Evidence (re)presentation and evidentials in popular and academic history: facts and sources speaking for themselves

> "There is nothing more deceptive
> than an obvious fact."
> A. C. Doyle
> *The Boscombe Valley Mistery*

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Abstract

The paper pivots around the different roles of evidentials and the different ways in which evidence is represented in the discourse of popular and academic history, thereby exploring the dynamics of both genres from a discourse analytical perspective. The analysis is based on two corpora of academic and popular articles on history. In particular, it is focused on those lexico-grammatical resources for tracing the speaker's source and mode of information that constitute the distinguishing features of the two genres. The analysis shows that the high frequency of *saw* in popular articles refers to the narrative of history, and to the evidence provided by historical characters and sources, rather than by the speaker. The frequency of the attributor *according* in academic journal articles, on the other hand, clearly qualifies as evidentiality in the narrative of historiography, and acts as a marker of the importance of sources in historical reasoning. The different frequencies thus seem to be related to the different communicative and social functions of the two genres and to be closely connected with the triptych of narratives (Bondi 2015) involved in historical discourse.

Keywords: evidentials, corpus-linguistics, discourse analysis, historical discourse, popular articles, journal articles

1 Introduction

One of the pillars supporting today's globalized and technological world is specialized knowledge. Its centrality has heightened the need for knowledge dissemination. Specialist discourse undergoes various changes when addressing lay audiences with a different professional, academic or cultural background, or simply having a different stage of cognitive development such as children (Myers 1989). The different types of readers and their specific background knowledge are discriminating elements governing the distinguishing features of professional science and popular science.

Discourse analytic approaches to popularization have variously investigated writer-reader relations, the asymmetry or symmetry of their communication, the different voices involved (see for example Bensaude-Vincent 2001; Myers 2003; Calsamiglia & Ferrero 2003; Minelli & Pagano 2006) as well as the relations between quoting and quoted voices (Minelli & Pagano 2006, 641). The asymmetrical relations between the interlocutors of specialist and non-specialist genres are mirrored in formal or functional variation in language features. Popularization does not simply render the content more comprehensible, but it also deploys a more reader-oriented approach. When the non-expert reader is addressed, there is a shift in the purpose superintending the discourse (Nwogu 1991; Moirand 1999a, 1999b, 2003), focussing on "the social meaning" of science and bringing into relation "scientifically unrelated matters" (Moirand 2003, 197). This frequently occurs in order to help societies preserve and develop their specific viewpoints, values and expectations.

Research articles and popularizations are therefore different social practices that arise from different settings of knowledge circulation (Calsamiglia & Ferrero 2003, 147) and from different processes of re-contextualization (Calsamiglia & Van Dijk 2004). The process of "mediation" across knowledge asymmetries (Kastberg 2011) is at the centre of a re-contextualization of purposes and strategies of the discourses that can be aptly seen as creating a "third space" (Bhabha 1990): a space where discourse communities with different backgrounds and interests can conflate and establish an "inter-discourse communication" (Scollon & Scollon 1995). This process of re-contextualiziation through the creation of a new discursive space can also be seen as one of "bridging across discourse communities" (Bondi 2015). These communities "may share forms of intercommunication, but will eventually bring to the area of interaction different backgrounds and different purposes" (Bondi 2015, 14). Re-contextualization is clearly reader-oriented: expert knowledge is made relevant or interesting for non-specialist readers by underlining the importance of the area investigated and its relevance to the community the readers belong to and to the readers' everyday life and experience.

In this context, growing attention has been paid to readers' engagement (Hyland 2001, 2004, 2005), i.e. the resources of inter-subjective positioning, the means by which interaction with the reader is achieved. Elements like hedges, reporting verbs, reader pronouns, personal asides, appeals to shared knowledge, directives and questions have been examined in order to define the role of interpersonal discourse in academic writing (Hyland 2001, 2004; Hyland & Tse 2004). Specifically, Hyland (2010) suggests that the relationship between popular science and professional science can be studied in terms of "proximity", namely, "the writer's control of rhetorical features that can display both authority as an expert and a personal position towards issues in an unfolding text" (2010, 117). In specialist texts, proximity is an effective device providing evidence for claims and highlighting the reliability of interpretations and the methodological rigour of research. Conversely, in popular science methodological and theoretical validity is not called into question and the efforts are all oriented towards the celebration of the novelty and relevance of scientific results (Hyland 2010, 119).

Comparably, when history is re-contextualized in popularization, the objective is not the reconstruction of events and positions, grounded on the rich plurality of voices involved in academic history (Bondi 2007, 2009): popularization of history is often "public history", meeting the lay readers' demands for a better understanding of the roots of their culture and community (Bondi 2014), while shedding light on the different genres across local and translational communities and on the concept of identity steeped into apparently extraneous genres (Bondi 2013). The different use of sources in specialized and popularized discourses can also paralleled to the different uses of the theoretical and methodological framework in popularized and specialized science texts: specialized texts on history are heavily reliant on references, carefully subdivided into primary and secondary ones; the opposite tendency is seen in popularized historical discourse, whose sources are flexible means through which the reader's attention is directed to highly selected and easily available evidence. More than in other disciplines, the concept of evidence is particularly significant in history. It is the core from which a multiplicity of sources cooperate in building a methodologically and theoretically comprehensive historical discourse.

The notion of evidentiality, often traced back to Boas' (1911, 496) analysis of suffixes denoting the speaker's source of information in Kwakiutl, has been brought to the forefront of linguistic analysis by Chafe and Nichols (1986, vii), referring to a "'natural epistemology', the ways in which ordinary people [...] naturally regard the source and reliability of their knowledge", and showing that in English, as in Indo-European languages in general, evidentiality is not encoded in grammar but rather in a wide range of lexical forms. Chafe's (1986) seminal paper in the volume has not only influenced

the ensuing theoretical debate, but also studies on academic discourse, based as it is on a comparison between conversation and academic writing. His adopting a broad definition of evidentiality – "any linguistic expression of attitudes toward knowledge" (Chafe 1986, 271) – opens space for intense debate on the definition of evidentiality, but also allows him to notice that academic writing favours specific modes of knowing such as deduction (typically signalled by modals) and "hearsay", in the form of reference citations. If reported speech – whether hearsay or explicitly quotative – can be viewed as "a universal evidentiality strategy" (Aikenwald 2004, 371), other strategies for "marking one's information source" (Aikenwald 2004, 1) can be based on visual evidence, non-visual sensory evidence, inference and assumption, which have widely varying lexical realizations in English. Reporting verbs and nouns play a major role in producing verbal indirect evidence, but verbs of cognition or perception (e.g. *believe, see*), modals (*must*), evidential auxiliaries (*seem*, Cornillie 2009, 46), various adjectives and adverbs (*obvious/ ly* Alonso-Almeida 2015*)* can also typically signal inferential or visual evidence.

The aim of this paper is to examine evidentiality, taken to refer to lexico-grammatical resources for marking the speaker's source and mode of information, in a discourse analytic perspective, by looking in particular at the dissemination of historical knowledge through journal articles and popular articles written by professional historians in English. The paper pays particular attention to how evidentials contribute to substantiating narrative elements in historical discourse, highlighting on the one hand that popular history tends to align the reader's perspective with the writer's or with quoted sources (Bondi 2013, 2014), and on the other that specialized history tends to clearly separate the different perspectives, thus reinforcing the writer's credibility inside the community.

The rest of the paper is organized as follows. The next section outlines the background: from approaches to evidentials in the context of the current linguistic debate to their role within discourse studies, with special reference to the analysis of historical discourse. This leads to a presentation of the corpora examined and the specific corpus-based analytic procedures applied. The results of the analysis are introduced by dealing with an overview of frequency data. This is followed by comparative discussion of selected evidentials that characterize either popular or academic history. Discussion and conclusions relate the lexico-grammatical and semantic patterns observed to the nature of the genres examined and to the ethos of the discipline.

2 Background

The debate on the nature of evidentiality has been very intense in linguistics, as different languages express the notion in different ways. The semantic nature of evidentiality is also so closely linked to expressions of speaker's stance and attitudes, that many different

definitions exist. We will start with a brief sketch of different definitions of evidentiality in linguistics to proceed to a focus on the use of notion in academic discourse studies and on the peculiarities of historical discourse, with its distinctive use of two spatio-temporal perpectives: the perspective of the writer (and the intended reader) and the one of the facts narrated.

2.1 Untying a Conceptual Knot: Evidentiality and Epistemic Modality

Whatever perspective you might adopt – grammatical, semantic or pragmatic –, when analysing evidentials (EVs) from a notional point of view, the debate on the relationship between evidentiality and epistemic modality cannot be neglected, since the two concepts appear to be part of some kind of theoretical tangle. Indeed, their connection "is still one of the main problems in this research area" (Dendale & Tasmowski 2001, 340). From this controversy, "a very complex one" (Nuyts 2006, 10), essentially focussed on their mutual autonomy, three main approaches have emerged in the literature: the inclusive, the intersective, and the disjunctive (Dendale &Tasmowski 2001, 341).

Inclusion sees either epistemic modality or evidentiality as the subset of the other. The roles of the including and of the included element might vary according to the different perspectives adopted.

On the one hand, this implies the use of the term "evidentiality" in its broadest sense (Chafe 1986, 262). The notion thus goes beyond the mere indication of the evidence, simultaneously encompassing the reference to the source of information and the reference to its degree of reliability. From this viewpoint, evidentiality details "the source of evidence on which statements are based, their degree of precision, their probability, and expectations concerning their probability" (Mithun 1986, 89). EVs are therefore classified as superordinate "linguistic units comprising part of epistemic modality" (Matlock 1989, 215). Obviously, if evidentiality is taken to refer to all this, then the relationship established between evidentiality and epistemicity is not binary: evidentiality includes epistemic markers, but not all the EVs subsume an epistemic judgement (Plungian 2001, 354).

When still considering their nexus as an inclusive one, the opposing view holds that evidentiality is a subcategory of epistemic modality (Willet 1988; Kranich 2009; Ortega-Barrera & Torres-Ramìrez, 2010). In particular, Palmer classifies evidential modality and epistemic modality as two sub-types of propositional modality "concerned with the speaker's attitude to the truth-value or factual status of the proposition." (Palmer 1986, 24) Not surprisingly, according to Dendale & Tasmowski (2001, 342) this assumption is frequently supported by the fact that the indication of the source of information

may be perceived as an "indirect means of marking an epistemic attitude". Again, by concentrating on the pragmatics of evidentiality and by relying on the concept of *epistemological stance* as a "necessary construal" (Mushin 2001, 52)*,* Mushin stresses the fact that whenever the source-of-knowledge is verbally marked, the speaker takes a *stand* on how the knowledge has been acquired.

Placed midway between inclusion and disjunction, there stands the intersective or "overlapping" relationship (van der Auwera & Plungian 1998; Faller 2002, 2006; Carretero 2004). Evidentiality and epistemicity are reckoned as two separate notions that meet up in the middle ground of inferential evidentiality and epistemic necessity. This in-between position is exemplified by the English modal verb *must*: the inference resulting from evidence or logical reasoning includes the speaker's confidence on the truth of the proposition (van der Auwera & Plungian 1998, 86)

A third type of relationship has been identified, that of disjunction. As stated by Dendale & Tasmoski, "indicating the source of information is conceptually different from indicating the speaker's assessment of the reliability of information, this distinction is not always clear in present uses of the terms evidentiality and modality" (2001, 342). Neither is this difference so clear-cut when the interpretation of data is at stake (Squartini 2004, 874), but there is a notional dichotomy to be taken into account. By the same token, de Hann (1999) and Nuyts (2001) strongly advocate that evidentiality and epistemic modality have to be treated as separate concepts and call for a consistent interpretation of the former. The argumentation revolves around the observation that although both notions have to do with evidence, they use it differently: while "epistemic modality *evaluates* evidence" (whence the deriving proposition conveys the speaker's degree of certainty with regard to what it is stated), "evidentiality *asserts* that there is evidence for the speaker's utterance but refuses to interpret the evidence in any way". (2001, 4) Similarly, Aikhenwald observes that evidentiality is "a category in its own right" (2004, 7). Accordingly, Cornillie stresses the "specific nature of the two qualifications" even if they do not exclude one another (2009, 49): modes of knowing (direct, indirect, visual, non-visual, acquired through inference processes) cannot be identified with any degree of speaker's certainty regarding the truthfulness of the proposition.

In studies of academic discourse, the study of evidentiality has obviously attracted great attention, for the centrality of the issue in the discourse of knowledge. Adverbials of stance and reporting verbs or attributors are a case in point (see also Hunston 2001).

Focusing on adverbials of stance and sentence evidentials in particular, Alonso-Almeida (2012) and Alonso-Almeida & Adams (2012) highlight that evidentiality and epistemicity should be faced as two different concepts, thus embracing Cornillie's standpoint. As Alonso-Almeida (2012) makes clear in reference to *obviously*:

The concept of obviousness relates to what is clear and easily perceived through the senses, i.e. evident, but the notion of what is evident very much depends on individuals and their selection of contextual premises. The implication of using obviously *in these examples is to give the impression of factuality without requiring the authors to offer further demonstration.* (2012, 27)

Other major influences in the field of academic discourse studies have placed the issue in a different context. Hyland (2005), for example, classifies EVs as metadiscursive resources belonging to the interactive dimension, in which the use of resources "addresses ways of organizing discourse, rather than experience, and reveals the extent to which the text is constructed with the readers' needs in mind" (Hyland 2005, 49). Thus, categorised together with transition markers, endophoric markers, and frame markers, EVs are defined as references to prior text, markers of representations of ideas from other sources:

In some genres this may involve hearsay or attribution to a reliable source; in academic writing it refers to a community-based literature and provides important support for arguments. Evidentials distinguish who is responsible for a position and while this may contribute to a persuasive goal, it needs to be distinguished from the writer's stance towards the view, which is coded as an interpersonal feature. (Hyland 2005, 52)

Our own focus here will be on lexico-grammatical resources indicating both the source and the mode of knowledge, while leaving in the background assessments on the reliability of information typically subsumed under the heading of epistemic modality, and the complex ways in which some lexical elements – e.g. modals and reporting verbs – can contribute to expressing both notions, evidentiality and epistemic modality.

2.2 Evidentiality in the historical narrative triptych

Given the due cross-linguistic, cross-disciplinary, and cross-generic differences in the use of EVs, evidentiality in specialized and popularized history can be said to show peculiar features. Beyond the distinction between popularization and research, sources and evidentiality are the driving forces behind historical narrative so that they are not relegated to the description of the present state of knowledge and disciplinary literature on which authors make claim and establish the narrative context (Myers 1990). In the ethos of historians, they are not exiled to the creation of the background of the study: rather, they are the main object of the study, the bearing walls of the narrative of facts, strongly characterized by an intricate poliphony of voices. Sources are variously interrogated in terms of research traditions/debates or in terms of question-raising, while

narrating the events. Stance *per se*, however, is an element to avoid: disciplinary tradition wants history to be objective and facts-based, even when developing historical debate or making reference to the present of the addressee.

In particular, whether we focus on narrative features of history (e.g. Martin & Wodak 2003; Coffin 2006; Bondi 2009) or on the interpretative role of the historian as manifested in the argumentative dimension (Coffin 2006), the narrative of history is easily related to two time axes, often simplistically referred to as "past and present". Adapting to history Myers' (1990, 142) distinction between "narrative of nature" (focused on the subject matter rather than the argument of the scientist) and a "narrative of scientific development" (meant to foreground the novelty and current relevance of the discovery or position presented), we might think of a "triple" narrative in history:

> *There is a Narrative of History, which relates to the story narrated, the historical event in focus. This is vastly dominant in academic discourse. There is also, however, a Narrative of Historiography, relating the writer's interpretation to current historiographic debates, and thus to the academic community. Finally, there can be a Narrative Interpretation of the Present, which relates to the world of the writer and the reader, with its current discourse(s).* (Bondi 2015, 19)

Evidentiality is closely interrelated with this narrative triptych in popularized and academic articles. More specifically, we aim to show that evidentials seem to be constituent elements of the Narrative of History in popularized articles and of the Narrative of Historiography in research articles. As mentioned above, evidentiality is the basis on which the historical discourse in the two genres rests.

3 Materials and methods

The analysis was carried out using two corpora, respectively representative of history as a discipline and as a popularized subject. The two corpora were elaborated independently and vary considerably in their dimensions: one is broader (about 2.5 million of words) including articles published in 10 academic journals and one is more limited (about 360.000 words), collecting historical popularization articles published in *History Today*. Both corpora cover a wide range of topics.

The first corpus (JAC – Journal Articles Corpus) comprises over 300 articles taken from the following journals: *Labour History Review* (LHR), *Historical Research* (HR), *Gender & History* (GH), *Journal of European Ideas* (JEI), *Journal of Medieval History* (JMH), *Journal of Interdisciplinary History* (JIH), *Journal of Social History* (JSH), *Studies in History* (SH), *American Quarterly* (AQ), *American Historical Review (AHR)*.

The second corpus (PAC – Popular Articles Corpus) consists of 125 articles published in *History Today* (HT). *History Today* is *de facto* considered as the icon of historical popularization in Great Britain: it has been active since 1951, publishing articles written by renowned historians and addressed to the general public.

The two corpora are both examples of academic discourse, as their articles are all written by academics. The difference lies in the audience addressed: the specialized research community in JAC and educated readers interested in history in PAC.

The analysis aimed to identify first the potential evidentials that characterize the two corpora and then their privileged syntactic patterns and semantic sequences, with a view to illuminating the nature of historical argument in the two genres.

The corpus tools used were keywords and concordance analysis of selected items. This was carried out using *Wordsmith Tools 6* (Scott 2008).

Keywords are defined in a quantitative perspective as those whose frequency (or infrequency) in a text or corpus is statistically significant, when compared to the standards set by a reference corpus. Keywords point to statistically significant differences between the two corpora. Focusing on general academic language allows the comparison even if there is no thematic correspondence between the two corpora and offers an overview of quantitative variation.

The examination started with the survey of those words whose frequency is significantly higher in the two corpora respectively. Grouping words by semantic or functional category helped relate expressions to their role in popularizing discourse vs academic discourse.

Concordances of selected items were then analysed looking at the co-text of the nodes with a view to their textual patterns, so as to bring out their semantic and pragmatic implications (see also Bondi 2010). The co-text was explored in order to identify any similarities and differences between the two corpora through collocational and phrasal patterns (Sinclair 1996, 2004). This involved looking at collocation as the simple "co-occurrence of words" (Sinclair 2004, 141), colligation as the "co-occurrence of grammatical phenomena" (Sinclair 2004, 142) and semantic preference as "the restriction of regular co-occurrence to items which share a semantic feature" (Sinclair 2004, 142). Attention was also paid to semantic sequences (Hunston 2008), defined as "recurring sequences of words and phrases that may be very diverse in form […], sequences of meaning elements, rather than as formal sequences" (Hunston 2008, 271).

4 Analysis

The analysis begins with an overview of frequency data showing the relevance of different candidate evidentials in popular and academic history. It then proceeds to focus on distinctive elements of the two corpora: statistically significant normalized frequencies point to *saw* and *according to* as characterizing evidentiality in popular and academic history respectively.

4.1 Overview

Frequency data offer an overview of quantitative variation pointing to major differences between popular and journal articles.

When grouped according to general reference and semantic categories, positive keywords (those that are outstandingly more frequent in the study corpus than they are in the reference corpus) offer interesting perspectives on the nature of popularizing discourse. As shown elsewhere on the same corpora (Bondi 2013), positive keywords (those that are outstandingly more frequent in PAC than JAC) include many potential deictics, suggesting significant differences in terms of the identities that are seen most clearly at play in the two genres. The higher frequency of lexical items like *there, today, now, thou, you* and deictic verbs like *came, went, took*, witnesses the relevance of the 'here and now' of the writer/reader and of the interaction with the reader in particular (*you*). Other meanings foregrounded are elements of description: places, directions, presentational structures. Table 1 shows examples of verbs of perception and cognition potentially carrying evidential value. These are reported with their frequencies (F) and normalized frequencies (pttw, per ten thousand words) in the study corpus and the reference corpus.

Candidate evidential		PAC		JAC	
		F	pttw	F	pttw
Verbs of perception	*saw*	137	3,84	444	1,83
Verbs of cognition	*proved*	75	2,10	226	0,93
	knew	69	1,93	202	0,83
	realized	32	0,89	30	0,12

Table 1. Candidate evidentials in positive keywords

Negative keywords are those that are particularly infrequent in popularizations. These can easily be related to features that are prominent in research articles. The overview shows that the argumentative dimension of discourse – reference to interdiscourse, to cognitive constructs and markers of probability/evidentiality – is foregrounded in

academic articles when compared to popularizations: negative keywords include reflexive or intertextual reference to textual or discourse units (*data, article, essay*, etc.), reference to potential discourse functions (*claim, argued, discussed* etc.) cognitive constructs (*model/s, roles, status* etc.), modality (*can, must* etc.), inferential markers (*thus*) and above all the proptotypical quotative *according to*. Table 2 provides frequency data for modals and quotative *according to*.

Candidate evidentials and modals		PAC		JAC	
		F	pttw	F	pttw
Quotative	*according to*	66	1,84	957	3,96
Modals	*can*	230	6,44	2742	11,35
	cannot	33	0,9	692	2,86
	must	115	3,22	1291	5,34

Table 2. Selected negative keywords

4.2 Focus on visual evidence: *saw*

The presence of *saw*, the past form of the verb SEE, among the top positive keywords of the corpus of popular articles stands out as an interesting element, as the lemma SEE represents a typical marker of a knowledge source (Aijmer 2004; Chafe 1986; Fox 2001). The use of the verb is prototypically connected with 'visual perception' and with descriptive elements (Bondi 2013). The fact that we find *saw* among the keywords, and we do not find *see* or *seen*, suggests that the 'seeing' that is most distinctive of popularizing is reported as part of the historical narrative. This obviously means that strictly speaking this is not a direct evidential, in that it does not refer to the historian's visual perception: it is usually the historical character who has direct evidence of facts (as reported in a textual source that is usually referred to in the footnotes).

Extract 1 provides an interesting odd example, where the reader is invited to imagine walking along Seven Sisters Road in 1901 and successively led to notice a flag and see the sign on a shopfront:

(1) *If you had been making your way along Seven Sisters Road in the north London suburbs in 1901 you would have noticed a large flag of St George flying over a modest looking café at the entrance to Finsbury Park. This may have seemed nothing special until you* **saw** *the foreign name on the canvas awnings over the shopfront: Pazzi's Restaurant. It was owned by Pietro Pazzi, who came from the Italian-speaking part of Switzerland.* (Pietro Pazzi: The Making of an Englishman)

Most other examples of *saw*, on the other hand, refer to visual perception in *realis* events taking place in the narrative of history, with historical characters gathering visual evidence of historical events, as in extracts 2 and 3:

(2) *<…> he was posted to Italy in 1939–40 and* **saw** *Mussolini's performances in the Piazza Venezia* (PAC)

(3) *During the time period he studied the group, he* **saw** *many displays of aggression but few actual conflicts* (JAC)

An analysis of occurrences of the verb form in context may add interesting features, as it helps us identify meanings and patterns of the verb. Following previous studies of the use of *see* (Aijmer 2004; Fox 2001; Reber 2014), but focusing on the past form of the verb, we have identified the most frequent meanings attested.

A very important set of occurrences is certainly associated with evaluative meanings, typically introducing how historical actors interpreted other actors or events in attitudinal terms. Different syntactic patterns are exemplified in 4, 5 and 6:

(4) *Some voices in the BBC* **saw** *this line towards Powell as a retreat from Greene's earlier position* (PAC)

(5) *These rulers* **saw** *in Buddhism both a source of miraculous power and prophecy and a means of legitimizing their rule* (JAC)

(6) *He* **saw** *no economic reason to oppose an official sanction for a new loan* (PAC)

Table 3 exemplifies the semantic sequences (Hunston 2008) that characterize these occurrences.

Evaluator	*Saw*	Evaluation	Thing evaluated
Henry IV, king of France since 1589,	*saw*	*no reason*	*to go to the expense of a coronation for his second queen*
Farmers and agricultural labourers	*Saw*	*no reason why*	*wild game, which was both nutritious and a pest, should not supply the demotic stew-pot as well as the tables of the landed gentry*
the Corporation also	*Saw*	*a need*	*to oppose racism in its news and current affairs output*

Evaluator	SAW	Thing Evaluated	Evaluation
John Dunlop, founder of the first mainland UK temperance society in Greenock, Glasgow in 1829	*saw*	*so-called drinking traditions*	*as an artificial form of social coercion*
Some voices in the BBC	*Saw*	*this line towards Powell*	*as a retreat from Greene's earlier position*
BI	*Saw*	*this 'covenant'*	*in apocalyptic stage-lighting*

Table 3. Evaluative sequences

Other examples can be classified as 'cognitive perception', as they are meant to refer to an act of 'understanding' events and processes, typically involving labeling nouns with metacognitive reference. These are often closely related to inferential meanings and epistemic assessment, as in examples 7 and 8:

(7) *The fourth successor of the Promised Messiah, Tahir Ahmad,* **saw** *the implications of the legislation immediately* (PAC)

(8) *He* **saw** *little possibility for the return of Gemeinschaft* (JAC)

An interesting group of examples can be paraphrased as 'witnessing' historical processes or events: interpretation is not marked as such, but at the same time the act of 'seeing' cannot be identified with visual perception either. This 'seeing' is a totally undetermined form of perception that seems to characterize historical narration and historical periodization in particular. The evidential nature of the act is rather vague (and logically speaking non-existent), especially as the subject of the seeing is usually a chrononym or an eventonym, i.e. a noun phrase referring to a time period or an event identifying a time period, a setting rather than a participant, as in 9 and 10:

(9) *These months, from March to December 1610,* **saw** *the birth of modern science* (PAC)

(10) *The war* **saw** *a stark shift in the purge policies from cleansing certain spaces to cleansing peoples in toto* (JAC)

These occurrences do not in fact produce any evidence to the claim, even if the claim is presented as metaphorically "witnessed" by personalized historical periods or events.

The four types of meanings were used to study the 137 concordances of *saw* in PAC (where absolute frequency is lower, but normalized frequency much higher) and of a random set of 100 occurrences from JAC (out of the total 444). Concordance analysis reveals that *saw* is characterized by a preference for different meanings in the two corpora. When comparing the results for both, PAC shows higher percentages of visual perception and "historical witnessing", whereas JAC shows higher percentages of references to evaluative interpretation and cognition. The data are summarized in Table 4.

Meanings	PAC-Freq.	%	JAC-Freq.	%
Visual perception	50	36.5	17	17
Evaluation	47/	34.3	51	51
Cognition	18	13.1	20	20
"Witnessing"	20	14.6	11	11
Other	2	1.5	1	1
TOTAL	137	100	100	100

Table 4. Meanings of *saw*

The prevalence of visual perception in popularization contributes to highlighting the narrative of history as against the narrative of historiography: the source of information is found in what historical characters saw rather than in what historians find in documents. The 'witnessing' meaning of *saw* also helps to establish an interesting discourse pattern that aims at characterizing the time setting of the narrative. The pattern is useful for identifying the distinctive features of historical periodization in forms of what we could call "empty evidentiality", as the evidential *saw* points to a source that is in fact a discursive construction of the writer, rather than a documentary source that can be truly questioned.

On the whole, the frequency of *saw* is not often related to visual perception and even when it is, it marks forms of (re)presentation of a visual evidence which was available to the historical (or fictional) character, rather than to the author of the article. The evidential basis of the claims of the historian, necessarily linked to textual sources, is backgrounded. The (limited) foregrounding of visual perception does not serve the purpose of justifying the interpretations of the historian, but rather that of providing information through the eyes of historical characters.

4.3 Focus on sources: *according to*, textual voices and inferential evidence

An interesting element characterizing journal articles against popular articles could be their use of sources, as suggested by the frequency of *according (to)*. The ethos of

the academic discipline requires a very complex subtext of textual references in the footnotes. These are carefully reduced to a minimum in popular history. Investigating concordances of *according to* in the main text of the article may reveal further distinctive features.

Focusing on the higher frequency of *according* in journal articles (4 occurrences pttw in JAC vs 2 pttw in PAC), it was possible to study the 66 occurrences in the corpus of popular articles and a random set of 100 concordances (out of 957). Occurrences introducing a classification principle rather than a candidate source (Example 11) were counted separately (as "Other"). The sources of textual voices were divided into three categories: human specified (Example 12), human unspecified (Example 13), documentary (Example 14).

(11) *European immigrants were not perceived as monolithic, but differentiated according to racial nuances and phenotypic gradations*. (JAC)

(12) *During and after the Civil War, according to historian Kim Townsend's Manhood at Harvard, "[t]he exemplary man who had once been closest to God, or had been most valiant in his pursuit of intellectual or moral betterment, was supplanted by a figure who had distinguished himself on the battlefield."* (JAC)

(13) *Only egoistically motivated persons who admit that they volunteer because of the utility benefit they receive are both rational and truthful, according to economists*. (JAC)

(14) *Between 1816 and 1834, 36,271 persons served time in the city prison and African Americans, who, according to the 1820 and 1830 censuses, constituted, respectively, only 8.8 percent and 6.9 percent of the population, made up 19.5 percent of those sentenced*. (JAC)

The results of concordance analysis are summarized in Table 5.

according to +	PAC occurrences	%	JAC occurrences	%
Human specified source	18	27.3	37	37
Human unspecified source	6	9.1	12	12
Documentary source: textual or cognitive construct (account, report, pamphlet, theory, view)	24	36.3	28	28
Other (principle, rather than source)	18	27.3	23	23
Total	66	100	100	100

Table 5. Use of *according to*

The higher frequency of *according to* in journals is confirmed, even considering the fact that there is a higher percentage of occurrences referring to distinguishing criteria rather than to evidential sources. What is more important, the data show that the use of *according to* is also associated to a higher frequency of its use in identifying explicitly specific individuals as sources of information. Of course, a lot of the references to documents may in the end refer to a specific author, but this is clearly more implicit and can only be reconstructed textually by the reader.

The higher frequency of inferential markers is also an interesting element that distinguishes journal articles and popular articles. The use of *must*, for example, is much more frequent in journal articles than in popular articles (5pttw vs 3pttw). However, the most typical pattern introducing a present inference about past states or events – *must* + perfect infinitive – is much more frequent in popular articles (30/115 occurrences of must, i.e. 26%) than in academic writing (178/1291, i.e. 13.8%). Even more importantly, when we look into the wider context of the patterns, to the way these inferences are built into the line of argument of the article, we notice clearly diverging rhetorical structures. In journal articles, the pattern is usually accompanied by data or evidence justifying the inference, as in example 11, with supporting evidentials highlighted:

(15) *The equation with the situation in 1067 cannot be made with certainty, but the organisation of the defence of the strategically important Dover castle* **must have been planned** *in advance and put into place by William immediately following Hastings.* **We know that** *Dover was one of the first places William sought to secure after the battle.* **According to** *William of Poitiers he spent eight days there strengthening the fortifications before advancing onto London*. (JAC)

In popular writing, on the other hand, a common pattern is to use these inferences to elaborate on events, building a network of inferential considerations around the focus of attention: inferences contribute to problematizing the event and raising interest in the reader, without making any explicit reference to sources of information, other than the writer him/herself.

(16) *On June 23rd, 1700, at Hampton Court Palace, William III knighted the financier Solomon de Medina – the first member of the Jewish community to be thus honoured: it would be 137 years before another Jew was knighted. Another precedent had been set on November 18th, 1699, when, as recorded in Narcissus Luttrell's A Brief Historical Relation of State Affairs, 'his Majestie dined with Mr Medina, a rich Jew at Richmond' – the first known visit to a Jew by an English king.*
The reason for the King's visit is easily guessed. The previous day he had appealed to Parliament for desperately needed money 'or the safety of the Kingdom by Sea

*and Land'. There **must have been** discussion at the dinner about a moratorium on the £40,744 debt owed to Medina on account of William's 1698 military campaign. That debt was indeed not repaid till 1702. The knighthood **must have been** in recognition of this arrangement (and, no doubt, the promise of future loans). It **must also have recognised** that Medina's Dutch firm had supplied William's armies with bread and corn since he became Netherlands Stadholder in 1672, as well as the English army in Flanders since 1679.* (PAC)

5 Discussion and conclusions

The study of potential evidentials in popular and academic history has highlighted a number of trends. First of all quite a number of keywords in our corpus showed that the argumentative dimension of discourse – reference to interdiscourse, to cognitive constructs and inferential markers – is backgrounded in popularizations, while other elements are foregrounded, such as references to visual perception (*saw*) and to elements characterizing historical periodization.

As a matter of fact, evidentiality seems to be rooted in the narrative of history in popularized articles. As the use of *saw* demonstrates, evidentiality (if any) lies within the realm of the narrative of history with its actors. This is also the case when, for example, chrononyms and eventonyms are personified. The frequency of *saw* in popular articles proves to be a form of "empty" evidentiality: it does not cross the boundaries of the narrative of history and of the historian's discursive construction, and EVs related to visual perception and "witnessing" prevail, but they all refer to historical characters and sources, rather than to the speaker.

The frequency of attributors such as *according* in academic history, on the other hand, clearly qualifies as evidentiality. This preference for the most neutral marker of attribution can even be taken as a sign of the ethos of historians, who strive to separate references to sources from their own interpretation of the sources and show themselves interacting with historical sources as well as with other interpreters of historical facts.

The interplay between attributors and markers of inferential evidence across the two genres points to interesting differences: sources are always more clearly identified in academic history, where inferential reasoning is also more clearly used in rhetorical patterns exploring the soundness of evidence than reconstructing context. Academic history is quite understandably marked by elements that highlight the development of the interpretative argument of the historian and the quality of his/her search for sound evidence. Hence, evidentiality is strictly connected to the narrative of historiography, thus creating a polyphony of voices and sources in which any type of inference and

deduction has to be attributed to a source. In popular writing, on the other hand – as it is clearly more focused on the reader and the relevance of the topic for the reader– both attributors and inferential marking are used to draw the reader's attention to elements of the narrative and its relevance, often without worrying too much about specifying the sources.

On the whole, the study of selected candidate evidentials confirms the key role played by documented evidence in the ethos of historians and in their disciplinary tradition that wants history to be objective and facts-based. Within this disciplinary framework, evidentiality and epistemicity neither meet nor collide.

Popular writing, however, has its peculiar features. EVs are deeply inserted in the Narrative of History: they often point to historical characters themselves or historical periodization as sources of "visual" evidence. The frequency of references to this kind of evidence aims at underlining that *res ipsa loquitur* (facts speak for themselves) and this (re)presentation of evidence turns out to be a proper narrative device on which the narrative of history is constructed, thus confirming that the narrative of popularizing seems to be more focused on representing, problematizing and sequencing events in order to support the Narrative Interpretation of the Present than on providing specific documentary evidence.

On the other hand, in specialized texts, evidentiality is the pillar on which the historian elaborates and explains history, thanks to the creation of a polyphony of historiographical and historical voices in which, conversely, "historical sources speak for themselves".

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