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# METADISCOURSE IN ENGLISH AND ITALIAN:
# AN ANALYSIS OF POPULAR SCIENTIFIC DISCOURSE ONLINE

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**Abstract**

This chapter surveys the role of some metadiscourse devices in a small pilot corpus of science and technology news concerning environmental issues in English and Italian collected from online sources, i.e. *Scientific American*, *ScienceDaily* and *EurekAlert!* (for English) and *Le Scienze* (for Italian). The study compares English and Italian texts in an attempt to evaluate the extent of their correspondence and to uncover possible preferential metadiscourse strategies that are specific to each language. The analysis identifies some patterns of variation, which obviously need further research and the correlated expansion of the corpus. The English texts, for instance, display a higher number of evidentials, a different and wider variety of reporting verbs and more hedges, while the Italian ones show a higher incidence of inclusive first person plural forms of address as engagement markers.

## 1. Introduction

Metadiscourse covers a variety of linguistic resources which are aimed at organizing the text for the benefit of readers and at engaging the latter in the exposition and argumentation within the text. [1] Recent research (e.g. Neff and Dafouz 2008; Suau 2010) has actually emphasized the usefulness of metadiscourse strategies for a deeper understanding of rhetorical conventions across fields of specialization, genres and languages. Suau (2010), in particular, has emphasized the need to take into account metadiscourse in and for the translation of scientific genres such as research articles and popular science discourse. This line of research pursues a comparison of metadiscourse elements associated with scientific areas in different languages, so as to evaluate the extent of cross-linguistic correspondence and avoid deficient translations. [2] Comparative accounts of metadiscourse variation across languages are in fact scarce (also cf. Hyland 2005: 124).

As far as scientific popularization is concerned, global e-communication ac-

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[1] Cf., among others, Crismore and Farnsworth 1990, Crismore, Markkanen and Steffensen 1993; Hyland 1998, 2005, Hyland and Tse 2004; Thompson 2001; VandeKopple 2002.

[2] On the relevance of metadiscourse to translation also see Nord (2007); for intercultural issues in the specialized translation of the discourse of scientific popularization, see Guido (2006).

counts for a great deal of news exchange and genre hybridization both intra- and cross-linguistically. English is the *lingua franca* for research and international communication and its dominance inevitably means that its norms  filter through and presumably influence other languages.

The aim of this chapter is to conduct a survey on the role of metadiscourse resources in a small pilot corpus of science and technology news articles concerning environmental issues in English and Italian texts collected from online sources, i.e. *Scientific American, ScienceDaily* and *EurekAlert!* for English and *Le Scienze* for Italian. We will  compare English and Italian texts so as to be able to evaluate the extent of cross-linguistic correspondence and identify possible preferential metadiscourse strategies which are specific to each language.

The following sections provide more details about 1) general metadiscourse categories, with special reference to scientific popularization; 2) the pilot corpus at the basis of this study, 3) the discussion of the main findings emerging from the analysis, followed by some tentative conclusions.


## 2. Metadiscourse categories

Metadiscourse can be broadly defined as the set of linguistic resources which are aimed at organizing the text (in its textual or interactive dimension) for the benefit of readers, and at engaging the latter in the exposition and argumentation within the text (in its interpersonal or interactional dimension). Below are the relevant sub-divisions, based mainly on Hyland's (2005) taxonomy.

### 2.1. *Textual or interactive resources*

These are text-organizing items with a basic clarifying/explanatory function and which conform to readers' expectations about text structuring in a given socio-rhetorical context.

- Transition markers

Conjunctions and adverbial phrases help readers interpret pragmatic connections within argumentation; they signal relations in the writer's thinking (rather than in the external dimension of facts and events). They can be additive (*and, furthermore, by the way,* etc.), comparative (*similarly, in the same way,* etc.), causative/consequential (*thus, therefore, consequently,* etc.) or contrastive (*but, however, nevertheless,* etc.);

- Frame markers

Items in this category serve to sequence (*first, then, next,* etc.) or label text

stages and announce topic shifts (*now, let us return to,* etc.) and discourse goals (*to summarize, in sum, by way of introduction, my purpose is, I argue here,* etc.. Items that label discourse goals are also called pragmatic/illocutionary markers);

- Endophoric markers

These are expressions that refer to other parts of the text (e.g. *see Figure 2, as noted above,* etc.);

- Code glosses

These supply additional information by rephrasing, explaining or elaborating. They can be introduced by phrases such as *this is called, in other words, that is, this can be defined as, for example,* or marked off by such things as parentheses;

- Evidentials

These distinguish who is responsible for a position (e.g. attribution to a source).

2.2. *Interpersonal or interactional resources*

Items in this category express writers' views and anticipate, acknowledge, challenge or suppress potentially divergent positions. They conform to readers' expectations about relevant *tenor* strategies in a given socio-rhetorical context.

- Hedges

These emphasize the subjectivity of a position by allowing information to be presented as an opinion rather than a fact (e.g. *possible, might, perhaps*);

- Boosters

These express certainty by means of expressions such as *clearly, obviously, demonstrate*, etc.

- Attitude markers

These indicate the writer's affective attitude (surprise, agreement, importance, obligation, frustration, etc.; cf. attitude verbs, e.g. *agree, prefer,* sentence adverbs, e.g. *unfortunately, hopefully,* adjectives, e.g. *appropriate, logical, remarkable*, etc.);

- Self-mention

This refers to the degree of explicit author presence in the text (signalled by pronouns and possessive adjectives);

- Engagement markers

These explicitly address readers (either highlighting or downplaying their presence in the text) and include such devices as pronouns referring to the reader (e.g. *you*, inclusive *we*) and interjections (e.g. *by the way*, *you may notice*, etc.), ques-

tions, directives, obligation modals such as *should, must, have to*, asides and refer-
ence to shared knowledge.

Hyland (2005: 53 ff.) underlines the multifunctional quality of many sub-cate-
gories, e.g. boosters emphasize certainty and construct rapport by marking in-
volvement with the topic and solidarity with an audience; furthermore, both affec-
tive and engagement markers can have relational implications, and are often
difficult to distinguish in practice.

### 2.3. *Metadiscourse in popular science texts*

Metadiscourse is related to and varies according to genre, i.e. the socio-rhetorical
context in which it is used, which presupposes specific purposes and a specific audi-
ence. Popular science texts attempt to link issues in the specialist domain to those of
everyday life and are written for the general public. Thus, they involve asymmetric
communication between the specialist writer and the lay reader for mainly exposi-
tive/informative purposes (cf., e.g., Gotti 1991, 2005). Compared with research arti-
cles, they tend to focus on the objects of study to present a 'narrative of nature' (Hy-
land 2005: 94) rather than the scientific procedures adopted to study them:
"Presentation in popularizations is therefore chronological, and the syntax and vo-
cabulary paint a picture of nature which is external to scientific practices" (*ibid.*).

Among the interactive sub-categories of metadiscourse commonly used in the
genre (see Hyland 2005: 98ff.) are code glosses, especially subservient to clarifying
purposes, while another common feature is the sub-category of evidentials, often
conferring credibility through source identification within institutions and fre-
quently adopting popular journalism reporting techniques (e.g. through direct
quotes and *say* as a reporting verb). Interactional meanings, instead, are largely
conveyed through affective attitude markers and engagement markers  (e.g., sec-
ond-person pronouns, questions and asides) which, in this genre, help impart an
informal tone and underline the accessibility of the material (*ibid.*). Affective atti-
tude markers, in particular, are used above all to upgrade the significance and
newsworthiness of claims (Fahnestock 1986), thus investing the latter with factual
status. The affective attitudes expressed are those which the interested lay reader
might be expected to hold (Hyland 2005: 99).

The relevance of such interactional sub-categories, which convey evaluative
meanings and contribute to a more involving style, inevitably shifts the balance of
text typology, within the genre, from expositive/informative purposes to a more
hybrid configuration also encompassing potential and entertaining persuasion (on
the entertaining quality of popular science texts see, e.g., Suau 2010). By  inter-
spersing different types of factual news reports  with  subjective components, the

text producers may be more effective in conveying and obtaining the projected affective reactions from lay readers. The consequences for the shaping of ideas in the community at large are obviously important, especially if we consider topics such as the environment, natural disasters and energy technology. [3]

My analysis has mainly focused on some of the sub-categories that have just been mentioned, as they are specifically representative of metadiscourse in science popularization. The investigation has privileged rather 'tangible' items, i.e. readily identifiable on the text surface, which lent themselves to both quantitative and qualitative analyses.


## 3. The corpus

The pilot corpus employed for the analysis consists of a selection of science and technology news articles and releases collected from the online editions of *Scientific American* (<http://www.scientificamerican.com/>)*, ScienceDaily* (http://www. sciencedaily.com/) and *EurekAlert!* (<http://www.eurekalert.org/>) for English, and of *Le Scienze* (<http://www.lescienze.it/>) for Italian, and covering the period June 2011 to May 2012. The texts selected for both languages concerned closely related topics addressing environmental issues (cf. energy and sustainability, the environment, climate and natural disasters), so as to assist the comparison of data.

The issue of data selection for comparative purposes was indeed one of the major difficulties encountered in this study. Although *Le Scienze* purports to be the Italian equivalent of *Scientific American*, the two publications differ in substantial ways, e.g. they do not always propose exactly the same range of news (either online or in the respective issues). Nor was this the primary target of my selection. Predictably, plenty of news coverage in the Italian website of *Le Scienze* hinged upon international news which, more often than not, was originally written in English. In order to reduce the potential influence of English on Italian as much as possible, the news selected from *Le Scienze* concerned environmental issues related to Italian areas, research and/or institutions. This rationale brought about a selection where the Italian texts tended to display more length variation than the English ones from the *Scientific American* website (and the same thing seems to be, to an extent, also true of texts other than those selected), often taking the form of press releases which were sometimes shorter than the other texts of the same section (although, on average,

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[3] The general idea behind the present investigation was actually generated by popular science news coverage of the Fukushima tsunami and consequent nuclear disaster (March 2011), and the following international debate on the use and security of nuclear plants, which in Italy climaxed in a national referendum (June 2011).

the format of press releases did not substantially differ from that of the other texts). In order to enhance cross-linguistic comparability, I then referred to *ScienceDaily* and *EurekAlert!* too, [4] where access to shorter texts (still about environmental issues) enabled me to achieve a more balanced cross-linguistic proportion in terms of text length, as well as to slightly improve the representativeness of this sample of online scientific popularization. The English section of the corpus thus amounts to 14,335 words in 26 texts (9 from *Scientific American*, 13 from *ScienceDaily* and 4 from *EurekAlert!*), while the Italian section contains 14,275 words in 29 texts. Since the two sections are similar in size, frequencies of occurrence of relevant devices could be directly compared.

## 4. Discussion of findings

Among the tangible interactive resources found in my data, the phenomena taken into account are code glosses and, above all, evidentials, while on the interactional side, we find the sub-categories of hedges and boosters, and engagement markers by means of questions and direct forms of address towards the receiver. Let us now consider each sub-category in turn.

### 4.1. *Interactive resources*

*Code glosses*

The number of code glosses is slightly lower in the English section of the corpus than in the Italian (viz. 181 cases vs. 214 respectively). This might be due, at least in part, to the inevitable dependence of the Italian scientific news source on international research popularized in English, which occasionally requires extra explanation. The following examples especially show the recursiveness frequently displayed by code glosses (in both sections of the corpus), either through juxtaposition (1) or embedding (2), cf.

> 1) Lo scopo del Progetto ARGOMARINE (Automatic Oil Spill Recognition and Geopo-
> sitioning integrated in a Marine Information System) progetto europeo del set-
> timo programma quadro, settembre 2009 – agosto 2012) è quello di sviluppare
> un sistema integrato… [from *Le Scienze*, hereafter LS].

[4] *EurekAlert!*, for instance, is a service of the American Association for the Advancement of Science (AAAS), an international non-profit organization promoting cooperation among scientists and supporting scientific education.

2) The Fukushima Daiichi plant, 240 Km (150 miles) northeast of Tokyio, was wrecked on March 11 by… [from *Scientific American*, hereafter SA].

In both sections of the corpus, code glosses take various forms; they are signalled by means of parentheses, dashes or commas, and/or introduced by formulaic expressions in each language (e.g. *such as, so-called, known as* vs. *cioè, come, quali*). They often provide more explicit lists of items (3) or extra source information (4), cf.

3) Solo in pochi altri paesi al mondo quali la Francia, Svizzera, Giappone, Inghilterra e Usa era possibile… [LS].

4) According to Juliette Finzi Hart, Regional Research and Planning Specialist at USC Grant and lead author of the survey report, "The organizations that… [from *EurekAlert!*, hereafter EA].

Interestingly, while in Italian they can be used to supply either extended versions of preceding acronyms (see 5a below) or acronyms themselves next to preceding fully-fledged expressions (see 5b), the English section of my corpus only displayed examples of the latter (6), cf.

5) I ricercatori esperti di modellistica climatica del CMCC (Centro Euro Mediterraneo per i Cambiamenti Climatici) (a), insieme con l'Istituto Nazionale di Geofisica e Vulcanologia (INGV) (b) di Bologna hanno partecipato… [LS].

6) The amount of […] that leaches from a broken compact fluorescent lamp (CFL) is lower than… [from *ScienceDaily*, hereafter SD].

This more 'anaphoric' trend emerging from the English data, which needs further research for corroboration, may be viewed as largely in line with stylistic conventions in written discourse in English  which generally prioritize user-friendliness and efficient communication.

Although the general function of code glosses consists in providing some sort of explanation, there is sometimes ambiguity between purely explanatory goals and more 'engaging' asides, which in Hyland's model actually have a different, i.e. interactional, status. The following example (from among several) illustrates this point,

7) In tutto questo, ovviamente i grandi assenti sono gli Stati Uniti, i secondi emettitori mondiali di gas serra, che hanno dichiarato di non avere intenzione di entrare nel secondo Periodo di impegno così come non erano entrati nel primo [LS].

The underlined part acquires comment-like overtones due to the assertive (cf.

the booster *ovviamente*) and evaluative quality of the co-text (see especially the negatively oriented function of intensification in the combination *grandi assenti*). This and similar types of interactions surely deserve a more in-depth analysis than we can provide here.

*Evidentials*

The number of evidentials in the English section of the corpus is significantly higher than in the Italian (273 cases vs. 155 respectively). The range of evidentials covers the following structures (see, e.g., Thompson 1994):

- Direct quotes (see 8a below), and discontinuous reports (where there is no reporting clause) with inverted commas (see 8b), with 103 cases in the English section vs. 91 in the Italian,

   8) "Shrinking summer sea ice has drawn much attention to exploiting Arctic resources and improving maritime trading routes," Nghiem said (a). "But the change in sea ice composition also has impacts on the environment. Changing conditions in the Arctic might increase bromine explosions in the future." (b) [SD]

- Indirect report structures introduced by reporting clauses (usually a reporting verb followed by *that*-clause [cf. the conjunction *che* in Italian] – with or without *that*), with 93 cases in English and 16 in Italian,

   9) Per confronto, [i ricercatori] ricordano che il rischio di morte per un incidente automobilistico è stato in Italia nel 2006 pari a […] [LS]

Other forms of indirect structures, introduced, for instance, by reporting nouns and/or showing alternative constructions to *that*-clauses, are included in this category too, e.g.,

   10) In their article, the researchers <u>make various suggestions as to how</u> the models for forecasting the response of soils to changes in the climate, vegetation and land use might be improved [SD].

- Partial quotes, with 7 cases in English and 12 in Italian,

   11) La ricerca ha anche rivelato che tutti i prodotti testati che vengono definiti "verdi" hanno un contenuto di carbonio di derivazione vegetale più alto […] [LS].

- Indirect report structures with reporting clause in mid- or final position, with 32 cases in English and 5 in Italian,

12) Mercury Vapor Released from Broken Compact Fluorescent Light Bulbs Can Exceed Safe Exposure Levels for Humans, Study Finds [SD].

- Reporting adjuncts, mainly *according to*… vs. *secondo*…, with 13 cases in English and 10 in Italian,

13) Coal plants in Asia are one of the largest sources, accounting for 860 metric tons, <u>according to</u> the United Nations Environmental Program [SA].

14) <u>Secondo</u> la prima ricerca cha ha tentato di quantificarli, la diffusa preoccupazione per i rischi di morte per fuoriuscita della CO2 […] [LS].

- What can be called 'pure evidentials' (similar to reporting adverbs such as *apparently*, *allegedly*), e.g. *appearing, it seems, x is thought to be* vs. the evidential use of the conditional mood in Italian (5 cases in English and 8 in Italian),

15) With PRO <u>appearing</u> to have great potential, the scientists set out to make better calculations on how much it actually could contribute to future energy needs under real-world conditions [SD].

16) Secondo la prima ricerca che ha tentato di quantificarli, la diffusa preoccupazione per i rischi di morte per fuoriuscita della CO2 da siti di stoccaggio terrestri <u>sarebbe</u> eccessiva [LS].

- Detached source or name of publication (20 cases in English and 14 in Italian):

17) The data were made public by TEPCO, the electric utility that owns the plants, and the Japanese Ministry of Culture, Sports, Science and Technology [SD].

18) Il risultato è pubblicato sulla rivista *Journal of Physical Chemistry* [LS].

Various forms of narrative reports (see, e.g., Leech and Short 1981 and Semino and Short 2004), which involve the omission (usually complete) of the words of the reported message and a high level of summarizing of speech or research acts, were found too (around 50 cases in English and 30 in Italian), often in the form of reporting verb/noun plus noun, cf.

19) Scientists <u>Assess</u> Radioactivity in the Ocean from Japan Nuclear Power Facility [SD].

20) ENEA: <u>La proposta</u> italiana per una macchina Tokamak PAST per ITER [LS].

However, the figures for this type of reporting structure have not been included in the totals for the evidentials sub-category, as this form of reporting involves more variation, and is consequently more difficult to identify without recourse to subjective criteria.

The higher incidence of evidentials in the English section of the corpus also emerges from their occurrence in text titles: 9 English texts out of 26 (around 37%) contained a relevant example, while only 4 Italian texts out of 29 (around 14%) did.

The array of reporting verbs too is different in the two sections of the corpus. In the English section the most frequent reporting verb is *say* (90 occurrences across the different reporting structures), while in the Italian one it is *concludere* (15 occurrences), with *dire* (the closest equivalent of *say*) occurring only three times. The English section also displays 38 different types of reporting verbs vs. 21 in Italian. The larger variety of English verbs covers items that contribute to the shaping of epistemic attitudes, i.e., for instance, on the 'hedging' side cf. verbs such as *suggest, estimate, envision, predict, contend, forecast, don't know, doubt, hope*, etc., while on the 'boosting' side are, e.g., *find, show, reveal, indicate, describe, determine* and *argue.* [5] The Italian verbs tend to focus more on how the message 'fits into' the text (e.g. *esordire, aggiungere, proseguire, concludere*), although boosters in the form of research act verbs such as *mostrare, indicare, rivelare* are found too.

## 4.2. *Interactional resources*

The interactional resources examined did not include items occurring within direct quotes or discontinuous reports with inverted commas, as the material within such boundaries is overtly attributed to voices other than the text producer's.

### *Hedges and boosters*

The hedging devices examined were: epistemic possibility modals and modal expressions in both languages (cf., e.g., English *may, might, should, would, likely, possibility, possible, potential* vs. Italian *può, possa, è possibile, eventuale, probabilmente*), conditional verb forms for Italian; approximators such as *roughly, nearly, about* (cf. expressions such as *quasi, circa, pressoché* in Italian); evidential expressions such as *appearing* vs. *non sembra*, and reporting signals strongly implying 'low evidentiality', e.g. *suggest, predict, estimate, forecast* – both as verbs and nouns – which were more frequent in the English data (see section on eviden-

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[5] The verb *argue* is classified by Hyland (2005) among hedges, together with *claim*, for example. However, the reporting verb *argue* in particular involves 'high evidentiality' judgments based on a logical chain of propositions, whereas *claim* rests more on potential evidence (see Masi 2007).

tials above); plus other expressions pointing to uncertainty, lack of clarity and/or validity (e.g. *expected, unexpected, unusually, unknown, unanswered, inexplicably, unclear, less justified* vs. *prevista, non sempre chiari e univoci, scarsa accuratezza e validità,* etc.).

Boosters include: English *will* and future verb forms in Italian, devices pointing to epistemic certainty and high levels of clarity (*no doubt, unmistakable, unquestionably, certainly, certainty, clearly, evident* vs. *indiscutibile, certamente, evidente, unica certezza, vera e propria, reale, ovviamente,* etc.); [6] emphasizers such as *indeed, actually* vs. *infatti*; reporting signals (verbs and nouns) implying 'high evidentiality' (see section on evidentials), e.g. *show, find, spot, indicate, reveal, identify, evidence* vs. *mostrare, indicare, rilevare, mettere in luce, dimostrare, scoperta,* etc.; plus other expressions pointing to exactness and reliability (e.g. *exactly, accurate, reliable, verified* vs. *confermate, esattamente, chiara conferma,* etc.).

While in the Italian section of the corpus the proportion of hedges and boosters was balanced (cf. around 70 cases for each sub-category), the English section displayed a decisive preference for hedging (cf. around 170 hedges vs. around 100 boosters). The figures for these sub-categories, however, only give part of the picture, due to the variety of items and local interaction effects that also need to be taken into account for a fully systematic treatment of the hedges – boosters ratio. [7] The example below illustrates how the interaction between such items may affect the way that they are to be interpreted:

> 21) But if the conditions aren't the same as how people use them at home, then the changes that designers make to the stove <u>may not actually</u> reduce emissions in the field [EA].

In (21), the function of *actually*, which frequently acts as a booster, is in fact affected by the preceding hedge *may not* (within the broader context of a hypothesis).

*Engagement markers*
The English data contained 7 questions and three occurrences of second person forms of direct address (*you, your*) in 6 texts. The Italian data included 8 questions in 6 texts. Below are two examples, one for each section of the corpus,

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[6] Although Hyland (2005) includes both *certainly* and *obviously* among boosters, a subtle distinction can be proposed, following Merlini Barbaresi (1987), whereby *certainly* signals epistemic commitment, while items such as *obviously* and *clearly* belong to a receiver-oriented inferrability dimension which, within a metadiscourse framework, can be viewed as pointing to an engagement marker function too.

[7] Many intensifying items, for instance, were excluded from this first survey, as intensification can actually take different forms and have different functions, which interact with the meanings of modified items and intertwine with affective meanings too.

22) Everyone in an earthquake-prone area wants to know when the next big one might come, but temblors are not well understood, and there is a plethora of methods that forecast quake risk. <u>So which one works best?</u> [SA].

23) <u>Il caldo estremo?</u> Si fa presto a dire anomalo [LS].

This balanced configuration is apparent only. There are, in fact, 22 occurrences of inclusive first person plural forms of address across 11 texts in the Italian section vs. 2 cases in only 1 English text. Here are two examples from the Italian data,

24) CNR: La crisi avvicina Nord e Sud del mare <u>nostrum</u> [LS].

25) Se si riuscisse a riprodurre questa sorgente sulla Terra <u>potremmo</u> disporre di una fonte praticamente illimitata di energia [...] [LS].

Further analysis is needed to verify whether there is in fact a stronger orientation towards a 'shared floor' of Italian, in-between self-centredness and other-centredness, as such examples suggest. Deictic elements should probably be taken into account, too, as the following two examples show,

26) Hurricane season is <u>here</u>, and FSU scientists predict an active one [EA].

27) È <u>ora</u> il momento di rilanciare il progetto [...] [LS].

Other engagement markers, in both sections of the corpus, which did not lend themselves to quantitative considerations and which surely deserve further scrutiny, are modal expressions and more or less indirect forms of exhortation:

28) È quindi <u>necessario</u> inserire FAST nel quadro delle collaborazioni internazionali [...] [LS].

The engaging quality of a marker can be partly downgraded, yet hardly cancelled, when it occurs in the scope of an indirect form of evidential, cf.

29) As Professor Schmidt explains, the findings <u>need to</u> be used for new experiments and models [SD].

- Colloquialisms and informal register items

30) I due geologi studieranno <u>insomma</u> una fetta di tempo più antica di quella esaminata attraverso le perforazioni dei ghiacci polari [LS].

- Other expressions, such as the underlined combination in the descriptive extract (31), intertextual references that evoke shared knowledge (see 32), figurative language use (see personification in 33) and puns on words (see paronomasia for ironic purposes in 34) are just some of the numerous multifunctional examples which serve as in-between engagement and affective markers,

31) The smoke rising from a cookstove fills the air with the <u>tantalizing aroma</u> of dinner – and a cloud of pollutants and particles that threaten both health and the environment [EA].

32) La lunga estate calda [8] [LS].

33) Sea Ice Drives Arctic Air Pollutants, NASA Finds [SD].

34) Durban: tutti d'<u>accordo</u> per rimandare gli <u>accordi</u> [LS].

## 5. Summary and concluding remarks

In talking about metadiscourse across languages, Hyland (2005: 116ff.) underlines that past research has revealed that, compared with other writing cultures, Anglo-American academic English tends to:

a) be more explicit about its structure and purposes;
b) employ more, and more recent, citations;
c) use fewer rhetorical questions;
d) be generally less tolerant of asides or digressions;
e) be more tentative and cautious in making claims;
f) have stricter conventions for sub-sections and their titles;
g) use more sentence connectors;
h) place the responsibility for clarity and understanding on the writer rather than the reader.

Although these findings pertain to academic genres, the data emerging from the present study highlight a certain degree of validity of some of them for scientific popularization in English vs. Italian too.

In relation to interactive resources, compared with the Italian section of my corpus, the English corpus indeed displays a substantially higher number of eviden-

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[8] The implied reference is to the film *The Long Hot Summer* (1958).

tials – especially indirect reporting structures, which supports (b), together with a more pervasive and efficient 'anaphoric type' of structuring of code glosses containing acronyms of preceding full-version expressions, which is in line with (h).

As to interactional resources, the English section shows a higher number of hedges, in compliance with (e). Another interesting finding, which deserves further analysis for corroboration, is the higher incidence in Italian of inclusive first person plural forms of address as engagement markers.

In fact, the present survey has mainly an exploratory goal, and each type of resource analysed needs further study. The imposition of discrete categories in the description of actual language use is hampered by the widespread multifunctionality of items already hinted at in the section about general metadiscourse devices and in the analysis of data (e.g. the blurred status of some engagement-affective markers mentioned at the end of the analysis). Further research, which obviously requires the expansion of the corpus, will shed more light on the trends emerging from the present study as well as on other tendencies within and beyond the list above.

More information about the extent to which the two languages under examination exhibit different metadiscourse patterns would allow us to evaluate the consequences that such differences can have for text reception in each culture, along with possible implications for translation applications. The retrieval of more authentically Italian material (by referring, for instance, to paper texts covering the period from the 1960s to the late 1980s, before the advent of mass e-communication) may also help us implement a more robust database as a reference corpus in more extended investigations of contemporary international news coverage written in Italian, so as to evaluate better, through the lens of metadiscourse, whether and, if so, to what extent the Italian style has changed under the influence of English.

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