive potential of evaluation. In connection to this, one of most notable differences found across the two sub-corpora was the higher occurrence of evaluative acts addressed to issues, explanations or definitions commonly accepted by the disciplinary community (which we referred to as Rx) in the SPENG sub-corpus. Spanish researchers did not evaluate key issues or concepts within the disciplinary community (Rx)as often as Anglo-Saxon (native) writers, which could mean that their introduction may present a weaker case in terms of justifying the need for further research in the area targeted by their study.

While they tended to avoid passing judgement on their disciplinary community, Spanish scholars showed an extreme proclivity to evaluate their own methods (M1) and their own research hypotheses, findings and conclusions (R1). This remarkable discrepancy in the evaluative strategies employed by Spanish scholars may also be explained in terms of the different patterns of social interaction and politeness principles which are acceptable or even favoured in different cultures.

The present analysis has, in my view, proved that evaluation in written academic texts is open to quantification and contrastive analysis provided that our methodology combines electronic and manual analysis. Electronic corpus analysis provides us with effective tools for the sorting and the quantitative treatment of data and can potentially allow us to identify preferred collocation which appear to be primed in certain parts of the text. Moreover, it has been argued here that in order to accurately describe the strategic and interpersonal potential of evaluative acts, as well as to be able

to carry out comparable cross-cultural contrastive studies, we need to map out evaluative acts using a number of relevant variables such as the type of evaluation (type of value assigned and positive-negative scale), the entity under evaluation and the agent of the evaluation. In doing so, we may provide an analysis that is deeper (Silver) and which can account for the specific functional and interpersonal uses which evaluative acts can perform in context. In relation to this, the analysis of rhetorical moves offers important advantages over other less context-bound methodologies.

Corpus analyses of academic texts can help us explain the extent to which Spanish researchers publishing internationally are able to acculturate to the target disciplinary norms and rhetorical practices of an international audience, as well as to take into account other contextual aspects (nature and size of the audience, impact, competitiveness, etc.) that affect international publication. In addition, studies like the one undertaken here may allow the identification of potential rhetorical inadequacies and limitations which may aggravate the difficulties Spanish researchers find when trying to publish internationally. Additionally, they may help reveal whether certain structures, functions or rhetorical moves are overused or neglected by Spanish researchers when trying to publish internationally, and could facilitate the compilation of a list of typical rhetorical difficulties and helpful rhetorical advice to facilitate writing for publication.

The present research might benefit from a larger corpus, which would allow us to establish the statistical significance of these findings. In addition, the use of ethnographic techniques, such as interviews with article writers and editorial gatekeepers would permit triangulation of research and would greatly increase the validity of these findings. Future research could also analyse intra-lingual variation to determine the degree of homogeneity or standard deviation in the use of these rhetorical practices across individuals belonging to the same discourse community.

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WORKS CITED

Afros, Elena and Catherine F. Schryer. "Promotional (Meta)discourse in Research Articles in Language and Literary Studies." *English for Specific Purposes* 28 (2009): 59-68. Print.

Alcaraz Ariza, Mª Ángeles. "Evaluation in English-Medium Medical Book Reviews." *International Journal of English Studies* 11.1 (2011): 137-153. Print.

Becher, T. *Academic Tribes and Territories: Intellectual Inquiry and the Cultures of Disciplines*. Buckingham: Open UP/ SRHE, 1989. Print.

Biber, Douglas and Finegan, Ruth. "Styles of Stance in English: Lexical and Grammatical Marking of Evidentiality and Affect." *Text* 9 (1989): 93-124. Print.

Burgess, Sally and Anna Fagan. "(Kid)gloves On or Off? Academic Conflict in Research Articles across the Disciplines." *Revista Canaria de Estudios Ingleses* 44 (2002): 79-96. Print.

Conrad, Susan and Douglas Biber. "Adverbial Marking of Stance in Speech and Writing." *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Ed. Susan Hunston and Geoff Thomson. Oxford: Oxford UP, 2001. 56-73. Print.

Crawford Camiciottoli, Belinda. "Audience-oriented Relevance Markers in Lectures." *Academic Discourse: New Insights into Evaluation*. Ed. G. Del Lungo and E. Tognini. Bern: Peter Lang, 2004. 81-97. Print.

Fløttum, Kjersti, Trine Dahl, and Torodd Kinn. *Academic Voices across Languages and Disciplines*. Amsterdam: John Benjamins, 2006. Print.

Fortanet Gómez, Inmaculada. "Evaluative Language in Peer Review Referee Reports." J*ournal of English for Academic Purposes* 7.1 (2008): 27-37. Print.

Hunston, Susan. "Evaluation and Ideology in Scientific Writing." *Register Analysis: Theory and Practice.* Ed. Mohsen Ghadesy. London: Pinter, 1993. 57-73. Print.

——."Evaluation and Organization in a Sample of Written Academic Discourse." *Advances in Written Text Analysis*. Ed. Michael Coulthard. London: Routledge, 1994. 191-218. Print.

Hyland, Ken. *Disciplinary Discourses: Social Interactions in Academic Writing.* London: Longman, 2000. Print.

——.*Metadiscourse*. London: Continuum, 2005. Print.

Itakura, Hiroko and Amy B.M. Tsui, "Evaluation in Academic Discourse: Managing Criticism in Japanese and English Book Reviews." *Journal of Pragmatics* 43.5 (2010): 1366-1379. Print.

Kanoksilapatham, Bubsada. "Introduction to Move Analysis." *Discourse on the Move: Using Corpus Analysis to Describe Discourse Structure*. Ed. Douglas Biber, Ulla Connor, and T.A. Upton. Amsterdam: John Benjamins, 2007. 23-41. Print.

Lafuente Millán, Enrique. "A Contrastive Study of Generic Integrity in the Use of Attitudinal Evaluation in Research Articles Written for Different Audiences." *Brno Studies in English* 38.2 (2012): 79-92. Print.

——."Epistemic and Approximative Meaning Revisited: The Use of Hedges, Boosters and Approximators when Writing Research in Different Disciplines." *English as an Additional Language in Research Publication and Communication*. Ed. Sally Burgess and Pedro Martín Martín. Berlin: Peter Lang, 2008. 65-82. Print.

——."'Extending this claim, we propose...': The Writer's Presence in Research Articles from Different Disciplines." *Ibérica* 20 (2010): 35-56. Print.

——"Reader Engagement across Cultures, Languages and Contexts of Publication in Business Research Articles." *International Journal of Applied Linguistics* 24.2 (2014): 201-223. Print.

Lorés Sanz, Rosa. "'I will argue that': First Person Pronouns as Metadiscoursal Devices in Research Article Abstracts in English and Spanish." *ESP Across Cultures* 3 (2006): 23-40. Print.

Martín Martín, Pedro and Sally Burgess. "The Rhetorical Management of Academic Criticism in Research Article Abstracts." *Text* 24 (2004): 171-195. Print.

Martin, J.R. "Beyond Exchange: Appraisal Systems in English." *Evaluation in Text: Authorial Stance and the Construction of Discourse.* Ed. Susan Hunston and Geoff Thomson. Oxford: Oxford UP, 2001. 142-175. Print.

Martin, J.R. and Rose, D. *Working with Discourse: Meaning Beyond the Clause*. London: Continuum, 2003. Print.

Moreno, Ana and Lorena Suárez. "A Study of Critical Attitude across English and Spanish Academic Book Reviews." *Journal of English for Academic Purposes* 7 (2008): 15-26. Print.

Mur Dueñas, Pilar. "Attitude Markers in Business Management Research Articles: A Cross-cultural Corpus-Driven Approach." *International Journal of Applied Linguistics* 20.1 (2010): 50-72. Print.

——."'I/we focus on...': A Cross-cultural Analysis of Self-mentions in Business Management Research Articles." *Journal of English for Academic Purposes* 6.2 (2007): 143-162. Print.

Querol Julián, Mercedes and Inmaculada Fortanet Gómez,. "Multimodal Evaluation in Academic Discussion Sessions: How Do Presenters Act and React?" *Journal of English for Specific Purposes* 31.4 (2012): 271-283. Print.

Shaw, Philip. "Evaluation and Promotion across Languages." *Journal of English for Academic Purposes* 2 (2003): 343-357. Print.

Silver, Marc. "The Stance of Stance: A Critical Look at Ways Stance Is Expressed and Modeled in Academic Discourse." *Journal of English for Academic Purposes* 2 (2003): 359-374. Print.

Soler, Viviana. "Analysing Adjectives in Scientific Discourse: An Exploratory Study with Educational Applications for Spanish Speakers at Advanced University Level." *English for Specific Purposes* 21 (2002): 145-165. Print.

Stotesbury, Hilkka. "Evaluation in Research Article Abstracts in the Narrative and Hard Sciences." *Journal of English for Academic Purposes* 2 (2003): 327-341. Print.

Sullivan, Dale. "Displaying Disciplinarity." *Written Communication* 13.2 (1996): 221-250. Print.

Swales, John. *Research Genres: Explorations and Applications*. New York: Cambridge UP, 2004. Print.

Swales, John and Amy Burke. "'It's really fascinating work': Differences in Evaluative Adjectives across Academic Registers." *Corpus Analysis: Language Structure and Language*. Ed. Pepi Leistyna and Charles F. Meyer. Amsterdam: Rodopi, 2003. 1-18. Print.

Thetela, Puleng. "Evaluated Entities and Parameters of Value in Academic Research Articles." *English for Specific Purposes* 16 (1997): 101-118. Print.

Thompson, Geoff and Susan Hunston. "Evaluation: An Introduction." *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Ed. Susan Hunston and Geoff Thomson. Oxford: Oxford UP, 2001. 1-27. Print.

Tse, Polly and Ken Hyland. "Claiming a Territory: Relative Clauses in Journal Descriptions." *Journal of Pragmatics* 42.7 (2010): 1880-1889. Print.

Valero Garcés, Carmen. "Contrastive ESP Rhetoric: Metatext in Spanish-English Economics Texts." *English for Specific Purposes* 15 (1996): 279-294. Print.

Varttala, Teppo. "Remarks on the Communicative Functions of Hedging in Popular Scientific and Specialist Research Articles on Medicine." *English for Specific Purposes* 18.2 (1999): 177-200. Print.

Yakhontova, Tatyana. "Cultural and Disciplinary Variation in Academic Discourse: The Issue of Influencing Factors." *Journal of English for Academic Purposes* 5 (2006): 153-167. Print.

APPENDIX 1

Swales' Revised Model for Research Article Introductions (From Kanoksilapatham)

Move 1: Establishing a territory (citations required) via Topic generalizations of increasing specificity

Move2: Establishing a niche (citations possible) via:

Step 1A: Indicating a gap, or

Step 1B: Adding to what is known

Step 2: Presenting positive justification (optional)

Move3: Presenting the present work via:

Step 1: Announcing present research descriptively and/or purposively (obligatory)

Step 2: Presenting research questions or hypotheses* (optional)

Step 3: Definitional clarifications* (optional)

Step 4: Summarizing methods* (optional)

Step 5: Announcing principal outcomes (optional)**

Step 6: Stating the value of the present research (optional)**

Step 7: Outlining the structure of the paper (optional)**

*Steps 2-4 are less fixed in their order of occurrence than the others.

**Steps 5-7 are probable in some fields, but unlikely in others.

APPENDIX 2

Rubric for Identification of Specific Entities

SPHERE	ENTITY	WHOSE? / WHO	
RESEARCH	**1. A research methodology**: *Is a method, variable or type of data being evaluated?*	The author(s) of the RA	M1
		Other researchers	M2
	2. A research work (hypotheses, results or conclusions): *Is someone's research work or the hypotheses contributions in that work being evaluated?*	The author(s) of the RA	R1
		Other researchers	R2
	3. An issue, explanation, definition. *Is a particular issue or the explanation of that issue in the literature evaluated?*	The disciplinary community	Rx
TOPIC AREA (Business Management)	**1. A company, business or institution:** *The entity being evaluated is a company, business or some other institution?*	Practitioners	T1
	2. A (business) strategy, procedure, operation: *Is a particular management strategy, production/business operation being evaluated?*	Practitioners	T2
	3. **A challenge, problem, difficulty, change** faced by a company, business or institution	Practitioners	T3
	4. A factor, issue, concept in the world of business	Practitioners	T4

APPENDIX 3

Rubric for Identification of Value Categories

CATEGORY	VALUE	CODE	POLARITY
SIGNIFICANCE	**1. Importance:** *-Entity evaluated as (not) significant, important or relevant in the research/world sphere?*	IMP	1. is important 0. lacks importance
	2. Attention: *- Entity evaluated as (not) receiving attention in the research/ business sphere?* *- Entity evaluated as (not) the subject of debate or controversy*	ATT	1. receives attention 0. receives no/little attention
	3. Novelty: *- Is the entity evaluated as (not) new, original, innovative*?	NEW	1. is new/original 0. not new/original
ASSESSMENT	**1. Solid:** *- How robust, stable, coherent, correct, careful is the entity?*	SOLID	Solid Not solid
	2. Approval: *How much agreement, support exists?* *How much evidence, proof exists? (upholding/ substantiating/ endorsing the entity)*	AGREE	+ agreement/evidence - agreement/evidence
	3. Comprehensiveness: *-How inclusive, broad or complete is the entity?*	COMPR	+ Comprensive - Comprehensive
	4. Usefulness: *To what extent does the entity help **increase** benefit, knowledge, ability, efficiency or any other advantage?* *To what extent does it help **reduce** risk, damage, problems or any other disadvantage?*	USE	+ Useful - Useful
	5. Simplicity: *How simple or easy is the entity?*	SIMPLE	+ Simple/ easy + Complex/ difficult
	6. Knowledge *How much do we know/ understand about the entity?*	KNOW	+ know/understand much - know/understand little
	7. Emotion/ personal assessment	EMOTION	+ / - personal reaction

MOTIVATIONS AND ATTITUDES OF SPANISH CHEMISTRY AND ECONOMIC RESEARCHERS TOWARDS PUBLICATION IN ENGLISH-MEDIUM SCIENTIFIC JOURNALS*

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Abstract

In our current globalised world of scientific and academic practices, research within English for Academic Purposes (EAP), and more specifically, English for Research Publication Purposes (ERPP) has undergone an exponential upsurge. The present study is part of a wider research project, led by the ENEIDA research group, aiming among other things at exploring Spanish scholars' attitudes and experiences of research publication by means of a large online questionnaire sent to academics from five Spanish universities and institutions. We here report on the answers provided by Chemistry and Economics' scholars as regards attitudes and motivations to use English for publication purposes. Relevant differences between them reveal different degrees of internationalization for Chemistry and Business scholars as well as different disciplinary idiosyncrasies and expectations.

Keywords: English for research publication purposes, Spanish, Chemistry academics, Economics academics, academic writing, attitudes.

Resumen

En el contexto actual de prácticas científicas y académicas globalizadas, la investigación del inglés para fines académicos y, de forma más concreta, del inglés con fines de publicación ha crecido de forma exponencial. Este estudio se integra dentro de un proyecto de investigación llevado a cabo por el grupo ENEIDA cuyo objetivo, entre otros, es explorar las actitudes y experiencias de los académicos españoles con relación a la publicación de su investigación utilizando un cuestionario en línea que se envió a académicos de cinco instituciones y universidades españolas. Presentamos aquí las respuestas de las disciplinas de Química y Económicas por lo que se refiere a actitudes y motivaciones a la hora de utilizar

el inglés como lengua de publicación de la investigación. Las diferencias entre estas dos disciplinas revelan diferentes grados de internacionalización así como diferentes expectativas e idiosincrasias disciplinares.

Palabras clave: Inglés para fines de publicación, español, académicos de Química, académicos de Económicas, escritura académica, actitudes.

1. INTRODUCTION

In recent years there has been an upsurge of research within English for Academic Purposes (EAP), and more specifically, within English for Research Publication Purposes (ERPP) (see Cargill and Burgess), possibly as a result of the increasing urge academics have, especially in given disciplinary fields, to get the results of their research published in international English-medium publications to gain recognition, get promoted and receive academic rewards. This is specially a hard endeavor for non-native speakers of the language, who need to become proficient in English academic literacies and undergo a process of enculturation in the international disciplinary community through English.

The ultimate goal of EAP and ERPP is to design and create materials and guidelines to help novice and non-native academics to become successful members of the international disciplinary community networks. It is believed that the use of English as a vehicle for communication in academia varies significantly across cultural and disciplinary contexts. As highlighted by Petersen and Shaw in their analysis of academics' discursive practices at Aarhus School of Economics in Denmark, there are many contextual factors that affect the degree of internationalization and of "academic anglicisation"[1]: it "varies widely across disciplines, genres and countries" (259) and also as a result of multiple contextual particular variables. That is why it is necessary to determine those disciplines and contexts in which English is more intensely used and required for scholars and, in which, as a result, there are further English language training needs. It is also important to explore their

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Despite current ELF (English as a Lingua Franca) postulates (Mauranen, "Hybrid," "English"; Seidlhofer; Jenkins) discursive practices and policies in academia still promote to a great extent the use of English as encoding the Anglophone rhetoric in international communication. According to Jenkins' (934): "despite the findings of ELF research, English language policies and practices around the world are still—probably even more widely than before—premised on the 'need' for all to use native academic English" (934).

attitudes towards using different languages in the dissemination of new scientific knowledge to gain a deeper insight into their discursive practices and establish stronger connections between textual and discourse analysis and cultural and professional identities (Bhatia, *Worlds*).

Besides some textographic analyses in several contexts, such as the North-American (Swales), and the Danish (Petersen and Shaw), a number of recent studies have focused on the use of English especially for publication purposes in different contexts, such as the Polish (Duszak and Lewkowicz), or the Chinese (Flowerdew and Li). In the Spanish context, the work by Fernández Polo and Cal Varela, Pérez-Llantada et al., and Ferguson et al. have allowed us to learn about the needs Spanish scholars have with respect to the use of English in academic interactions at Spanish universities. Thus, based on a survey, Fernández Polo and Cal Varela report on the use made of the English language by the teaching and research staff at the Universidad de Santiago de Compostela, in the North-West of Spain. They find that there are great differences in the use of EAP among different areas and disciplines, that Spanish researchers strongly demand training, and that researchers perceive their oral competences to be much lower than their written ones. Further, respondents reported lacking institutional support and having to find help in their learning of academic literacies outside university. Finally, their attitudes towards the use of English in academia are overall positive. Similarly, Ferguson et al.'s work focuses on the attitudes of 300 staff members at the Universidad de Zaragoza, in the North-East of Spain. Given their non-native condition, they mostly feel at a disadvantage when participating in international networks through English but, nevertheless, they see the use of English for international communication as favourable and positive. Pérez-Llantada et al. focus on the use made of English by a group of lecturers in the hard sciences and in the social sciences at the Universidad de Zaragoza. Based on interviews, Pérez-Llantada et al. report on two groups of researchers' attitudes towards the dominance of English in the spread of scientific knowledge, their greatest difficulties when drafting RAs in English and their views on what type of support they should receive.

The ENEIDA group (Equipo Nacional de Estudios Interculturales sobre el Discurso Académico) sought to provide a more general overview of the use of English and Spanish for research purposes in the Spanish context. Unlike previous studies, which are based on a single institution, our aim was to find insights from 5 Spanish institutions: the Spanish Consejo Superior de Investigaciones Científicas (CSIC), Universidad de León, Universidad de La Laguna, Universitat Jaume I and Universidad de Zaragoza. Overall findings regarding Spanish academics' language competence, preferences to publish in one or the other language, publication experiences, and writing strategies have been already reported with reference to various disciplines (Burgess et al.; Gea-Valor et al.; Martín et al.; Moreno et al., "Spanish Researchers Publishing," "Spanish Researchers' Perceived"; Mur-Dueñas et al.; Rey-Rocha et al.).

It is the aim of this paper to cast some light on the Spanish scholars' attitudes and motivations when it comes to publishing the results of their research in international English-medium journals. The focus of the present study will be

Spanish scholars in two disciplinary contexts, Chemistry and Economics, and their views and attitudes towards these practices. We will analyze the responses of 231 Spanish Chemistry scholars and 74 Spanish Economics scholars to a questionnaire created by the ENEIDA group, consisting of 37 questions, with the overall goal of understanding current needs and strategies of research staff at Spanish institutions with regard to the writing and publishing of RAs in scientific journals.

The research questions which the present study explores are the following:

What is the self-perceived competence of Chemistry and Economics scholars with regard to their performance in the use of general English?
Is this self-perceived competence any different with regard to academic English?
Is this perceived self-competence any different between the two disciplinary communities?
Do Spanish Chemistry and Economics scholars use Spanish and English for publication purposes to the same extent? Are there any differences in the practices of both disciplinary communities?
Why do they attempt publication in English/Spanish? Are there any differences between the two communities in the reasons they find?
Which factors influence their decision to publish (or not) in English/Spanish? Do different factors influence the two communities?
Do they wish to publish in English/Spanish?

2. METHODS

The data to give answers to these research questions were drawn from a larger study and database created by the ENEIDA research team. A large-scale online questionnaire (Moreno et al., "Eneida") was designed and administered in late 2010 to researchers at four Spanish universities (the Universidad de La Laguna, Universidad de León, Universitat Jaume I, and Universidad de Zaragoza) and a research institution in Spain (CSIC—Consejo Superior de Investigaciones Científicas). Information about the methodological procedures used in its design, validation and implementation is offered in detail in Moreno et al. ("Spanish Researchers Publishing," "Spanish Researchers' Perceived," "Eneida").

The questionnaire was sent to researchers from all fields, among them, Chemistry and Economics. A total number of 8,794 Castilian Spanish-speaking academics received the questionnaire, and 1,717 replied (19.6% response rate). Responses were then classified according to the UNESCO code they used to identify their main area of research interest. The number of respondents from the fields under study here were the following: 231 from the field of Chemistry and 74 in Economics, totaling 305.

The questionnaire consisted of 6 sections including a total of 37 closed and open-ended questions. The sections focused on the following issues:

1. Personal and professional information

2. Competence in the use of Spanish and English
3. Language choice for research publication: attitudes and motivations
4. Experience with publishing RAs
5. Current strategies for writing for publication in scientific journals in English
6. Training in writing RAs for publication

The present study is based on the answers provided to 8 questions of the questionnaire which mainly focused on the attitudes and motivations Spanish Chemistry and Economics scholars have towards writing research in English (and also Spanish) for publications purposes.

3. RESULTS AND DISCUSSION

3.1. Personal and Professional Information

To understand the attitudes and motivations that Spanish members of two distinct disciplinary communities have towards research publication in English-medium scientific journals, it is first required to depict a personal and academic profile of those who replied to the questionnaire, as this information can foster interpretation of the answers. Thus, aspects such as gender, age, academic position, years of service since completion of doctoral thesis and affiliation were firstly explored, giving the following results.

As regards gender, more males (almost 58.68%) than females (41.35%) answered the questionnaire in the two disciplines (see Table 1). If we take the answers to this questionnaire as representative, we may infer that in Economics and Chemistry there are more men than women academics. It is also interesting to note that the average number of replies by men and women in the two disciplines was very similar, showing that there are not significant gender differences between the two fields:

TABLE 1. GENDER DISTRIBUTION OF RESPONDENTS ACCORDING TO DISCIPLINE.

	Chemistry (n.231)	Economics (n.74)	Average
Males	58.4	59.4	58.7
Females	41.6	40.6	41.3

The average age of those who replied to the questionnaire was also very similar: 43 in the case of Economics and 46 in the case of Chemistry, although the level of dispersion was rather high.

However, their academic profile showed certain differences. As shown in Table 2 below, there are extreme differences in the type of institution our respondents are affiliated to. A significant number of answers in the field of Chemistry came from academics working at the CSIC, whereas in the case of Economics the

percentage of replies from scholars affiliated to the CSIC was lower, in accordance with the lower number of academics from Economics working at this institution.

The fact that academics affiliated to the CSIC are not required to teach means that they can devote more time to research. This, in our view, may have an impact on the interpretation of results as regards the factors intervening against, or in favour of, their decision to publish in English, or in the interpretation of other results, such as the number of RAs published (see below).

TABLE 2. ACADEMIC AFFILIATION OF RESPONDENTS.

	Chemistry (n. 231)	Economics (n.74)
Universities	16.5	94.6
CSIC	83.5	5.4

This professional and academic profile might also explain the differences found in their length of time as doctors, not explained by their average ages: whereas the average span of time for Chemistry academics is 17 years since they got their PhD, it is 10 years for Economics scholars.

As regards their professional status and the posts they occupy in their institutions, slight differences are found in terms of seniority of the respondents according to discipline. Thus, 80.1 respondents were tenured staff in the field of Chemistry and 66.3 in the case of Economics.

The different percentages in the seniority of the informants in the two disciplines under discussion can also contribute to the explanation of the differences found in some of the results, like the number of RAs published discussed below.

In spite of the differences, there is a certain degree of coincidence in the profile of those who replied to the questionnaire, and who, consequently, were more motivated by the topic it deals with (attitudes, motivations and challenges to/of publication practices): it is a researcher fully involved in his/her her academic career with a few years' experience in research publication.

3.2. Self-Perceived Competence in the Use of General and Academic English

A second thematic strand we needed to explore before focusing on the academics' opportunities and motivations to write for publication purposes was how they perceived their competence in the use of both general and academic English with regard to the written skills (writing and reading).

A scale of 1 to 5 was used (from 1= very low, to 5 = very high), yielding the following results. With regard to General English, the percentages were the following:

TABLE 3. SELF-PERCEIVED LEVEL OF COMPETENCE IN GENERAL ENGLISH.		
	Chemistry (n.231)	Economics (n.74)
WRITING		
Very low-low	6.9	25.0
Medium	26.0	35.1
Very high-high	67.1	41.9
READING		
Very low-low	1.7	1.4
Medium	7.4	18.9
Very high - high	90.9	79.7

TABLE 4. SELF-PERCEIVED LEVEL OF COMPETENCE IN ACADEMIC ENGLISH.		
	Chemistry (n.231)	Economics (n.74)
WRITING		
Very low-low	6.5	27.0
Medium	18.2	32.4
Very high-high	75.3	40.5
READING		
Very low-low	0.9	4.1
Medium	1.7	8.1
Very high - high	97.4	87.8

The most significant differences in the perception academics have in the two disciplines of their competence in reading and writing English lie in the productive skill of writing, both in general and academic English, with Chemistry scholars perceiving themselves as more skilled than Economics academics. When contrasting general and academic English, Chemistry scholars also see themselves as having fewer difficulties than Economics academics.

Also interesting is the fact that Chemistry scholars perceive themselves as more skilled in Academic English, both in reading and in writing, than in General English. This finding may point to the high internationalization level of the discipline of Chemistry, which demands the mastering of the language for academic purposes.

The fact that Chemistry academics are more self-confident than their peers in their use of English for general and academic purposes might be the result of having been more successful at publishing English RAs in international journals and having a longer research publication experience than their Economics peers, as reported in the answers to other parts of the questionnaire (Mur-Dueñas et al.).

When compared with the results yielded in other disciplines, some further differences emerge. This is the case when the contrast is established with three disciplines in the Social Sciences (Education, Psychology and Sociology), as reported

in the study by Gea-Valor et al. In these disciplines, the rate of self-perceived level of competence in General and Academic English reading was still high, but not as high as in the disciplines in the present study. Thus, the results reported for the Social Sciences for the "very high-high" axis is 65.3%, much below the 90.9% reported by Chemistry scholars and still below the 79.7% yielded by Economics scholars, also a Social Science discipline.

Results are even more striking when writing is in focus. The results yielded in the above mentioned study for disciplines within the Social Sciences are very different from the ones gathered in Chemistry and Economics. Table 8 captures comparative percentages for all the disciplines under discussion here:

TABLE 5. SELF-PERCEIVED VERY HIGH-HIGH LEVEL OF COMPETENCE IN WRITING GENERAL/ACADEMIC ENGLISH.

	Chemistry (n.231)	Economics (n.74)	Education, Psychology and Sociology (n.111) (Gea Valor et al.)
Writing General English	67.1	41.9	28.7
Writing Academic English	75.3	40.5	23.8

Similar results to those in Gea-Valor et al. for academic writing in the Social Sciences are provided and discussed for the discipline of History in Burgess et al.: a percentage of 25.8% historians perceive themselves as having a very high or high competence when writing research in English.

These data reveal interesting differences among disciplines within the same division (i.e. Economics vs Psychology/Education/Sociology/History), showing that there are other factors (e.g. scope of research and professional interests, degree of internationalization) which may be determinant for the aspects under study.

3.3. Motivations for Publishing: Views and Attitudes

3.3.1. Choice of Language of Publication: Number of RAs in Spanish/English

In order to explore the motivations Chemistry and Economics scholars have to publish in English, a series of questions were designed and included in the questionnaire, which had to do with their number of publications, the factors which influenced their decision for publishing in either language, or the factors that had deterred them from doing so.

To analyze and interpret the results corresponding to these questions, we firstly considered relevant to explore to what extent they use their native language, Spanish, in comparison with English for research publication purposes. Here again some differences are observed between the two disciplines (see Figure 1 below):

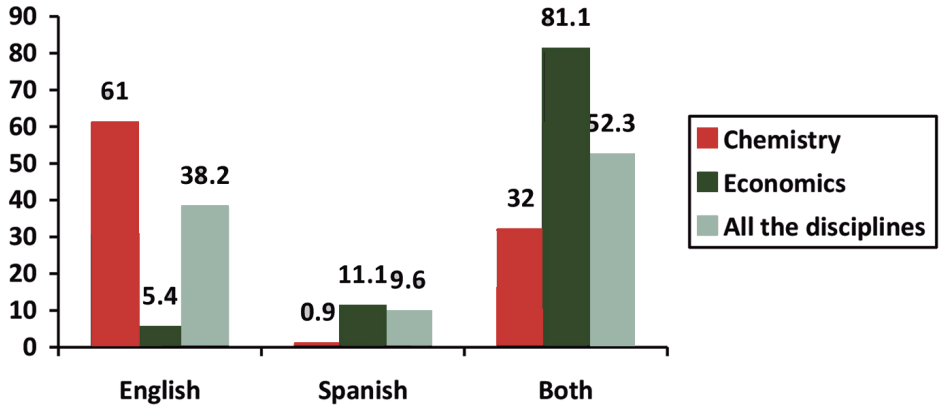

Figure 1. Percentages of respondents who use English and/or Spanish as languages of publication.

With regard to Chemistry, out of 231 replies, only 2 scholars answered they published only in Spanish (0.9%), vs. 141 (61 %) who published only in English, and 74 (32%) who do it in both languages. Fourteen (6.1%) published in other languages like French, German or Catalan.

In Economics, out of 74 replies, 8 scholars answered that they published only in Spanish (11.1%) and 4 stated that they only did in English (5.4%). Only 2 informants (2.7%) had never published in any language.

When contrasted with the results gathered for all the disciplines under study (Martín-Martín et al.; Moreno et al., "Spanish Researchers' Perceived"), we observe that the use of English as a single language of publication is considerably above average (61%) in the case of Chemistry. As a result they publish far fewer RAs in Spanish (the mean number of articles they have published in Spanish as a corresponding author over the last 10 years is 1.2), compared not only to their Economics peers (8.9) but also to the general average taking all the disciplines into account (6.1). The number of scholars who publish in both languages is also comparatively low (32%), below the average for all the disciplines (52.3%) and much lower than in the discipline of Economics (81.1%).

Economics respondents confirm a different behavior: their rate of publication in English only is very low if compared to Chemistry informants (for whom English seems to be "the" language of publication), and also low if contrasted with the average in all the disciplines. This does not mean, however, that Economics scholars do not publish in English, as an overwhelming 81.1% state that they publish both in English and Spanish, a percentage far higher than the one for Chemistry and also than the average for all the disciplines. Moreover, Spanish as the only language of publication does not seem to be a general option for them (only 11.1%)

A possible explanation for these results might have to do not only with their "degree of internationalization," that is, with considering Chemistry as a "fully internationalized publication culture" and Economics as a "partially internationalized"

one (Petersen and Shaw), but also with the type of research they carry out and the site of publication for such research. Even though there are no Spanish journals in the disciplines under analysis included in the JCR (Journal Citation Report), Spanish Economics scholars publish some of their research results in Spanish-medium journals, which may be due to two possible reasons: 1) the local nature of some of their studies, which may not be accepted in international English-medium sites of publication and 2) the applied character of their research, which may lead them in some cases to publish the outcomes of their research in sites with a professional (besides academic/scholarly) audience, which tend to be published in Spanish.

The number of RAs each disciplinary community published in each language was also analyzed (see Table 10 below). The time span for these data was the ten-year period before December 2010, when the questionnaire was administered.

TABLE 6. AVERAGE NUMBER (AND LEVEL OF DISPERSION OF THE MEDIAN) OF RAS WRITTEN IN ENGLISH AND IN SPANISH PER RESPONDENT.

	Chemistry (n.231)	Economics (n.74)
Ras in English	25.57±32.57(0-200)	9.14±10.72(0-50)
Ras in Spanish	1.23±2.96(0-20)	8.98±10.63(0-61)

In Chemistry we observe that the average number of RAs written in English (25.57) is much higher than in Spanish (1.23). What is more interesting, though, is that whereas there is a homogeneous behavior with regard to the publication in Spanish (many academics in the field do not publish in Spanish and, if they do, the average number of RAs is very similar), in the case of English, there is a high level of variation with regard to the number of RAs published (hence the level of dispersion of the median, 32.57 in English vs 2.96 in Spanish).

As regards Economics scholars, the average number of RAs written in English (9.14) is very similar to that of RAs in Spanish (8.98). With respect to the level of variation, and in contrast to what happened with Chemistry scholars, their behaviour seems to be very homogeneous, as the median for both cases (publication in English and in Spanish) is very similar (5 and 6 respectively).

These results are in line with the previous findings about their language of publication. Economics scholars seem to be combining English and Spanish as their research languages. Moreover, this behaviour is apparently very homogeneous among the members of the discipline who seem to be evolving in the same direction and at the same pace, something which does not seem to be the case in Chemistry, where the level of dispersion is very high and therefore very revealing. It may also be the case that, although multiple authorship is usually the norm in both disciplines, the number of signing scholars is much larger in Chemistry (usually 5 to 8 authors per article) than in Economics (usually 2 to 3 authors per article), which may result in a varying production rate but a higher one in any case.

3.3.2. Factors Influencing Their Decision to Publish in English-Medium Journals

In order to explore the motivations for using English for research publication purposes, informants were asked about the factors which influenced their decision to publish in English. Applying a scale of 1 to 5 (from 1= not at all, to 5 = a lot), the results revealed an overall coincidence between both disciplinary communities with respect to the factors that were most influential. This was also coincident with the factors pointed out by all the respondents to the questionnaire, from all the disciplines (Rey-Rocha et al.), and, as was expected, by respondents from the Social Sciences (Gea-Valor et al.), History and Psychology (Burgess et al.) and Medicine (Martín et al.). In all the cases the factors that encourage scholars to publish internationally in English are those which have to do with promotion, recognition and professional projection, as the table below shows:

TABLE 7. MAIN FACTORS SIGNALED BY INFORMANTS AS MOST INFLUENTIAL AT THE TIME OF DECIDING TO PUBLISH IN ENGLISH.

	Chemistry (n.231)	Economics (n.74)	All the disciplines (n. 1717) (Rey-Rocha et al.)
My desire to communicate the results of my research to the international scientific community	4.80	4.41	4.7
My desire for my research work to be recognized	4.58	4.45	4.5
My desire to meet the requirements for professional promotion	4.14	4.61	4.2
My desire to get cited more frequently	4.02	4.08	4.0

As can be inferred from the data above, the average answers in each case are interestingly similar with regard to Chemistry and all the other disciplines, with the desire to communicate the results of the research internationally marked as the most influential factor. However, Economics academics indicate two other factors as even more influential: the desire to meet the requirements for professional promotion and the desire for their research work to be recognized. It seems to be the case that, whereas Chemistry researchers have long assumed that English is the language to be used as the language of dissemination of research results, their *lingua franca*, Economics scholars attempt publication in English prompted by an outer pressure to publish in this language (e.g. professional promotion), and not so much out of an inner conviction that English is "the" vehicle of communication for science.

With respect to the factors that influence the least, Chemistry and Economics scholars also coincide in signalling those which have to do with more personal rewards (economic, but also of skills improvement). In this case the results are also very similar to those gathered for all the disciplines.

TABLE 8. MAIN FACTORS INDICATED BY INFORMANTS AS THE LEAST INFLUENTIAL AT THE TIME OF DECIDING TO PUBLISH IN ENGLISH.

	Chemistry (n.231)	Economics (n.74)	All the disciplines (n. 1717)
My desire for the continued existence of scientific journals in English	1.97	1.67	1.96
My assessment of my ability to write up the results of my research in English	2.45	2.02	2.45
My desire to improve my writing ability in English	2.57	2.61	2.6
My desire to communicate the results of my research to the local community	2.96	2.52	2.58
My desire to increase my chances of receiving a bonus payment	2.67	2.75	2.57

3.3.3. Attitudes Against Publishing Research Articles as Corresponding Author in Journals in Spanish and in English: Views and Reasons

The reasons why some of the respondents objected to publishing in English/Spanish were also explored. They were specifically asked whether they had ever considered publishing as corresponding authors in those languages in which they did not have any publications.

What is interesting here is the very significant difference in the results between the two disciplinary communities with regard to the consideration of Spanish as a language of publication, for the reasons commented above. Chemistry scholars do not even consider it a possibility. The comments offered by the informants cannot be more revealing:

> English is the language of my specialty.[2]
>
> In my discipline, [to publish in Spanish] would entail losing in the range of dissemination. For me it is almost an obligation to publish in an English journal.
>
> There is no journal in Spanish that is rated as high in the scientific community as the journals in English. This is an indisputable fact.

However, the attitude of those Economics scholars who have never published in Spanish is slightly different: they do consider publication in Spanish but decide against it. Again, reasons of disciplinary impact are argued:

[2] The original comments in Spanish have been translated into English by the authors for the sake of understanding.

There is no Spanish journal of my category in the ISI Web of Knowledge

The same arguments against research publication in Spanish are given by Medicine scholars (Martín et al.), who also pointed out the fact that the lack of prestigious Spanish journals in the field of Medicine has led scholars to publishing almost exclusively in English-language journals which, in turn, is causing the almost total disappearance of the national journals in this field of research.

Spanish, however, is not considered a hindrance by historians even in areas such as international dissemination of research findings and participation and visibility of Spanish researchers (Burgess et al.). In that sense, they distance themselves not only from their Chemistry and Economics colleagues, but also from Psychologists, with whom they otherwise share many attitudes.

As regards objection to publishing in English, in Chemistry only 2 scholars out of 231 (0.9%) had never published in that language. One of them said that s/he had considered publishing in English but decided against it. The other one said that s/he had published in English but not in the last 10 years.

Although not significant in the statistical sense, it is interesting to notice that the only Chemistry academic who could really respond to this question (the only one who had never published in English) indicated the following factors as quite influential in his/her decision not to publish in English:

> There is already another person in my group who is responsible for writing the articles.
>
> I think my writing ability in this language is below the standard the journals require.

The reasons for this person seem to lie, therefore, in the research group dynamics at the time of drafting results in English for publication.

In the case of Economics there were eight replies to this question, as only 8 informants had never published in English as corresponding authors, with the following results: 1 (1.4%) had never considered it, 4 (5.4%) had considered it but decided against it, 2 (2.7%) had tried but had been unsuccessful. As for Medicine scholars, the most important reason for them not to publish in English seems to be that there are no prestigious journals in their field for that language.

Therefore, the reasons not to attempt publication in English seem to lie in the discipline itself and in the degree of internationalization of the discipline. It is interesting to notice that whereas the Chemistry informant pointed at the lack of prestigious journals in Spanish, the Economics scholar commented on the lack of an English journal of his/her specialty, which reveals that Economics and Chemistry are disciplines or, at least, have subdisciplines, which are constructed in different languages.

Their attitudes, especially those of Chemistry scholars, are in sharp contrast to those revealed by other academics, and more specifically by Historians (Burgess et al.), who openly manifest their resentment of institutional pressures to publish in English. Another reason offered by Historians not to attempt publication in English was that they considered their writing ability to be below the

standard required by the journal. This argument matches the low percentage of Historians and Psychologists who perceived their English writing competence as high or very high (Burgess et al.; see section 3.2. above). According to Burgess et al., Historians and Psychologists share two further concerns: the costs of translation and of authors' editing services, both of which also enhance their reluctance to publish in English.

Again disciplinary issues are at the heart of the reasons which compel scholars to attempt or not publication in their native language (Spanish) or in English as an international language of communication.

3.3.4 Attitudes towards Publication: Desirability of Publishing in Spanish/English

Within the section which focused on the language choices they made for research publication purposes, one of the questions asked scholars about how desirable they thought it was for Spanish researchers in their field to publish their research in English/Spanish. Here again some interesting differences were found (answers were provided in a five-point scale from "not at all" to "a lot").

In the case of publication in Spanish, the results are shown in Figure 2 below:

The data shown in this figure corroborate and match the results found and commented on above regarding the divergent attitudes towards the publication of research in Spanish in both disciplinary communities: a substantial percentage of Chemistry academics are against it (44.2%) and only a third of them wishes to publish in Spanish (33.6%) whereas more than a half of Economics informants are openly in favour of it (55.5%). The answers provided by the latter are, thus, more in tune with the answers provided in the general survey by all respondents (45.6%). What these and other results show (88.2% of Historians and 71% of Psychologists wish to publish in Spanish according to Burgess et al.) is that there is a wide range of attitudes at least as far as publication in Spanish is concerned.

However, when the data are contrasted for English as the language of publication, the results are interestingly similar across disciplinary communities, as observed in Figure 3 below:

In both cases, an overwhelming percentage of informants consider publishing in English very or quite desirable (94.9% in the case of Chemistry and 90.3% in the case of Economics) vs a very low percentage of those who consider it not at all or slightly desirable (0.5% for Chemistry and 2.8% for Economics). These results are in the same line as those provided in the general survey by all respondents (90.7%). Psychologists (89.9%) show a similar degree of desirability whereas for Historians (80.6%) it is a little bit lower, very much in tune with the reluctance to publish in English they manifest in other parts of the questionnaire (Burgess et al.).

Interestingly then, the most significant differences found across disciplines do not concern their attitudes towards English as the international language for research publication purposes, which are very similar and favourable, but their attitude towards Spanish, as their local language of dissemination, with Spanish

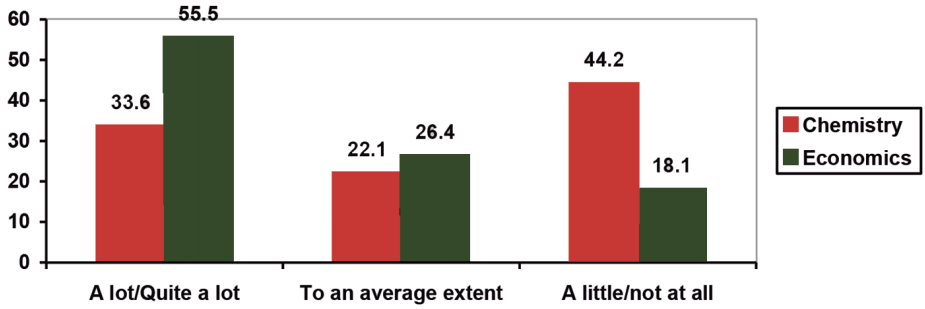

Figure 2. Spanish researchers' degree of desirability to publish their research in Spanish.

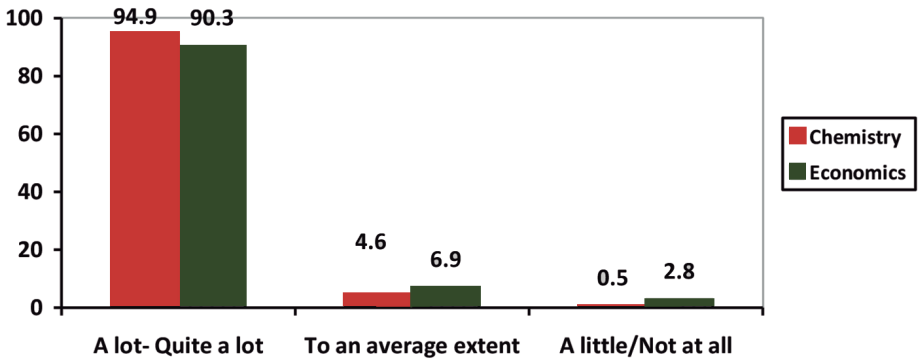

Figure 3. Spanish researchers' degree of desirability to publish their research in English.

Chemistry scholars having ruled out publication in Spanish as an option for them and Economics scholars still considering publication in Spanish as a viable option.

In our view, these different attitudes show that research is still relevant at a local level in the Economics disciplinary community, and the use of Spanish for research dissemination is the logical option for them. In this sense, the degree of internationalisation would be given by the essence of the discipline (more "universal" disciplines such as Chemistry vs more "locally-set" discipline like Economics) and not by the stage they are in the process of becoming "internationalised." This may lead us to state that Chemistry is a more urban discipline than Economics, which might be considered partially rural (Becher and Trowler 2001).

4. FINAL REMARKS

Our main purpose in this study was to explore the attitudes and motivations that Spanish scholars working in two well-defined areas of knowledge, Chemistry and Economics, had towards research publication in English, and also in their native language, Spanish. Both disciplinary communities were chosen as they are highly productive at an international level, so a large degree of common perceptions and attitudes towards publication in English-medium scientific journals was expected, as has been corroborated by the data yielded by the ENEIDA questionnaire. Both disciplinary communities see publication in English as an opportunity for international dissemination of research results, professional promotion and academic projection. This is especially the case of Chemistry scholars. However, even though they share the view of publishing in English as an opportunity, Spanish members from these two disciplinary communities hold different perceptions as to their own linguistic, rhetorical and discursive competence in English, which make Economics scholars more cautious when attempting publication in English.

Highly relevant are also the differences reported in their attitudes towards publication in Spanish. For Chemistry scholars, publication in Spanish journals is not a viable option. They argue that dissemination is not ensured and that there are no prestigious journals in Spanish in their field.[3] This, in our view, may be resulting in a certain degree of domain loss in Spanish (Ferguson) which may be taking place in the discipline of Chemistry. The attitude of Economics scholars towards publication in Spanish is quite different. They still find it a valid vehicle of scientific communication, especially when dealing with topics of local interest.

On the whole, a different degree of "internationalisation" is observed in both disciplines due, among other factors, to the inherent characteristics and research interests of each discipline: more "universal" in the case of Chemistry and, sometimes, more locally-oriented in the case of Economics. The fact that disciplinary and linguistic factors interact when using one or the other language for research publication purposes may explain the, at times, different attitudes of both disciplinary communities towards the use of such languages. Thus, Spanish Economics academics may share attitudes towards English to a larger extent with their international colleagues working in other national contexts (such as French, German, Italian, Portuguese, etc.) rather than with Spanish academics working in other fields, even within closely related domains. As has been discussed, the discipline (or small culture, Holliday) can, to a very large extent, explain diverging attitudes, motivations and perceptions of using English as a language for research publication purposes within the same national context (or big culture, Holliday).What all this shows is that, to varying degrees, the Spanish academics under study have a strong

[3] As Sano reports in Ferguson (10), based on the abstracting journal *Chemistry Abstracts*, between the years 1970-2000 the percentage of chemistry journal articles in English rose from 54.2% to 82.1%. This might explain the frequent use of English for publication purposes made by Chemistry scholars and reported in the present study, and also the lack of prestigious Spanish journals in their field.

need to disseminate their scientific results internationally in English and that to be able to do so, they need to be provided with the pedagogical tools, adapted to their disciplinary idiosyncrasy, which will allow them to do so in a competitive and successful way.

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WORKS CITED

Bhatia, Vijay K. *Worlds of Written Discourse: A Genre-Based View*. London: Continuum, 2004. Print.

Becher, Tony and Paul Trowler. *Academic Tribes and Territories: Intellectual Inquiry and the Culture of Disciplines.* Buckingham: The Society for Research into Higher Education/Open UP, 2001. Print.

Burgess, Sally, María Lluïsa Gea-Valor, Ana I. Moreno, and Jesús Rey-Rocha. "Affordances and Constraints on Research Publication: A Comparative Study of the Language Choices of Spanish Historians and Psychologists." *Journal of English for Academic Purposes* 14 (June 2014): 72-83. Print.

Cargill, Margaret and Sally Burgess. "Introduction to the Special Issue: English for Research Publication Purposes." *Journal of English for Academic Purposes* 7.2 (2008): 75-76. Print.

Duszak, Anna and Jo Lewkowicz. "Publishing Academic Texts in English: A Polish Perspective." *Journal of English for Academic Purposes* 7.2 (2008): 108-120. Print.

Ferguson, Gibson. "The Global Spread of English, Scientific Communication and ESP: Questions of Equity, Access and Domain Loss." *Ibérica* 13 (Spring 2007): 7-38. Print.

Ferguson, Gibson, Carmen Pérez-Llantada, and Ramón Plo. "English as an International Language of Scientific Publication: A Study of Attitudes." *World Englishes* 30.1 (2011): 41-59. Print.

Fernández Polo, Francisco Javier and Mario Cal Varela. "English for Research Purposes at the University of Santiago de Compostela: A Survey." *Journal of English for Academic Purposes* 8.3 (2009): 152-164. Print.

Flowerdew, John and Li Yongyan. "English or Chinese? The Trade-off Between Local and International Publication among Chinese Academics in the Humanities and Social Sicences." *Journal of Second Language Writing* 18.1 (2009): 1-16. Print.

Gea-Valor, María-Lluïsa, Jesús Rey-Rocha, and Ana I. Moreno. "Publishing Research in the International Context: An Analysis of Spanish Scholars' Academic Writing Needs in the Social Sciences." *English for Specific Purposes* 36 (October 2014): 47-59. Print.

Holliday, Adrian. "Small Cultures." *Applied Linguistics* 20.2 (1999): 237-264. Print.

Jenkins, Jennifer. "Accommodating (to) ELF in the International University." *Journal of Pragmatics* 43.4 (2011): 926-936. Print.

Martín, Pedro, Jesús Rey-Rocha, Sally Burgess, and Ana I. Moreno. "Publishing Research in English-language Journals: Attitudes, Strategies and Difficulties of Multilingual Scholars of Medicine." *Journal of English for Academic Purposes* 16 (December 2014): 57-67. Print.

Martín Martín, Pedro, Ana I. Moreno, Jesús Rey-Rocha, Sally Burgess, Irene López, and Itesh Sachdev. "Spanish Researchers' Past Experiences and Difficulties with the Publication of Research Articles." 2nd International PRISEAL Conference: Publishing and Presenting Research Internationally: Issues for Speakers of English as an Additional Language. University of Silesia, Katowice, Poland. 9-11 June 2011.

Mauranen, Anna. "English as the Lingua Franca of the Academic World." *New Directions in English for Specific Purposes Research*. Ed. Diane Belcher, Ann M. Johns, and Brian Paltridge. Ann Arbor: Michigan UP, 2011. 94-117. Print.

———."Hybrid Voices: English as the Lingua Franca of Academics." *Language and Discipline Perspectives on Academic Discourse*. Ed. Kjersti Fløttum. Newcastle: Cambridge Scholars, 2007. 244-259. Print.

Moreno, Ana I., Jesús Rey-Rocha, Sally Burgess, Irene López-Navarro, and Itesch Sachdev. "Spanish Researchers' Perceived Difficulty Writing Research Articles for English-medium Journals: The Impact of Proficiency in English versus Publication Experience." *Ibérica* 24 (Fall 2012): 157-184. Print.

Moreno, Ana I., Jesús Rey-Rocha, Sally Burgess, Pedro Martín-Martín, María Lluïsa Gea-Valor, Irene López-Navarro, Belén Garzón, and Itesh Sachdev. "Spanish Researchers Publishing in Scientific Journals: Motivations, Views, Strategies, Experiences and Training Needs." 2nd International PRISEAL Conference: Publishing and Presenting Research Internationally: Issues for Speakers of English as an Additional Language. University of Silesia, Katowice, Poland. 9-11 June 2011.

Moreno, Ana I., Sally Burgess, Itesh Sachdev, Irene López-Navarro, and Jesús Rey-Rocha. "The ENEIDA Questionnaire: Publication Experiences in Scientific Journals in English and Spanish." ENEIDA, 2013. Web. 10 Feb. 2014. http://eneida.unileon.es/eneidaquestionnaire.php

Mur-Dueñas, Pilar, Rosa Lorés-Sanz, Jesús Rey-Rocha, and Ana I. Moreno. "English Specialized Discourse in the Academia: Publishing Practices by Spanish Scholars in Chemistry and Economics." *Discourses in Co(n)text: The Many Faces of Specialised Discourse.* Ed. Magdalena Murawska, Anna Szczepaniak-Kozak, and Emilia Wąsikiewicz-Firlej. Newcastle: Cambridge Scholars, 2014. [Forthcoming]

Pérez-Llantada, Carmen, Ramón Plo, and Gibson R. Ferguson. "'You Don't Say What You Know, Only What You Can': The Perceptions and Practices of Senior Spanish Academics Regarding Research Dissemination in English." *English for Specific Purposes* 30.1 (2010): 18-30. Print.

Petersen, Margarethe and Philip Shaw. "Disciplinary Differences and Language of Publication in a Biliterate Environment." *World Englishes* 2.3 (2002): 357-374. Print.

Rey-Rocha, Jesús, Ana I. Moreno, Sally Burgess, Irene López, Belén Garzón, and Itesh Sachdev. "Spanish Researchers' Language Choices for Scientific Publication Purposes: Attitudes and Motivations." 2nd International PRISEAL Conference: Publishing and Presenting Research Internationally: Issues for Speakers of English as an Additional Language. University of Silesia, Katowice, Poland. 9-11 June 2011.

Seidlhofer, Barbara. "Lingua Franca English: The European Context." *The Routledge Handbook of World Englishes*. Ed. Andy Kirkpatrick. Oxon: Routledge, 2010. 355-371. Print.

Swales, John. *Other Floors, Other Voices: A Textography of a Small University*. Michigan: Michigan UP, 1998. Print.

PUBLICATION SKILLS DEVELOPMENT IN THE SCIENCES: DECISION SUPPORT FOR EFFECTIVE PROGRAM DESIGN

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Abstract

In the face of expanding pressure for science researchers to write articles for refereed journals, research is needed on ways to design cost-effective training programs that respond to contextual variables including language backgrounds. Here we propose a matrix of four descriptor scales for classifying groups to be trained, based on detailed analysis of workshops taught by interdisciplinary teams in a wide range of institutional and linguistic contexts using a collaborative approach grounded in genre analysis and corpus linguistics. The resulting classification of participants and context enable optimisation of the training team and effective decision-making about program design.

Keywords: Publication skills; research articles; academic writing; training programs; interdisciplinary collaboration.

Resumen

Frente al incremento de la presión en investigadores científicos a escribir artículos para revistas indexadas, hacen falta estudios sobre maneras rentables de diseñar programas de formación que responden a variables contextuales, entre ellos la lengua materna de los participantes. En este estudio proponemos una matriz de cuatro escalas descriptivas para la clasificación de grupos de formación, basada en el análisis detallado de talleres impartidos por equipos interdisciplinarios en una amplia gama de contextos institucionales y lingüísticos utilizando un enfoque colaborativo basado en el análisis de géneros y la lingüística de corpus. La clasificación resultante de los participantes y el contexto permite la optimización del equipo de formación y la toma de decisiones eficaces sobre el diseño del programa.

Palabras clave: Habilidades de publicación; artículos de investigación; escritura académica; programas de capacitación; colaboración interdisciplinaria

INTRODUCTION

The issue addressed in this article is the need for effective approaches to developing the range of skills required by researchers to publish scientific articles in the peer-reviewed international literature. This currently means 'in English', regardless of what we may think of the equity of this requirement (Ferguson). The need

can be seen as situated in the field of science research education, as it is most often supervising academics in the scientific disciplines who are expected to work with their graduate students on the writing and submission of their first manuscripts, thereby providing quality control on the product as well as helping them develop towards independent author proficiency – although the degree to which the latter outcome is achieved is highly variable (Li, "Publish"). However, it runs parallel to and is impacted by understandings and approaches located within the fields of applied linguistics and English language teaching, especially but not exclusively for the many scientists who use English as an additional language (EAL). Many science research workplaces worldwide are now both multicultural and multilingual, and this trend will only intensify as globalising tendencies take increased effect. Users of English as a first language (EL1) are already a minority among users of the language worldwide (Graddol). Increasingly, supervisors/advisors and mentors helping junior scientists write manuscripts in English will themselves be from EAL backgrounds, as will journal editors and referees. The discourse communities that novice authors are seeking to join are thus changing rapidly in terms of their composition. An additional factor here is the general decrease in the amount and effectiveness of instruction in English grammar and writing provided to EL1 students in schools in many places (e.g. Grow). This means that the metalanguage needed to discuss why particular language choices are appropriate in a given situation may not be shared by mentors and mentees. In locations where English is a foreign language (EFL), for example China, effective teaching of the discipline-specific English needed by researchers is often hampered by the problems posed for English teachers by complex scientific content – and this problem applies to all fields of specialised research. When this situation is combined with the limited and generally prescriptivist coverage of many of the available books on scientific writing addressed to scientists (Cargill, *Collaborative,* 4-8), it is clear that previous approaches to addressing the problem can be characterised as somewhat ad hoc and piecemeal.

At the same time, the 'context of situation' (Halliday and Hasan) in which scientific articles are being submitted is becoming more stringent, with rejection rates reported for highly-ranked journals of around 93% for *Nature* (http://www.nature.com/nature/peerreview/debate/nature05535.html), approximately 75% across a broad range of journals (Sugimoto et al.), and still as high as 31% (PLoS One http://www.plosone.org/static/information#1) for full open access journals. In parallel, the pressure is increasing to publish, and to publish within higher degree candidature in many cases (Cargill and O'Connor, *Developing*). Burgess et al. describe Spanish contexts and Cargill, O'Connor and Li Chinese contexts. The Indonesian Ministry of Higher Education has recently instituted a graduation requirement for PhDs of an article published in English in a journal listed in the Scopus database (M. Damriyasa, Udayana University Bali, pers. comm. 2013). Thus the pressure on academics, in their own right and as supervisors/advisors, as well as on their graduate students, can be extreme.

Training is clearly needed in many contexts that will support novice authors writing for publication in highly-rated international journals, but identifying who to train, when to train them, and what type of training will be most effective can

be a complex challenge. There is little published research investigating these issues to date. Burgess et al. report that practically oriented workshops were the preferred training option for the academic historians and psychologists they studied, even though they had limited experience of such training in the past. The Chinese plant scientists studies by Cargill and O'Connor ("Identifying") reported strong intentions to implement training in their own contexts based on that they had received, but no follow-up research has been conducted.

An additional contributor to this complexity is issues related to institutional structure: who is responsible for arranging and/or providing the training? As quality assurance and the reaching of broad targets directed at improving positions on league tables become more important for higher education and research institutions, decisions on training provision may be more likely to be made centrally, rather than at discipline level, perhaps by staff in human relations or research management branches. This in turn may mean that decision makers come from a range of backgrounds and worldviews, often removed from the specifics of academics' concerns. As a result, training programs are often required to target transferable generic skills rather than discipline-specific needs (Bastalich). However, this trend seems to fly in the face of accepted ESP wisdom for advanced academic literacies; Ken Hyland in an article entitled 'Specificity revisited: how far should we go now?' came to the conclusion: "as far as possible" for this type of training. It is thus an ongoing challenge to convince training providers of the benefits of a discipline-specific approach to training. However, even when decision making is in the hands of those to be trained, they may have limited exposure to current thinking around the pedagogical aspects of publication skill development. There is a pressing need for strategies to support decision making about training options, to help ensure best value for both the effort and funds expended.

The focus of this paper is therefore factors found to be relevant to designing effective and cost-effective programs for developing the skills of novice writers of scientific research articles for submission to refereed journals published in English. We present a tool for locating groups to be trained on a matrix of four variables that have been identified as salient through analysis of prior workshops, thus enabling informed decision-making about program design. The remainder of the article is organised as follows. We first describe the collaborative training approach we use, the contexts where it has been applied and the workshops analysed in the process of developing the decision support matrix. The four descriptor scales are then presented, with explanations of three points on each based on the analysed workshops. The final section discusses broader applicability and a potential future research agenda.

COLLABORATIVE TRAINING: DEVELOPMENT AND UPTAKE

Elsewhere we and others have reported and analysed the development and implementation in various contexts of a training approach based in interdisciplinary collaboration across sciences, education and applied linguistics and named Collaborative Interdisciplinary Publication Skills Education: CIPSE (e.g. Cargill "Collaborative"; Cargill and O'Connor "Structuring Interdisciplinary Collaboration to Develop Research Students' Skills for Publishing Research Internationally: Lessons from Implementation"). The approach is demonstrated in the book/website package *Writing scientific research articles: Strategy and steps* (*WSRA,* Cargill and O'Connor). It builds on the interdisciplinary teaching approaches traditionally used within English for Specific Purposes (ESP) (Coffey), and extends their use. ESP has as its goal the teaching of the English needed for a particular specific purpose. CIPSE takes this one step further and focuses on achieving the purpose: the writing and submission of a manuscript and negotiation of its publication. It thus requires, in its 'strong' form, hands-on input from expert members of the target discourse community – publishing, refereeing scientists in the relevant field of science. Details of the application within CIPSE of the genre analysis and corpus linguistics approaches that are its strengths can be found in Burgess and Cargill.

Scientists can, and do, provide advice to their junior colleagues and students without recognising a need for a framework such as CIPSE. What CIPSE provides in this situation is the means to harness the insights of genre analysis and ESP pedagogy to give a principled and accessible way to overcome the teaching issues commonly faced by mentoring scientists. These issues often lead scientists to simply rewrite their mentee's draft (Li, "I Have") rather than try to show how it can be improved by the student herself, thus supporting skill development for future application. The WSRA book/website package has been shown to be useful in this way for Australian scientists (Cargill and Smernik) and potentially for Chinese scientists (Cargill and O'Connor "Identifying and Addressing Challenges to International Publication Success for Efl Science Researchers: Implementing an Integrated Training Package in China"). Reviews of the book in science journals have also been positive (Opie; Jobling; Crissman), and over 12,000 copies have been sold to date. Thus there is a modest amount of evidence that the approach exemplified in the WSRA package is accessible to and usable by scientists. Thus CIPSE training is relevant for scientists (including masters and doctoral students) as authors, and for scientists as mentors.

CIPSE training workshops have been delivered in a wide range of contexts, sometimes by the first author alone and sometimes in teams with the remaining authors or other scientists. Contexts include universities in Australia, China, Spain and Indonesia; and research institutes, centres or groups in Australia, the Philippines and China. Trainee groups have been made up of EAL users who shared a first language, EAL users from several language backgrounds, and a mix of EAL and EL1 users. All workshops have been evaluated using the same methodology, enabling comparisons to be made of outcomes across the contexts. The appendix

gives details of workshops delivered and the publications in which data from them are analysed. Relevant findings are referred to in the following section in support of the descriptor scales we propose.

A DESCRIPTOR SCALE MATRIX

This work builds in part on the broader 'model' concept presented in Cargill and O'Connor ("Getting"), but is more tightly focused, aiming to provide a tool for use in negotiations with responsible parties that will enable the salient educational aspects of the situation to be taken appropriately into consideration. It therefore seeks to develop ways of talking about CIPSE and its potential contributions that will resonate with the concerns of different audiences.

Based on analysis of the outcomes of workshops and courses run in a wide range of contexts, as discussed above, we propose the following set of four descriptor scales for analysing groups to be trained, in order to decide on the most cost-effective use of available training budgets. The scales are labelled as follows: Client goals for training; Trainee research experience; Training program type (combined in Fig. 1); and English language context (Fig. 2). We describe three points on each scale, using evidence from research on previous workshops to exemplify each point.

Client training goals

This scale represents the goals held for the training by those arranging for its provision, for whom we use the shorthand term *client*. We characterise the right-hand end of the *Client training goal* descriptor scale (Fig. 1) as 'an increase in the number of SCI (Science Citation Index, Thomson Reuters) papers produced', or, in some situations, 'an increase in the Impact Factor of journals publishing the papers produced'. Such a goal picks up the perspective of McGrail et al. , that only published papers should count as an outcome of an intervention to improve publishing rates. We would debate this view in terms of its effectiveness in evaluating a workshop's success, as it does not take into account the overriding importance for journal acceptance of scientific quality and novelty, nor match with the journal's desired position in the field. Nevertheless, using this wording for the scale end-point is an effective way to get the issue 'on the table' when negotiating training options with a prospective client. If this is their desired outcome from an intervention, then a much more comprehensive program would need to be implemented – the components of which could be clarified using the remaining scales within the matrix.

An intermediate point on this scale is 'an increase in self-assessed confidence to write manuscripts for SCI submission and deal with the publishing process'. As demonstrated by the evaluation outcomes from all workshops analysed in the previous publications, this outcome can be anticipated from running CIPSE work-

shops, and relevant evidence can readily be provided to prospective clients using the published papers.

The left-hand end-point we propose is 'development of the full range of pre-requisite skills for writing a manuscript for submission to an SCI journal'. The pre-requisite skills list that has emerged from our analysis is represented in Table 1. Demonstrating their embeddedness in the concerns of the community of practice of science research, the list items are presented in relation to relevant aspects of the referee criteria list (Cargill and O'Connor *Writing,* 16) that forms a basic jumping-off point for CIPSE teaching. Table 1 also indicates the items for which teaching input from members of the discourse community/ies relevant to the students' fields is of high value. Thus it could serve as a basis for curriculum planning conversations, using as it does terminology that is meaningful across a range of areas with an interest in publication skill development.

TABLE 1. PRE-REQUISITE SKILLS FOR THE PRODUCTION OF A POTENTIALLY PUBLISHABLE ARTICLE IN ENGLISH, IN RELATION TO THE COLLATED LIST OF REFEREE CRITERIA FOR SCIENCE ARTICLES PUBLISHED IN CARGILL AND O'CONNOR (WRITING SCIENTIFIC RESEARCH ARTICLES: STRATEGY AND STEPS 16). HIGHLIGHTS INDICATE ITEMS REQUIRING/BENEFITTING FROM INPUT FROM EXPERTS IN THE RELEVANT SCIENCE DISCIPLINE/S.

Referee criterion	Pre-requisite skills for writing submittable manuscripts
Is the contribution new?	Library/database/internet access and skills to find relevant literature; analysis of literature to identify gaps and justify a study; writing in own 'voice' using literature; understanding role of audience analysis for effective writing
Is the contribution significant?	
Is it suitable for publication in the Journal?	
Is the organisation acceptable?	Knowledge of all article structures relevant to the discipline area, and content of the sections in each
Do the methods and treatment of results conform to acceptable scientific standards?	Research methodology, research question development and statistics/data presentation relevant to the discipline; discipline-specific use of structure, tense and modal verbs to write about results and conclusions
Are all conclusions firmly based in the data presented?	
Is the length of the paper satisfactory?	Meticulous attention to detail
Are all illustrations required?	Ability to analyse, and formulate 'take-home messages' from, datasets; data presentation and summary skills relevant to the discipline
Are all the tables and figures necessary?	
Are figure legends and table titles adequate?	
Do the title and the abstract clearly indicate the content of the paper?	Ability to highlight key messages for an intended audience
Are the references up-to-date, complete, and the journal titles correctly abbreviated?	Understanding of and skills in citation practice relevant to the discipline and avoidance of plagiarism; use of bibliographic software or manual systems for storage/ retrieval of references and preparation of reference lists

Is the paper excellent, good or poor?	Appropriate proficiency in discipline-specific English at the levels of vocabulary choice and use, accurate sentence structure for clear meaning, argument construction and linking, and information ordering to meet audience expectations; skills in self-editing and responding to feedback[1]

[1]Although this criterion can be expected to relate more, for the journal and the referees, to issues of newness and significance than to the issues listed, these language-based skills are important pre-requisites for communicating newness and significance and will affect judgements made about this criterion. Note, even PLOS ONE (pioneering acceptance of articles which may make only 'incremental' contribution through novelty and significance i.e. not Impact driven) has one of its seven criteria for acceptance as: "Is the article presented in an intelligible fashion and written in English?" with the consequence that "Poor presentation and language is a justifiable reason for rejection."

Trainee research experience

This scale relates to Swales (56) notion of Senior and Junior Researchers, but with somewhat finer distinctions (Fig 1). The right-hand end is represented by more senior researchers who are responsible for overseeing and mentoring the publishing of junior staff and students, as well as for publishing their own papers – characterized here as Mentoring Researchers (MR). The intermediate position on the scale for our purposes begins with senior research students in the process of drafting an article on their own results, through to employed/ post-doctoral researchers who may have published several papers internationally but are looking to improve their efficiency and polish their skills. This group is characterized as Early-career researchers (ER). We would argue for a further subdivision within Swales' *Junior* category for the left-hand endpoint of this scale. That is because in several of the EFL contexts we have experienced, beginning research students are gathered together, sometimes from sites at quite some distance, and taught as a cohort in the very early stages of their research degree candidature. The discipline areas within science of the cohort may be very disparate (or could even extend beyond science to all fields where primary data are collected and analysed, as for centrally run paper-writing workshops in our own university in Australia). The outcomes of our workshops at GUCAS demonstrate that where trainees have not yet conducted a research project to its completion and struggled to present the data analysis and conclusions to a critical public audience in writing, they are less likely to benefit from training that includes the full range of CIPSE content, including for example strategies for dealing with reviewers' comments. In such cases, the cost of including a collaborating scientist member in the training team is likely not to be warranted. Thus the left-hand end of the scale is a commencing HDR (higher degree by research) candidate, with no/little experience of designing and conducting research and/or no/little formal research training. This group is characterized as Commencing Researchers (CR).

Aspects to be considered in defining the position of a cohort on this scale need to include their level of research training, as well as their levels of experience in reading research articles in English, designing and conducting research studies

independently, and writing up the research. It is important to note here that, in relation to the last-mentioned point, the actual level of input to writing a paper needs to be considered – the appearance of a person's name in the author list should not be accepted uncritically as evidence of substantial input to the English writing in all cases (Li "I Have"), the widely accepted Vancouver Protocol notwithstanding (International Committee of Medical Journal Editors).

Training program type

The right-hand end of this descriptor scale represents an embedded or integrated approach to developing publication skills within a research workplace (Fig 1). Its defining feature is that the research workplace/s of the participants form/s an integral part of the planning and organisation of the program, including their discipline locations, their practical agendas and the constraints affecting them. If external CIPSE presenters are used, local implementation options and professional development for local staff are part of the program planning. If graduate students are the trainees, then supervisors/advisors participate in order to be able to carry on the educational process after the training event. If an academic support course or similar is wanted, then a full context analysis can be included to identify the feasibility of various embedding options. In practice, as represented by the implementations analysed to date, this degree of integration has not often been on the horizon. However, where repeat training events are arranged, perhaps annually, this point can be a useful reference point for indicating what may be possible.

The mid-point on this descriptor scale represents situations where a program (course or training event) is requested for a group of trainees taken out of their workplaces, but where the details of the workplace/s can form part of the event planning: discipline locations are known, at least some relevant details of the research context can be provided, and local uptake options can be considered in the planning, including train-the-trainer options. Examples of this point on this scale are the China Academy of Engineering Physics workshop (2009), and the New Phytologist workshops (2007, 2009). The left-hand end of the scale is a stand-alone, one-off training event, external to participants' working environment, where issues of discipline mix are not taken into consideration. Examples include lecture series offered across an entire university, such as in Nanjing (2006).

These three scales (Figure 1) can usefully be considered together as a base point for negotiations. The closer to the right-hand end of each scale the training context is, the more likely it is that significant value will be added to the training by including a scientist in the CIPSE presentation team – preferably one whose research interests match those of the trainees, at least in terms of general field and approach/ methodology. If the trainees' context falls to the left of the mid-point on any scale, it is likely that the additional cost of including a scientist presenter will not be warranted, and that very satisfactory outcomes will be achieved with a CIPSE program taught by an applied linguist/ESP teacher alone. For example, the

program run by Cargill alone for CRs at GUCAS in 2008 received comparably high evaluations to those run by scientist/linguist teams in 2006, and those she taught at Nanjing and Shanghai Universities in 2006 for mixed CR/ER groups, organized without taking discipline/workplace into consideration, showed strong increases in participant confidence to write and deal with the publishing process. It should be noted that the level of value added by the inclusion of a scientist in the team, in those situations where it is appropriate, is very high, not least in terms of the enhanced credibility it affords the training course.

Training context descriptor	Less added value	Significant added value	Very high degree of added value
Client training goals	Prerequisite skills for ms writing	Increased trainee confidence to write/publish	Increased output/level of published articles
Trainee research experience	Commencing researchers	Early-career researchers	Mentoring researchers
Training program type	Stand-alone, workplace contexts not considered	External but workplace contexts considered	Embedded in workplace

Figure 1: Variation in degree of value added by including scientist presenters in CIPSE training, in relation to three training context descriptor scales.

English language context

The fourth descriptor scale, English language context, operates alongside the first three in terms of determining presentation style and methodology and the amount of content that can be covered in a given time; however, it is not a determinant of the team structure. Current practice for CIPSE training in EFL contexts is to stipulate that participants must have a level of English proficiency that will enable them to follow a presentation given exclusively in English and based on articles in English, and to interact appropriately with the presenters. We rely on self-assessment of this level, as previous attempts to stipulate test scores or the equivalent did not lead to more homogeneous proficiency in trainee groups.

The descriptor scale for English language context takes into account Swales (56-57) concepts of "Broadly English Proficient" (BEP) and "Narrowly English Proficient" (NEP), and the fact that users of English as a first language (EL1) experience many of the same difficulties in writing science English at this advanced level as do academics from other language backgrounds (52). We propose that this scale focus not on the individuals to be trained, but the context in which the training takes place and the research workplace is located. This is because the resources and strategies that trainees will need to learn about and practise relate more directly to

these contextual features than to their individual proficiency in many cases, and this formulation of the scale points makes this fact explicit to those making decisions. Thus the right-hand end-point is an EL1 context where all novice authors, including EAL authors, have readily available opportunities for interaction in English about their science and their developing manuscript, and where the working language of the laboratory or group is English. The intermediate point is an ESL science context, where such opportunities are available or can be sought out, although the primary working language of the laboratory or group is not English. Such a context could be in an EFL location, but one where collaboration with EL1 scientists is an ongoing part of the program, with frequent visits from scientists who do not speak the home language of the lab, requiring in-depth communication in English on a regular basis. The left-hand end-point of the descriptor scale is an EFL context, characterised here as being one where opportunities to interact outside the training event with fluent English speakers conversant with the discipline content of the research being conducted range from non-existent to rare and in need of careful structuring. This is the kind of context described by Martinez in an Argentinian university setting, where the 'collaboration' she describes in her content-based course was between herself and her students, who provided the strong content knowledge to pair with her knowledge of genre and language form.

Rather than relating to the added value provided by including a scientist in the CIPSE presenter team, this descriptor scale relates to the value of including an appropriately trained ESP teacher in the team (Figure 2). The added value continuum runs in the opposite direction in Figure 2 from that in Figure 1, with the greatest degree of added value occurring at the left-hand end of the descriptor scale, in science contexts where interaction in English about the science being conducted is not available outside the training event or program, i.e. the type of EFL science contexts described above.

Training context descriptor	Very high degree of added value	Significant added value	Less added value
English language context	EFL science context, interaction in English re science unavailable	ESL science context, interaction re science in English available	EL1 science context, interaction re science in English readily available

Figure 2: Variation in the added value of including an appropriately trained ESP teacher in CIPSE training, in relation to a descriptor scale for the English language context of the training.

CONCLUSIONS

The matrix represented in Figures 1 and 2 reflects the range of contexts and outcomes we have experienced on the ground. The high value of including ESP-trained presenters for CIPSE in EFL contexts has been demonstrated in Spain and a range of contexts in China. At the other end of the scale, the evidence presented of scientists successfully using the CIPSE approach via the WSRA package indicates that including ESP expertise in the teaching team is less essential in an EL1 context, although value is certainly added, especially if the participant group includes EAL scientists.

We propose that the matrix provides a decision support tool with potential for use in the interdisciplinary space occupied by those wanting to strengthen researchers' skills for writing for publication, given the growing range of contexts where scientists are under strong pressure to write for journals publishing in English, and the wide range of structures and understandings into which any efforts to support this writing must fit. For example, when English language professionals receive a request to provide professional development training for science graduate students or early career researchers, as a course or a workshop, the first three focus issues from the matrix (client goals, trainee research experience and training program type), and the descriptor sets for each, can usefully guide negotiations with the requesters and avoid potential mismatches of expectations. The matrix also opens up a future research agenda, addressing issues such as the effectiveness of the tool for supporting effective program development in different national, linguistic, institutional and cultural contexts, and the applicability of the collaborative and interdisciplinary training approach that underlies it in disciplinary contexts beyond science and technology.

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REFERENCES

Bastalich, Wendy. "Knowledge Economy and Research Innovation." *Studies in Higher Education* 35.7 (2010): 845–57. Print.

Burgess, S., *et al*. "Affordances and Constraints on Research Publication: A Comparative Study of the Language Choices of Spanish Historians and Psychologists." *Journal of English for Academic Purposes* 14 (2014): 72-83. Print.

Burgess, Sally, and Margaret Cargill. "Using Genre Analysis and Corpus Linguistics to Teach Research Article Writing." *Supporting Research Writing: Roles and Challenges in Multilingual Settings*. Ed. Matarese, Valerie. Cambridge UK: Woodhead Publishing, 2013. 55-71. Print.

Cadman, Kate ed. *Lessons for Onshore Esl from Offshore Scientific Writing Workshops*. Learners from Diverse Cultures: Advancing Australia's Potential. ACTA and ESL Educators National Conference. 20-22 January 2002. Australian Council of TESOL Associations. Print.

——. "Transferable Skills within Research Degrees: A Collaborative Genre-Based Approach to Developing Publication Skills and Its Implications for Research Education." *Teaching in Higher Education* 9.1 (2004): 83-98. Print.

Cargill, Margaret. "Collaborative Interdisciplinary Publication Skills Education: Implementation and Implications in International Science Research Contexts." The University of Adelaide, 2011. Print.

Cargill, Margaret, and Patrick O'Connor. "Developing Chinese Scientists' Skills for Publishing in English: Evaluating Collaborating-Colleague Workshops Based on Genre Analysis." *Journal of English for Academic Purposes* 5.3 (2006): 207-21. Print.

——. "Getting Research Published in English: Towards a Curriculum Design Model for Developing Skills and Enhancing Outcomes." *Revista Canaria de Estudios Ingleses* 53 (2006): 79-94. Print.

——. "Identifying and Addressing Challenges to International Publication Success for Efl Science Researchers: Implementing an Integrated Training Package in China." *Academic Writing in a Second or Foreign Language: Issues and Challenges Facing Esl/Efl Academic Writers in Higher Education Contexts*. Ed. Tang, Ramona. London: Continuum, 2012. 21-44. Print.

——. "Structuring Interdisciplinary Collaboration to Develop Research Students' Skills for Publishing Research Internationally: Lessons from Implementation." *Interdisciplinary Higher Education: Perspectives and Practicalities. International Perspectives on Higher Education Research Volume 5* Eds. Davies, M., M. Devlin and M. Tight. International Perspectives on Higher Education Research. Bingley, UK: Emerald Group Publishing Ltd, 2010. 279-92. Print.

——. *Writing Scientific Research Articles: Strategy and Steps*. 2nd ed. Oxford UK: Wiley-Blackwell, 2013. Print.

——. *Writing Scientific Research Articles: Strategy and Steps*. Oxford UK: Wiley-Blackwell, 2009. Print.

Cargill, Margaret, Patrick O'Connor, and Yongyan Li. "Educating Chinese Scientists to Write for International Journals: Addressing the Divide between Science and Technology Education and English Language Teaching " *English for Specific Purposes* (submitted). Print.

Cargill, Margaret, and Ronald Smernik. "Embedding Publication Skills in Science Research Training: A Writing Group Program Based on Applied Linguistics Frameworks and Facilitated by a Scientist " (under review). Print.

Coffey, B. "Esp - English for Specific Purposes." *Language Teaching: The International Abstracting Journal for Language Teachers and Applied Linguists* 17 (1984): 2-6. Print.

Crissman, James W. "Book Review: Writing Scientific Research Articles: Strategy and Steps." *Veterinary Pathology* 46.5 (2009): 1018. Print.

Ferguson, G. "The Global Spread of English, Scientific Communication and Esp: Questions of Equity, Access and Domain Loss." *Ibérica* 13 (2007): 7-38. Print.

Graddol, David. "The Decline of the Native Speaker." *AILA Review* 13 (1999): 57-68. Print.

Grow, Gerald. "When Journalism Majors Don't Know Grammar: Causes, Considerations, and Approaches." *ASJMC Insights* Spring (2006): 4-12. Print.

Halliday, M.A.K., and R. Hasan. *Language, Context and Text: Aspects of Language in a Social Semiotic Perspective*. Geelong, Australia: Deakin University Press, 1985. Print.

Hyland, Ken. "Specificity Revisited: How Far Should We Go Now?" *English for Specific Purposes* 21 (2002): 385-95. Print.

International Committee of Medical Journal Editors. "Uniform Requirements for Manuscripts Submitted to Biomedical Journals." 2009. Web. 6 March 2010.

Jobling, Malcolm. "Book Review: M. Cargill and P. O'connor, Writing Scientific Research Articles: Strategy and Steps." *Aquaculture International* 18.4 (2009): 705-06. Print.

Li, Yongyan. "'I Have No Time to Find out Where the Sentences Came from; I Just Rebuild Them": A Biochemistry Professor Eliminating Novices' Textual Borrowing." *Journal of Second Language Writing* 21 (2012): 59-70. Print.

——. "'Publish Sci Papers or No Degree': Practices of Chinese Doctoral Supervisors in Response to the Publication Pressure on Science Students " *Asia Pacific Journal of Education* (in press). Print.

Martinez, Iliana A. "Developing Genre Awareness in Non-Native-English-Speaking Writers of Experimental Research Articles: A Collaborative Approach." *Content-Based Instruction in Higher Education Settings*. Eds. Crandall, JoAnn and Dorit Kaufman. Case Studies in Tesol Practice. Alexandria, VA, USA: Teachers of English to Speakers of Other Languages, Inc., 2002. 79-91. Print.

McGrail, Matthew R., Claire M. Rickard, and Rebecca Jones. "Publish or Perish: A Systematic Review of Interventions to Increase Academic Publication Rates." *Higher Education Research and Development* 25.1 (2006): 19-35. Print.

Opie, Jane M. "Practical Help for Beginning Scientific Writers: Review of 'Writing Scientific Research Articles: Strategy and Steps'." *The Write Stuff* 18.4 (2009): 245. Print.

Sugimoto, C.R. , *et al*. "Journal Acceptance Rates: A Cross-Disciplinary Analysis of Variability and Relationships with Journal Measures." *Journal of Informetrics* 7.4 (2013): 897-906. Print.

Swales, John M. *Research Genres: Explorations and Applications*. Cambridge, UK: Cambridge University Press, 2004. Print.

APPENDIX

TABLE A1. CIPSE WORKSHOPS CONDUCTED 2000-2009 AND PUBLICATIONS ANALYSING DATA FROM THEM.

CIPSE Workshop/Publication	TinC 2002[1]	THE 2004[2]	JEAP 2006[3]	Revista 2006[4]	Inter-dis HE[5]	ESP[6]	Issues[7]	DEd thesis[8]
Hanoi 2000	x	x		x				
[9]CAS Beijing/Nanjing 2001	x	x	x	x				
Lanzhou 2002			x	x		x		
CAS Beijing 2003			x	x				
CAS Beijing 2004				x				
Inst. of Botany CAS 2005				x		x		
Uni of La Laguna, Spain 2005				x	x			
[10]GUCAS 2006					x	x		x
Nanjing Uni 2006						x		
Shanghai Uni 2006						x		
GUCAS 2007								x
New Phytologist-Beijing 2007					x	x	x	
One-day workshops in Australia 2001-8		x			x			
GUCAS 2008								x
GUCAS 2009								x
Changchun Institute of Applied Chemistry CAS 2009							x	
China Academy of Engineering Physics 2009							x	
New Phytologist-Kunming 2009							x	

[1] (Cargill Lessons for Onshore Esl from Offshore Scientific Writing Workshops)[2](Cargill "Transferable Skills within Research Degrees: A Collaborative Genre-Based Approach to Developing Publication Skills and Its Implications for Research Education"); [3](Cargill and O'Connor "Developing Chinese Scientists' Skills for Publishing in English: Evaluating Collaborating-Colleague Workshops Based on Genre Analysis"); [4](Cargill and O'Connor "Getting Research Published in English: Towards a Curriculum Design Model for Developing Skills and Enhancing Outcomes"); [5](Cargill and O'Connor "Structuring Interdisciplinary Collaboration to Develop Research Students' Skills for Publishing Research Internationally: Lessons from Implementation"); [6](Cargill, O'Connor and Li); [7](Cargill and O'Connor "Identifying and Addressing Challenges to International Publication Success for Efl Science Researchers: Implementing an Integrated Training Package in China"); [8] (Cargill "Collaborative Interdisciplinary Publication Skills Education: Implementation and Implications in International Science Research Contexts" 132-68);

[9]Chinese Academy of Sciences; [10]Graduate University of the Chinese Academy of Sciences.

THE CONSTRUCTION OF ADDRESSEE IN LAW STUDENTS' WRITING

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Abstract

Successful writing by students is often presumed to be possible only when students have achieved mastery over relevant genres, and genres are described in terms of the relatively stable forms which characterise texts produced for specific purposes in specific social contexts. However, students are often engaged in the successful production of texts prior to gaining mastery. Bakhtin suggests genre is defined by the typical addressee it is directed to. However, for many students the typical addressee is relatively opaque. This paper takes up Bakhtin's concept of dialogism to show how students produce addressee and genre through dialogic responsiveness to the contingent circumstances of their writing. It argues that this process is more critical to successful writing than gaining mastery over typified formulations of addressee and genre.

Key words: Addressivity; Bakhtin; legal writing; second language acquisition; genre; writing subject.

Resumen

Redactar de forma satisfactoria se presume a menudo posible sólo por que los estudiantes han alcanzado maestría sobre los géneros relevantes, y que los géneros se describen en términos de formas relativamente estables que a su vez caracterizan textos producidos para propósitos específicos en determinados contextos sociales. Sin embargo, suelen participar con éxito en la producción de textos antes de obtener la maestría. Bakhtin sugiere que género se define por el destinatario típico a que está dirigido. Sin embargo, para muchos estudiantes el destinatario típico es relativamente opaco. En este trabajo hemos adoptado el concepto Bakhtiniano de dialogismo para mostrar cómo los estudiantes producen tanto el destinatario como el género a través de una respuesta dialógica a las circunstancias contingentes de la redacción. Se sostiene que este proceso es más crítico para la redacción exitosa que para ganar maestría sobre formulaciones tipificadas del destinatario y género.

Palabras clave: Direccionalidad; Bakhtin; redacción jurídica; adquisición de segundas lenguas; género; sujeto que escribe.

INTRODUCTION

Assessing students through written assignments demands not only that they understand the substantive issues they must write about but also that they are capable of communicating their understanding in acceptable ways. Such a capability is often viewed as possible only when a speaker/writer assumes the "ways of behaving, interacting, valuing, thinking, believing, speaking and often reading and writing that are accepted as instantiations of particular roles" associated with the discourses involved (Gee, *Social* viii). That is, producing competent text, whether spoken or written, requires that one has acquired the relevant ways of thinking and being and gained mastery over the linguistic skills that both characterise and produce such roles or ways of being. This includes mastery over micro-levels of grammar to macro-levels of the genre appropriate to the specific social context in which one speaks/writes. In this view, pedagogy thus entails inducting students into appropriate practices and explicitly teaching formal properties of the language and genres involved. Language is therefore both the medium through which one becomes a certain kind of person, and "language-in-use is a tool" which we use "to design and build things" (Gee, *Introduction* 11).

In this paper, however, I wish to focus on genre not as something one masters and reproduces, but as something one engages with. In order to do this I take up Bakhtin's notion of dialogism (*Dialogic*, *Speech*). Bakhtin notes that genres acquire "relatively stable forms" (*Speech* 60) and consequently, that "genres must be fully mastered in order to be manipulated freely" (*Speech* 80), and the understanding that language learning is concerned with precisely acquiring and mastering existing conventions has been taken up by various researchers who draw on Bakhtin (e.g. see contributors to Hall, Vitanova, and Marchenkova). However, Bakhtin's model of language also centres on dialogic processes which ensure both meaning and form are never finalised. A central concept for Bakhtin is the utterance and this places the emphasis not on form but on the active participation of a speaker-listener in the realisation of language in social life. On hearing an utterance one "simultaneously takes an active, responsive attitude towards it" (Bakhtin, *Speech* 68) and in responding one necessarily directs one's own uterance towards an addressee (*Speech* 95). Consequently, "any utterance is a link in a very complexly organised chain of other utterances" (*Speech* 69). Because utterances exist in ongoing, lived activity, the utterance "provides the link between language and life" (*Speech* 63) and constitutes a fundamental feature of language which is irreducible to the syntactic and textual forms through which it is realised. Indeed, for Bakhtin grammatical and generic forms emerge from language as lived practice and in this sense are secondary phenomena, and thus genres, or "typical forms of utterances" (*Speech* 78) themselves derive their force not from the "relatively stable forms" (*Speech* 60) they assume, but from the dialogic processes which gave rise and continue to give rise to them.

In this paper I want to examine evidence for the Bakhtinian view of dialogism in the construction of texts by students. Instead of looking for how dialogism leads to mastery by students over relevant generic forms, the argument here is that the dialogic processes between students and lecturers *produce* the context through

which they are both constituted as participants and this in turn constrains the kind of text produced by the student which will successfully satisfy the demands of that context. That is, to understand the text that emerges and its success we need not measure it against relatively stable conventions but instead observe how such conventions and practices are nuanced and, indeed, made differently through the ongoing, dialogic relationship.

This paper draws on a larger research project which followed a number of international postgraduate law students enrolled in an Australian university through the process of writing research assignments for assessment. They had Bachelor degrees in law from their home countries which, unlike Australia, did not follow the common law system (for further details see Price, *Engagement*). In addition to the system of law being unfamiliar, English was not their first language, and consequently, as remarked by the students, they were struggling to understand an alien legal system they had no background or experience in, which was an expression of a culture they knew little of, and all their efforts at understanding had to be achieved in a language they did not feel very confident about!

The project involved students keeping a journal in which they documented their thoughts and practices as they worked through researching and writing their assignments. Copies of a first draft and final draft of the assignment were submitted to the researcher for analysis, and interviews were held with both the students and their examiner-lecturer after the assignments had been graded. Material from each of these sources is drawn on in this paper. The analysis focuses in particular on the assumed addressee the student texts presuppose and the impact this has on their texts, since for Bakhtin genre is defined by the typical conception of the addressee it is directed to (*Speech* 95). Each of the student essays referred to were very successful (receiving the highest or second highest grade from a spectrum of five grades, the lowest being a fail) and my argument is that this success is not because the students produced texts which conformed closely to the "relatively stable" forms of the relevant genres, since in certain respects they did not. The success is due to the text produced arising out of a dialogic process the student engaged in with their lecturer and text sources, and which resulted in the students producing a text which addressed the addressee produced through this process rather than the more typical but abstract addressee entailed by the typified generic form that is usually taken to characterise the student research assignment.

BAKHTIN ON GENRE AND ADDRESSIVITY

For Bakhtin, even the briefest utterance is unavoidably generic in nature. Although "language is realised in the form of individual concrete utterances by participants in the various areas of human activity" it is "compositional structure" more than linguistic choices (lexical, syntactic etc) that above all reflect the "specific conditions and goals of each such area" (Bakhtin, *Speech* 60). These compositional structures are conventionalised: "each sphere in which language is used develops its own *relatively stable types* of these utterances. These we may call

speech genres" (Bakhtin, *Speech* 60, italics in original translation). The individual who produces an utterance in speech or writing always has a plan or speech will (77) and realizes this through "a generic form in which the utterance will be constructed" (77). "The speaker's speech will is manifested primarily in the *choice of a particular speech genre*" (78). Genre is therefore unavoidable: "all our utterances have definite and relatively stable typical *forms of construction of the whole*." Consequently, "when the speaker's speech plan with all its individuality and subjectivity is applied and adapted to a chosen genre, it is shaped and developed within a certain generic form" (78). In this sense, effective communication is constrained by and presupposes that the writer/speaker grasps the social context in which s/he speaks and has mastery over the relevant generic forms. The critical question, however, is: in what sense are such genres realized (or is communication successful) when the writer does not have mastery over the genre and the context in which they are writing remains clouded for them?

For Bakhtin, the dialogic nature of language operates diachronically. That is, an utterance simultaneously responds to prior texts and anticipates an addressee, and thus, although texts and addressees may appear to be synchronously present the dynamic relationship at work is diachronic. Every utterance lies within a chain of utterances or of communication and this position constrains the potential meaning an utterance has. "Each individual utterance (which a text is) is a link in a chain of communication" (*Speech* 93) and each link contributes to the chain not by virtue of repeating generic form (although it may well do so) but by virtue of it being a response to prior utterances and by addressing an anticipated reader. With respect to the addressee, "from the very beginning , the utterance is constructed while taking into account possible responsive reactions, for whose sake, in essence, it is actually created" (*Speech* 94). This "quality of being addressed to someone" is "an essential (constitutive) marker of the utterance" (*Speech* 95). The chain is held together by the responsiveness and addressivity inherent in the utterances of which it consists. Consequently, while generic forms may become stabilised, and may be imposed upon students, they nevertheless are a *consequence* of and subject to this dialogic dynamic (responsiveness and addressivity) *which persists* in being active.

Because a chain of utterances is in principle non-finite and can always be added to, the meaning of an utterance can never be finalized. Genres then, these "relatively stable types of utterances," are produced historically and my argument here is that these also can never be finalized. The "relative stability" therefore can be viewed as a secondary phenomenon, born of the centripetal forces Bakhtin recognizes in language use but which he suggests are "posited" and not integral to language use itself. Centripetal forces "are the forces used to unify and centralise the verbal-ideological world" but "a unitary language is not something given but is always in essence posited" (Bakhtin, *Dialogic* 270). The dialogic process from which certain forms emerge and which in turn are posited as normative nevertheless allows for the possibility of utterances participating in a chain of communication even when they do not reproduce established generic forms.

We noted above that addressivity is "an essential (constitutive) marker of the utterance" (*Speech* 95) and Bakhtin points out that "the variations and conceptions

of the addressee are determined by that area of human activity and everyday life to which the given utterance is related" (95). Of course, when that area of human activity is relatively opaque to the speaker (eg a student coming to grips with new discursive worlds) they have no clear sense of the "area of human activity" they engage in nor the typical addressee that belongs to it. This is especially so if their access to the area of human activity is mediated wholly by texts and not at all, or minimally, by actual, embodied participation in it. Nevertheless, for Bakhtin "both the composition, and, particularly, the style of the utterance depend on those to whom the utterance is addressed, how the speaker (or writer) senses and imagines his addressees, and the force of their effect on the speaker (or writer)" (95). The dialogic process entails that the addressee one "imagines" will by nuanced by the student writer's own history and interests. Although "each speech genre in each area of speech communication has its own typical conception of the addressee, and this defines it as a genre" (*Speech* 95), I am suggesting that when this "typical conception of the addressee" is not clear to the student, their writing can nevertheless be successful as they *construct* an addressee through responding to resources available (source texts; conversations with lecturers), even though these do not necessarily replicate the "area of human activity" they are being asked to simulate (for example, a lawyer advising a legal client).

It is possible to read Bakhtin as suggesting that to communicate effectively a writer must try and put him or herself into the shoes of another in order to anticipate the response the addressee will make. For Bakhtin, "when constructing my utterance I try actively to determine this response" (*Speech* 95) and this in turn constrains my utterance. Morson takes this view (323) and argues that it is not a matter of dominating or overcoming and thereby destroying the voice of this other (then there can be no dialogue) but instead one must be open to "other" voices (e.g. 326).

This raises an important question. How do we put ourselves in the shoes of an "other" who is unknown to us? To answer that we do so through language misses the important point at stake: how do we engage through language if meaningful utterances in an area of life is possible only when an understanding of that "area of life" has been achieved? How do we approach an "other" and engage in meaningful communication when there is an absence of shared life experiences? How can we possibly place ourselves in the shoes of another if our means of conceptualizing and understanding them is necessarily different from their self-understanding and experience? It is in answer to this question that I next explore the process by which the student writer constructs both themselves and their addressee. Central to this discussion is the idea that the "authoritative discourse" which plays a part in the development of "ideological consciousness" (Bakhtin, *Dialogic* 342) is not a discourse that one must reproduce or obey but instead, a discourse (or its textual representation) one must attend to. Such discourses are plentiful for the student, in terms of both the institutional discourses regulating processes of assessment which demand the student write, and the disciplinary discourses/texts to which they respond in the substance of their assignments.

STUDENT CONSTRUCTION OF ADDRESSEE

I now want to look at the construction by these postgraduate law students of their addressee as revealed by their comments in an interview and by their text. The focus of this discussion is on the way students engage with the resources available to them (their text sources; their lecturers) and it is this *process* of engagement which is placed at the centre, and not how such engagement may facilitate the acquisition of *pre-given* disciplinary practices and generic forms, which, it is sometimes argued, are constitutive of the discourse. That is, the emphasis is on showing the *construction* of the addressee by the students in the course of dialogically engaging with source texts and lecturers and how this in turn gave generic shape to their texts.

While we can happily accept that conventions exist, it is through engagement with them that they take up a place in a chain of communication, not by the reproduction of them. Thus they are always open to variation and adaptation and "being done differently," and thus differences produced even by writers conventionally described as novices can be fully legitimate and not merely aberrations from the norm. The point to emphasise here is that this "being done differently" is in itself no more than a conventional way of speaking. That is, the "sameness" we attribute as present in different instantiations or reproductions of a genre is itself a metadiscursive construction; what is seen as the same is posited by an external discourse rather than determined by empirical properties to be found within the texts. Thus, these centripetal forces deeming (leading to a demand for) "sameness," as already noted, are for Bakhtin not intrinsic to the communicative act.

Freadman points out that a genre (such as providing legal advice for a client) when simulated in the classroom becomes something else (48). That is, the exigence (Miller, "Genre" 30) which sets in motion and gives direction to the genre of "legal advice" is replaced by quite a different exigence for students. As students, their purpose in writing is to fulfil the communicative act the institution requires of them. Their primary concern is no longer to advise a client or provide an analysis of existing law in terms of policy interests, but to demonstrate to the examiner his/her legal understanding, and this clearly impacts on the kind of text they produce. The stakes that produce the genre of legal advice are no longer at stake (Freadman 48). With no experience of the "real life" contexts in which such a genre naturally arises the students' capacity to reproduce the genre is minimal, other than in a merely formulaic manner. Yet there are forces compelling them to attend to, engage with such a genre, even though these are not the same as those which compel a lawyer to attend to and produce such advice. These forces of course are, amongst others, the institutional demand that students produce such a text for assessment. The centrifugal forces at work here threaten to tear apart the typified addressee of such a genre (the client a lawyer addresses) although, as already noted, the students have no or very little sense of who that typified addressee is in the first place. The relative stabilities Bakhtin speaks of, constituting not only the genre and addressee, but we can add, the writer (as student; as lawyer), are all clearly rendered considerably *unstable*. Thus, "attending to" unavoidably predominates over any "reproduction of" and in this respect there always remains a certain open-endedness which

the students must manage. As Lea notes, the precise demands placed on students vary not only from discipline to discipline but from department to department and person to person. For this reason she argues that writing should be understood in its "institutional and epistemological context" rather than in terms of achieving mastery over specific generic forms.

As an example, one student was required in his assignment to provide legal advice to an imaginary client and it was clear from his text that for this student his addressee remained unclear. This was evident in several confusions which satisfied neither the legal world of advising clients nor the institutional world of students writing for assessment. The student fluctuated between addressing the client (using the second person "*you* should") and addressing the lecturer (using the third person "he should" when referring to the client). Similarly, there was confusion over whether or not to cite legal authority (a requirement when writing as a student; not usually included in advice written for a client) and which register to write in (whether to write more formally and use legal jargon to demonstrate to the examiner his grasp of legal concepts and associated terminology) or whether to write in a style which avoided technical legal language with the purpose of ensuring the client clearly understood the advice he was receiving. It is worth noting that the lecturer stated that he had not actually thought about the problem students face as they seek to address both client and lecturer.

Kamler and MacLean follow a cohort of students in order to study how they transition from being a "law student" subject to becoming a "lawyerly" subject in the course of their study. While distinguishing such subject positions is useful, I am suggesting that what counts as a "law student" subject or "lawyerly" subject are themselves not givens but subject always to ongoing dialogic processes. Kamler and MacLean tend to treat both subject types as givens, and so becoming a "lawyerly" subject is a matter of adapting to a subject position already given and identifiable in advance, and the process they describe by which students learn to become such a subject appears to offer no acknowledgement of the experiences and understandings students bring to this process. In addition, achieving such a "lawyerly subject" position would not resolve the problem of writing *at the same moment* for both the client and the examiner. Indeed, this is usually resolved by the examiner instructing students what to do, for example whether to include citations or not, and this of course has force as an utterance only for a *student* subject, further performatively entrenching the "law student" position and diminishing the lawyerly subject!

AN EXAMPLE OF ADDRESSEE CONSTRUCTION THROUGH STUDENT ENGAGEMENT WITH SOURCE TEXTS

In another example we see a student who is motivated by a desire to understand the common law, rather than simply fulfill institutional requirements and obtain a good grade, but she was very much aware of her "lack of background" (a phrase repeated a number of times in an interview with her) in common law practices and the common law system. Although her previous work as a drafter of law

in the parliament of her home country had exposed her to common law examples of legislation which dealt with issues her own country needed to address, her actual exposure to the common law was fundamentally through texts in her work place, and now through formal lectures/seminars in her studies.

Thuy had a conception of what was entailed in being a student from her experience as a student in her own country, but she had also been obliged to attend in Australia, prior to commencing her Master's degree study, a five-week bridging programme which sought to induct her into the academic culture of Australian universities and to provide her with instruction on academic writing. During that course she had been instructed, she said, to write her assignments

> for the professional people. So don't go on the detail, or the issue. You don't have to explain everything. So I just think of that from the first semester, up to now [right]. Write something for the professional people.

Similarly, she was taught that when researching and writing assignments to "do the research, develop an outline" and then "stick to that and start writing." However, she added "it didn't work with me." Significantly, Thuy's attempt to engage with, or acquire a good grasp of the common law system led her away from such instrumental approaches to writing as she sought not simply to fulfil her position as a student but more importantly for her to come to grips with the common law in a way that was meaningful. Thus, having in mind her lack of background knowledge of the common law in general as well as of the specific issues raised within it and which she had to research and address, she stated "I'm not sure what the lecturer expects from us." For this reason, she said, she wrote for "somebody like me" and in this statement she clearly moves away from the "professional addressee" she had been taught she should write for, since Thuy clearly feels she does not know who such a professional addressee might be in this common law context! Thus she included in her essay contextual and background material she needed in order to frame and make sense of issues she was dealing with. Her addressee is not an expert reader but a person who is struggling to understand this legal system and specific areas of law. Her primary concern then is not to present to her reader as an expert or as a writer addressing the requirements of her institutional context. Unlike the student I shall discuss next, who was clearly aware of his reader as "examiner" and mentioned several times that he included specific elements in his assignment to "show the lecturer that I have done research" or that he "looked at contrary views" to show he was being fair, Thuy insisted on quite the opposite. She said that she would have liked more time and words for her assignment, because "I want to go deeper inside." When asked whether this was "to get your position worked out more clearly" or because she wants to show the extent of her reading, she replied "No, I don't want to show, to show off. Yes, I just want to explain it carefully." The sense again here is that the institutional addressee, the examiner, loses significance as she struggles to address the discipline and construct a place for herself within it. Indeed, she adds elsewhere that:

> I didn't know how she assess the assignment. The way she assess it. I didn't sure about the result, but I still feel satisfied with this . . and it doesn't matter how the result is [*laughs*].

The insistence here is on a satisfaction which has nothing, or at least little, to do with meeting the institutional requirement as such and obtaining a good grade. "It doesn't matter what the result is" yet "I still feel satisfied with this" points to the creation of a position for herself through her engagement with her sources which satisfies her even though she has little sense of where this self might be located within the institutional context (how she might be graded as student). Her identification is with this new position (the person also for whom she writes) and not with the "student" satisfying institutional demands and therefore she can say "it doesn't matter how the result is" (in fact, she received the highest mark, a High Distinction).

Of course, she remains a student and is aware she must write for her institutional addressee, the examiner:

> when I write I also show that I understand about what this section means before to evaluate as an issue relate to this topic [mm]. That's shows the teacher what I understand in this course, I guess so" (CL T112).

Nevertheless, the "I guess so" hints at a weak attachment for her to this institutional addressee and the need to speak/write to them in a manner that will elicit an anticipated response (Bakhtin, *Speech* 94).

Thuy reads her source texts with the purpose of constructing herself as a reader of the common law, and thus aims at an addressee who is the ideal reader who understands her completely (the superaddressee for Bakhtin, *Speech* 126) even though this reader is not well-formed for her. This is not a process of becoming a given, typical "lawyerly subject" but of constructing a speaker and addressee whose characteristics remain unknown in advance. In effect she does not *know* who she is becoming, but in allowing herself to be led by the *texts* she engages with she allows an unfolding to take place. Again, this is unlike the student I shall comment on next who appears to have remained unchanged by the process; he remains a pragmatic student instrumentally directed towards managing whatever was relevant to produce the kind of text he believed his institutional addressee—his examiner—wanted, although as I will show who he was as student and who she was as examiner were equally produced through their dialogic encounter.

For Thuy this process entailed being vulnerable since it required her to surrender any present sense of a writing or student self as she allowed herself to be led by the texts she engaged with and for an unknown common law identity and addressee to emerge from that process. An anxiety associated with this which I would suggest was ontological in nature was evident in several comments she made. First of all, she commented in a despairing tone that on a number of occasions where a judgment was called for concerning what to include/exclude, what points to follow up on and so on, she felt she had no bearings and all she could do was "just try."

Secondly, she spoke of "depression" at crucial moments in the writing of both the assignments she was interviewed about, and this affective suffering appeared to be linked to the process of composing her papers. That such a process of becoming had prominence is also suggested by her comment that she had "no great commitment to the position she developed" but she nevertheless felt very satisfied with her achievement. I take this satisfaction to reflect the quality of her *struggle with her texts*, rather than having to do with the quality of her essay with respect to institutional requirements. She still had no idea how her lecturer would read and judge what she had accomplished. In this regard the identity and her alter ego addressee she is creating draw some of their quality from her *engagement with text*, since she has felt during the process and even on completion of her assignment that she still has little sense of position and identity within the broader common law discourse. This satisfaction is not reducible to the discourses and meanings that are perceived to attach to such texts.

In this section I have indicated how a student constructed a sense of self and an addressee from her engagement with relevant texts, but their place within the broader common law discourse remains unclear to her, as evident from her statements, not only to the effect that she doesn't know how her examiner will read her text, but also that she doesn't really care, not because she is indifferent but because her encounter with her texts has already enabled the emergence of an addressee who provides an anticipated response. But it is critical to insist here that this addressee is not the product of a narcissistic subject but of a subject who has opened herself to the "otherness" of the texts she encountered. In my view this suggests that texts are not solely mediators of discourse but also contribute to the process of subject formation in ways not reducible to discourse.

AN EXAMPLE OF ADDRESSEE CONSTRUCTION THROUGH STUDENT ENGAGEMENT WITH LECTURER-EXAMINER

In this section I discuss the effects of a student's encounter with his lecturer on the text he produced and the addressee he wrote for. The 134 word introduction to Narin's 4,000 word "Law of the Internet" essay reads as follows (P2P refers to "person-to-person"):

> This paper will discuss the statement of Bowrey with following steps. Firstly, this paper will explain generally the operation of P2P file sharing network. Secondly, I will look at the existing law which is a legal constraint regulating P2P file sharing. Thirdly, I will describe why P2P file sharing has been used widely, which makes the music industry has to respond in order to protect their interest. Next part of this paper will discuss the case in the U.S and Australia. In this part, this paper will show how the court in the U.S and Australia deal with applying copyright laws with P2P file sharing networks. Finally, this paper will discuss the consequence of the litigation against P2P file sharing distributors and determine whether the courts have the consistent view with Bowrey or not.

The first striking feature is the brevity of the introduction, and then its content, which consists solely of an outline of what the essay will do. This is not a typical "introduction" to such a research essay, as described by Swales and Feak (24); also Swales. For Swales and Feak, the introduction of a research paper typically consists of three moves: "establishing the territory"; "establishing a niche"; "occupying the niche." The *structure* of this introduction presupposes a reader of a very particular kind. In following only the third move Swales and Feak outline, Narin implies a specific view about what his addressee needs to know.

We can read the structuring of this introduction in light of his encounters with his lecturer, with his addressee being constructed from these experiences. Narin contacted his lecturer in order to confirm he was interpreting the question appropriately and to seek further advice. He met her face to face on two occasions where the lecturer was able to direct Narin in a number of ways. The lecturer commented that

> I actually remember him very well which is unusual because um, this subject is taught entirely on-line and so often I don't get to see, or talk to the students at all, but he actually came to see me, at least once, I think it is probably more like twice. So I spoke to him. So it was unusual in the sense that I had more contact with him than I have with the majority of students that do this subject.

It is clear from further comments she made that when assessing his final text she had in mind these meetings and was continuing the dialogue that came out of them. She said it was clear he was "genuinely trying to do what was being asked of him" even if not always successfully, but his effort pleased her. Narin too, in explanations he gave for features of his text and in reading the comments his lecturer made on his final draft, refers to these conversations he had with her. It is quite clear that the dialogue extends beyond the face to face meetings to the writing of his text and the assessment of it. Both can be said in this sense to be engaged in a "rhythmning" that Taylor (172) speaks of through which the *rules* of Narin's writing are being constructed.

The concrete engagement Narin has with his lecturer produces a context within which a sense of what is called for arises. He writes to that context, and his lecturer's comments, on his text and in an interview later about this text, suggests she shares this context when reading his text. He writes for a particular addressee which in this context his reader identifies with. This is an addressee who knows the task he is dealing with (she set it, and they have talked about it together). What she does not know, however, is the structure and development he will give to his text, and so this he outlines. In this respect his text is another turn in the discussions he has already had with his lecturer. In this way Narin narrows the community for whom his text is written (Martin and Rose 305) limiting it to his lecturer and himself, a community which his lecturer in fact perpetuates in the way she responds to his text.

There is then a shifting in Narin's positioning on the concrete-typified spectrum within which he writes, which demonstrates that context itself is very fluid, as indeed Widdowson suggests in his critique of linguistic perspectives that treat "context" as something given, and which Maybin foregrounds in her argument

for the situated and hence constructed nature of context. This sometimes facilitates an approximation towards more typified "disciplinary" practices (the practices of a "lawyerly subject" as Kamler and MacLean put it) and other times towards the more immediate, concretely-experienced world the student is writing within which nuances greatly the form the genre takes.

This addressee may not be clearly conceived as such by Narin, of course, but the structuring of this introduction does not come from nowhere. Bakhtin states that a genre has "its own typical conception of the addressee, and this defines it as a genre" (*Speech* 95), and certainly Narin shows some recognition of this typified addressee in the very act of writing an introduction for his text. But a typified addressee is rather abstract. Miller suggests that "for the student, genres serve as keys to understanding how to participate in the actions of a community" ("Rhetorical" 57) since they mediate between the micro level of language processing and the macro level of culture ("Rhetorical" 68). But the application of an abstract formulation on a particular occasion always entails some uncertainty, argues Taylor (176-7); see also Derrida (961) and at such a point the rule has to be constituted, which goes beyond the instancing Miller speaks of. It is such a construction that I suggest Narin is engaged in, *through* the relationship with his lecturer and to which his lecturer contributes. This dialogic process ultimately sustains what *counts* as an instance of a given genre.

It is worth noting that the lecturer-examiner, on re-reading Narin's text six months later, expressed some surprise and said she felt she had been overly generous in the grade she awarded, although she then began to find reasons why perhaps she had not been! She was of course now reading his text in a context that was considerably removed from the context Narin and she had co-constructed through their interactions and so she now read his text differently.

CONCLUSION

These findings suggest that the production of successful text by students is not wholly dependent upon the extent to which they conform to existing, "relatively stable" forms. It is true that the exercise of power may result in certain "rules" being imposed, but these are not integral to the process of engaging satisfactorily with and hence in a genre. Such rules are contingent impositions, part of the centripetal forces which are always present, in Bakhtin's view, yet at the same time never inherent in the language process itself. For Bakhtin, the communicative effectiveness is hinged along an axis of responding and addressing which introduces a "semantic openness" and exposes the "unfinishedness and the inexhaustibility" that issues from dialogic interaction (Bakhtin, *Dialogic* 346). It is therefore a process of engaging or attending to which is operative, rather than learning to conform to and reproduce given forms and practices. Thus I argue against the view that dialogism is a means of understanding how learners come to acquire existing conventions, or "stable genres." Instead of viewing dialogism as a tool which makes facilitates the acquisition by students of a language, genres and discourses with their stabilized and characteristic forms, it is better viewed as a process with ontological status, that

is, as bringing into being again and again language, genres and discourse, each of which have no existence beyond their instantiation on each occasion (see Price). The emphasis on reproducing existing forms and practices is essentially a socially conservative view of discourse and genre, whereas a dialogic approach opens the door always for change, including through the contribution learners may bring. In a parallel way we can argue that speakers and writers in English, but for whom English is not the primary language, also participate in this dynamic, and understanding this dynamic is more important than understanding how such speakers can learn to conform to relatively stable practices already in place. I have argued this process underpins the production of competent text by students, but we can extend this argument to other domains, such as publishing research.

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WORKS CITED

Bakhtin, M.M. *The Dialogic Imagination: Four Essays*. Austin: The U of Texas P, 1981.

——.*Speech Genres and Other Late Essays*. Austin: The U of Texas P, 1986. Print.

Derrida, J. "The Force of Law: The Mystical Foundations of Authority." *Cordoza Law Review* 11 (1990): 920-1046. Print.

Freadman, A. "Anyone for Tennis?" *Genre and the New Rhetoric*. Ed. A Freedman and P. Medway. London: Taylor and Francis, 1994. 37-56. Print.

Freedman, A. and P. Medway, eds. *Genre and the New Rhetoric*. London: Taylor and Francis, 1994. Print.

Gee, J.P. *An Introduction to Discourse Analysis*. Oxford: Routledge, 2005. Print.

——.*Social Linguistics and Literacies: Ideology in Discourse*. London: Taylor and Francis, 1996. Print.

Hall, J.K., G. Vitanova, and L. Marchenkova, eds. *Dialogue with Bakhtin on Second and Foreign Language Learning*. Mahwah: Lawrence Erlbaum, 2005. Print.

Kamler, B. and R. MacLean, R. "You Can't Just Go to Court and Move Your Body: First-year Students Learn to Write and Speak the Law." *Law, Text, Culture* 3 (1996): 176-209. Print.

Lea, M. "'Communities of Practice' in Higher Education: Useful Heuristic or Educational Model?" *Beyond Communities of Practice*. Ed. D. Barton and K. Tusting. Cambridge: Cambridge UP, 2005. 180-197. Print

Martin, J.R. and D. Rose. *Working with Discourse: Meaning beyond the Clause*. London: Continuum, 2007. Print.

Maybin, J. "The New Literacy Studies: Context, Intertextuality and Discourse." *Situated Literacy: Reading and Writing in Context*. Ed. D. Barton, M. Hamilton, and R. Ivanic. London: Routledge, 2005. 195-206. Print.

Miller, C. "Genre as Social Action." *Genre and the New Rhetoric*. Ed. A Freedman and P. Medway. London: Taylor and Francis, 1994. 20-36. Print.

——."Rhetorical Community: The Cultural Basis of Genre." *Genre and the New Rhetoric*. Ed. A. Freedman and P. Medway. London: Taylor and Francis, 1994. 57-66. Print.

Morson, G.S. "The Process of Ideological Becoming." *Bakhtinian Perspectives on Language, Literacy and Learning*. Ed. Aretha F. Ball and Sarah Warshauer Freedman. Cambridge: Cambridge UP, 2004. 315-332. Print.

Price, S. "Critical Discourse Analysis: Discourse Acquisition and Discourse Practices." *TESOL Quarterly* 33.3 (1999): 581-595. Print.

——.*Engagement with Legal Discourse in an Australian University By International Postgraduate Law Students From Non-Common Law And Non-English Speaking Backgrounds*. Diss. University of Technology, Sydney. 10 Oct. 2013. Web. <http://trove.nla.gov.au/work/180021982?l-format=Thesis&sortby=dateDesc&q=Price%2C+Stephen&l-availability=y&l-australian=y&c=book&versionId=195955183>.

Prior, P. *Writing/Disciplinarity: A Sociohistoric Account of Literate Activity in the Academy*. Mahwah: Larence Erlbaum, 1998. Print.

Swales, John M. *Genre Analysis: English in Academic and Research Settings*. Cambridge: Cambridge UP, 1990. Print.

Swales, J.M. and C.B. Feak. *Academic Writing for Graduate Students*. Ann Arbor: The U of Michigan P, 2004. Print.

Taylor, Charles. *Philosophical Arguments*. Cambridge: Harvard UP, 1995. Print.

Widdowson, H.G. *Text, Context, Pretext: Critical Issues in Discourse Analysis*. Oxford: Blackwell, 2004. Print.

ACADEMIC NETWORKING FACE-TO-FACE: WHAT IT LOOKS LIKE AND WHAT IT CAN TELL US ABOUT RESEARCH COLLABORATION

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Abstract

This paper draws on the tools of conversation analysis and network theory to investigate how academic networking takes place face-to-face in academic presentations. An analysis of 176 presentations made to interdisciplinary peer audiences by early-career scholars participating in an EU-funded postdoctoral programme reveals five functions of mentioning individual audience members (procedural, deictic anchoring of examples, contextualizing, co-membershipping, 'fishing' for research collaboration); it also highlights typical patterns of intertextual chaining. The study documents variation in the use of individual mentions by scholars from different disciplines; it also shows that the order in which scholars present influences the chances of their being mentioned by others. A follow-up questionnaire designed to probe how the patterns identified relate to subsequent collaboration shows that the scholars who mentioned others were more likely to maintain contact and co-author with members of their cohort. Implications of the study for a better understanding of the dynamics of research collaboration and for training for academic practice are briefly discussed.

Key words: academic presentations, academic publishing, audience mention, research collaboration, co-authoring, conversation analysis, network theory, macro-micro link.

Resumen

Este trabajo se basa en las herramientas de análisis de la conversación y la teoría de redes para investigar cómo se realizan las redes académicas en la interacción cara a cara en presentaciones científicas. Un análisis de 176 exposiciones presentadas a un público interdisciplinario de investigadores por pares al principio de su carrera participando en un programa postdoctoral europeo reveló cinco funciones de mencionar miembros individuales del público (procesal, anclaje deíctico de ejemplos, contextualizar, establecer co-afiliación, 'cazar' colaboración investigadora); también se destacan patrones típicos de encadenamiento intertextual. El estudio documenta una variación en el uso de menciones individuales por estudiosos de diversas disciplinas; también muestra que el orden en que los investigadores exponen influye en las posibilidades de ser mencionado por otros. Un cuestionario de seguimiento diseñado para sondear cómo se relacionan los patrones identificados con colaboración posterior muestra que los investigadores que mencionaron otros eran más propensos a mantener contacto y colaborar como co-autores con miembros de su cohorte. Implicaciones del estudio para una

mejor comprensión de la dinámica de colaboración de investigación y capacitación para la práctica académica serán tratadas brevemente.

Palabras clave: Palabras clave: presentaciones académicas, publicaciones académicas, mención de audiencia, colaboración en investigación, co-autoría, análisis de conversación, teoría de redes, eslabón macro-micro.

1. INTRODUCTION

In recent years, the constructivist turn in the social sciences has increasingly emphasized the role of face-to-face interaction in the creation and circulation of scientific knowledge. Evidence of this attention to social processes in academia can be found in studies carried out from diverse disciplinary perspectives, including bibliometrics, research policy, network theory, and research on academic writing.[1] Of particular interest to the focus of the current contribution is recent work that brings together insights from these latter two strands of research within an academic literacies perspective. Curry and Lillis, for instance, underline the importance of understanding how academics actually enter into and consolidate research networks. Citing data from their longitudinal study of publishing by 50 scholars from four different European countries, the two authors stress the importance of face-to-face contact: their informants repeatedly indicated face-to-face interaction at conferences, seminars and research meetings as an important catalyst in establishing and maintaining research contacts (Lillis and Curry). These results are in line with those of several earlier interview-based studies on research collaboration carried out in other contexts (Liberman and Wolf; Melin; also see Laudel, qtd. Wagner and Leydesdorff; Coromina et al.). Investigating the practices through which scholars seek out like-minded others face-to-face would thus appear useful to understanding how research and publishing networks are established and maintained. The present analysis investigates what I hypothesize constitutes a key interactional resource for doing academic networking: the individual mention, in the course of academic presentations, of specific audience members.

Given its interdisciplinary focus, the study draws on theoretical frameworks, methodological tools and research results from three distinct lines of inquiry: conversation analysis (which takes as its starting point the view that the close study of talk-in-interaction can uncover participants' orientations towards the social events in which they are engaged); network theory (which investigates how social relationships can be characterized in terms of the interpersonal ties that individuals establish and maintain with others); and research on academic writing and publishing (which has documented the existence of disciplinary variation in co-authoring and modes of

[1] For representative work in the first three fields relevant to the present contribution, see Carolan and Natriello; Defazio et al.; Katz and Martin; Moody; Wagner and Leydesdorff. For examples of work on academic writing focusing on social aspects of the writing/publishing process, see Burrough-Boenisch; Ferenz; Li and Flowerdew; Lillis and Curry.

research collaboration). These complementary perspectives are used to investigate the practices of several different groups of individuals engaged, in the same setting and in similar conditions, in the production of an ad hoc academic genre geared specifically to fostering research collaboration. The data examined are of two types:

1. A primary data set consisting in 176 oral presentations made by four cohorts of fellowship holders at the beginning of a one-year post-doc period with the express aim of familiarizing each other with their respective lines of research and establishing possible research links;

2. A follow-up questionnaire with the scholars in question after they left the post-doctoral programme, in which they were asked to detail any ongoing research and publishing collaboration with other members of their cohort.

Based on a formal and sequential analysis of the presentations from a conversational analytic perspective (integrated with a quantitative analysis, where appropriate), I describe the functions to which individual mention is put in the context examined, the dynamics to which it is subject, and variation in its use among scholars from four different disciplines. The goal of this analysis is to identify how the deployment of this interactional resource relates to stable and evolving aspects of the local discourse context—specifically, to the disciplinary membership of participants and the order in which they present their work. In analysing the questionnaire data, instead, I draw on some basic concepts from network theory—specifically, the notions of strength/intensity of network ties and of network density—in order to assess to what extent mentioning audience members foreshadows subsequent research collaboration. Here, as with the presentation data, recent work on disciplinary variation in academic collaboration constitutes the main backdrop to my discussion of the results.

The paper is structured as follows. Section 2 contextualizes the study by highlighting why, in analysing oral presentations, the audience needs to be viewed as an interactional resource—in other words, as a constitutive feature of the genre. Section 3 introduces the data and methodology used. Section 4 illustrates the principal uses to which mention of audience members is put. Section 5 explores the dynamics of individual mention in the four cohorts, with particular reference to how participants draw on previous presentations to create characteristic patterns of intertextual chaining. Section 6 discusses disciplinary differences in the use of individual mentions. Section 7 discusses patterns of post-programme research collaboration among the scholars in question, distinguishing between those who mentioned audience members and those who did not; on the basis of the results obtained, some brief considerations about what the analysis of oral interaction can and cannot contribute to attempts to bridge the well-known micro-macro gap in studies on social interaction are advanced. The paper concludes with a brief reflection on the implications of the results for an understanding of how scholars interact in international academia and, in applied terms, for the teaching of academic English and for the management of institutional practices designed to foster research collaboration.

2. AUDIENCE AS INTERACTIONAL RESOURCE

Contributions from various disciplines (for a useful overview, see Rendle-Short) have shown that in academic presentations the audience is an interactional resource towards which speakers are constantly orienting as they structure a discourse which is only apparently monologic. The co-presence of speaker and audience in a shared physical space has a pervasive impact on all levels—from bodily orientation and the use of gaze and gesture, to dynamic processes such as pacing and the staging of information. The audience's presence can also be exploited overtly by referring to or addressing it directly. Such audience mention can be either collective or individual and creates specific contextual effects.

"Collective mention" of the audience as a group with particular characteristics can help render certain information particularly salient. The following two examples illustrate some ways in which "membership categorization" (Sacks) of the audience can occur.[2] In example 1, the audience is invited to sit up and listen by casting it in a role (that of "consumers") that is also shared by the speaker: [3]

(1) Now what I want to focus on is enforcement of competition policy by damage actions (.) brought by individuals, consumers <u>like you and me</u>, harmed by the anticompetitive behaviour and brought before the court. (B-08)

In example 2, instead, collective mention is used to partition the audience into different types of listeners—here, experts and non-experts—thus making different types of listening behaviour relevant for different members of the group:

(2) During my PhD I mainly focused on international trade and also on economic geography and political economics. But I did all this emphasising the role of firm productivity heterogeneity. So I know that <u>for those of you who are not economists</u> that doesn't mean something, so I will try to just explain this in a few words. (C-07)

"Mention of individual audience members" also creates contextual effects. These arise, as will be illustrated below, from the speaker's projecting a tie of some sort between him/herself and the person mentioned. Because the act of mentioning takes place in a public space, what is at issue is not simply the existence or establishment of some sort of relationship between two individuals: whoever is present in

[2] For a more detailed study of how membership categorization takes place in this setting, see Anderson ("'Internationality'").

[3] All examples, here and elsewhere in the paper, are taken from the corpus analysed. The transcriptions are verbatim, but details about mode of enunciation and timing have not been noted unless directly relevant to the point under discussion. Conventions: (.) = pause; text- = syllable cut short; <u>text</u> = extra stress or deliberate enunciation; (XXX) = recording unclear; ((text)) = non-verbal activity or transcriber's comment.

the context is invited to take note of possible connections between the speaker and the individual mentioned. It thus appears legitimate to assume that acts of mention of "present others" in oral presentations possess a potential for setting up socially relevant connections.

In order to operationalize the investigation of such contextual effects, the current study addresses the following questions:

1. What functions of individual mention can be identified in the data?
2. Who mentions whom? More specifically:
   2a. What are the dynamics of individual mention? Does order of presentation (whether one speaks earlier or later) have an impact?
   2b. To what extent do disciplinary membership and affinities between disciplines come into play?
3. What correlations, if any, are there between patterns of individual mention and patterns of post-programme research collaboration between presenters and audience members, as evidenced by responses to the post-programme questionnaire?
4. How do the patterns of individual mention and modes of research collaboration identified relate to previous findings about disciplinary variation in academic collaboration and publishing?

The following section describes the data sets and methodology used in this study to investigate the above questions.

3. DATA AND METHODOLOGY

The primary data set utilized consists in 176 video-recorded presentations of 12-15 minutes in length[4] made by holders of one-year fellowships at the Max Weber post-doctoral programme, located at the European University Institute, Florence.[5] The initiative in question is the largest post-doctoral programme in the social sciences in Europe and is funded by the European Commission. The fellows come from a wide range of geographical and linguistic backgrounds and represent

[4] In total 183 presentations were recorded; for technical reasons seven have been excluded from the present analysis.

[5] I would like to thank Ramon Marimon (at the time of recording, director) and Karin Tilmans, (coordinator) of the Max Weber Programme, for providing me with the opportunity to observe this unique community of international scholars in action; Nicky Owtram (head of the EUI Language Centre) and Nicki Hargreaves (member of the EUI English Unit) for useful discussions about the materials and the broader institutional context; Letizia Cirillo (with whom I am currently conducting research on talk by international scholars in multidisciplinary contexts) for support in the transcription and analysis of the data presented in this paper. Any errors or omissions remain my sole responsibility.

four broad disciplinary areas: economics, history, law and social and political sciences (henceforth, ECO, HIS, LAW, SPS). The data were collected over a four-year period; the following table summarizes the disciplinary backgrounds of the fellows in the four cohorts considered in the present study:

TABLE 1.

COHORT	ECONOMICS	HISTORY	LAW	POLITICAL & SOCIAL SCIENCES	TOTAL
A	9	10	10	11	40
B	11	11	10	15	47
C	11	10	8	17	46
D	8	12	8	15	43
total	39	43	36	58	176

The presentations analysed took place on 5-6 consecutive weekdays at the beginning of the fellowship period. In addition to the other fellows in the cohort, the audience typically included one or more supervisors (professors from the various departments), the director, coordinator and one or more members of the programme staff. All four cohorts received the same instructions, and in each session presenters from different disciplinary backgrounds were deliberately mixed. The presentations were video-recorded using a digital video-recorder on a fixed tripod, positioned approximately in the centre of the audience. Recording was carried out for both research and training purposes, and all speakers received pedagogic feedback on their presentations from EAP professionals.

For the purposes of the present study, the videos were viewed separately by two analysts in order to identify all cases of reference to or address of individual audience members. This process led to the identification of 160 instances of individual mentions (henceforth also referred to as "acts of mention" or, simply, "mentions"), of which 146 were mentions of other fellows and 14 of other audience members.[6] These mentions were transcribed, together with the immediately preceding and following segments of talk, and were subsequently entered into a database containing details about both the presenters' background (discipline, native language, country of PhD)[7] and the presentations themselves (duration, sequential order). For each mention, two pieces of information about the referred-to audience member were also recorded: his/her disciplinary affiliation and, for those who were also speakers (i.e. the fellows), the sequential position of his/her presentation. The following

[6] All 160 cases were considered in developing the typology of functions of individual mention presented in Section 4. Because the focus on the study is specifically on the patterns and dynamics of audience mention and its links with research collaboration among academic peers, in rest of the article only mentions of other fellows are considered.

[7] To protect their anonymity, all identifying information about the participants has been deleted in the examples presented.

formal and sequential characteristics considered relevant to pinpointing patterns in the corpus were also recorded: whether the audience member was referred to by name or name plus surname, by reference to the position and/or content of his/her presentation, by citing his/her exact words;[8] whether the mention in question was isolated or part of an intertextual "chain" or other recognisable discourse structure.

Drawing on an analysis of the above information, each case of individual mention was then categorized in functional terms. In line with the conversational analytic perspective adopted, this categorization was carried out on the basis of repeated reviewing of the data in order to take all relevant formal and sequential features into account; the five categories identified in this way are described and illustrated in section 4, below. After entering into the database the primary function of each mention, an analysis of the dynamics of individual mention and of the role that disciplinary membership plays in determining who mentions whom was then carried out; the procedures used for these two analyses are described directly in the respective results sections (sections 5 and 6).

The second data set consists in the responses provided by the presenters to three questions about post-programme collaboration with other members of the same cohort. These questions were included in a more extensive survey about post-programme research and publishing by the scholars in question administered by E-mail approximately 1 ½ years after the last of the four cohorts exited the programme. The questions regarded (i) co-authoring, (ii) participation in joint research projects, and (iii) other research-related collaboration, such as organisation of workshops or conference panels, participation in teaching exchanges, etc. The responses to these questions by respondents who had and had not mentioned other fellows in the audience during their presentations were compared in order to identify possible links between how the speakers interacted with an interdisciplinary peer audience and subsequent patterns of research collaboration. Details about the analysis, which drew on the network theory concepts of intensity and density to investigate the research collaboration ties maintained by participants in the study, are presented in section 7, together with the results.

4. FUNCTIONS OF INDIVIDUAL MENTION IN THE DATA

The analysis of the 160 cases of individual mention revealed two broad categories: mentions which included no reference to the contents of the mentioned audience member's research (57 cases; 35.6%) and content-based mentions highlighting some aspect of his/her research topic or methodology (103 cases; 64.4%).

[8] Although not the central focus in the current analysis, of direct relevance to the present contribution is work in the conversation analysis tradition on the distinction between naming and so-called recognitional reference: see Sacks and Schegloff; Schegloff; and the volume on person reference edited by Enfield and Stivers).

The mentions belonging to the former category have two distinct functions: *procedural* (i.e. they serve to instantiate "oral presentations" as a conventional discourse genre) and *deictic* (i.e. they are used to anchor examples in the situational context, thus bringing them alive for the target listeners). Audience members mentioned with these two functions included both other fellows (43 mentions) and departmental supervisors and members of the programme staff (14 mentions).

The mentions in the second category, i.e. those regarding audience members' research topics or methodology, can be functionally distinguished into three types, broadly positioned along a gradient of intensity of interest expressed in the mentioned audience member's area of research. *Contextualizing mentions* are those in which reference to the contents of presentations by previous speakers basically serves to create a shared context of reference. With the term "*co-membershipping*," instead, I will refer to those mentions in which presenters claim that they and the audience member indicated share some relevant characteristic(s) and therefore belong to a particular category. Finally, "*fishing*" will be used to refer to the third and most explicit type of content-based mention, in which the possibility of future research collaborations is projected by indicating overlaps in research topics or by explicitly declaring an interest in collaborating. In the data examined, individual mentions with these three functions involve only other fellows, not other members of the audience.

The five functions in question are briefly described and illustrated below.

4.1. Non content-related mentions of individual audience members

4.1.1. Procedural

The procedural mentions of individual audience members identified in the data (32 occurrences; 20% of all mentions) are highly routinized and conventional. They are located in two positions: at the beginning of the presentations and in the question-answer sessions. In both positions they serve to ensure the smooth functioning of the discourse genre "oral presentation."

In initial position procedural mentions include politeness moves such as thanking the chair for the floor (examples 3-4) and acknowledging the presence of the presenter's departmental supervisor (examples 5-6):[9]

(3) Thank you very much NAME/CHAIR. Thank you all for being here today. (A-09)

[9] The term "mentor" is used in this context to refer to the faculty member who acts as a reference point for a fellow during his/her stay. Again to preserve the anonymity of both speakers and audience members (see footnote 3, above), disciplinary affiliations have only been indicated when considered relevant to the analysis.

(4) Merci NAME/CHAIR.[10] Thank you everybody for coming. (D-15)

(5) My name is NAME-SURNAME and I'm affiliated here with the department of economics and I would like to welcome also my mentor, professor NAME-SURNAME/SUPERVISOR. I'm going to talk today a bit about my work, about my experience, about my general research, and finally about my research agenda concerning my stay at the EUI. (A-34)

(6) So good afternoon everybody and let me say first welcome to one of my two mentors, NAME-SURNAME/SUPERVISOR. What you see on the screen is the title of my new research, but first of all I would like to speak about my educational background. (A-35)

They also include passing references to other presenters in the same session, as illustrated by examples 7 and 8, in which the speaker refers—respectively—to the preceding and following speakers:[11]

(7) There is a piece of paper that's coming around, which is (XXX) what I'm gonna talk about. So I have the duty and honour of closing the first day with a topic which is not as exciting as popular music in Yugoslavia [reference to D-06], but is about my research which is on the implementation mechanisms for competition policy. (D-07)

(8) Okay. Well, thank you. I think I've met most of you by now. Like NAME/A-18 and other panellists in this session I've the fortune of having already been here for a year and I'll just present you with what I've come up so far and what I will do next. (A-17)

The data even contain instances in which presenters apparently felt obliged to mention a colleague in the audience for no other reason than the simple fact that he/she had originally been scheduled to speak. Example 9 contains a mention of this sort (alongside direct address of four (unspecified) members of the audience) and once again illustrates the importance of politeness considerations in the opening sections of presentations:

(9) Uhm thank you everyone for coming. First of all I'd like to apologize for the last minute change in schedule and uh thank you NAME/C-48 ((waves)) I know that at least four of you were probably expecting to see him today and

[10] The chair of this section was a native speaker of French; the presenter was not.

[11] As example 7 illustrates, procedural mention can draw on intertextuality as a resource, as do some instances of "fishing" and one of the two modes of "co-membershipping" described in section 4.4. For the operational criteria used to distinguish "core" intertextual mentions from these derivative uses, see section 4.3.

would prefer to see him today and you'll have to put up with me for about twelve minutes. So the uhm I'm a microeconomist by training. (C-26)

Individual mentions in question-answer sessions also help "oil" the interactional machinery. Here they are used to show appreciation of the interest expressed by the questioner. When questions have been collected from the floor, such mentions also serve a tracking function by helping to signal which question the presenter is about to answer (e.g. "And about NAME's question (D-33); "And as to NAME's comments" (D-27)).

4.1.2. Deictic anchoring of examples

A second function of mentions of individual audience members is to "animate" examples designed to illustrate ideas and concepts by anchoring them deictically in the ongoing context of interaction. Although occasionally presented as authentic (example 10), such examples are usually framed as hypothetical (examples 11-12). In the latter case any member of the audience could presumably be mentioned. In practice, however, speakers tend to refer to individuals who are easily identifiable. These include fellows who have just spoken or are about to speak, members of the programme staff, or members of their own department:

(10) Consciously or unconsciously we compare prices of the same product. For example NAME/SPS-A-33 two days ago she bought sheets for her bed finally. And she paid thirty euro. So I asked and said oh, you could wait and I could bring you from Poland for half the price ((laughter)). But she said to me, listen in India I could buy forty sheets for this price ((laughter)). (ECO-A-34)

(11) Consumers are different in terms of how rich they are okay? How much they're willing to pay for a good, depending on how much money they have. But they're also different in their cost characteristics. (.) Assume I uhm ((sighs)) (.) I want to teach a student how to speak English, well this student can be very talented and he'll need less effort, a few hours of education uh: ((laughs)) (.) like NAME/ECO-B-40 ((laughs)) well it's a long story. (.) Other student can be (.) a student, can be actually very slow like me, and it takes so much effort to uh have me speaking English. (ECO-B-13)

(12) Human rights apply in relationships between private parties, for example between myself and NAME/STAFF or for example if I slept with NAME/STAFF (SAME), it could be a human offence. (LAW-C-29)

Occasionally, however, audience members appear to be chosen because some stable characteristic they possess is pertinent to the point being made. This is the

case in the following example, in which mention of the programme director is used to explain the presenter's work on team organization (example 13):

(13) So the one on organizing teams. Uhm essentially what I'm interested in is, imagine that there's a group of us and someone uhm NAME/STAFF has to organize us into a group so that we're the most productive right? And he's got a limited number of resources so he can create a link say between me and NAME/SPS-C-27 and between me and NAME/ECO-C-48 or- and via- using these links he creates different organizations, so different structures. So if I have a link with NAME/SPS-C-27 there are complementarities we both enjoy which bring us to produce more. (ECO-C-26)

Whether drawing on situational information or on stable characteristics of individuals to ensure recognisability, the mention of a member of the audience seems designed to bring alive the example by increasing its relevance/pertinence to listeners. In all, 25 mentions (15.6% of the occurrences in the data) belong to this category.

4.2. Content-oriented mentions of individual audience members

4.2.1. Contextualizing mentions

Mentions have been categorised as "contextualizing mentions" for the purposes of the present analysis, when their core use is to highlight connections between the content of the speaker's presentation and those of others without explicitly affirming a convergence of interests. Such connections usually regard research topics or theoretical perspectives (examples 14, 15, 16), but can also concern commonalities in terms of methodology (example 17). These mentions (36 cases; 22.5% of the total) are usually explicit. Where other fellows are not mentioned by name, they are identified in terms of time and space coordinates that are accessible to the audience (e.g. use of "yesterday" in example 16). Stivers calls the latter type of recognitional descriptors "in theknow reference forms," and argues that they serve to make visible a shared context of reference:

(14) This kind of issue is studied in a very well-known work (XXX) in economics, which is the complete market model, which NAME/ECO-A-13 talked-introduced a few days ago. (ECO-A-26)

(15) Especially as NAME/SPS-B-44 said, as the process of ageing which is affecting very much this system. (ECO-B-45)

(16) So we talked about game theory already yesterday [reference to ECO-D-06] (ECO-D-11)

(17) So, I'm happy, following the presentation of NAME/SPS-B-14, she already talked about how important the data are. (ECO-B-15)

The content-based ties included in this category usually invoke broad affinities in research topic. However, they can also serve to bridge rather divergent interests: in example 18, for instance, a historian frames her choice of wording through reference to the notion of "branding" introduced by a sociologist in a previous session:

(18) Sachen-Masoch is most known as the so-called founding father of masochism. So we have, using NAME/SPS-B-21's term, we have a brand. (HIS-B-28)

4.2.2. "Co-membershipping"

Co-membershipping through individual mention draws on a variety of resources to achieve its effects. Although a relatively limited phenomenon in the data (12 cases, 7.5 % of all mentions), mentions of this sort are particularly interesting. Presenters can highlight stable personal characteristics they share with audience members (e.g. educational background in example 19; marital status in example 20) or they can invoke ad hoc categories to which they claim both they and the audience member belong (the category of "Max Weber fans coming out of the closet" in example 21). While co-membershipping on the basis of stable personal characteristics may be presented as grounded in prior knowledge about the audience member, it is usually justified intertextually; ad hoc categories are likewise invoked by referring to the content of the person's presentation or by citing his/her exact words:

(19) So in terms of personal background, NAME/ECO-D-30 was telling us that he came full circle because he did his undergraduate degree here and then came back here. My circle is even bigger, first of all because I think I'm older than you, also because I was born here and now I'm coming back. (SPS-D-37)

(20) And both places are recommended venues for weddings [reference to photo of wedding location projected by LAW-C-28] (LAW-C-37)

(21) (XXX) so "coming out" as NAME/SPS-B-11 put it this afternoon, I also like Max Weber. (NAME/SPS-B-20)

Functional categories are rarely airtight: example 21 suggests how co-membershipping, when it touches on research interests, may shade into "fishing" (see following section).

4.2.3. "Fishing"

"Fishing" is the most widespread function of individual mention in this corpus, a tendency that reflects the institutional aims of this ad hoc genre (55 cases of individual mention, i.e. 34.4%, fall into this category). The following examples illustrate typical ways in which presenters signal interest in establishing possible collaborations with individual audience members.

Sometimes interest is expressed indirectly, with speakers limiting themselves to affirming a convergence of interests or areas of possible overlap (example 22).

(22) I think I found a link with NAME/LAW-B-04, who yesterday also presented his project. (LAW-B-17)

More overt bids for collaboration are frequently framed as an interest in simply "talking about" or "discussing" the topic (examples 23 and 24). This choice of wording may be linked to the fact that explicit "fishing" for collaborators can be potentially face-threatening for both the presenter and the audience member mentioned:

(23) The second element is party organisation, but that's something that I've really not gone into very much, so I'll I look forward to talk, talking about this with NAME/SPS-B-03. (SPS-B-26)

(24) Well, as I said, my main subject is free movement of workers. And I've actually discovered that my office mate works on the same subject. So she's already proposed to me, also with NAME/SPS-D-16, too, and NAME/LAW-D-12, to kind of discuss what we could do when it comes to labour market policy and labour market issues, so the broad domain we're interested in, and that could be a field of potential collaboration. (SPS-D-01)

Attention to face concerns is also apparent from other features. Mentions of this sort are in fact frequently hedged through the use of attenuating expressions (e.g. "kind of discuss" in example 24), verbs of cognition or volition (e.g. "hoping" in example 25) epistemic modals (e.g. "might" in example 26) and/or the addition of humorous touches, such as the use of hyperbole or understatement (respectively examples 25 and 26):

(25) What about interdisciplinary relevance? Well, I thought about this. The one person whose research I think is fairly similar that's NAME/SPS-D-41. Hoping we'll write six or seven papers together this year! (SPS-D-03)

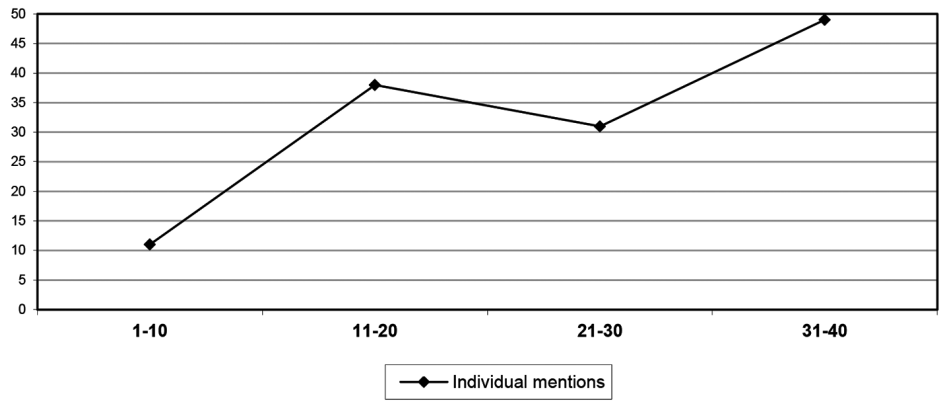
(26) Cooperation wise, there might be some overlap with the work that that NAME/SPS-D-03's doing, we might work together on things (XXX) you're studying non-violent stuff, I study the violent side ((laughter)) (SPS-D-41)

In the following section we now turn to the dynamics of individual mention over each 5-6 day period.

5. DYNAMICS OF "INDIVIDUAL MENTION"

To what extent does the position of a presentation along the temporal dimension have an impact on patterns of individual mention? And what sort of intertextual effects, if any, can be discerned in the talk produced?

Taking the smallest cohort (40 fellows) as a reference point, Graph 1 (below) shows the distribution of individual mentions of other fellows in the first 40 presentations of each cohort, considering the presentations in successive blocks of 10. It can be observed how such mentions are initially limited (note the low frequency for the first 10 presentations), and then increase. This suggests that a certain critical mass of shared information is needed in order to get the ball rolling. Quantitative support for this view emerges from an analysis of mentions of other fellows in terms of directionality: excluding those occurring in question-answer sessions and mentions of the session chair (which are obviously directly anchored in the immediate discourse context), close to 80% refer to fellows who have already spoken, as opposed to fellows who have yet to speak.



Graph 1. Frequency of individual mentions in the first forty presentations, excluding question-answer sessions (aggregate data for all 4 cohorts, n. 129 mentions).

We have already had occasion to observe, through a qualitative examination of the data, how a sense of shared context is constituted and reinforced through talk: many of the examples examined in section 4 have illustrated how speakers draw on contextually available information about audience members in producing individual mentions. We will therefore limit our attention here to a specific practice with some interesting structural characteristics—what I will term "intertextual chaining."

Intertextual chaining consists in the reuse by two or more speakers of the words of another speaker who has preceded them. Such "revoicing" (Bakhtin) can

contribute to creating recognizable local meanings that are unique to the group in question. For instance, in the chain reproduced in example 27, the expression "dot dot dot" becomes, over the course of the three presentations, a shorthand way of referring to the speaker's research plans for the year:

(27) intertextual chain—"dot dot dot":

> Okay, so the title of my presentation is social equality, self-respect, and dot dot dot. I changed that from social equality and self-respect to this because the end is what I'm planning to do with my post-doc research obviously. (SPS-C-28)
> So my presentation is entitled political representation and income inequality, and in line with NAME/SPS-C-28 I guess I could call it income inequality dot dot dot. Political representation what I've done and income inequality what I intend to do. (SPS-C-30)
> (XXX) everyone. My topic is Lisbon two, national parliaments and dot dot dot. [reference to SPS-C-28 and SPS-C-30] Has to deal with the European referenda and the longer I spend here in Florence the more dots I think we're gonna add to this first line, but I'll let you know in two-week's time how many dots exactly. (LAW-C-40)

A similar dynamic is discernible in the chain presented in example 28: here, the term "schizophrenic" gradually becomes an insider way of indicating an interest in a range of research topics:

(28) intertextual chain—"schizophrenic":

> So I do a lot of different things. So you can describe me in one way as this ((looking at the whiteboard, where "schizophrenic" is written)) but would be more sympathetic to me if what you say (XXX) ((audience laughter)) (.) So I have a lot of different interests. (SPS-D-29)
> NAME/SPS D-29 earlier said that his work is somewhat schizophrenic, I like to say that my interests are eclectic. (HIS-D-31)
> And I will just leave up for you know for you to see the the the connections that I see. I also have schizophrenic- broad interests [reference to SPS-D29 and HIS-D-31]. So I would be happy to talk with you about that. (SPS-D-37)

Although the number of intertextual chains in the data is not sufficient to make firm generalizations about specific structural characteristics, it is interesting to note that in the chains identified the third speaker no longer appears to feel it necessary to attribute the expression used to the original speaker. To express what occurs here in conversation analytic terms, we might say that what a given expression "means" is displayed in such cases as a talk achievement ("what we—presenters and audience -have understood through our discussion thus far").

6. DISCIPLINARY ORIENTATIONS IN "INDIVIDUAL MENTION"

This section investigates how mention of individual audience members in the setting examined relates to disciplinary membership. The literature on research collaboration shows that the production of scientific knowledge is more of a collective enterprise in certain disciplines than in others, a state of affairs that to a large extent is captured by patterns of co-authoring in various fields (cf., among others, Katz and Martin; Wagner and Leydesdorff; Jons; Anderson, "Publishing"). Given this greater or lesser orientation towards working in teams, it would thus seem reasonable to expect some disciplinary variation in how presenters orient towards the audience. To explore this, in this section I focus on the 146 mentions of fellows in the audience, examining "how frequently" scholars in the four disciplines represented in the corpus mention other fellows present (6.1) and for "what purposes" (6.2); I then move on to explore how "who mentions whom" provides insights into disciplinary orientations among young scholars in the four fields of the social sciences represented in the corpus (6.3).

6.1. Tendency to mention according to discipline

Table 2 (below) indicates, for each cohort, the number of presenters in each discipline (out of the total number of fellows in the discipline for the cohort in question) who mentioned specific members of the audience. The second column for each cohort indicates the percentage of fellows in the discipline who made such mentions; the third, the relative ranking of the discipline within the cohort in terms of the tendency of its members to mention audience members (table 2):

TABLE 2. MENTION/NON-MENTION OF AUDIENCE MEMBERS (N = 176 PRESENTERS; PRESENTERS WHO MENTION = 74; PRESENTERS WHO DO NOT MENTION = 102; RANKING INDICATES WHICH DISCIPLINE USED AUDIENCE MENTION MOST/LEAST IN COHORT IN QUESTION).

Speakers within each discipline who make individual mentions (in raw numbers and%)

discipline	cohort A			cohort B			cohort C			cohort D			all cohorts		
	n	%	ranking	n	%	ranking	n	%	ranking	n	%	ranking	n	%	ranking
SPS	5/11	45.5	1	9/15	60.0	1	7/17	41.2	1	9/15	60.0	2	30/58	51.7	1
LAW	4/10	40.0	2	4/10	40.0	3	3/8	37.5	2	6/8	75.0	1	17/36	47.2	2
ECO	3/9	33.3	3	6/11	54.5	2	4/11	36.4	3	4/8	50.0	3	17/39	43.6	3
HIS	1/10	10.0	4	2/11	18.2	4	2/10	20.0	4	5/12	41.7	4	10/43	23.3	4
all speakers	13/40	32.5	//	21/47	44.7	//	17/46	37.0	//	24/43	55.8	//	74/176	42.1	//

As can be seen, the social and political scientists tend to mention audience members most often, while the historians do so least. Although there is variation from one cohort to another in terms of "overall" frequency of mention (from a low of 32.5% of the speakers in cohort A who mention present others, to a high of 55.8% in cohort D), these disciplinary tendencies hold (with slight variations) for each of the cohorts considered separately. This suggests that the way speakers orient towards multidisciplinary audiences is largely a question of what discipline they belong to, and depends only marginally on the makeup of the particular group.

To get a better picture of how disciplinary membership intersects with audience mention, however, it is necessary to look at the purposes to which individual mentions are put, a question to which we turn in the next section.

6.2. Functions of individual mention according to discipline

Table 3 summarises the functions to which mentions are put by the presenters in each of the four fields. To facilitate comparisons, tendencies within each discipline have been expressed in both raw numbers and percentages, and the functions have been ranked from most to least frequent (again, for the discipline in question):

TABLE 3. RANKING OF DIFFERENT FUNCTIONS OF INDIVIDUAL MENTION ACCORDING TO DISCIPLINE (1 = MOST FREQUENT; 5 = LEAST FREQUENT).

	SPS			LAW			ECO			HIS		
	function	n.	%	function	n.	%	function	n.	%	function	n.	%
1	'fishing'	34	47.9	'fishing'	9	42.9	deictic	14	43.8	'fishing'	10	45.5
2	procedural	13	18.3	contextual-izing	7	33.3	contextual-izing	11	34.3	contextual-izing	7	31.8
3	contextual-izing	11	15.5	procedural	2 2	9,5 9,5	procedural	4	12,5	procedural	5	22,7
4	co-member-shipping	10	14.1	co-member-shipping	1	4.8	'fishing'	2	6.3	–	0	0
5	deictic	3	4.2	–	0	0	co-member-shipping	1	3.1	–	0	0

Some interesting similarities but also some intriguing differences among the four disciplines emerge from this functional analysis.

All four disciplines seem attentive to the need to construct a comprehensible and structured context of interaction: "contextualizing" uses are the second most common function for three out of four disciplines, while procedural uses, which help instantiate the genre, come in third (again, for three disciplines out of four). There are discernible differences, instead, in how members of the four disciplines

appear to view this multidisciplinary setting in terms of its potential for facilitating research contacts.

For the social and political scientists, legal scholars and historians, "fishing" for collaboration is the main function of individual mention: all three disciplines thus appear to be responding (to a greater or lesser extent) to the institutional mandate to use these research presentations as an opportunity to explore potential research links. The recourse to "co-membershipping" among the social scientists—a mode of individual mention that, as highlighted in section 4.2.2, can also be used to signal common interests—reinforces the view that members of this discipline see the setting as well-suited to seeking out potential research contacts.

For the economists, however, "fishing" and "co-membershipping" are marginal. In their presentations, individual mentions are mainly deictic and occur in examples designed to make their work accessible to non-specialists (see examples 10, 11 and 13, section 4.2). These divergent patterns of individual mention suggest that the economists consider talk to multidisciplinary peer audiences as not particularly conducive to setting up research collaborations, perhaps because they view it primarily as a form of expert/non-expert communication.[12]

6.3. Orientations toward own and other disciplines

A final question is that of disciplinary affinities, i.e. of how members of the four disciplines orient to individuals in the audience according to the discipline to which the latter belong. Tables 4 and 5 explore this issue by looking at the ties with other fellows projected by the presenters. It should be noted that the unit of analysis here is not the single act of mention but, rather, the interpersonal tie projected: for example, if SPS fellow n. 1 mentions ECO fellow n. 5 twice in the course of his presentation, one tie (not two) has been considered. To facilitate comparisons, the orientations of each discipline have been expressed both in terms of raw numbers and in terms of the percentage of fellows mentioned per discipline.

Table 4 presents the disciplinary orientations among the participants in the study when all five functional categories of individual mentions are taken into account; table 5, instead, those that emerge when only mentions explicitly aimed at affirming co-membership in a given group or establishing collaborative links are considered:

The data reveal that a tendency common to presenters in all four disciplines is a strong orientation towards members of their "own" discipline: this can be readily seen in both tables, where bold font has been used to highlight the diagonal containing the percentages in question. Mentions of audience members belonging to the same discipline range from 44.4 to 60% in Table 4 (all mentions) and from 61.5 to 72.7% in Table 5 (explicit bids for collaboration). There also appears to be some

[12] The economists also often use category mentions to signal that they are addressing non-experts in the audience (paper in preparation).

TABLE 4. TIES PROJECTED BETWEEN PRESENTERS AND FELLOWS IN AUDIENCE, ALL 5 CATEGORIES OF MENTIONS (146 ACTS OF MENTION; 74 MENTIONERS; 79 FELLOWS MENTIONED IN TOTAL, OF WHOM 21 BY PRESENTERS FROM TWO OR MORE DISCIPLINES).

	DISCIPLINE OF AUDIENCE MEMBER MENTIONED								
PRESENTER'S DISCIPLINE	SPS		LAW		ECO		HIS		TOTAL TIES
	n.	%	n.	%	n.	%	n.	%	n.
SPS	25	**56.8**	5	11.4	44	13.6	8	18.2	44
LAW	5	29.4	10	**58.8**	17	5.9	1	5.9	17
ECO	7	38.9	--	--	18	**44.4**	3	16.7	18
HIS	5	25.0	3	15.0	20	--	12	**60.0**	20

TABLE 5. TIES PROJECTED BETWEEN PRESENTERS AND FELLOWS IN AUDIENCE THROUGH 'FISHING' AND 'CO-MEMBERSHIPPING' MENTIONS ONLY (67 ACTS OF MENTION; 33 MENTIONERS, 56 FELLOWS MENTIONED, OF WHOM 6 BY PRESENTERS FROM TWO OR MORE DISCIPLINES).

	DISCIPLINE OF AUDIENCE MEMBER MENTIONED								
PRESENTER'S DISCIPLINE	SPS		LAW		ECO		HIS		TOTAL TIES
	n.	%	n.	%	n.	%	n.	%	n.
SPS	24	**61,5**	4	10,3	39	7,7	8	20,5	39
LAW	2	18,2	8	**72,7**	11	9,1	--	--	11
ECO	1	33,3	--	--	3	**66,7**	--	--	3
HIS	2	22,2	1	11,1	9	--	6	**66,7**	9

interest among the SPS fellows in collaborating with historians; a possible explanation may be a perception that the historical dimension can provide a complementary perspective on contemporary social phenomena. In addition, both tables suggest that political and social scientists exert a certain appeal to lawyers, economists and historians, although this observation should be treated as tentative, given the fact that in all four cohorts the SPS fellows were the most numerous.

The next section investigates to what extent the patterns of individual mention outlined in this and the preceding sections are reflected in actual research collaboration by the participants in this study, as documented by their responses to the post-programme questionnaire.

7. PATTERNS OF POST-PROGRAMME COLLABORATION

Does mentioning individual audience members make a difference in terms of subsequent research collaboration? Posing such a question implies assuming an "emergentist" perspective on the relationship between discourse practices and social

practices—in this case, on links between ways of doing oral presentations and ways of doing research. Once the question is posed, however, it becomes almost immediately evident that operationalizing it is not an easy matter. Does investigating the issue imply tracing the links between specific mentions of individual audience members and subsequent research collaborations between the presenter who made them and the scholar in question? Or are we interested, instead, in examining whether mentioning audience members by name predicts a general propensity towards collaborative research with other cohort members?

Were we to take the first approach to the data at hand, the answer is immediately apparent: of the vast majority of the mentions in the presentations, there is no trace in the questionnaire data. Vice versa, if we attempt to retrace specific research collaborations back to the presentations, the evidence is likewise slight—although we would find, for example, that four of the co-authoring relationships reported are foreshadowed by mentions by at least one of the co-authoring presenters. Establishing direct links between a single communicative event and structural characteristics of scholars' professional activity such as research collaboration is not, in short, a feasible endeavour.

It is more reasonable—and also more in line with our experience of everyday reality—to take the second approach, in which the relationship between discourse and social structure is viewed not as linear but rather as a question of "cumulative practice" (Knorr-Cetina and Cicourel; Krause). In this view, rather than direct links between acts of mention and research collaboration, what is of interest are possible correlations between an openness to further interaction with members of the audience, as manifested by mentioning audience members, and subsequent engagement in collaborative research. In the following analysis I pursue this line of inquiry by comparing post-programme collaboration by members of two groups—participants who mentioned audience members and participants who did not. To do so I draw on two central notions from network theory: intensity (also termed "strength" by some scholars) and density (Burt; Coromina et al.).

"Intensity," in the network literature, is usually defined as the frequency of contacts between individuals. Here I operationalize it in terms of the three different levels of research collaboration investigated in the questionnaire: (a) co-authoring (high intensity); (b) participation in joint research (medium intensity); (c) other professional collaboration e.g. organising of conference panels, participation in workshops or teaching exchanges (low intensity). "Density," succinctly put, is the extent to which individuals in a network are connected to other individuals in the network. I operationalize this parameter on the basis of how many other members of the cohort were mentioned as current research contacts by scholars responding to the questionnaire.

Table 6 presents the results of the analysis of the questionnaire responses in terms of intensity of research collaboration. [13] Individuals have been placed in the

[13] 78 fellows out of 176 (44.3%) responded to the questionnaire. The responses received yielded collaboration data for 104 participants in the study (59.1%). Network analysts stress that every effort should be made to obtain data for all group members (Contractor and Su). Although in

TABLE 6. INTENSITY OF POST-PROGRAMME COLLABORATION, DISTINGUISHING BETWEEN FELLOWS WHO MENTIONED AUDIENCE MEMBERS ('MENTIONERS'; N = 53) AND THOSE WHO NOT ('NON-MENTIONERS'; N = 51) (N=104).

	TYPE OF COLLABORATION	'MENTIONERS'		'NON-MENTIONERS'	
		n	%	n	%
(a)	co-authoring	12	22.6	7	13.7
(b)	joint research	8	15.1	7	13.7
(c)	other professional collaboration	8	15.1	6	11.8
(a-b-c)	*maintained research contact with one or more cohort members*	28	52.8	20	39.2
	generic (no individuals named)	2	3.8	2	3.9
	none (or question left in blank)	23	43.4	29	56.9
		53		51	

TABLE 7. NUMBER OF POST-PROGRAMME RESEARCH COLLABORATIONS OF FELLOWS WHO MAINTAINED RESEARCH CONTACTS, DISTINGUISHING BETWEEN THOSE WHO MENTIONED AUDIENCE MEMBERS ('MENTIONERS') AND THOSE WHO DID NOT ('NON-MENTIONERS') (N=48).

N. OF COLLABORATIONS MAINTAINED WITH COHORT MEMBERS	'MENTIONERS'		'NON-MENTIONERS'	
	n.	%	n.	%
with 1 other fellow	20	71.4	16	80
with 2 other fellows	5	17.9	3	15
with 3 other fellows	2	7.1	0	-
with 4 other fellows	0	-	0	-
with 5 other fellows	1	3.6	1	5

highest—i.e. most "intense"—category indicated in the responses received to the questionnaire: this means that those categorized as "co-authoring," for example, may—and, indeed, often do—have other forms of research collaboration with the same or other cohort members:

The results show that fellows who mentioned audience members by name during their presentations are more likely to maintain post-programme research contacts with other scholars in their cohort (52,8% v. 39.2%); they also tend to

the present case this has not proved possible, the overall response rate is in line with rates typical for follow-up surveys in general, and can therefore be considered informative for comparative purposes. It is interesting to note that there was a noticeable difference in the response rate for mentioners (40 individuals out of 74; 54.1%) and non-mentioners (38 individuals out of 102; 37.3%). This difference suggests greater "programme loyalty" and, indirectly, a greater propensity to collaborate—among mentioners, and is thus in line with the overall questionnaire results.

collaborate more closely with the ex-colleagues with whom they have remained in contact (a + b: 37.7% of the "mentioners"; 27.4% of the "non-mentioners").

Table 7, instead, presents the questionnaire results regarding the density of research collaborations, as measured by the number of research contacts maintained by those participants who collaborate with ex-colleagues. Although the difference between the two groups is less striking (for both "mentioners" and "non-mentioners," collaborations were generally maintained with only one ex-colleague), there is a tendency for fellows who mentioned audience members in their presentations to maintain denser research networks: calculating density (following Burt 1983, cit. in Coromina et al. 2008: 54) as the ratio between the number of actual ties per cohort and possible ties per cohort, the contribution to the average network density per cohort (circa 0,90%) is 0,54% for "mentioners" and 0,36% for "non-mentioners." To put this another way: "mentioners" participate in approximately 60% of the intra-cohort ties and "non-mentioners" in approximately 40%.

A final aspect of interest regards disciplinary patterns in post-programme collaboration. Here the questionnaire evidence confirms the tendency to orient towards one's own discipline found in the oral presentation data. Both "mentioners" and "non-mentioners" prefer to collaborate with ex-colleagues from their own discipline. This is particularly true when co-authoring is involved: among the ex-fellows for whom post-programme collaboration data was received, there are only two cross-disciplinary authoring pairs (SPS-HIS and ECO-SPS).

8. CONSTRUCTING RESEARCH COLLABORATION FACE-TO-FACE: SOME PRELIMINARY OBSERVATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The present study represents the first attempt (at least to my knowledge) to bring together insights from research on network theory and on writing for publication with the analysis of face-to-face interaction with a multidisciplinary audience. I have argued that the stated aims of the ad hoc genre investigated here, i.e. to facilitate research collaboration within groups of post doc fellows, make it a particularly useful locus in which to investigate informal processes in networking among academics. The operational assumption has been to consider mentions of individual audience members in oral presentations as potential ties between the speaker and the individual(s) mentioned. Starting from this premise, I have attempted to investigate connections between who speakers mention or address, patterns of disciplinary affinity, and functions to which individual mention is put. I have also tried to investigate what connections may be visible between social structure "writ small" (in the mentions in question) and social structure "writ large" (in subsequent patterns of research collaboration). In searching for these connections, I have tried to take into account the role of context, viewed not as a static determinant but as a resource upon which speakers draw and to which their talk actively contributes, using as my point of departure a research perspective in which socially-relevant phenomena (here, research collaboration) are viewed as the result of cumulative social practice.

As the original impetus behind the present study was an interest in scholarly publishing, in these brief concluding remarks I will first focus on the implications of the results for a better understanding of this aspect of scholarly activity. I will then briefly highlight the methodological contribution of the study and its implications for those involved in training for academic practice (e.g. EAP researchers and practitioners, PhD supervisors) and in promoting and supporting research collaboration on an institutional and inter-institutional level (e.g. project coordinators, programme administrators).

First of all, as regards our understanding of the dynamics of research collaboration and publishing, a common thread emerging from the analysis is that, at least at this point in their careers, the participants in the study are predominantly oriented towards establishing connections, whether substantive or simply phatic, with others working within their own discipline. These results are in line with studies comparing co-authoring by early and late-career scholars which indicate that co-authoring across disciplines is more common among the latter group (Wagner and Leydesdorff; Balakrishnan et al.). It has been claimed that such differences in co-authoring reflect the need among younger scholars to create a strong disciplinary identity and consolidate ties within their own fields conducive to career advancement; the results of the present investigation support this conclusion.

A second result that merits some reflection is how the patterns of mention of audience members by speakers belonging to different disciplines relate to disciplinary patterns in writing for publication attested in the literature. The tendencies that emerge for the social scientists and historians are in line with tendencies towards collaboration identified in the bibliometric and academic publishing literature on single and co-authorship—there is evidence of a strong "other-orientation" among the social scientists (for whom co-authorship is common) and of a low "other-orientation" among the historians (for whom single authorship is the norm). The current dearth of studies on co-authoring among legal scholars does not permit comparison of the results obtain. The patterns for individual mention found for the economists, instead, do not reflect trends documented in the publishing literature, which has repeatedly indicated co-authoring as routine. The divergent uses to which the economists in the sample put individual audience mentions—in particular, in order to deictically anchor examples designed to clarify their work to non-specialists in the audience—highlight how multidisciplinary settings can present very different affordances for networking to members of different disciplines

As concerns the methodological implications of the present study, these are closely linked to its applied aims, i.e. to provide insights useful for training for academic practice and for initiatives designed to support research collaboration. A key contribution of the analysis of the presentation data is the way in which it documents how dynamic aspects of the context—in the present case, at what point over the 5-6 day period a given fellow actually presents his/her work—influence the "opportunity structure" for establishing contacts and collaborations. The study clearly reveals how scholars who present earlier have more likelihood of being mentioned, while those who present later are able to draw on a richer shared context of reference. This finding has implications not only on a methodological level for

the analysis of institutional talk, but also in practical terms for those involved in organizing workshops and conferences, and—more generally—in coordinating research initiatives: deciding who is to speak when is not a logistic issue of secondary importance, but may have an impact on how future research collaborations develop. As far as training for academic practice is concerned, instead, the typology of the functions to which individual mention is put in the data and the examples provided will be of use to those involved in supporting early-career scholars in the development of the presentation skills necessary to network successfully, both with disciplinary peers and in multidisciplinary settings.

A final contribution of the study derives from the comparison of the analysis of individual mentions with the patterns of research collaboration documented by the post-programme questionnaire. Methodologically, by exposing some of the difficulties involved in addressing the gap between the meso-level of network studies and the micro-level of the analysis of face-to-face interaction, this comparison highlights some of the hurdles involved in attempting to bring the tools of network analysis to bear on conversational data. To more fully understand how scholars establish and maintain research collaborations, it would be useful to integrate the analysis presented here with information derived from interviews of the participants. Despite its limitations, the study nonetheless provides a nuanced, and hopefully more realistic, view of the range of factors that come into play in settings and in specific genres designed to foster interdisciplinary collaboration.

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WORKS CITED

Anderson, L. "'Internationality' as a Metapragmatic Resource in Research Presentations Addressed to English as a Lingua Franca Audiences." *Corpus and Genre in English for Academic Purposes: Approaches and Implications*. Ed. P. Thompson and G. Diani. Newcastle-upon-Tyne: Cambridge Scholars. [Forthcoming]

——."Publishing Strategies of Young, Highly Mobile Academics: The Question of Language in the European Context. *Language Policy* 1.2-3 (2013): 273-288.

Bakhtin, M.M. *The Dialogic Imagination: Four Essays*. Austin: U of Texas P, 1981.

Balakrishnan, A.D., S. Kiesler, J.N. Cummings, and R. Zadeh. "Research Team Integration: What It Is and Why It Matters." *Proceedings of the ACM 2011 Conference on Computer Supported Cooperative Work*. 523-532. 12 Nov. 2014. Web. <http://stanford.edu/~rezab/papers/integration.pdf>.

Burrough-Boenisch, J. "Shapers of Published NNS Research Articles." *Journal of Second Language Writing* 12 (2003): 223-243.

Burt, R.S. *Applied Network Analysis*. Beverly Hills: Sage, 1983.

Carolan, B. and G. Natriello. "Data-Mining Journals and Books: Using the Science of Networks to Uncover the Structure of the Educational Research Community." *Educational Researcher* 34.3 (2005): 25-33.

Coromina, L., J. Guia, G. Coenders, and A. Ferligoj. "Duocentered Networks." *Social Networks* 30 (2008): 49-59.

Curry, M.J. and T. Lillis. "Academic Research Networks: Accessing Resources for English-Medium Publishing." *English for Specific Purposes* 29 (2010): 281-295.

Defazio, D., A. Lockett, and M. Wright. "Funding Incentives, Collaborative Dynamics and Scientific Productivity: Evidence from the EU Framework Program." *Research Policy* 38 (2009): 293-305.

Enfield, N.J. and T. Stivers, eds. *Person Reference in Interaction: Linguistic, Cultural and Social Perspectives.* Cambridge: Cambridge UP, 2007.

Ferenz, O. "EFL Writers' Social Networks: Impact on Advanced Academic Literacy Development." *Journal of English for Academic Purposes* 4 (2005): 339-351.

Jons, H. "Transnational Mobility and the Spaces of Knowledge Production: A Comparison of Global Patterns, Motivations and Collaborations in Different Academic Fields." *Social Geography* 2 (2007): 97-114.

Katz, J.S. and B. Martin. "What Is Research Collaboration? *Research Policy* 26 (1997): 1-18.

Knorr-Cetina, K. and A.V. Cicourel. *Advances in Social Theory and Methodology: Toward an Integration of Micro- and Macro-Sociologies*. London: Routledge, 1981.

Krause, M. "Recombining Micro/macro: The Grammar of Theoretical Innovation." *European Journal of Social Theory* 16 (2013): 139-152.

Laudel, G. "Collaboration, Creativity and Awards: Why and How Scientists Collaborate." *International Journal of Technology Management* 22 (2001): 762-781.

Li, Y. and J. Flowerdew. "Shaping Chinese Novice Scientists' Manuscripts for Publication." *Journal of Second Language Writing* 16 (2007): 100-117.

Liberman, S. and K. Wolf. "The Flow of Knowledge. Scientific Contacts in Formal Meetings." *Social Networks* 19 (1997): 271-283.

Lillis, T. and M.J. Curry. *Academic Writing in a Global Context: The Politics and Practices of Publishing in English.* London: Routledge, 2010.

Melin, G. "Pragmatism and Self-organization: Research Collaboration on the Individual Level." *Research Policy* 29 (2000): 31-40.

Moody, J. "The Structure of a Social Science Collaboration Network: Disciplinary Cohesion from 1963 to 1999." *American Sociological Review* 69.2 (1999): 213-238.

Rendle-Short, J. *The Academic Presentation: Situated Talk in Action.* Hampshire: Ashgate, 2006.

Sacks, H. "Hotrodder: A Revolutionary Category." *Everyday Language: Studies in Ethnomethodology*. Ed. George Psathas. New York: Irvington, 1979. 7-21.

Sacks, H. and E.A. Schegloff. "Two Preferences in the Organization of Reference to Persons in Conversation and Their Interaction." *Everyday Language: Studies in Ethnomethodology*. Ed. George Psathas. New York: Irvington, 1979. 15-21.

Schegeloff, Emanuel A. "Some Practices for Referring to Persons in Talk-in-Interaction: A Partial Sketch of a Systematics." *Studies in Anaphora*. Ed. Barbara Fox. Amsterdam: John Benjamins, 1996. 437-485.

Stivers, T. "Alternative Recognitionals in Person Reference." *Person Reference in Interaction: Linguistic, Cultural and Social Perspectives*. Ed. N.J. Enfield and T. Stivers. Cambridge: Cambridge UP, 2007. 73-96.

Wagner, C. and L. Leydesdorff. "Network Structure, Self-organization, and the Growth of International Collaboration in Science." *Research Policy* 34 (2005): 1608-1618.

THE "BUTLER" SYNDROME: ACADEMIC CULTURE ON THE SEMIPERIPHERY

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Abstract

Discussions about the geopolitics of academic writing frequently make use of the terms "centre" and "periphery" to compare scientific practices and attitudes in different parts of the world. However, there are some countries that do not slot easily into either category, being positioned geographically and economically between the two and sharing features of each. This paper borrows the term semiperiphery from world-systems theory to refer to those second-division players, and outlines some of the characteristics that they have in common. Focusing on the specific case of Portugal, it looks at how semiperipherality both determines and reflects researchers' productivity within the broader geopolitics of academic practice.

Key words: semiperiphery, geopolitics, academic discourse, Portuguese, "butler" syndrome.

Resumen

Debates sobre la geopolítica de la escritura académica con frecuencia hacen uso de los términos "centro" y "periferia" para comparar las prácticas científicas y actitudes de diferentes partes del mundo. Sin embargo, hay algunos países que no se colocan tan fácilmente en ninguna de estas dos categorías, yaciendo geográficamente y económicamente entre las dos y compartiendo rasgos de cada una. Este artículo toma prestado el término semi-periferia de la teoría de sistemas mundiales para referirse a los participantes de segundo rango y describe algunas características que tienen en común. Centrándose en el caso específico de Portugal, se examina la forma en que la semi-periferalidad determina y también refleja la productividad de los investigadores en el contexto más amplio de la geopolítica de las prácticas académicas.

Palabras clave: semi-periferia, geopolítica, discurso académico, portugués. síndrome del 'mayordomo'

1. INTRODUCTION

Although the practice of modern science has traditionally been sustained by the myth of *universalism*, according to which it is supposedly unaffected by questions of place or identity (Merton), studies since the 1970s have repeatedly shown how scholars' publishing success is conditioned by factors relating to geographic loca-

tion and/or culture. These include not only linguistic and rhetorical factors arising from the dominance of English in academic publishing (Lillis and Curry; Uzuner; Salager-Meyer; Ferguson; Flowerdew) but also non-linguistic constraints such as unequal access to material resources and disciplinary networks, and differences in institutional infrastructure and academic culture (Canagarajah).

Some of these analyses (notably Canagarajah; Lillis and Curry; Uzuner; Salager-Meyer) have been conducted in terms of the framework laid down by world-systems theory, which divides the world up into *centre* (or *core*) and *peripheral* countries on the basis of economic, social and political criteria. This has proved to be an extremely effective model for discussing academic practices in different parts of the globe as there seems to be a clear correlation between national wealth and scientific achievement as measured by parameters such as published research papers and citations (May; King; Lee et al). However, as these bibliometric studies show, there are countries that fall between the two camps, being neither in the "premier league" (King) nor properly of the "third world". Hence, it is suggested that the term *semiperiphery* be used to refer to second-division players, those that are neither centre nor periphery but have characteristics of each (see Bennett, *Semiperiphery*). In Europe, this would mean the countries on the southern and eastern borders of the European landmass (i.e. the so-called "PIGS" countries,[1] along with most of the new and aspiring members of the European Union).

The term is useful for a number of reasons. Firstly, it can account for some of the inconsistencies that inevitably arise if we attempt to use the categories of "centre" and "periphery" to explain phenomena occurring in countries such as these. Semiperipheral universities, for example, tend not to be wholly meritocratic institutions committed to the pursuit of excellence, but neither are they organised entirely as "minifiefdoms" where academic progress can only be achieved through the cultivation of influential relationships (Canagarajah). The reality is somewhere between the two, as it also is on issues such as material resources, academic culture, attitudes to intellectual property, and epistemological orientation.

Secondly, by emphasising how a community that is peripheral on the continental scale becomes an intermediate one on the global, this terminology highlights an important function that may otherwise remain invisible. In the world system, the semiperiphery also *mediates* in the transmission of economic and cultural assets between centre and periphery (Wallerstein; Santos). Hence, in the domain of knowledge production, its publications and conferences serve communities for whom the more prestigious international ones may be inaccessible for different reasons (Lillis and Curry), and its centres offer a way into the system for scholars from the outer rim who might otherwise be completely excluded. Indeed, they are often the

[1] The "PIGS" acronym refers to Portugal, Italy, Greece and Spain—the countries of Southern Europe most at risk of defaulting on their sovereign debt (in some analyses, Ireland is included instead of or as well as Italy, though as an English-speaking nation, it is obviously less relevant in this context).

hubs of subsidiary networks that disseminate knowledge back and forth across the language barrier: for example, Portugal and Spain produce scholarly journals in their national languages for distribution amongst the countries of their former colonies, and in some cases translate knowledge produced in those languages into English for wider circulation.

Finally, the notion of the semiperiphery may also go some way towards explaining the tendency for uncritical emulation some countries display towards centre scholars and practices (Gizycki; Nunes and Gonçalves), often resulting in a lack of originality and general derivativeness. Gizycki (480), who applies world-systems theory to scientific production without ever using the term "semiperiphery", nevertheless distinguishes between the far-out periphery, which does not have the power to be competitive, and the nearer periphery, which is "close enough to eminence to be impelled to compete with the leading centres in the hope of justifying a claim to equal eminence". This would suggest that the excessive deference results from an identity instability provoked by this in-between status. Like the butler in a stately home that emulates his master and despises members of his own class, semiperipheral scholars and institutions may become more precious about centre values than the core countries themselves, leading them to reject markers of their own identity in favour of imported ones that are perceived to carry more status. This has important implications for many aspects of academic practice, as I hope to show over the course of this paper.

However, my main aim here is to explore how semiperipheral status affects researchers' output in the particular case of Portugal, which I do by focusing on a set of material and social conditions that, according to Canagarajah, both reflect and determine global status in the academic context. The paper begins with a review of world-systems theory in the context of scientific research, which is followed by a brief introduction to Portugal as a semiperipheral country *par excellence*. It then goes on to look more closely at some of the dimensions of the material and social context of science production in Portugal, suggesting how each of them might effectively impede or restrict researchers' output.

2. THE GEOPOLITICS OF SCIENTIFIC RESEARCH

World-systems theory developed in the 1970s in the social sciences to take account of long-term shifts in patterns of power and culture that could not adequately be explained on the level of the nation-state. Though primarily economic in orientation, its terminology and basic premises were soon being applied to all kinds of social, political and cultural phenomena, thus emphasising the intricate interconnections between these various dimensions.

In the early 1970s, it was already being used to analyse the social dimension of science by figures such as John Ziman, Joseph Ben-David and Edward Shils. Many of the general conclusions reached at that time are summed up in the introduction to Gizycki's article, which describes how scientific centres generate new theories and techniques ("a centre is a place from which influence radiates"),

which are then diffused to the periphery by means of publications and learned societies (476). Peripheral science communities are, he says, constantly engaged in a game of catch-up, manifested through "patterns of emulation" (Gizycki 475) which operate in the choice of problems to study, hypotheses and techniques and also in the replication of institutional structures and procedures. However, it is also on the periphery that major paradigm shifts originate, particularly when the centre has exhausted its innovatory potential. Interestingly, it is the "absence of the incentive of emulation" (Gizycki 476) which effectively causes this stagnation.

As for the term *semiperiphery*, this was coined by Wallerstein within a predominantly economic framework. According to this analysis, semiperipheral countries are positioned, geographically and economically, between the core and the periphery of the world system and have characteristics of each. Thus, they are essential to the functioning of the world system, providing a buffer zone between rich and poor, and mediating change across the global system as a whole.

The concept has since been thoroughly explored within the Portuguese context by researchers at the Centre for Social Studies in Coimbra, headed by the sociologist Boaventura de Sousa Santos. Following Santos' seminal paper of 1985, in which the concept was used to explain Portugal's economic and social condition in the decade after the Carnation Revolution of 1974, it has been applied in fields as diverse as law, literature, commerce and medicine. For our purposes, the most relevant is probably a collection of articles about science on the semiperiphery (Nunes and Gonçalves), evocatively entitled *Enteados de Galileu: a semiperiferia no sistema mundial da ciência* [*Galileo's Stepchildren: The Semiperiphery in the World System of Science*]. In their introduction to the volume, the editors describe semiperipheral science as being characterised by "low productivity, resistance to innovation, inefficiency and lack of organization" (19),[2] and stress the subservience of the semiperiphery towards the centre: the unequal involvement in transnational partnerships, extreme dependence upon European funding, and the importance given to international networks for building scientific reputations. However, they also point out that semiperipheral science tends to be very "heterogeneous", with "fluid or fluctuating frontiers between disciplines and research domains". That is to say, the semiperiphery, less constrained by the need for "rigour" (which defines and sustains the centre's superiority), is much more open to outside influences and can therefore afford to engage in "boundary work"[3] of both the demarcating and transgressive variety (22). This, I argue, may prove to be important for the long-term evolution of the system as a whole.

In the next section, I discuss Portugal's semiperipherality, first in general terms and then with reference to specific academic attitudes and practices.

[2] All quotations from this volume have been translated from the Portuguese by me.

[3] This term was coined by the sociologist Thomas Gieryn to refer to activities that define, redefine or dissolve the frontiers between different domains of knowledge.

3. PORTUGAL: A SEMIPERIPHERAL COUNTRY *PAR EXCELLENCE*

Portugal has many distinctive characteristics that make it an extremely good example of a semiperipheral country, as originally defined by Wallerstein. It is situated on the extreme Western edge of the European landmass, a geographical accident which meant not only that it was remote from the main European centres of economic and political power for much of its history, but also that it was ideally placed to develop a vast seaborne empire in the 15th and 16th centuries. This enabled it to become an important transporter of economic and cultural assets in the 17th and 18th. The fact that it failed to fix the vast wealth that flowed into the country at that time may be both an effect and a cause of its semiperipheral status; for instead of industrializing, as the Northern European countries did, Portugal (like its larger neighbour, Spain) used the gold that it imported to acquire manufactured goods from those countries, which were flaunted as superficial markers of superiority. It was this fixation with the symbolic dimension of status that caused it to slide back into relative poverty in subsequent years – a pattern which seems to have been repeated in the latter decades of the 20th century with the vast sums that it received from the European Union for development purposes.

Max Weber, for whom the development of modern capitalism was driven by the Protestant work ethic, would no doubt have found a link between the country's economic decline and its Catholicism. Certainly, the centrality of the Catholic Church in Portugal was largely responsible for the persistence of an academic culture that seems to have more in common with the periphery than the centre. That is to say, the Catholic Church's hostility to modern science and to Enlightenment values in general meant not only that Portuguese schools and universities continued to employ Scholasticism as the official teaching method long after it had been abandoned in Northern Europe,[4] but also that these institutions proved resistant to democratizing tendencies, retaining a rigidly hierarchical organization to the modern day. Both of these have had profound effects upon academic production, as I describe below.

As regards its attitudes towards the outside world, these have oscillated between closed-door inward-looking policies and excessive subservience to foreign powers (Nunes and Gonçalves 21). There was a great deal of intellectual repression at various phases in its history, most recently during the 48 years of dictatorship in the 20th century (1926-1974), when education was subordinated to ideology, and foreign influences were discouraged. Largely as a result of these policies, in 1970, 25.6% of the population was still illiterate, 52.2% had only 4-6 years of schooling, and only 1.6% of the population had attended higher education;[5] consequently, after the over-

[4] The Index of books forbidden to Catholics contained, alongside Copernicus and Galileo, names such as Francis Bacon, Descartes, Spinoza, Kant, Rousseau, Voltaire, John Stuart Mill, Locke, Hume and Comte. The list was only abolished in 1966.

[5] From the 1970 Census (qtd. Loff and Pereira 148).

throw of the dictatorship in 1974, one of the main priorities of the new democratic governments was to build schools and train teachers. This policy was furthered by Portugal's accession to the European Union in 1986 and the influx of funds destined for developmental purposes, and between 1985 and 1995, growth was so rapid that public institutions of higher education were unable to cope with the demand, leading to the establishment of many private universities and colleges (Gomes). [6]

As regards research output, this has seen a dramatic growth in the last two decades,[7] following the creation of a network of state-funded laboratories and research centres in the 1990s. However, despite this, Portugal's scientific production per thousand inhabitants continues well below that of other European countries, and by 2006 was only half of Spain's and less than a sixth of Holland's.[8]

In recent decades, Portugal has also undergone an important reorientation away from the French model that it had followed for years towards an Anglo-Saxon one. This began with the Educational Reforms of the 1980s in which the role of science and technology was reassessed, resulting in the ascendancy of the "empirical experimental Anglo-Saxon" method of inquiry at the expense of the "typically deductive Latin" model (Nóvoa 51). However, it was the Bologna Accord, legislated between 2005 and 2007,[9] that caused the biggest shakeup of the university system in Portugal, with consequences upon all aspects of the academic culture. Designed to boost the competitiveness of the higher education system and increase academic mobility throughout Europe and beyond, this was manifested in Portugal, first and foremost, by the re-structuring of the degree system to bring it into line with the British model, bringing important consequences upon teaching and examination systems used in the country. Other measures taken include: the implementation of the European Credit Transfer and Accumulation System (ECTS), the adoption of an academic recruitment system based on meritocratic principles, and an overhaul of institutional organization to improve efficiency and productivity.

One of the main consequences of this attempt to bring Portuguese higher education into line with the rest of Europe was an increased attention to English at all levels of the system. In higher education, this was reflected by the provision of courses in English for academic purposes, the creation of language centres for the translation, revision and proof-reading of academic papers, and the translation of course syllabi and promotional material into that language. There are some departments that now teach their postgraduate courses in English, with a view to attracting

[6] Many of these were forced to close down later when demand declined as a result of demographic shifts and economic contraction (Gomes).

[7] In 2009, Portugal was the country in Europe with the fastest pace of growth in scientific production (Gomes).

[8] Figures from the OECD (qtd. Gomes).

[9] All information about the Bologna Process in Portugal is taken from the website of the Direction-General of Higher Education, "O Processo de Bolonha." Web. 27 Nov. 2011. <http://www.dges.mctes.pt/DGES/pt/Estudantes/Processo+de+Bolonha/Processo+de+Bolonha/>.

students from abroad, though the phenomenon is by no means as widespread as it is in the North of Europe (Ferguson 10-12).

Having undergone such a profound transition so recently, Portuguese universities are still experiencing a considerable tension between traditional practices and attitudes, and the more modern, imported ones. What is more, these changes have not occurred everywhere at the same time. Today there are considerable differences between the universities located in the prosperous coastal strip (particularly in the main cities of Lisbon and Porto) and those in the interior of the country, which are much more conservative. Even within the same university, there may also be large disciplinary differences, with faculties of science and technology generally taking a more progressive attitude to knowledge production than their counterparts in the arts and law.

Let us now look at how semiperipherality affects Portuguese academic life in the various areas identified by Canagarajah as playing an important role in research success: i) material resources and academic networks; ii) institutional organization and academic culture; iii) academic careers and recruitment policies; iv) attitudes towards intellectual property and research quality; and v) epistemological orientation and discourse.

i) Material Resources and Academic Networks

One of the most compelling sections of Canagarajah's analysis of the geopolitics of academic discourse concerns the constraints placed on researchers in some parts of the world by a lack of material resources. Drawing upon his own experiences in Sri Lanka in the 1980s and early '90s, he describes how peripheral researchers may not have access to library facilities or even to basic equipment such as computers, photocopiers and durable stationery, which not only makes it difficult to physically produce and send articles to centre publications, but also limits participation in scholarly networks.[10] For without access to scholarly journals or the funds to participate in international conferences, peripheral researchers are effectively off-network, unable to keep up with the latest developments in the discipline. Thus, it is not surprising that much of the work submitted by them to mainstream academic journals is dismissed as "parochial" (Flowerdew; Lillis and Curry; Ferguson).

In the mid 1990s, Portuguese universities were still very under-resourced by centre standards, and the worst cases were not so different from the situation Canagarajah describes. There was a general lack of computers and other equipment (though, ironically, not photocopiers, given the widespread and entirely institu-

[10] Some of Canagarajah's precise complaints are now redundant, given the current policy of electronic manuscript submissions. However, as Salager-Meyer points out, this development has produced new inequalities, discriminating against researchers in parts of the world where phone lines are limited and internet host penetration rates are very low.

tionalized practice of photocopying textbooks instead of buying them), and library resources were limited, badly-organised, antiquated and/or oriented more towards Lusophone and Francophone debates than to Anglophone ones. However, in the last decade or so, the desire to become competitive and to attract international students has resulted in a great deal of investment at this level. Institutions have been re-equipped and new laboratories founded, and today the major public universities are not lagging too far behind comparable countries in other parts of Europe.

Consequently, although the lack of material resources was for a long time a major impediment to research in Portugal, this is no longer the case for most disciplines. Far more inhibiting would seem to be the intangible constraints imposed by an academic tradition which, for years, was not really oriented towards productivity in this domain, as we shall see.

ii) Institutional Organization and Academic Culture

While no one doubts that adequate funding is fundamental for research success, there is disagreement amongst some authors as to the influence of particular institutional settings. For example, Nunes and Gonçalves imply that Portugal's low productivity is due at least in part to the fact that most researchers work in universities or in university-connected research units, "there is an overlap between the world of science and the world of the university" (22), while May suggests that the USA, UK and Scandinavian head the league tables precisely *because* their research is done in universities as opposed to research institutes, as in France and Germany. However, the discrepancy between these two positions may not be as great as appears at first sight. In each case, the main point is not so much the nature of the institution hosting the research as the *academic culture* in that institution. For Nunes and Gonçalves, the real problem appears to be that Portuguese researchers are unable to devote much time to research because they have heavy workloads as lecturers—indeed, the subordination of research to teaching would seem to be another important characteristic of peripherality (Canagarajah 225). May, however, stresses a quite different quality—the need for a culture of open debate and constant questioning:

> The non-hierarchical nature of most North American and northern European universities, coupled with the pervasive presence of irreverent young undergraduate and postgraduate students, could be the best environment for research. The peace and quiet to focus on a mission in a research institute, undistracted by teaching or other responsibilities, may be a questionable blessing. (796)

Indeed, it may well be that "non-hierarchical" is the key word in this analysis; for not only is critical debate impossible in cultures where there is excessive deference to authority, rigid hierarchies also offer little motivation to produce research. Such situations seem to be particularly characteristic of the periphery, where "feudal and patriarchal values" (Canagarajah 196) may prevail in many universities, as in society at large, restricting the possibilities for vertical mobility.

In Portugal, the general academic culture is still very formal and hierarchical, and a great deal of deference is shown to people of higher standing. This is manifested in many aspects of academic life: by an excessive attention to formal titles, which are used even on a daily basis between colleagues of the same institution; through dress codes (students often wear their gowns to class, while male lecturers frequently don suits and ties); teaching methods (there is an emphasis on the formal lecture rather than on more student-oriented techniques); and even classroom architecture (the lecturer is typically raised above the level of the students on a dais or platform). However, in recent years, things have begun to change. Not only have mobility programmes such as Socrates/Erasmus brought Portuguese students into closer contact with less hierarchical academic cultures in other countries, partnerships with foreign universities for both teaching and research have prompted significant shifts in attitude at the institutional level too.

Canagarah also suggests that *embedment in the local culture* may be an important marker of academic peripherality, in that the university, in such contexts, tends to accommodate influences from the local community in its policies and practices, and "earns status and sustenance by serving society", rather than "leaning towards detachment and autonomy" (225). Once more, Portugal seems to fall between camps on this score. There are universities in the interior of the country that largely comply with this description in that they seem to exist solely to serve the educational needs of the immediate community: their student catchment areas are very local; teaching staff are mostly recruited from the student body and are therefore also local; and institutional activities are often integrated into the civic life of the town or city where they are based. On the other hand, the larger universities in the main cities along the coastal strip are much more cosmopolitan in outlook, with students and staff drawn from around the country (and, increasingly, from abroad). These universities are also more likely to have active research centres, which means that they produce as well as reproduce knowledge.

However, as already mentioned, research has traditionally been considered secondary to teaching in most Portuguese universities, with the effect that relatively little time is devoted to it and until recently, it counted for less for the purposes of career advancement. This has naturally had effects upon productivity.

iii) Academic Careers and Recruitment Policies

One of the points made by Canagarajah in his description of the academic culture in the University of Jaffna is that departments are effectively "minifiefdoms" (195), run by senior professors with their own students and associates. Consequently, success depends less upon publication record than upon systems of patronage and membership of an influential clique.

In such a system, seniority is determined by age and date of academic appointment rather than through achievements (Canagarajah 196), and there is practically no horizontal/geographical mobility as scholars usually prefer to stay in the same university to be close to family and friends (Canagarajah 197). The system does

provide job security, however, as tenure is effectively achieved at entry level provided that proof is given of enrolment in a postgraduate degree course (Canagarajah 191). Thereafter, annual promotions and salary increases are almost automatic, based upon required years of service rather than merit points earned, and the individual track record merely serves to confirm the new rank (Canagarajah 190). Even here publications count for very little. More important is teaching experience (though there is no practice of student and peer evaluation) and institutional service, such as membership of committees and appointment for office (Canagarajah 192).

Twenty years ago, the academic career system in Portugal was almost identical to that described by Canagarajah. Lecturers would be recruited from the student body and would usually spend their whole lives in the same institution, moving from rank to rank fairly automatically without competition or obstacles. In such situations, there was little incentive to publish, with the result that many senior academics today have a pitiful research record compared to what would be expected in centre countries.

This situation has now changed, however, and as a result, competition for jobs has become intense. In 2009, new legislation (Decree-Law No. 205/2009 of 31st August) came into force which abolished automatic career progression and imposed meritocratic recruitment criteria at all ranks. In an attempt to avoid "corruption" (i.e. recourse to the traditional system of patronage) in job appointments, the system used for ranking candidates is now highly quantified. Merit points are allocated to each kind of contribution, with research record (and particularly international publications) now counting for more than teaching experience or institutional service.[11] Candidates are then ordered by means of a complex mathematical formula.

This excessive quantification, which precludes the possibility of qualitative assessments, offers a good example of the phenomenon that I have termed the "butler" syndrome. That is to say, in its drive to emulate the centre and become accepted by it on equal terms, the semiperiphery may sometimes err on the side of excess, becoming even more precious about centre values than the centre itself. Though we have yet to see the consequences of this policy, it is reasonable to assume that it might encourage researchers to privilege quantity over quality, a situation which would bring further repercussions upon the community as a whole.

[11] For example, an announcement published in the state gazette in October 2011 ("Edital" no. 1008/2011 in *Diário da República*, 2nd Series, No. 201) for a job opening in the Faculty of Letters, University of Lisbon, stipulated that candidates would be ranked strictly according to merit, with research record counting for 60%, teaching ability for 25% and other relevant activities (such as institutional office and membership of committees) for 15%. Each of these categories was then subdivided (for example, within the first category, publications would count for 35%, participation in research projects for 15%, conference participation for 5%, and supervision and examining of dissertations for 5%).

iv) Attitudes towards Intellectual Property and Research Quality

Much has been written about the cultural dimensions of plagiarism and of the problems that peripheral students appear to have with the centre's notions of intellectual property. Most of the early studies (Matalene; Sherman; Deckert; Bloch and Chi; Scollon; Pennycook; Myers) suggested that there was a whole different attitude to intellectual property on the periphery, a perspective endorsed by Canagarajah, who claims that it is common practice in Sri Lanka to quote the works of others without critical engagement:

> Borrowing from other texts, like borrowing freely from others' words in the communal stock of oral knowledge, is unrestricted. The ownership of knowledge is fluid, just as copyright laws are hardly in operation. Local scholars see themselves as freely borrowing from and contributing to the pool of available knowledge. (131)

However, a more recent survey of foreign students' attitudes to plagiarism in a Canadian university (Abasi and Graves) suggests that things might be changing. Instead of expressing bewilderment at the whole notion that copying could be wrong, these students seemed to share the same basic moral framework as the host culture, claiming only a difference of degree (in the sense that such offences were treated as less serious in their home countries and punished less harshly).

A similar change seems to have taken place in Portugal over the course of this period. In the early 1990s, copying was still being tacitly encouraged by an education system that valued deference to authority over originality and critical reasoning: students at all levels of the system were expected to absorb the words of their masters and other authorities and then regurgitate them verbatim in examinations, while practices such as collusion were not only tolerated, they were viewed as an entirely normal part of the learning process. However, growing internationalization has brought an increased awareness of the opprobrium with which such practices are viewed elsewhere. A number of high-profile scandals (involving, amongst other things, the expulsion of Portuguese students from Erasmus programmes and the termination of collaboration agreements) forced the authorities to take these matters more seriously, so that, today, no student in most higher education establishments can claim not to understand the rules of the game.

Despite these changes, Portugal's semiperipheral status is evident in the patchiness with which standards are enforced. In some traditional departments, the authorities often turn a blind eye to cheating, either because the modern ethos has not properly penetrated or because it suits them to take a more lenient view (perhaps to maintain student numbers or because the perpetrator is protected by influential connections). However, in the more progressive universities, and particularly those involved in prestigious partnerships with important international institutions, all efforts are now made to ensure that standards are strictly maintained—the costs of doing otherwise are of course too great to contemplate.

Similarly, Portuguese publications vary tremendously as to the extent to which they uphold the centre's standards with regards to the quality of the articles they publish. Though peer-reviewing procedures are now being increasingly implemented in journals with wider circulation, there are still many cases where editorial decisions are taken by an internal committee, or even by a single individual, without recourse to any form of quality control. One of the consequences of this is that social status still plays a large role in determining who or what gets published. An editorial board is unlikely to refuse an article by a prominent figure in the community, even if it does not come up to the desired standard, while work by individuals from communities deemed to be culturally inferior (such as countries on the outer periphery) may often be rejected outright without due consideration of their merits.

Perhaps the greatest sign of semiperipherality in this domain is the extent to which the Portuguese academy fails to acknowledge its own fragilities. That is to say, the centripetal pressure is so strong that the official discourse on quality is now identical to that of the centre, despite the fact that these norms have not yet been fully assimilated throughout the national system.[12] This sometimes results in the vociferous condemnation of more peripheral cultures for practices that have by no means been eradicated from the Portuguese system.

v) Epistemological Orientation and Academic Discourse

According to Canagarajah, one of the most significant differences between core and peripheral academic cultures has to do with epistemological orientation. That is to say, the scientific paradigm that is so taken-for-granted at the centre of the world system[13] does not always have quite the same status on the periphery, where it may have to compete with other forms of knowledge based on different ideological premises—at the University of Jaffna, for example, a great deal of research activity is carried out within the framework of the Saiva Siddanthu religious tradition (189). One of the ways in which this instability is manifested is on the level of clashing textual conventions. Canagarajah (137-155) lists a number of ways in which the conventions traditionally employed in his home country of Sri Lanka differ from

[12] For example, the Portuguese research funding body, the Fundação de Ciência e Tecnologia, has as one of its strategic objectives the implementation of "rigorous and transparent evaluation processes through peer-assessment with national and international experts" (FCT, "Sobre a FCT: Linhas orientadoras e objectivos estratégicos," No. 3. 30 Oct. 2014. Web. <https://www.fct.pt/fct.phtml.pt>), yet its own 2014 evaluation of the research centres under its jurisdiction has been widely criticized as profoundly flawed, including by the Council of Rectors (cf. Firmino; De Rerum Natura).

[13] According to Halliday and Martin, the scientific paradigm and the discourse that it spawned are so overwhelmingly dominant in Anglo-Saxon culture that even the humanities subscribe to it: there is "an essential continuity between humanities and science as far as interpreting the world is concerned" (220).

those of the centre,[14] demonstrating how they make sense within a conception of knowledge that is "contextualized, personal, intuitive, tradition-confirming and collective" (142). However, when local scholars write for centre journals, he says, they have a tendency to hypercorrect, moving to "the diametrical opposite of the discourse adopted for the local audience" (145). That is to say, aware that the centre conceives of knowledge as de-contextualised, transcendental and value-free, they often produce a stereotype of what they think centre discourse sounds like, without the subtler modulations that in fact occur in texts produced by centre-based disciplinary communities.

To some extent, the situation in Portugal is not unlike that described in Sri Lanka, in that the scientific paradigm is a relatively recent import and is still competing with an older humanistic tradition that was culturally dominant until the last decades of the 20th century. But the problems that the Portuguese experience with English academic discourse are, if anything, more severe than those described by Canagarajah, simply because, for them, English is an entirely foreign language.[15] The discourse traditionally used in the Portuguese academy is so different from English academic discourse that it is practically incommensurable[16]—very elaborate and literary, with long complex sentences and a preference for poetic or high-flown diction (Bennett, "Academic"; *Academic*). Thus, Portuguese researchers wishing to publish in English will not only have to make adjustments at the rhetorical level; they may also be forced to undertake a massive reconceptualization that can have deep-reaching consequences on the level of personal identity (cf. Ivanič).

However, the scientific paradigm is now clearly in the ascendancy in Portugal, supported by government funding policies that are oriented more towards wealth creation than to the cultivation of ethical or aesthetic values. This has meant that a "modern" style of discourse, calqued on English and identical to it in almost all respects, is now gaining ground in Portuguese academia, not only in the sciences but also, increasingly, in the social sciences and humanities as well (Bennett, "Erosion"). Thus, it is possible that, in coming years, the traditional style will disappear

[14] They include: a linear author-centred rhetoric as opposed to the dialogic object-centred approach used in centre research articles (137); an ethos of humility rather than contentiousness when making claims (139); a preference for "end-weighted" argumentation strategies (that is, the tendency to develop a thesis gradually rather than explicitly defining it at the outset) (147), and the use of "patterned language" (literary devices to create aesthetic effects) (151).

[15] In the linguistic domain, Kachru's circles may offer a more appropriate model than the centre/semiperiphery/periphery approach that I have been using until now. This divides the English-speaking world into an *inner circle* (countries like the UK, USA, Canada, Australia etc, where English is the mother tongue), an *outer circle* (typically countries of the former British empire where English is the language of education and official transactions) and the *expanding circle* (countries where it is learned as a foreign language). This would put Sri Lanka closer to the centre than Portugal.

[16] It embodies a completely different paradigm of knowledge that values the aesthetic, emotional and ethical dimensions of knowledge as much as or more than the capacity to make truthful observations about the outside world.

altogether, rejected by younger researchers as archaic and incompatible with the needs of modern democratic society.

This too may be considered as a manifestation of the "butler" syndrome, in the sense that it involves a repudiation of the traditional Portuguese worldview in favour of the values transported by English academic discourse. This subservience contrasts with the more contestatory posture evident in some parts of the outer periphery in the postcolonial context, where there have been attempts to challenge and subvert the hegemonic discourse through the creation of hybrid discourses (eg. Ngugi wa Thiong'o) or the use of deconstruction techniques that intervene in the language in order to call attention to underlying assumptions that might otherwise have gone unnoticed (eg. Bhabha; Spivak).

4. CONCLUSION

As these examples show, semiperipherality seems to represent a transitional phase in a country's economic and social development, which is ultimately the main determinant of research success (May; King; Lee et al.). Indeed, for Wallerstein and Santos, the category of "semiperiphery" is defined precisely by the fact that it contains features of both centre and periphery rather than by any particular characteristics of its own.

However, in this text, I have argued that the semiperiphery does have one defining feature—a peculiar propensity for emulation (the "butler" syndrome), which causes it to uncritically assimilate centre values while rejecting all that is peripheral, including aspects of its own identity. This conservative tendency is what causes it to function as a "buffer zone" (Wallerstein), dampening the impact of radical innovation and protecting the system as a whole from potentially destructive change.

Yet this unqualified identification with the centre seems to be more posture than fact; for, as we have seen, the semiperiphery is actually quite tolerant of non-standard practices and procedures, whether this is expressed negatively as a lack of stringency or positively as a propensity for "boundary work". Unlike the centre, it is not in the grip of an epistemological monopoly nor is it constrained by its own status to uphold rigid procedures in the interests of "rigour". Instead, it can accommodate conflicting epistemological frameworks, which permits not only a broad range of vantage points, but also greater flexibility and adaptability.

According to world-systems theory, major power shifts in scientific production, as in other fields, tend to result from a growing staleness or loss of innovative energy at the centre, largely due to the absence of competition— "The centre [...] has to go on initiating and making discoveries without having the pattern of another superior centre to guide it. It has only its own traditions to draw on and these also have a decelerating stagnating effect" (Gizycki 494). The semiperiphery, on the other hand, has every incentive to compete, something it does by emulating the centre and professing a commitment to its standards. This enables it to be accepted as a (junior) partner in joint ventures, which in turn permits it to learn from the centre and absorb everything it has to offer.

At the same time, however, the semiperiphery may be surreptitiously undermining that hegemony by giving a platform to alternative practices and non-standard forms of knowledge. These activities generally take place in the shadows, out of the limelight, because they are considered unworthy of the centre's attention. But they nevertheless contribute to a build-up in pressure that may one day bring about a major paradigm shift that drastically alters the balance of power.

As Gizycki says, "the periphery has an advantage over the centre because the time-lag of imitation causes the centre to become exhausted while it still believes it is the centre" (494). In this sense, the butler's unwavering deference towards his master seems almost like a diversionary tactic designed to hide the fact that subversive elements are being ushered in through the back door.

The semiperiphery should not, therefore, be underestimated. It clearly plays an important role in the geopolitics of academic practice, and any major shifts occurring in the system as a whole may well have their epicentre in one of its tectonic plates.

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WORKS CITED

Abasi, A.E. and B. Graves. "Academic Literacy and Plagiarism: Conversations with International Graduate Students and Disciplinary Professors." *Journal of English for Academic Purposes* 7 (2008): 221-233. Print.

Bennett. K. "Academic Discourse in Portugal: A Whole Different Ballgame? *Journal of English for Academic Purposes* 9 (2010): 21-32. Print.

——. *Academic Writing in Portugal I: Discourses in Conflict*. Coimbra: Coimbra UP, 2011. Print.

——. "The Erosion of Portuguese Historiographic Discourse." *The Semiperiphery of Academic Writing: Discourses, Communities and Practices*. Ed. K. Bennett. Basingstoke: Palgrave Macmillan, 2014. 13-38. Print.

——. ed. *The Semiperiphery of Academic Writing: Discourses, Communities and Practices.* Basingstoke: Palgrave Macmillan, 2014. Print.

Bhabha, H. *The Location of Culture.* London: Routledge, 1994. Print.

Blagojevic, M. *Knowledge Production at the Semiperiphery: A Gender Perspective*. Belgrade: Institute for Criminological and Sociological Research, 2009. Print.

Blagojevic, M. and G. Yair. "The Catch 22 Syndrome of Social Scientists in the Semiperiphery: Exploratory Sociological Observations." *Sociologija* 52.4 (2010): 337-358. Print.

Bloch, J. and L. Chi. "A Comparison of the Use of Citations in Chinese and English Academic Discourse. *Academic Writing in a Second Language: Essays on Research and Pedagogy*. Ed. D. Belcher and G. Braine. Norwood: Ablex, 1995. Print.

Canagarajah, A.S. *A Geopolitics of Academic Writing,* Pittsburgh: U of Pittsburgh P, 2002. Print.

De Rerum Natura. "The Rules of the Game: The Evaluation of Portuguese Research Units." *FCT/ESF Evaluation: The Seven Differences as Announced and as Carried Out*." (3 de Outubro de 2014). 30 Oct. 2014. Web. <http://dererummundi.blogspot.pt/2014/10/the-rules-of-game-evaluation-of.html>.

Deckert, G.D. "A Pedagogical Response to Learned Plagiarism among Tertiary-level ESL Students." *Journal of Second Language Writing* 2 (1993): 94-104. Print.

Fundação de Ciência e Tecnologia (FCT). 30 Oct. 2014. Web. <http://www.fct.pt/Fct>.

Ferguson, G. "The Global Spread of English, Scientific Communication and ESP: Questions of Equity, Access and Domain Loss." *Ibérica* 13 (2007): 7-38. Print.

Firmino, T. "Reitores arrasam avaliação da FCT: 'Um falhanço pleno'." *Público* (24 de Outubro de 2014). 30 Oct. 2014. Web. <http://www.publico.pt/Ciencia/Noticia/Crup-Arrasa-Avaliacao-Da-Fct-Um-Falhanco-Pleno-1674052>.

Flowerdew, J. "Attitudes of Journal Editors to Nonnative Speaker Contributions." *TESOL Quarterly* 35.1 (2001): 121-150. Print.

Gizycki, R. von. "Centre and Periphery in the International Scientific Community: Germany, France and Great Britain in the 19th Century." *Minerva* 11 (1973): 474-494. Print.

Gomes, J.F. "A Reforma da educação superior portuguesa." *Revista de Economia* 35.3 (2009): 103-118. Print.

Halliday, M.A.K. and J.R. Martin, eds. *Writing Science: Literacy and Discursive Power*. Pittsburgh: U of Pittsburgh P, 1993. Print.

Ivanič, R. *Writing and Identity: The Discoursal Construction of Identity in Academic Writing*. Amsterdam: John Benjamins, 1998. Print.

Kachru, B. "World Englishes." *Concise Encyclopedia of Sociolinguistics*. Ed. R. Mesthrie. New York: Elsevier, 2001. 519-524. Print.

King, D. "The Scientific Impact of Nations: What Different Countries Get for Their Research Spending." *Nature* 430 (2004): 311-316. Print.

Lee, L.C., P.H. Lin, Y.W. Chuang, and Y.Y. Lee. "Research Output and Economic Productivity: A Granger Causality Test." *Scientometrics* 89 (2011): 469-478. Print.

Lillis, T. and M.J. Curry. *Academic Writing in a Global Context: The Politics and Practices of Publishing in English*. London: Routledge, 2010. Print.

Loff, M. and M.C.M. Pereira, eds. *Portugal: 30 anos de democracia (1974-2004)*. Porto: Editora da Universidade do Porto, 2006. Print.

Matalene, C. "Contrastive Rhetoric: An American Writing Teacher in China." *College English* 47.8 (1985): 789-808. Print.

May, R. "The Scientific Wealth of Nations." *Science* 275 (1997): 793-796. Print.

Merton, R. "The Normative Structure of Science." *The Sociology of Science: Theoretical and Empirical Investigations*. Chicago: U of Chicago P, 1973. Print.

Myers, S. "Questioning Author(ity): ESL/EFL, Science and Teaching about Plagiarism." *Teaching English as a Second or Foreign Language* 3.2 (1998): 1-21. Print.

Ngugi Wa Thiongo. *Decolonising the Mind: The Politics of Language in African Literature*. Portsmouth: Heinemann, 1986. Print.

Nóvoa, A. "As ciências da educação e a reforma do sistema educativo." *Ciências de educação e mudança*." Ed. E**.** Nóvoa, B. Campos, J.P. Ponte, M.E. Brederode Santos. Oporto: Sociedade Portuguesa de Ciências de Educação, 1991. 51-67. Print.

Nunes, J.A. and M.E. Gonçalves, eds. *Enteados de Galileu? A semiperiferia no sistema mundial da ciência*. Porto: Edições Afrontamento, 2001. Print.

Pennycook, A. "Borrowing Others' Words: Text, Ownership, Memory, and Plagiarism." *TESOL Quarterly* 30.2 (1996): 201-230. Print.

Salager-Meyer, F. "Scientific Publishing in Developing Countries: Challenges for the Future." *Journal of English for Academic Purposes* 7 (2008): 121-132. Print.

Santos, B.S. "Estado e sociedade na semiperiferia do sistema mundial: o caso português." *Análise Social* 21.87-88-89 (1985): 869-901. Print.

Scollon, R. "Plagiarism and Ideology: Identity in Intercultural Discourse." *Language in Society* 24 (1995): 1-28. Print.

Sherman, J. "Your Own Thoughts in Your Own Words." *ELT Journal* 46.3 (1992): 190-198. Print.

Spivak, G. *A Critique of Postcolonial Reason: Toward a History of the Vanishing Present*. Cambridge: Harvard UP, 1999. Print.

Uzuner, S. "Multilingual Scholars Participation in Core/Global Academic Communities: A Literature Review." *Journal of English for Academic Purposes* 7 ((2008): 250-263. Print.

Wallerstein, I. *The Politics of the World-Economy: The States, the Movements and the Civilizations*. Cambridge: Cambridge UP, 1984. Print.

Weber, M. *The Protestant Ethic and the Spirit of Capitalism*. New York: Routledge, 1992. Print.

EXPRESSIVE OBJECT CONSTRUCTIONS IN ENGLISH. A CORPUS BASED ANALYSIS

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Abstract

This article aims to explore the way speakers report verbal and nonverbal communication in complex constructions of the type "She smiled her agreement" (Levin's "Reaction Object Constructions"). These expressive constructions report the manifestation of a mental state transmitted by means of a sound or gesture. The speaker decodes the message into a condensed nominal object. The verb denotes the code, or manner of communication. The analysis of over 3000 corpus examples reveals different syntactic and semantic properties of this construction.

Key words: reaction objects, manner of speaking verbs, gesture verbs, (non)verbal communication.

Resumen

Este artículo se propone analizar la manera en que los hablantes transmiten actos comunicativos verbales y no verbales mediante construcciones complejas del tipo "She smiled her agreement" ("Construcciones de Objeto de Reacción" según Levin). Estas construcciones expresivas describen la manifestación de un estado mental transmitido mediante un sonido o gesto. El hablante decodifica el mensaje y lo condensa en un sintagma nominal abreviado. El verbo denota el código o la manera de comunicación. El análisis de más de 3000 ejemplos extraídos de corpus muestra diferentes propiedades sintácticas y semánticas de esta construcción.

Palabras clave: objeto de reacción, verbos de manera de hablar, verbos gestuales, comunicación verbal y no verbal.

INTRODUCTION

Levin, under the rubric "Reaction Object Construction," discusses an alternation involving the transitive use of typically intransitive verbs:

(1) a. Pauline smiled her thanks.
b. Sandra beamed a cheerful welcome.
c. She mumbled her adoration. (Levin 98)

According to Levin (98), such a verb belongs to the class of Manner of Speaking (henceforth MS) verbs or to the class of verbs of gestures and signs, while the object expresses a "reaction," specifically "an emotion or disposition." The semantics of the construction —"express (a reaction) by Ving"— suggests a communicative setting, which includes a resultative object, the message.

The term "reaction" as used by Levin implies that there is a previous event, or "stimulus," causing this expressive event. Thus, in (1a) we may assume that something positive is done for Pauline and she reacts with an act of thanks. It could also be argued that in (1b) Sandra's welcome is a "reaction" to someone's arrival. However, the object in (1c) does not necessarily express a reaction; it denotes an emotional attitude with a possible longer extension over time, for example, "She mumbled that she adores her (and has always adored her)." It seems more appropriate, therefore, to use the term "expressive" to refer to all these objects that convey a thought or feeling ("an emotion or disposition" in Levin's words).

Expressive Object Constructions (henceforth EOC) have received little attention to date. Some researchers analyze them in relation to Cognate Objects (Massam, Felser and Wanner, Mirto). Ross's study on declarative sentences touches upon these constructions "whose main verbs denote nonverbal communication" (239), and Martínez-Vázquez ("Effected Objects") discusses them along with other cases of non-subcategorized resultant objects.

From a syntactic point of view the object has been described as "a non-subcategorized DP that originates in an argument position within the VP headed by an intransitive verb" (Felser and Wanner 5). Mirto underscores the importance of the relation between the object and the clausal subject. Thus, "She nodded her approval," paraphrased as "she approved (of something) by nodding", entails both "she approved" and "she nodded." The object is thus considered predicative, sharing the clausal subject with the verb. Kogusuri also underlines this coreferential relation. He bases his analysis of these objects as arguments on their status as effected objects and the coreferential constraint imposed on the possessive NPs.

Major English grammars such as Quirk *et al*. do not discuss these expressive objects, even though resultant, cognate and eventive objects are considered (749-752). Huddleston and Pullum (305) briefly discuss the examples reproduced as (2) under the rubric "object of conveyed reaction":

(2) a. He grinned his appreciation.
b. I nodded my agreement.
c. He roared his thanks. (Huddleston and Pullum 305)

There is general consensus that examples like those in (1) involve non-subcategorized objects expressing an emotion or disposition closely associated with the action denoted by the verb. However, an absence of empirical data leads to a poor characterisation of all those elements which may be involved in the EOC; it is thus reasonable to conclude that the construction is more productive and creative than normally assumed. This article sets out to explain the formation of these constructions on the basis of an analysis of extensive corpus data. The remainder

of the paper is structured as follows: section 2 describes the data and methodology used; section 3 analyses the data and discusses the different elements which may appear in EOCs; finally, section 4 summarizes the main conclusions.

DATA AND METHOD

Levin mentions two classes of verbs which may form EOCs: MS verbs and verbs of gestures or signs. On similar lines, Huddleston and Pullum (305) distinguish constructions with verbs of "non-verbal communication" ("grin", "laugh", "nod", "sigh", "smile" and "wave") and MS verbs ("mumble", "roar", "scream" and "whisper"). With the aim of delimiting the potential elements in EOCs, extensive searches for these two classes of verbs and their constructional and usage contexts were conducted using the *Corpus of Contemporary American English* (henceforth COCA).[1] The searches were run in the four genres represented in COCA: Fiction, Magazine, Newspaper, Academic and Spoken. The first search involved the collocational patterning of MS and gesture verbs followed by a possessive determiner and a noun (e.g. "She smiled her agreement"). A second set of searches was made for constructions with an indefinite determiner (e.g. "He smiled a welcome"). Finally, strings with a noun directly attached to the verb (e.g. "She nodded agreement") were searched for. The results were filtered manually to assure the coreferencial relation between both NPs. Thus, examples like "They clap their approval" were selected, whereas examples like "They applauded his performance when he left" were not.

Sentences with a metalinguistic noun standing for a direct or indirect speech act with MS verbs (e.g. "She screamed her name/her message/her story") were also discarded in that they are regular objects which pronominalize and passivize, showing the same behaviour as objects with verbs of speaking.

More than 3000 EOCs were found. The aim was not to extract all the EOCs in the COCA, but to identify the different items which may take part in the construction. For this purpose, additional searches for any verb with prototypical expressive objects were conducted.

All EOCs involving the most frequent gesture verbs were gathered, as a means of gaining information on their productivity. This was not possible with MS verbs, since they form a much more extensive class and co-occur in other constructions which, although formally similar, are functionally different.

[1] The COCA is a 450 million words corpus, parsed and made available online by Mark Davies. Unless otherwise stated, all the examples cited in this paper are from COCA. The searches were carried out during August-November 2013. Some examples have been shortened for clarity.

RESULTS AND DISCUSSION

Manner of speaking and sound emission verbs

MS verbs are closely related to the *verba dicendi* class (e.g. "say", "tell"). The verbs in both classes share a sound component, but while MS verbs only involve the emission of sounds, speaking verbs include the sound as a subcomponent of the act of speaking. A way of extending the meaning of an otherwise neutral verb of transfer of information is to take a sound component that is conceived of as a salient ingredient of the speaking process which substitutes it. This SOUND FOR SPEECH metonymy explains the conventionalized transitive usage of some MS verbs (Martínez-Vázquez, "Communicative Constructions"). For example, the verbs in (3) share a loud sound component that may be perceived as "aggressive." This salient feature will be responsible for instantiating the metonymic usage of the verb. The sound emission verb acquires a new meaning, "to communicate with an aggressive type of sound."

(3) a. They screeched that Medicare would be the demise of quality medical care.
b. Congressional candidate Eric Massa [...] roared that those who challenge them are insulting the people who made this country great.

These extended communicative uses of MS verbs are acknowledged in dictionaries. In fact, MS verbs, like speaking verbs, take subordinate "that" clauses (as in 3), allow pronominalization of their objects (4), and may undergo passivization (5).

(4) a. People whisper his name, as if saying *it* too loud would cause him to appear in the room, guns ablaze.
b. My father would whistle his phrase, my mother would try to whistle, then hum *hers* back.

(5) a. Orders are yelled.
b. Adults feel the same way when commands are barked at them.
c. Warnings were shouted, and the Elves poured back through the breach.
d. For three months, night and day, orders are screamed at young men and women to try to cut that umbilical cord from home.

Huddleston and Pullum (305) note that "objects of conveyed reactions" with verbs of nonverbal communication hardly express an argument of the verb, and for this reason cannot be made into the passive (see 6b). MS verbs, on the other hand, take a wider range of objects and may appear in passive constructions (6d):

(6) a. She smiled her assent.
b. *Her assent was smiled.
c. He roared the command.

d. On the parade ground commands must be roared, not whispered. (Huddleston and Pullum 305)

However, the subject of the passive sentence in (6d), like those of the examples in (5), has a generic reference; thus it cannot be claimed to be the object of an EOC, which must be coreferential with the agent of the MS verb. Notice that these passive sentences are open to an interpretation like that in (7), where the agent of the MS verb ("yell") and that of the expressive event ("order") do not coincide:

(7) As the captain's orders were being constantly yelled the crashing waves drowned out the only human sound during an evil and malevolent night. (*books.google.com/books?isbn=1426925018)*

In fact, Huddleston and Pullum's example of "object of conveyed reaction" with a MS verb, reproduced as (6c), cannot be considered an EOC, since its object takes a definite article, which implies a prior mention to this noun; hence, its referent cannot be a product of the verbal action. The objects in EOCs are "released" by the participant in subject position as a result of the action denoted by the verb, thus they cannot show a prior external existence. The coreferential relation in EOCs is marked by the presence of a possessive determiner, as in (8a), which bans passivization (8b), following Massam's generalization: "[i]f the direct object contains a bound variable, passive is impossible (whether or not this element is syntactically explicit)" (Massam 180).

(8) a. A hundred keening widows screech their lamentations as a hundred shovels break the earth.
b. *Their lamentations were screeched.

The number of potential MS verbs in EOCs is very extensive. The following verbs from Levin's list were attested in EOCs in COCA:

(9) "babble," "bark," "bawl," "bray," "bellow," "bleat," "boom," "burble," "chant," "chatter," "chirp," "cluck," "coo," "croak," "croon," "crow," "cry," "drawl," "groan," "growl," "grumble," "grunt," "hiss," "holler," "hoot," "howl," "lisp," "moan," "mumble," "murmur," "mutter," "purr," "rage," "rasp," "roar," "rumble," "scream," "screech," "shout," "shriek," "sing," "snarl," "squeal," "stammer," "stutter," "thunder," "trill," "trumpet," "wail," "wheeze," "whimper," "whine," "whisper," "whistle," "yap," "yell," "yelp,"and "yodel."

Notice that Levin's class of MS verbs includes verbs which are cross-listed in other classes. Hence, many MS verbs may be used as verbs of animal sounds and/or verbs of sound emission "if sounds with similar characteristics are associated with animals and/or inanimate entities" (Levin 206). Some MS verbs are also included in her list of verbs of nonverbal expression: "cackle," "cry," "groan," "growl," "howl"

and "whistle." In fact, she points out that all the verbs in this class "could show properties of manner of speaking verbs" (Levin 219).

Our data confirm this cross-classification of verbs with a sound component in EOCs. For example, (10) shows instances of EOCs with the verb *roar* alternatively associated with human, animal and inanimate subjects. The SOUND FOR COMMUNICATION metonymy explains the association of verbs of animal sounds to human beings, as in (10a). Example (10b) reveals a type of EOC which involves unintentional transmission of information. Finally, (10c) illustrates a non-agentive EOC, which involves more complex metaphorical mappings:

(10) a. The audience roared their approval.
b. During those times, Tiger roared his dissatisfaction into the night and went looking for other prey.
c. Well, the markets roared their approval over Greenspan's renomination.

Our corpus analysis shows that the potential list of MS verbs involved in EOCs is unlimited. It includes verbs already acknowledged as reporting verbs —"murmur," "whisper," etc.— but also other verbs of sound emission which may potentially be associated with a speaker. For example, verbs related to the release of air through the mouth are easily linked to speaking events, as illustrated in the following examples:

(11) a. How many handsome fellows had sighed compliments to Aly.
b. The young man exhaled his words in a stream of smoke.

Not surprisingly, verbs like "exhale," "puff," "sigh," "cough" or "belch" have been attested in EOCs:

(12) My wife exhaled her frustration, letting me know it had been the same for her.
(13) He puffed relief, fear draining from his charged muscles.
(14) Kip sighed his pleasure.
(15) But I have no sympathy for what I consider the intellectual and moral offense of coughing discouragement on people.
(16) "Burgers in five!" calls Shirley. Eldon belches acknowledgment and the screen door chinks shut.

Moreover, sounds produced when inhaling air, like "sniff" or "inhale," which are physically incompatible with the release of air involved in articulating speech —indeed, they rather express the opposite: perception, rather than expression, as in (17a)— are, nevertheless, also used in EOCs, as in (17b):

(17) a. Wolfgang inhales their disappointment.
b. He sniffed his contempt.

Notice, however, that although these verbs incorporate a sound component they are not used as MS verbs, but as verbs of nonverbal communication. In fact, any sound which may be "interpreted" in a given situation may lexicalize in a nonverbal EOC, as the following more creative examples illustrate:

(18) a. I have great respect for the work you are doing. Seed tut-tuts his thanks.
b. I simply do not have time to go back in there. I honk good-bye to Charles and Faye.
c. The butcher store was crowded, and as we stepped inside the door jingled a welcome.

In sum, verbs with a sound component may potentially appear in EOCs conveying either verbal or nonverbal messages. Table 1 shows a scalar illustration of EOCs, ranging from verbal to nonverbal communication. At the top, human MS verbs closely related to the *verba dicendi* class produce verbal messages. At the bottom of the scale, EOCs with verbs associated with inanimate beings, as in (g), denote non-linguistic messages. The closer the sound is to human production the more probabilities it has of conveying linguistic messages in their EOC formation. The limits, however, are fuzzy. For example, in examples (c) and (d), it is difficult to tell whether "thanks" stands for a speech act or a guttural thanking signal.

TABLE 1. VERBAL AND NONVERBAL EOCS WITH MS VERBS.

verbal	a I murmured my thanks in Arabic.
	b He mumbled his thanks, merci, and turned left to exit the market.
	c The Japanese grunted his thanks.
	d I gurgled my thanks and lay my head back, closing my eyes.
	e Young squeals her approval.
	f The baby crowed his delight.
nonverbal	g Protesters in Cadillacs and pickup trucks honked their opposition outside the state Capitol.

VERBS OF SIGNS AND GESTURES

Beside sounds, which may be used to produce both linguistic and nonlinguistic signs, gestures are an important source of nonverbal communication. But facial expressions, or hand movements, are not assigned a fixed meaning, so they must be interpreted within an unambiguous context.

In order to appear in EOCs, gesture verbs must be easily associated with a specific communicative scene, and their objects must denote a feeling or disposition compatible with the act denoted by the verb (Martínez-Vázquez, "Effected Objects"). For example, the act of nodding is pragmatically understood, at least in Western culture, as an affirmative sign, as illustrated in (19); hence, the verb is felicitous in an EOC to express an act of transmission of this affirmation, as in (20). In fact, the semantic matching is so precise here that the object is perceived as redundant.

(19) a. Appreciative nods of assent all around.
b. She nodded her head in assent to her evaluation.
c. He nodded approvingly.
d. He nodded in approval.
e. I nodded and said okay again.

(20) Marisa nods her assent.

Sniffing suggests a feeling of dislike or distaste; hence, this gesture may be taken as a means of expressing contempt, as in (17b) above. Acts of smiling are usually concomitant with positive communication; therefore, smiling verbs appear in EOCs to convey manner of positive expression:

(21) a. The white-haired bus driver grinned his sympathy.
b. He dearly enjoyed seeing her grin, and he smiled his pleasure.

Huddleston and Pullum (305) point out that verbs of nonverbal expression are more constrained in their EOC formation than MS verbs. But note that the issue of being or not being a MS verb is a matter of linguistic and extralinguistic context; sound verbs may convey both verbal and nonverbal messages, as was shown in table 1. Thus, a human sound emission verb like "murmur" takes a wide variety of objects, that is, one can "murmur" any type of message. However, a more specific type of sound, one associated with an animal, for example, is pragmatically restricted in its metonymic association to a speaker, while an inanimate sound, like "honk," is difficult to turn into speech. When a sound verb is used to convey nonverbal signals, contextual information is essential for its interpretation. For example, "whistle" conveys opposite communicative functions in (22); its interpretation relies on the previous context, and the modulation of the sound, which is also significant:

(22) a. Artoo whistled his assurances.
b. Gerry whistles his disapproval.

The potential messages transmitted through gestures are even more limited by contextual information. As Ross (267) claims, the objects of sentences like (23) must be "mental states which can be behaviorally manifested." Thus, abstract nouns like "belief," "recklessness," "prejudice," "greed," "hope" or "kindness" are not allowed:

(23) a. Tom$_i$ frowned his$_i$ disbelief of the witness's story.
b. ?*Tom$_i$ nodded/smiled/grinned his$_i$ belief in the witness's story. (Ross 267)

Contextual information plays a crucial role in the formation of these constructions. For example, the verb "frown," which suggests disapproval or displeas-

ure, appears 7 times in EOCs in COCA with the following objects: "displeasure," "confusion," "annoyance," "disapproval" and "agreement." The latter noun here seems not to match the connotations of "frown." However, the context reveals that the expresser "agrees" with a statement of disapproval, which thus matches the frowning gesture:

(24) He stares right at me. "Clears two or three murders, bitch thinks she's a dick." Our Watch LT frowns agreement and checks the camera.

Likewise, the objects attested with the verb "smile" in (25) do not directly imply a positive outcome, but the context provides a key to unambiguous interpretation:

(25) a. She never argued; she joked. She smiled her disapproval.
b. Mom tenderly held my hand and said in a low voice: "Do what your father tells you. I don't like it either..." And she stoically smiled her courage to always surrender.

EOCs with the verb "nod", which are associated with affirmative events, as in (19-20), allow for a certain amount of variation, if provided with enough contextual information. For example, the objects in (26) do not denote affirmation directly; their assertive meaning is achieved through anaphoric reference. Therefore, even though noun phrases like "our familiarity with the genre" or "their wishes to help" refer to mental states which cannot be externally manifested, the previous context makes them perfectly "perceivable."

(26) a. "Are you all familiar with gangster rap?" McPherson asked. [...] While we each nodded our familiarity with the genre, McPherson reached into a shopping bag he'd brought and removed a magazine.
b. What can we do, Paul? [...] The two girls nodded their wishes to help too.

The list of gesture verbs appearing in EOCs is more limited than that of MS verbs. Table 2 shows the total number of EOCs with verbs used to convey nonverbal messages in COCA, plus their percentage share of the overall token count for that verb in the corpus.[2]

[2] Verbs with less than 5 EOC occurrences, like "wag," "bow," "bob," "weep," "chortle," "chuckle" and "cough" are not included in this table.

TABLE 2. INSTANCES OF GESTURE VERBS IN EOCS AND OVERALL PERCENTAGE.		
Type	in EOCs	percentage
kiss	926	5,10
nod	693	2,19
wave	507	3,28
hug	103	1,20
smile	92	0,20
snort	26	0,97
sigh	25	0,21
shrug	15	0,12
glare	10	0,24
blink	10	0,14
whistle	9	0,28
frown	7	0,10
clap	5	0,14
wink	5	0,18

Some recurrent gestures in our daily lives lexicalize into EOCs without the need for explicit extralinguistic information. For example, the act of kissing evokes a highly conventional greeting ritual, so the verb "kiss" is frequently attached to a small number of greeting formulae ("goodbye," "good night," "good morning," "bye" and "hello").[3] These semi-fixed constructions rank as the most frequent EOCs in COCA (926 examples). Since the verb is transitive, it includes a subcategorized object, the affected participant, which is also the recipient of the greeting expression:[4]

(27) Their first date she had kissed him goodnight.

This greeting scenario is also lexicalized with "hug," as in (28a). Two examples of the equivalent Romance verb, "embrace," have been attested, as illustrated in (28b):

(28) a. She pauses to hug a friend goodbye.
b. I expected to embrace Roddy's widow goodbye, but this time she only gave me her thin, strong hand.

[3] These formulae appear with different spellings in COCA, such as "good-night," "good night" and "goodnight."

[4] For a detailed analysis of the "kiss goodbye" construction see Haïk (2011).

It is surprising, however, that other pragmatically fixed greeting rituals, like shaking hands, do not lexicalize into these abbreviated constructions, though some creative uses were found:

(29) a. [...] mutton-chop hands so impossibly large that yours get lost in their folds when you shake hello.
b. It s a place near his office, and he hands out hellos all around as he makes his way over to my table.

The signal verb "wave" is used quite recurrently in EOCs, typically with a recipient introduced by "to," as in (30a), but it also appears in the dative construction with the recipient in object position (30b). This verb mostly combines with greeting nouns ("good-bye," "hello," "farewell") though it also appears with the object "thanks" (13 instances).

(30) a. He waved good-bye to a few acquaintances.
b. They shriek and wave him good-bye.

Since greetings are generally interpreted as reciprocal actions, verbs like "hug," "kiss," "embrace" and "smooch" are also found in the intransitive reciprocal construction:

(31) a. Marla let them hug their hellos.
b. And I look the other way as they are kissing their hellos.
c. And there they embraced goodbye.
d. One day I suddenly realized that our morning routine of smooching good-bye at the train station had somehow fallen by the wayside.

The second most frequent gesture verb in our corpus is "nod." It frequently forms semi-fixed constructions with affirmative nouns like: "acceptance," "affirmation," "agreement," "approval," "assent," "confirmation" and "consent." However, unlike "kiss," "nod" may convey an ample variety of messages relying on contextual interpretation, as illustrated in (26). The following less prototypical nouns have also been attested as expressive objects of "nod":

(32) "acknowledgment," "acquaintances," "acquiescence," "answer," "apology," "appreciation," "awareness," "compliance," "comprehension," "congratulations," "disinterest," "dismissal," "dreads," "encouragement," "farewell(s)," "forgiveness," "go-ahead," "good-bye(s)," "gratitude," "greeting," "hello," "lie," "no," "permission," "recognition," "recrimination," "reply," "satisfaction," "support," "surrender," "thank-you," "thanks," "understanding," and "welcome."

The verb "smile" is also frequently encoded in EOCs (92 occurrences). Other variants ("chortle," "grin," "beam," "chuckle") have been attested occasionally with

expressive nouns. Verbs with gestures socially perceived as negative (e.g. "snort," "sigh," "shrug," "frown") are less common in EOCs (see table 2).

In sum, since gestures convey inaccurate non-linguistic communication, their EOC formation is highly context dependent. Some daily rituals are lexicalized into semi-fixed collocations of the type "nod agreement" or "kiss good-night," but other gesture verbs combine more freely, provided that the context supplies enough information for precise decoding.

OBJECTS IN THE EOC

The objects in EOCs are abstract nouns conceived of as abbreviated communicative events.[5] These nouns are introduced by an indefinite or possessive determiner, but they may also appear directly attached to the verb. As an illustration of this, table 3 shows the distribution of the most recurrent objects in EOCs with the verb "nod." The most frequent collocation is the fixed phrase "nod yes":

TABLE. 3. STRUCTURE OF NPS OF MOST FREQUENT OBJECTS IN EOCS WITH "NOD".

	POSSESSIVE DETERMINER	Ø DETERMINER	INDEFINITE DETERMINER
yes	0	273	7
agreement	71	70	2
approval	79	39	2
thanks	51	20	1
assent	20	21	0
understanding	35	4	0

There are three possible types of object in EOCs. The first of these involves nominalized conventional speech-act formulae (e.g. "hello," "good-bye," "thanks"). These independent speech segments are uttered in socially fixed situations, like greetings, farewells or thanking acts. Their nominal status in EOCs is formally marked by the presence of a determiner, as in (33a-b). When the nominalization is not formally marked, as in (33c), the object resembles a direct speech segment:

(33) a. Aringarosa grumbled his hello.
b. Be prepared for random recordings of children hollering a welcome.
c. Hannah murmured good-bye.

[5] A detailed analysis of the different nominalization processes in EOCs is presented in Martínez-Vázquez ("Nominalized Expressive Acts").

Notice the similarity between the examples with "say" in (34) and "mumble" in (35). The MS verb in (35) only adds a manner component (indistinct and quiet manner of speaking) to ordinary speaking events like those in (34). The use of quotation marks in (34b) and (35b) shows the ambiguous status of these objects, which stand in the fuzzy area between direct speech segments and nouns:

(34) a. The phone rang, and I said hello.
b. Danny says "Hi" to her, and she smiles.

(35) a. I stumbled down the hall to the phone and mumbled hello.
b. He could only mumble "Hi" as he pushed open the door.

Surprisingly, these formulae are found in quotation marks even after verbs of gestures, as in (36), where they are no longer conceived of as verbal messages. The nouns "good-bye" and "hello" in (36) and (37) are parting and greeting signals, respectively, rather than speech acts. These brief conventional formulae used for stereotyped communicative situations extend their use in the EOC to denote the abstract speechless signal performed in the same type of scenarios.

(36) a. She waves "hello" to the receptionist.
b. The elevator doors start to close. LeDuc nods "good-bye."

(37) a. She watched her knight bow good-bye to the Witch.
b. She winks goodbye to the old man.
c. Margie smiled and waved hello to Gil and Harold.
d. He shrugs hello to the band.
e. Most of the artists nod hello to Fred.

A second type of object found in EOCs —"approval," "disapproval," "assent"— involves nouns derived from expressive illocutionary verbs ("agree," "disapprove," "assent"). Expressive illocutionary verbs name "forces whose point is to express approbation or discontent which are important in our social forms of life" (Vanderveken 213). Like speech-act formulae, they are addressee-oriented messages, but they imply a higher personal commitment on the part of the expresser. The message is not an empty social formula uttered in a conventional situation like "thanks" or "hello," but a performative individual response to a particular situation.[6]

(38) a. What do you think? Barnett smiles his approval.

[6] The words "yes" and "no" are categorized as formulae for their ability to stand in isolation as direct speech segments, but they share the illocutionary force of nouns like "agreement" and "disagreement," hence "nod yes" is almost synonymous with "nod agreement".

b. "Ahm, okay if I get some of these oranges too?" Brian asks. I shrug agreement, surprised when he fills up a plastic bag with about ten of them.
c. Women have never been allowed to fight. That doesn't mean they can't. All the women nod their assent.

Finally, some EOCs take attitudinal nouns like "admiration" or "disgust," which reveal an emotional state of mind. The expresser is no longer the agent but the experiencer of the corresponding verb:

(39) a. The women of the family murmured admiration.
b. The two Jacksons whisper their disgust at 'all the injustice' they see on TV.

These constructions involve no commitment on the part of the expresser. In fact, attitudinal objects are not necessarily intentional messages; they sometimes denote states of mind unintentionally revealed in a gesture or manner of speaking:

(40) a. She sighed her disappointment, absently looking around at the varnished cabinets gleaming in reflected firelight.
b. "I don't know. I don't really hate him." She puffed derision through her nostrils.

In sum, there are three types of objects in EOCs, as illustrated in table 4:[7]

TABLE 4. TYPES OF OBJECTS IN EOCS.

NOUNS	EXAMPLES
formulaic nouns	The other man nodded his goodbye.
responsive nouns	Merrick hesitates before nodding his assent.
attitudinal nouns	He did it several times until Sakera nodded her satisfaction.

CONCLUDING REMARKS

EOCs are much more diverse and productive than typically assumed. The analysis of more than 3000 examples extracted from COCA has revealed different syntactic and semantic properties of these expressive constructions.

[7] Bouso adds a fourth subtype of reaction nouns: "neutral nouns" (e.g. "Jem muttered some words").

This construction involves two causally linked events: the verbal event, which denotes the means by which the second event —the nominalized expressive act— is revealed. Some verbs of sound or gesture linked to a highly conventional communicative scenario appear in fixed or semi-fixed EOCs (e.g. "nod yes," "kiss good-night"). Alternatively, a verb may take part in the EOC to convey less conventional communicative situations, provided contextual information is supplied (e.g. "At midnight they will have a banquet and dance their love till dawn"). The speaker, a kind of omniscient narrator who interprets the expresser's manifested mental state, condenses it into an abbreviated noun. This message is frequently nominalized through the use of a possessive determiner, which underlines its predicative relation with the subject.

The structure of the EOC is represented in (41), with its ditransitive variant in (42):

(41) EOC: [$SUBJ_i$ [V → [($POSS$)$_i$ message] (OBL)]]

(42) DITRANSITIVE EOC: [$SUBJ_i$ [V → OBJ [($POSS$)$_i$ message] (OBL)]]

The general meaning of the construction can be summarized as follows:

1. An agent performs a sound/gesture.
2. The sound or gesture reveals a state of mind.
3. A receiver may perceive this state of mind.

Our data analysis has revealed three different types of EOCs:

A. Formulaic EOCs ("She grunted/ smiled hello").
   1. A volitional agent performs a sound/gesture.
   2. The sound or gesture is a sign for a socially bound formulaic expression.
   3. A receiver perceives (hears/sees) this formula.
B. Responsive EOCs ("She mumbled/nodded her agreement").
   1. A volitional agent performs a sound/gesture in response to a situation or event.
   2. The sound or gesture is an answer to an antecedent event.
   3. A receiver perceives (hears/sees) this answer.
C. Attitudinal EOCs ("She screamed/sighed her frustration").
   1. A (non)volitional agent performs a sound/gesture.
   2. The sound or gesture reveals an attitude.
   3. A receiver interprets this attitude reflected in the expresser's behavior.

Most EOCs imply direct or intended communication with an explicit or implicit receiver. But in some attitudinal EOCs no receiver is necessarily implied; instead, the focus falls on the first part of the communicative process, viewed as the liberation of a strong emotion, with no reception necessarily implied.

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WORKS CITED

Bouso, Tamara. "Towards an understanding of nonprototypical objects, with special reference to reaction objects" Handout. 37th AEDEAN Conference. Oviedo, 2013. Print.

Felser, Claudia and Anja Wanner. "The Syntax of Cognate and Other Unselected Objects." *Structural Aspects of Semantically Complex Verbs*. Eds. N. Dehé and A. Wanner. Frankfurt, Bern and New York: Peter Lang, 2001. 105-130. Print.

Haïk, Isabelle (2011). "Kissing goodbye." *Corela* 9.2 (2011) 5 Aug. 2013. <http ://corela.edel.univ-poitiers.fr/index.php ?id=2314> Web.

Huddelston, Rodney, and Geoffrey K. Pullum. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge UP, 2002. Print.

Kogusuri, Tetsuya. "The syntax and semantics of Reaction Object Constructions in English." *Tsukuba English Studies* 28 (2009): 33-53. Print.

Levin, Beth. *English Verb Classes and Alternations. A Preliminary Investigation*. Chicago: U of Chicago P, 1993. Print.

Martínez-Vázquez, Montserrat. "Nominalized Expressive Acts in English". *Nominalization and Corpus*. Forthcoming in Spec. issue of *Verbum*. Eds. E. Jacquey and M.-L. Knittel. Print.

——— "Communicative Constructions in English and Spanish". *The Dynamics of Language Use: Functional and Contrastive Perspectives*. Eds. Christopher S. Butler, Mª de los Angeles Gómez-González and Susana M. Doval-Suárez. Amsterdam: John Benjamins, 2005. 79-109. Print.

——— "Effected Objects in English and Spanish." *Languages in Contrast* 1:2 (1998): 245-264. Print.

Massam, Diane. "Cognate Objects as Thematic Objects." *Canadian Journal of Linguistics* 35. 2 (1990): 161-190. Print.

Mirto, Ignazio Mauro. "Dream a little dream of me: Cognate Predicates in English." *Actes du 26e Colloque International Lexique-Grammaire*. Bonifacio, 2-6 October 2007: 121-128. Print.

Quirk, Randolph, Sidney Greenbaum, Geoffry Leech, and Jan Svartvik. *A Comprehensive Grammar of the English Language*. London: Longman, 1985. Print.

Reddy, Michael J. "The Conduit Metaphor. A Case of Frame Conflict in our Language about Language." *Metaphor and Thought*. Ed. A. Ortony. Cambridge: Cambridge UP, 1979. 284-324. Print.

Ross, John R. "On declarative sentences." *Readings in English transformational grammar*. Eds. R. A. Jacobs and P. S. Rosenbaum. Waltham, Massachusetts: Xerox College Publishing, 1970. 222-272. Print.

Vanderveken, Daniel. *Meaning and Speech Acts: Principles of Language Use*. Vol. 1. Cambridge: Cambridge UP, 1990. Print.

Zwicky, Arnold, M. "In a Manner of Speaking". *Linguistic Inquiry* 2 (1971): 223-232. Print.

THE LIMINOID IN ALAN HOLLINGHURST'S *THE SWIMMING-POOL LIBRARY* AND *THE FOLDING STAR*

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Abstract

This paper aims to be a first approach to the liminoid as a valuable concept in the analysis of gay fiction, more specifically Alan Hollinghurst's first two novels. Being a classic concept, the liminoid addresses how gayness has been and still is articulated as a problematic identity, always in the make, and in a state of "inbetweenness." As the paper shows, the liminoid in *The Swimming-Pool Library* (1988) and *The Folding Star* (1994) adopts different patterns. Both novels constitute gay *Bildungsromane* whose heroes return to an Arcadian scenario —namely that interstitial moment immediately prior to the onset of adulthood— where the limits between reality and fantasy do not hold. Like Derek Jarman's film *Blue*, Hollinghurst's texts deal with the liminoid as a stage of nothingness which recalls the effects of AIDS. As the paper demonstrates, the liminoid is no longer related to the characters' middle stage in their maturation process, as in classic *Bildungsromane*, but to an abstract space where art breaks down ontological barriers and addresses withdrawal and renunciation.

Key words: liminal, liminoid, "inbetweenness," nothingness, trauma, AIDS.

Resumen

El presente artículo pretende aportar una primera aproximación a lo liminoide como un concepto útil en el análisis de la ficción gay, especialmente en las dos primeras novelas de Alan Hollinghurst. Tratándose de un concepto clásico, lo liminoide aborda la forma en que la homosexualidad ha sido, y aún es, explicada como un tipo de identidad problemática, siempre en desarrollo, y en un punto de "intercesión." Como señala este artículo, lo liminoide en *The Swimming-Pool Library* (1988) y *The Folding Star* (1994) adopta diferentes patrones. Ambas novelas son consideradas como *Bildungsromane* gays, cuyos héroes retornan a un escenario arcádico —concretamente a ese momento intersticial inmediatamente anterior al inicio de la edad adulta— donde los límites entre la realidad y la fantasía no se mantienen. Como en la película de Derek Jarman, *Blue*, los textos de Hollinghurst se enfrentan con lo liminoide como un estado de vacío que evoca los efectos del SIDA. Como este artículo demuestra, lo liminoide ya no hace alusión a la etapa intermedia del proceso de madurez de los personajes, como ocurre en los *Bildungsromane* clásicos, sino a un espacio abstracto donde el arte elimina barreras ontológicas y aborda el retraimiento y el abandono.

Palabras clave: liminal, liminoide, "intercesión," vacío, trauma, SIDA.

According to the *Oxford English Dictionary*, liminal makes reference "to the threshold or initial stage of a process," and more specifically "to a 'limen' [in Latin] or 'threshold'." The concept was originally considered by Arnold Van Gennep (1909). The French anthropologist firstly used it to explain rites of passage in different societies and cultures. However, it was in the nineteen sixties that Victor Turner expanded and popularised Van Gennep's model. Out of the three-staged pattern in coming-of-age rites both critics focus their attention on the liminal period, which stands between the social separation and re-assimilation of the hero. Turner calls this intermediate stage "the betwixt and between" of the classic *Bildungsroman* (95), as the hero is within and without social structures. Liminality is therefore a psychological, neurological, or metaphysical state, conscious or unconscious, of being on the threshold between two different existential planes, as defined in neurological psychology and in the anthropological theories of ritual. The liminal is often replaced by the liminoid, a term also coined by Victor Turner, which constitutes an updated version of the former. In his view, the liminal is restricted to the phenomenal and the liminoid to the artistic manifestations of social outcasts. The liminal/liminoid fosters transgression for it escapes easy categorization and keeps the subject at the margins of social structures for some time; "as having departed but not yet arrived, it is "at once no longer classified and not yet classified [...] neither one thing nor another; or may be both; or neither here nor there; or may even be nowhere" (in Wright, 2004). The transient state of indefinition of the liminoid is "akin to that of queer identities in Butler's seminal work" (Wright 2004). Both the liminoid and the queer are unstable concepts or phenomena, rejecting taxonomies that may constrain their free articulation. After a closer reading, however, it is patent that liminality transcends the sex/gender dynamics addressed to by queer theory and responds to postmodern uncertainty as a whole. The liminoid is a sort of limbo, a space of pure possibility (Turner 97), structurally and physically invisible (95), and necessarily ambiguous and ephemeral.

The aforementioned sense of inarticulacy of the liminoid is particularly appropriate for trauma (mis)representation. Being an ambiguous state where limits do not hold —a space which rejects its own spatiality— the liminoid allegorises the inaccessibility of the traumatic event. Likewise, being neither nor, on the verge of self-extinction, the "transitional-being" or "liminal persona" (Wright 2004) is the prospective victim and/or witness to trauma. Trauma is a limit phenomenon that takes place, so to speak, out of classic time-space coordinates. Freud and Breuer already delved into it at the end of the nineteenth century as the incapacitating ef-

[1] This is an improved extended version of the paper "The Liminal as (Homo)Erotic Territory in Alan Hollinghurst's Fiction," delivered in the symposium Trauma in Contemporary Culture the 10th of February 2012 at Northampton University. The research carried out for the writing of this article is part of a project financed by the Spanish Ministry of Economy and Competitiveness (MINECO) (code FFI2012-32719). The author is also grateful for the support of the Government of Aragón and the European Social Fund (ESF) (code H05).

fect of the conscious mind to come to terms and remember psychically-distressing episodes. It is only its traces, never its kernel, that are left and can be witnessed and rendered. The traumatic event can only be glimpsed in retrospect, as it recurs suddenly and unexpectedly, haunting the victim in the form of flashbacks and other temporal ellipses and/or fractures (Caruth 4-5), thus placing him/her in a liminal territory. Drawing on Caruth, Whitehead points out that trauma constitutes a non-experience, causing conventional epistemologies to falter (3). Literature has recently explored new formulae to come to terms with the limits of traumatic experience. Being itself a liminoid phenomenon, the literary text helps render the representational edges of trauma. Artistic discourses reach where psychoanalysis, history, sociology, anthropology and philosophy fall short. It is not that literature can address the 'authenticity' of the traumatic event; but, it can at least ventriloquise how it haunts the survivor(s) through multifarious forms: from narrative temporal ellipses to incoherent discourses, pieces of stream-of-consciousness, split identities and speeches. Hillis Miller's concept of undecidability (1987) can help to understand the nature and possibilities of literature to (mis)represent trauma as a textual phenomenon. The text is a self-deferring event: it simultaneously asserts and rejects representation, thus othering its own textuality. Hence, the poetics of (im)possibility of trauma literature results from the delaying nature of trauma and the self-deferring character of (literary) texts. In other words, although the traumatic event itself is unrepresentable, literature can (and must) address its unrepresentability. This is the closest the text can be to trauma itself, the liminoid being its compelling metaphor.

With all this in mind, I will focus on Hollinghurst's early fiction to explore the tropes of undecidability it uses to render same-sex desire as a liminoid phenomenon. My claim is that the liminoid helps to articulate the traumatic discourses of gayness in the times of AIDS in *The Swimming-Pool Library* and *The Folding Star*. Will Beckwith and Edward Manners, the main characters in both novels, are split for they are simultaneously insiders and outsiders: they remain on the threshold between adolescence and maturity; between the mainstream —being upper-middle class— and social discrimination as sexual dissidents. That is why their representation can only be transient and precarious, potentially traumatic. In fact, and this is my second claim, their liminoid status as gays in the era of AIDS and queer theory makes them remain in a state of becomingness, which is akin to almostness or near-nothingness gayness was identified with.

Being the main representative of British gay literature today, Hollinghurst can barely elude the effects of AIDS. Critics like Gregory Woods claim (or complain) that virtually no main character in Hollinghurst's first two novels dies as a consequence of the disease, though (369). Although there is no direct reference to the disease, there are frequent tropes equating gayness and death. In *AIDS and its Metaphors* (1989) Sontag shows how tropes (un)cover AIDS and other illnesses in (gay) texts. This discourse of indirection is frequently regarded as lack of implication, a way to roundabout the ethical undertones of gay discrimination. In my view, however, Hollinghurst's fiction is primarily an aesthetic event where the effect of gay mass death in the eighties and nineties soundly resonates. Trauma is a double-timed phenomenon and so is AIDS articulation in *The Swimming-Pool Library* and *The*

Folding Star. The disease cannot be represented as it occurs but belatedly, as Freud claims with the term *Nachträglichkeit*.

Trauma is essentially liminoid as it results from the overlapping of temporalities and epistemologies. The use of troped narratives of trauma helps victims act out and, ideally, work through their suffering. I contend that Hollinghurst's first two novels work as symptoms of a long-lasting community trauma which affects both their protagonists and generations of gays before. As a matter of fact, the logic and effects of trauma are not only (inter)personal but also transgenerational. Abraham and Torok already pointed to the transmission of trauma through generations (165-206). More recently Gabriele Schwab has further delved into the transgenerational impact of the Holocaust as if trauma remained at a standstill between generations of victims and perpetrators (2010). This inbetweenness is especially obvious in novels with different plotlines, alternating past and present narratives. *The Swimming-Pool Library* and *The Folding Star* constitute *tour de forces* between generations of gays. Will Beckwith and Edward Manners re-live and are haunted in the late twentieth century by the traumas that affected Charles Nantwich and Paul Echevin/Egar Orst decades before. In other words, the AIDS generation comes to terms with its own unspeakability bearing after witness —using Kohlke and Gutleben's terminology—[2] to their predecessors' grief.

Following Linda Hutcheon's view on postmodern literature —particularly the genre she calls "historiographic metafiction" (1988)— pure genres have been replaced by a widespread generic hybridity. This bent for the hybrid and the liminoid explains why females, non-whites, gays and lesbians take centre stage giving an alternative, more 'truthful' version of themselves and their status. In fact, the marginalised, in Turner's view, can see beyond the rest as they live on the edge. This is the case of most heroes in current speculative fiction, namely vampires, walking dead, cyborgs and other liminal species. Hollinghurst's gay characters also form part of the list.

The Swimming-Pool Library and *The Folding Star* update the liminal territory previously explored by Edward M. Forster, Ronald Firbank and L. P. Hartley. In reference to them, Hollinghurst argues in his unpublished dissertation:

> It is in the margin between naturalism and fantasy —between responsibility to observed life and to the imagination— that the subversive and unstable element of homosexual concealment flourishes. What at first seems the result of the author's compromise with normality, an adaptation of his personal imaginative scheme to comply with the moral expectations of the public, a reference to a notional heterosexual text, may in the fullness of time be interpreted in its full ambivalence, where the moral norm itself can be seen to have been subverted with new and cryptic meanings. (*Creative Uses of Homosexuality*, 9)

[2] "Bearing after witness" is the expression coined by Marie-Louise Kohlke and Christian Gutleben (2010) to make reference to the delayed "narration" of nineteenth-century traumas in current neo-Victorian fiction.

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Hollinghurst's words on early-twentieth-century texts already foreshadowed his own fiction. His notion and compromise with 'normality' is necessarily renewed, as well as readers' moral expectations. After some political reforms, homosexuality is no longer a criminal offence to be hidden or punished. Yet, his novels still play with gayness as a precarious identity, swinging between pleasure and pain (both sides of desire), textual excess and repression. The traumatic enactment of same-sex desire —particularly its AIDS-related articulation— makes its representation still politically and aesthetically ambivalent. Homo-liminality firstly appears on the first pages of *The Swimming-pool Library* when the hero recalls "his belle époque" (3); that moment constitutes the limit between pre-AIDS joy and the traumatic (down) fall into the Real. Both Will and Edward experience the painful transition from an extended adolescence to maturity.

The liminoid in Hollinghurst's fiction adopts different faces: the Dionysian impulse from Nietzsche's *The Birth of Tragedy* (1872), the will to art in his fourth novel *The Line of Beauty* (2004), or Derrida's undecidables and "his problematization of aesthetic framing" (Broadhurst 1999), to the original model of Turner and Van Gennep updated to the demands of current sexual politics. Hollinghurst's first two novels render how the liminoid enacts passive subversion: Will Beckwith and Edward Manners fail to overcome heteronormative rites of passage through indirection and/or omission. However, and this is one of Hollinghurst's particularities (if compared to other gay writers), the liminoid turning-point in his heroes' *Bildungsromane* does not coincide with their coming-out. It is the contradiction between their post-liberation politics and the dreadful episodes they go through and those they recall from their predecessors (as well as their problematic representation) that determines his characters' traumatic experience. The type of ambivalence that Hollinghurst claims in Hartley, Forster and Firbank's texts does not apply to his own novels literally. His writing still swings between naturalism and fantasy. Yet, its liminality is not informed by a politics and poetics of compulsory concealment and moral normalcy. Hollinghurst's fiction plays with the limits of representation of same-sex desire and its clash with literary tradition as part of a self-conscious aesthetic project. It is not their coming-out, but their falling down from pre-AIDS freedom, that informs Beckwith and Manners' life stories. Both experience liminoid episodes whereby the recognition of an inassimilable danger or challenge exceeds themselves and their narrating processes. This state of undecidability is the symptom of liminoid trauma in gay poetics/politics. As Dollimore argues in *Sexual Dissidence, Augustine to Wilde, Freud to Foucault* (1991) gayness has been edified on contradictions, between normalcy and the anomalous, the visible and the closeted, adolescence and adulthood. This is the case of Will and Edward. Being post-liberation gays, they bear witness to their own vulnerability. Although they feel proud about their liberated life style, they find out a moment too soon the shadows of (others') past traumas implicating them in ways unimagined before. They are caught in the double (betwixt) space and time of trauma poetics, and more particularly in what Abraham and Torok have called transgenerational trauma. The ancestors of Hollinghurst's heroes were victims or perpetrators in traumatic episodes which have remained henceforth hidden, or rather encrypted. Thanks to the liberation movement and the trauma of AIDS alike,

Will and Edward ventriloquise their ancestors' voices and encrypted traumas. No matter how reticent they are, the traces of the past come back through them for, as mentioned above, trauma must come out after a period of latency. Theirs is a liminoid voice and time.

In *The Swimming-pool Library* Will's promiscuous lifestyle in the nineteen eighties finds its counterpart in Charles Nantwich's colonial story in the twenties. *The Folding Star* also swings between the nineteen nineties of the hero and the fin-de-siècle and early forties of the symbolist painter Edgar Orst and scholar Paul Echevin respectively. Like gothic heroes, torn between the rational and the Numinous (Aguirre 15), Will and Edward also inhabit a territory they want to abandon. Both —particularly Will (when he finds out his grandfather was the leader of a homophobic crusade) — must respond for the "crimes" committed by their ancestors (260); they are thus trapped in transgenerational trauma. The new generation is supposed to close a circle their ancestors opened, though in vain: Will is commissioned to write Nantwich's biography; likewise, Echevin and Edward Manners try to register Orst's paintings. All of them fail. This is the logic of trauma that forces these characters into being through repetition: a wounded existence, namely that of pre-Stonewall gays and queer Orst and his semi-closeted devotee Echevin, recurs in the AIDS-inflected life of current gay characters.

The two novels and their main characters show and experience ostracism and discrimination, their (prospective) death and that of the whole community, as well as their defective rites of passage. Although they belong to the upper-middle class, their sexual orientation eventually takes them to the edge of social margins. They undergo liminoid experiences as individuals and as part of a group: as males, they are forced into a heteronormative psychosexual development they cannot hold on to, or simply they reject; as gays in the AIDS era, their identity (politics) is doomed to a tragic end. Being outsiders, they reformulate normative rites of passage. Instead of marrying and having offspring, as classic heroes do after fulfilling their individuation processes, Hollinghurst's characters enter an ambiguous territory. They inhabit the threshold between the fantasy of invulnerability and the abject face of disease and death. They make up what Turner calls the "communitas," simultaneously inhabiting and defying the limits of the margins. Hollinghurst's gay characters merge in spaces, like saunas, swimming-pools, discos or gyms, where their bodies merge into an indistinguishable whole. Thus, they recall (Whitmanian) democratic brotherhood or the members of Turner's "communitas" who "have nothing. They have no status, property, insignia, secular clothing, rank, kinship, position, nothing to demarcate them structurally from their fellows [...]. Each for all, and all for each" (98-101).

Liminality (also) affects the state of consciousness of Will and Edward. They are never fully integrated outside the "communitas" being unable to overcome a series of prescriptive heteronormative phases. The limits between the normative and the perverse in their sexual practices are constantly trespassed. I use perverse etymologically, from Latin "per-vertere" or "thorough turning about" of the "straight" line. In *The Swimming-Pool Library* Will reads the journals of Charles Nantwich, an old gay and former convict for sexual perversion in the nineteen fifties. After his release from prison, the wealthy Nantwich sets up a group mostly made up of (gay)

ex-prisoners. This underground web constitutes a liminoid micro-"communitas" outside the limits of heteronormativity. Its members do not overcome the threshold into maturity and want to remain adolescent forever. Despite his attempts to follow Nantwich's model and profit from the aftermath of the (gay) liberation movements, Will is eventually slapped in the face with the outburst of AIDS and the return of the past. Will's current crisis is related to and haunted by his gay predecessors who were imprisoned, as mentioned above, by his grandfather's homophobic "crusade to eradicate male vice" (260). With Will suffering the effects of his grandfather's politics the circle of transgenerational trauma comes to an end.

The Folding Star is also a return to origins. Edward Manners revisits home and his childhood when his friend and ex-lover Dawn dies (*Folding Star*, 194). The hero-narrator idealises his return —which coincides with the second part of the novel— in Arcadian terms. Like Will, Edward is also a naïve character unable to come to terms with his precarious status. Although a liberated gay, he is however forced to re-experience past homophobia through the life stories of Orst and Echevin. Both Will and Edward see the true face of their Otherness, as Dorian Gray does when confronted with the picture-mirror of himself. Liminality is rendered not only in the form of a failed maturation process but also as a state of self-dissolution and, with AIDS, of communal extinction.

Both sex and writing constitute liminoid events: the former is interpersonal, engaging the contours of foreign bodies; literature swings between the said and the unsaid, the speakable and the unspeakable, the explicit and implicit, the physical trace and its act of (mis)representation. Being the kernel of gay discourses since the nineteen eighties, AIDS centres most current gay literature. *The Swimming-pool Library* and *The Folding Star* explore the limit between the actual disease and its (im) possible representation. Troping is the excuse to (mis)represent traumatic events. This is the case of AIDS, whose metaphors —like the talcum powder that men exchange throughout *The Swimming-pool Library*— constitute a symptom of the social metastasis of the disease. Likewise, despite being infected with AIDS, Edward's friend Dawn dies in a car accident so that no one, the narrator argues, "can say he died of AIDS" (194). A sexually-inflected death is thus troped as a desexualised car crash.

Many tropes (mis)represent the specificity of the self-referential inter and intra-textual discourse of sexual dissidence. Among them, I find blankness a particularly compelling one. By blankness I mean the liminoid territory of discourse where the *ergon* and the *parergon* (Derrida, 1987), the textual and the paratextual and intertextual, undecidability and the need to speak, the "I" and the Other clash to produce meaning. Although, in my view, it is Freud's conception of desire and the compulsion to live and die that best fit the sense of anxiety and blankness mentioned above. Drawing on Freud, Dollimore points out: "undergoing repression, desire tends towards a compulsion to repeat which is a manifestation of the death drive" (2001: 185). The echoes of trauma poetics, always trying to return to a fantasised scenario —a prior state of things— make the death drive a powerful sign; as a matter of fact, it "seeks to 'dissolve' life back into its 'primaeval, inorganic state" (Dollimore 186). It is there where writers like Thomas Mann and André Gide found their way to represent the dissolution of the self —Aschenbach and Corydon testify to this

process (Dollimore 299)— before postmodernist gay writers like Hollinghurst and Will Self. This fantasy land (be it utopian or dystopian) is plenty of promises and hazards, namely sex and AIDS. Some of Hollinghurst's heroes return to threatening Arcadias as their predecessors did. Others perform sexually in public scenarios, thus blurring the boundaries between intimate acts and public display. All of them live in the limit between their own fictionality, the precarious reality they address to, and the layers of intertextuality they cross over in search of meaning and (self) representation. These characters are occasionally confronted with blankness, as the spectators of Jarman's latest films do. The effect of AIDS incontestably determines this turn to neo-nihilism in homoerotic literature and cinema. *Blue*, a film where there is no action or plot, but a blue screen, can be read as the trace of Jarman's sight degradation as a consequence of AIDS, and as the symbolic representation of the disease. Andrew Moor regards it as an allegory of oceanic dissolution:

> A film without images, it is a rare instance of creative Puritanism; a cinema of denial. Consisting of an uninterrupted aquamarine screen, accompanied by a rhapsodic soundtrack revolving around Jarman's experience of AIDS it achieves for queer cinema what Laura Mulvey had advocated for feminist film practice in the mid-1970s, namely an ascetic denial of visual pleasure. (49)

Like Hollinghurst's novels, Jarman's films recall, update, celebrate and vindicate a genuinely British tradition. A combination of Anglophilia, anti-bourgeois politics and high camp make up their artistic discourses which stand between the physical and the metaphysical. As Jarman himself points out: "Film is the wedding of spirit and matter —an alchemical conjunction" (in Moor, 62). In Moor's view, these (meta)physical aspirations "achieve their apotheosis in *Blue*" (63). The semiotic emptiness of a blue screen conveys a message of sublimity which equates Jarman's cinematic language to Hollinghurst's literary one. This is particularly so when Will and Edward keep stuck in prelapsarian romantic-pastoral scenarios. Will attempts to do so by idealising his relations after E. M. Forster's fashion; firstly with Arthur, a young Jamaican (3). Later, Will regains Arcadia with Phil, a working-class teenager he meets at the Corry (84). Edward also romanticizes his perverse fascination with Luc, his Flemish teenager pupil whom he compares with a blond Aztec (*Folding Star* 29). He imagines "with surprising nostalgia of chasing velvety butterflies [...] with Luc" (36) while he admires the teenager's "mythically beautiful mouth" (141).

Blue finishes in a "marginal-magical zone" of aquatic dissolution which recalls the Roman mosaic Will admires at Nantwich's cellar: "The upper parts of two figures could be seen, the one in front turning to the one behind with open, choric mouth as they dissolved into the nothingness beyond the broken edge of the pavement" (79-80). The tesserae are covered in their turn by the Corry, the club where a new generation of gays swim in the same waters as their predecessors. Immediately after his "visit" to the Romans at Nantwich's (82), Will meets seventeen-year-old Phil in the changing-room of the gym. The echoes of the youths of the mosaic resound in the scene between Will and his young lover. This trans-generational/historical mix-up of men-loving men opens up a space of undifferentiation. In Jarman's waters

"lost boys [...] lie in a deep embrace, salt lips touching in submarine gardens, [...] deep love drifting on the tide forever" (Moor 63). The multilayered scenarios in *The Swimming-pool Library* and Jarman's films address void spaces where outsiders can experience their liminality. In subterraneous scenarios, particularly the Corry, Will and his peers make up an undistinguishable whole: "This naked mingling, which formed a ritualistic heart to the life of the club, produced its own improper incitements to ideal liaisons and polyandrous happenings" (16). Likewise, Jarman's latest films draw on the monochromatic paintings by Edgar Orst in *The Folding Star*. Both constitute the physical and spiritual traces of near-death experiences, that liminal space where spirit and matter dovetail.

Jarman's paintings in his exhibition *Queer* are the visceral counterpart to *Blue*: "He takes multiple photocopies of homophobic tabloid front pages and almost covers them in paint —mainly reds, browns and yellows. He then scores graffiti-like obscenities into the paint, directly invoking blood, sex and the plague" (Moor 64). The artist juxtaposes the excess of corporeality and its spiritual underside. In Hollinghurst's fiction there is plenty of sexual activity and the male body is worshipped to the point of idolatry. However, the "truth" of (literary) AIDS, the ultimate fascination with self-extinction/annihilation (as proposed by Freud, Bataille and Foucault), is never explicit. It is troped instead in the form of intertextual references, as well as through aesthetization, displacement and sublimation. In *The Folding Star*, Orst 'tropes' the sexually-related deaths of his lovers as mythological extravaganzas. He paints Jane chained-up like "a bronze Andromeda" (*Folding Star* 301). He later paints another woman. Unlike Jane however, this new girl cannot stand for legendary heroines like Janis Hérodias (303) and is paid a sadist use instead (304). Orst's bonds with women recall *fin-de-siècle* gender transgression and liminality as hinted at in the ambiguous androgyny of Wilde's *Salome* or Aubrey Beardsley's pictures. The aesthetics of deviancy runs parallel to that of death, and the fictional painter is a good practitioner of both. In his life and art women lose physicality and become over/de-sexualised objects of worship. His constant performance and pervert defamiliarizarion of normative sexuality, and particularly his role as diva-worshipper, convert Orst into a 'queer'/liminoid heterosexual who eventually dies of syphilis (285). Like Jarman's ambivalent discourse between carnality and cold spirituality, Orst's work bears witness to his ambiguous nature. As a diseased almost-blind old man, his former realistic pictures give way to almost monochromatic canvases where the contours blur. Their effect is profoundly spiritual, albeit inflated by a strange physicality, a desire for the exalted and ultimate emotions; the sublime in short (Shaw 121). Orst's world conveys a bizarre feeling of extinction, nothingness and withdrawal. Looking at one of his pictures the narrator feels impressed "as he was by the idea of total disappearance, the vertigo of it, and the way it none the less left room for wasting hope" (302).

Echoing Jarman's last film, Orst's blue seascape was produced "when his sight was deteriorating steady and he only painted from memory" (*Folding Star* 279). Helene, the girl in charge of Orst's museum, calls the painter's monochromatic series "the white paintings." In her view, they are unfinished works: "You can see how broad the handling is, and the composition is of the simplest. [...] His

later works sometimes have that kind of force" (279). Like abstract expressionists' paintings, Orst's masterworks confront the spectator with the enigma of nothingness and with its emotional implications. On Orst's sea scene the hero concludes: "It had a certain power, the lonely sea and the sky, though I felt it took enigma to the verge of emptiness" (300). The spectator or reader is confronted with a vacuum whereby he is exposed to himself and the Other. This is a deeply-charged event, as the 'visual' purity of this(these) pictures insinuates an overall sense of moral desolation. Although these artistic language(s) still long(s) for the sublime, it does so from a de-secularised, liminoid and immanent perspective.

Orst's latest paintings bear witness to his sexually-related disease and his traumatic end as an outcast. As a Jew in occupied Belgium, the painter becomes a prisoner in his own house and country. Old and forgotten, he is secluded in "a scene of curtained gloom, rather as if he had disappeared into one of his own prints [with] so little light that the colour was closed out of things" (411). Addressing silence, his obscure paintings gain a new meaning, particularly with the incursion of the Holocaust in the story. There is no single episode in history that better symbolises the undecidability of trauma than the Jewish genocide. Yet, Hollinghurst's heroes' connection with Nazism is rather problematic. Will Beckwith tells how he is attacked by a group of homophobic neo-Nazis whose imagery paradoxically awakens his sexual interest; they have, the narrator explains, "some, if not all, of the things one was looking for" (172). In *The Folding Star* the Nazis condemn Orst to a life in the dark while they arouse Paul Echevin's sexual desire. Paul reports having had an affair with Willem, a young fascist, "a great big boy [...] in uniform" (410-11), which makes Edward feel liminal by proxy, a "kind of double agent himself" (410). It is as if the liminoid territory between mass death and beauty, hatred and love, the nihilism and sublime in art helped these characters meet the kernel of trauma, the void of extinction: they are death-driven. Both Jarman's images and Orst's pictures perform an act of consciousness-raising whereby the traumatic is forced into being, at least as a symptom of itself. They accomplish an ethical task redefining the current sense of crisis by addressing the otherness and dissolution implicit in the aesthetic act. On rejecting figurative representation and evoking nothingness instead their paintings and images constitute ever-deferring semiotic signs. They perform the impossibility of representing the traumatic event itself although they insist on representing its unrepresentability.

Despite eluding AIDS per se, Hollinghurst's oversexualised heroes inhabit oversexualised worlds threatened by annihilating fantasies. As a matter of fact, Will and Edward bear witness to their prospective eradication as individuals and as part of the gay "communitas." Drawing on Georges Bataille, Dollimore deals with self-extinction when the erotic is concerned:

> In eroticism we desire to lose ourselves without reservation; we ask of it that it 'uses up our strength and our resources and, if necessary, places our life in danger'; this is one reason why the object we desire most is that most likely to endanger or destroy us. Eroticism 'demands the greatest possible loss', and this is at heart what we want — to lose ourselves and look death in the face'. (254)

Consciously or not, Hollinghurst's heroes desire what eventually exterminates them. They hang around saunas, bars and other gay scenarios, where the contours of male bodies mix up into an undistinguishable mass. Theirs is not a "clean annihilation" as Western metaphysics claims (Dollimore 256). In other words, their lethal desire does not seek only transcendence but also bodily pleasure. Novels like Will Self's *Dorian* (2002) stick to a neo-medieval drive to physical decomposition, "an immolation in natural process — and of the putrefaction that follows it" (256). However, Hollinghurst's fiction still adheres to Bataille's blending of decomposition with romantic desire. For the French critic: "While the sexual organs are at the opposite pole to the disintegration of the flesh, the look of the exposed inner mucosae makes [him] think of wounds that suppurate, which manifest the connection between the life of the body and the decomposition of the corpse" (Dollimore 256). Wounds are sites of liminality, in constant flux, blurring the boundaries between health and disease, the body and foreign objects. With the outburst of AIDS, sexual acts turned into wound-like incursions into the Other. Despite the traumatic violence of the plague both Will and Edward still abide by a romanticism that eventually fails. Will's romantic affiliations, particularly with Phil, come to an end because the youth turns up less naïve than the hero-narrator presumes (276). Edward turns up an obsessive voyeur in search of an illusion. Hence, the novel closes with the hero as "a victim, to be stared at and pitied" (*Folding Star* 422), trying to find Luc among "the named photos of the disappeared" (422).

Desire and extinction constitute the edges of the liminoid territory Hollinghurst's characters inhabit. The gay genocide is represented very graphically in a scene Will witnesses while waiting to watch a porn film: "We saw the freakishly extensile tongue of the ant-eater come flicking towards us, cleaning the fleeing termites off the wall" (48). The ants symbolise gay victims and the monster eating them stands for the abject face of AIDS. There is always a masochistic underside to most characters and events in Hollinghurst's novels closely linked to the aforementioned self-extinction drive: "A masochism in the sense of a sexual pleasure that crosses a threshold, and which shatters psychic organization; in which 'the self is exuberantly discarded' and there occurs 'the terrifying appeal of a loss of the ego, of a self-abasement. A kind of death" (Dollimore 303). Although Will and Edward worship beauty, they are confronted with the filthy side of marginality. There are scenes in which the heroes lose their individuality as they blur among "the dozens of bodies, squatting, lying, straining, muscles sliding to the surface [...] shoulders bending and pumping" (66).

The paper has explored how liminality and trauma represent gayness in Hollinghurst's first two novels. Since Wilde's legal process, homosexuality became an interstitial phenomenon. Whereas the sodomite, Michel Foucault points out, "was a recidivist, [...] the homosexual is a species" (43); the effeminate Other to the healthy heterosexual male. *The Swimming-pool Library* and *The Folding Star* swing between past and present representations of same-sex desire. Thus, they can delve into identity politics from a trans-generational perspective. The history and stories of gay generations before Will and Edward help to understand the heroes' liminoid status at the turn of the millennium. Their liminality is structural for it affects and

determines their arrested psychosexual development. In fact, they reject the onset of adulthood and remain in a state of immaturity and permanent inbetweenness instead. They create Arcadias that eventually collapse, though. The heroes' liminality is also spiritual and metaphysical, as the limits between life and death do not easily hold. Same-sex desire is rendered excessive; more concretely, an excess (and blend) of *eros* and of *thanatos*. It is on the edge between both where Will and Edward lose their sense of identity and open themselves to the Other after Lévinas's "Ethics of alterity." They stand between being and non-being, space and non-space, the traumatic events their ancestors suffered and that they re-live. The traumatic character of gayness in the era of AIDS can only be enacted through tropes like erasure and dissolution. However, it is not only the erasure of the contours of the (homo)sexual body, but the role of literature as a liminoid event (which transcends, and complements, the limits of psychoanalysis, ethics or history) that ultimately explains the poetics and politics of postmodern texts like *The Swimming-pool Library* and *The Folding Star*.

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WORKS CITED

Abraham, Nicholas and Maria Torok. *The Shell and the Kernel: v. 1: Renewals of Psychoanalysis*. Chicago: University of Chicago P, 1994. Print.

Aguirre, Manuel. "Liminal Terror: The Poetics of Gothic Space." *The Dynamics of the Threshold: Essays on Liminal Negotiations*. Eds. Jesús Benito and Ana M. Manzanas. Madrid: The Gateway Press, 2007. Print.

Alderson, David and Linda Anderson, eds. *Territories of Desire in Queer Culture*. Manchester: Manchester UP, 2000. Print.

Bataille, Georges. *The Accursed Share*. Trans. Robert Hurley. New York: Zone Books, 1988. Print.

BLUE. Dir. Derek Jarman. Artificial Eye, 1993. Film.

Broadhurst, Sue. "Liminal Aesthetics." 1999. Accessed on 13 Jan. 2012. <http://people.brunel.ac.uk/bst/1no1 /suebroadhurst.htm>. Web.

Caruth, Cathy, ed. *Trauma: Explorations in Memory*. Baltimore: Johns Hopkins UP, 1995. Print.

Derrida, Jacques. *The Truth in Painting*. Trans. Geoff Bennington and Ian McLeod. Chicago: Chicago UP, 1987. Print.

Dollimore, Jonathan. *Death, Desire and Loss in Western Culture*. New York and London: Routledge, 2001. Print.

Foucault, Michel. *The History of Sexuality. An Introduction*. London: Vintage. 1978. Print.

Freud, Sigmund and Josef Breuer. "On the Psychical Mechanism of Hysterical Phenomena: Preliminary Communication." *The Standard Edition of the Complete Psychological Works of*

Sigmund Freud, vol. II (1893-1895). Eds. And Trans. Strachey, James, Anna Freud, Alix Strachey and Alan Tyson. London: Vintage, 2001: 3-17. Print.

Gennep, Arnold van. *The Rites of Passage*. London: Routledge & Kegan Paul. 1960. Print.

Hollinghurst, Alan. "The Creative Uses of Homosexuality in the Novels of E. M. Forster, Ronald Firbank and L. P. Hartley." MLitt. thesis, University of Oxford, 1980. Print.

——. *The Swimming-Pool Library*. London: Vintage, 1988. Print.

——. *The Folding Star*. London: Vintage, 1994. Print.

——. *The Line of Beauty*. London: Vintage, 2004. Print.

Hutcheon, Linda. *A Poetics of Postmodernism: History, Theory, Fiction*. Oxon and New York: Routledge, 1988. Print.

Kohlke, Marie-Luise, and Christian Gutleben. "Introduction: Bearing After-Witness to the Nineteenth Century." *Neo-Victorian Tropes of Trauma: The Politics of Bearing After-Witness in Nineteenth-Century Suffering*. Eds. Kohlke, Marie-Luise and Christian Gutleben. Amsterdam and New York: Rodopi, 2010: 1-34. Print.

Miller, Hillis. *The Ethics of Reading: Kant, De Man, Eliot, Trollope, James, and Benjamin*, New York: Columbia Press, 1987.

Moor, Andrew. "Derek Jarman: Spirit and Matter." *Territories of Desire in Queer Culture*. Eds. Alderson, David and Linda Anderson. Manchester: Manchester UP, 2000. 49-67. Print.

Nietzsche, Fiedrich. *The Birth of Tragedy*. Trans. Francis Golffin. First Anchor Books, 1988 (1872). Print.

Schwab, Gabriele. *Haunting Legacies*. New York: Columbia UP, 2010. Print.

Self, Will. *Dorian. An Imitation*. London: Penguin, 2002. Print.

Sontag, Susan. *Illness as Metaphor and AIDS and Its Metaphors*. London and New York. Penguin, 2009 (1991). Print.

Shaw, Phillip. *The Sublime*. London: Routledge, 2005. Print.

Turner, Victor. *The Forest of Symbols: Aspects of Ndembu Ritual*. Ithaca: Cornell UP, 1967. Print.

Whitehead, Anne. *Trauma Fiction*. Edinburgh: Edinburgh University Press, 2004. Print.

Woods, Gregory. *The History of Gay Literature. The Male Tradition*. Yale: Yale UP. 1998. Print.

Wright, Allison. "Liminal, Liminality." *Theories of Media. University of Chicago*. 2004. Accessed on 12 Jan. 2012. <http://csmt.uchicago.edu/glossary2004/liminal.htm>. Web.