

## **Literary stylistics, authorial intention and the scientific study of literature: a critical overview**

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### **Abstract**

A tendency by literary stylisticians to overlook the role of the author in the generation of literary meaning has been a significant source of tension between linguistic approaches to literariness and other practices in the discipline, such as text-editing and literary biography. Recently, however, efforts have been made to close this gap, with the branch of stylistics, cognitive poetics, claiming to have developed a new and empirical method of integrating an appreciation of authorial imagination and creativity into the study of readers' responses to the language of literary texts. We examine these claims critically, testing the grounds of assertions about scientific rigour in relation to demands about model testing and falsifiability associated with the scientific study of literature more generally. We then explore how some other methodologies, technologies and insights associated with this last branch of the discipline might be brought to bear on the topic of authorial intention, with the aim of determining whether, and in what ways, our understanding of an authorial intention, and its role in literary processing, might be furthered through empirical enquiry.

### **Keywords**

Authorial intention, literary creativity, literary stylistics, cognitive poetics, scientific method, empirical study of literature, foregrounding effects, eye-tracking, text-editing, literary biography

## **1 Introduction**

Literary stylistics is premised on the assumption that literariness is primarily a linguistic phenomenon of creative language use which exists on a 'cline or continuum' (Carter, 2004: 66). In terms of understanding an author's creative intentions, the key object of scholarly investigation is not the agents—including, but not necessarily limited to, the author—responsible for producing a literary text, both as a material and linguistic object. Instead it is what Katie Wales (2011: 38) has termed 'the responses and responsibilities of the reader' who engages with it, and who, through that engagement, realises the literary work. In this view, it is the identification of patterns or regularities in language-use and/or reader affect which yields explanations of literariness that can lay claim to the kind of objectivity associated with the scientific paradigm. It is this objectivity which literary stylists have long argued distinguishes their accounts of literary meaning from those offered by literary critics and historians.

Focusing on authorial intention, the present article critically addresses the proposed objectivity that is pursued through detailed stylistic analyses and, in some cases, supported by cognitive science. Through an interdisciplinary review of different approaches and practices to authorial intention, we explore the possibility and potential of using empirical methods to gain insight into the role of this concept in the generation of literary meaning.

## **2 Approaches to authorial intention: theory and practice**

Sotirova (2014: 136) has recently suggested that the 'argument surrounding intentionality is alive and well' within literary stylistics, citing work by Herman (2008) and Mitchell (2008). However, it remains the case that literary linguistic approaches to literary meaning remain firmly text-centred. Authorial intention<sup>1</sup> continues to be understood, as Mitchell (2008: 149) argues, as a 'formal or structural feature of texts', with the 'logic' or 'intentionality of the text' posited as ruling out 'certain meanings and interpretations' (Mitchell, 2008: 158; see also Boase-Beier, 2004). This understanding is exemplified in Sotirova's (2014: 147) own careful study of Virginia Woolf's revisions to *Mrs Dalloway*, which she sees as providing 'strong evidence in the explication of the significance of stylistic techniques', enabling authorial intention to be 'uncovered in a linguistically sustained way'. While attempting to take account of historicity and of authors as creative

agents, Sotirova (2014: 137) nonetheless privileges the 'rigour of a linguistic analysis'. Her description of authorial agency in terms of linguistic choices, although detailed and insightful, overlooks the possibility that the assigning of interpretative significance to particular stylistic features may be dependent on a concept of authorial creativity which is brought *to*, rather than derived *from*, the text.

## **2.1 Authorial intention and other practices in literary studies**

One consequence of linguists' tendency to overlook questions about how literary works—or more precisely, the specific texts<sup>2</sup> through which readers encounter them—are created has been to exacerbate tensions with other forms of literary study for which 'the author' has remained central. These include literary biography, life-writing, book-history, text-editing and literary recovery projects, all of which have enjoyed a significant growth in interest over the past two decades. For all, the concept of the author, conceived of as a 'real' historical entity, has remained indispensable. All assume that the author's creative decisions can (at least in part) be recovered, evaluated and brought to bear on understanding the meaning of specific literary works. These creative decisions are assumed to be especially pertinent to distinguishing devices such as allusion from plagiarism, to identifying the relationship of an individual work to an oeuvre, and to determining in which linguistic text a work may be most fully realised.

In relation to these studies, it perhaps needs emphasising, as Sherri Irvin (2006) has commented, that a focus on the role of the author in generating literary meaning does not have to entail a commitment to a naïve form of critical monism (as has been associated with some early formalist criticism). Nor does it necessarily deny that literary interpretation may have several legitimate targets, including what Irvin terms 'virtually unconstrained interpretative play', whereby the intentions of a biographical author may be largely considered as irrelevant (Irvin, 2006: 115). However, author-centric studies of the kinds mentioned above do contribute to the persistence of the idea, as Irvin (2006: 114) puts it, that 'the author's intentions have an important role to play in fixing a work's meaning' (see also Gibbs, 2001). Moreover, seeking evidence about a biographical author remains an important way in which attributions of literary meaning, by both expert and ordinary readers, are criticised or assumed to be constrained. Such evidence might be available through a text editor's examination of the processes of authorial revision, or in

an author's correspondence or private journals. Were this not the case, then it is hard to see what the point of the knowledge produced by practices such as literary biography, considered as a specialised form of life-writing, or of the processes of creativity exhibited through variorum editing, might be. Likewise, the habitual use of author biographies, including interviews and photographs, in the marketing of literary works, provide explicit encouragement to identify literary meaning with the intentions of an authorial agent beyond the text.

Irvin's (2006) own approach to these issues is philosophical. She explains how critical attitudes towards the acceptance of the role of authorial intention in generating literary meaning are determined by assumptions about linguistic conventionalism—that 'to know what a work means [...] we need only consider it in light of the relevant linguistic conventions' (Irvin, 2006: 121). Linguistic conventionalism assumes that the meanings of literary works can therefore 'be neither enhanced nor diminished by the aspirations or limitations of their authors' (Irvin, 2006: 125). Also relevant to critical views about authorial intention is the idea that literary works are public items with a social existence. Together, these assumptions determine attitudes towards the kind and availability of information that might count as evidence of such intentions, and how the concept of 'the author' is thereby construed. Irvin (2006) categorises thinking about the author in terms of 'extreme actual', 'modest actual' and two forms of 'hypothetical intentionalism' ('postulated author hypothetical intentionalism' and 'actual author hypothetical intentionalism'). Each category denotes different attitudes towards the role of the author in fixing literary meaning, and different degrees of convergence with conventionalism. In aiming to delineate the 'logical space' (Irvin, 2006: 125) of the debate within the discipline, Irvin (2006: 125) shows how what she terms (broadly) 'an appeal to publicly accessible information about the author's life and works' may be permissible within certain kinds of linguistic conventionalism. That is, such an appeal may be theoretically compatible with the idea that 'a literary work, once released to an audience, is an autonomous entity which can transcend the boundaries imposed by the mind of the historical person who created it' (Irvin, 2006: 125). The challenge for a scientific understanding of authorial intention—an issue beyond the scope of Irvin's (2006) concerns—is to show how *in practice* such information may affect, or (perhaps) is

affected by, readers' processing of linguistic features in the generation of literary meaning.

## **2.2 Reader response and empirical approaches**

At present reader response research in stylistics is topical and making steady progress (see Peplow and Carter, 2014; Whiteley and Canning, 2017). As Peplow and Carter (2014: 440) explain, such research falls into two broad areas distinguished by methodology: 'the empirical study of literature (ESL) and the naturalistic study of readers (NSR)'. The former 'favours experimental methods, with researchers carrying out reading tests with participants in quasi-laboratory conditions', whereas the latter 'considers readers in more natural habitats such as book groups' (Peplow and Carter, 2014: 441). Both types of reader response research centre on the investigation of readerly experience. This means looking at 'how readers find meaning in literary texts' (Peplow and Carter, 2014: 440) and how textual features affect interpretation (Whiteley and Canning, 2017: 75). The specific role of authorial intention in readers' experiencing of texts has, however, received relatively little attention. In terms of ESL methodologies, the few empirical studies that have been undertaken have addressed authorial intention in two ways. There are studies which have examined readers' recognition and evaluation of specific authorial linguistic choices, such as might be evidenced in textual variants and associated with foregrounding effects (Hartung et al., 2016; Sopčák, 2007). There has also been research into how readers generate inferences about authorial intention during the process of literary reading, and the role that may be played in those inferences by information about the origins of a text, including biographical information about the author (see Claassen, 2012). The research question that concerns us, and which Irvin's (2006) analysis points to, is how to *connect* these areas of enquiry.

The pertinence of this task can be well appreciated in relation to Sopčák's (2007: 191) finding that 'differences in literary training' do not 'significantly affect [...] responses'. In his study, participants were presented with textual variants of excerpts from manuscript and typescript versions of the third chapter of James Joyce's *Ulysses* (1984). His results seemed to corroborate earlier research by van Peer (1986) and Miall and Kuiken (1994), insofar as it suggested that foregrounding appeared to be 'a quality of literary works of art that readers respond to in a partly predictable way' (Sopčák, 2007:

194). It also seemed to lend support more broadly to the supposition that we can understand literariness through descriptions of linguistic features. However, a question Sopčák's (2007) study did not take account of (which he acknowledges) is whether expert and non-expert readers held similar hypotheses about an intending author. It is possible that the test-conditions and task-instruction—Sopčák (2007) tested responses to 'strikingness' and 'feeling' using a 7-point Likert scale—may have impacted on the nature of those hypotheses and how they were formulated. For example, when judging the strikingness or feeling of isolated textual excerpts, expert and non-expert reader responses may be more likely to coincide than when such judgments are made in the context of more natural reading situations. These situations might include reading the same excerpts as elements of a longer passage, whether a whole chapter or the entire text of *Ulysses*. Given the much greater interpretative demands of the last tasks, it seems probable that the expert reader's literary epistemology would play a more significant role in how an intending author was hypothesised. The evaluation of qualities like strikingness and feeling seem likely to be affected by exactly the sort of general knowledge about modernist authors and their textual strategies, as well as by particular knowledge of Joyce himself and his other writings, that an expert reader may possess.

In relation to this last observation, it is relevant that Claassen's (2012) investigation of authorial intention was in the context of how readers perceive and evaluate the moral content of a story. Morality is an issue for which inferences about an intending author might be expected to be especially prominent, along with receptiveness to the relevance for that construct of public information about a biographical author. This is in part because writers deemed to offend public decency, whether through libel, obscenity, blasphemy or racism may be, and have been, subject to legal sanction (Claassen took as the subject of one of her studies a notably provocative text: a Dutch translation of Michel Houellebecq's *Les Particules Élémentaires*). However, the issue of morality is not necessarily, and certainly not in any straightforward way, a key element in an appreciation of a text's literary identity, including its aesthetic qualities, certainly among expert readers. In short, the role of inferences about authorial creativity, and how they are influenced by information about a biographical author in the kinds of 'interpretive moments' which are typically the focus of linguists' descriptive attention (see Hakemulder and van Peer, 2016: 191), has been largely neglected by both literary

stylistics and empirical studies of literature. This is especially the case when readers are making judgements about the aesthetics of a text.

### **2.3 Moving towards a scientific study of literature**

As we will discuss below, empirical investigations of readers' responses to texts, whether literary or non-literary, require a high level of control, whereby every element of an experiment is the same, other than the variable that is being studied and manipulated. This is to ensure that any difference in participant behaviour can be attributed to the variable of interest. Such a demand places significant limits on what any individual study can achieve, especially when investigating phenomena as complex as readers' hypotheses about an author's creative intentions. Our proposals are thus presented only as a starting point for enquiry. They centre on a relatively circumscribed issue: that of ascertaining the effect (if any) of prior information about a biographical author on readers' on-line recognition and evaluation of the kinds of complex surface textual features that linguists have associated with foregrounding effects. When posing the research question in these terms, we are aware that the equation of literariness with foregrounding effects, or the level of interpretability associated with them, is not straightforward. As McCarthy (2015: 101-102) has observed, a problem for linguistic studies of literariness in general is that there is no agreed definition of 'literary merit', even though that of interpretability 'is implicitly supported by the texts that have been selected for research'. Many literary critics would probably concur with stylisticians that foregrounding may be a necessary condition of literary texts (the explicitness of which can largely be affected by whether a text is poetry or prose). But few would concede that it is a sufficient one. Empirical studies of literature tend to get around the problem of what constitutes literariness by selecting works whose literary merit is not (or is only minimally) contested; as Martindale (2007: 142-143) defines it, texts which possess 'eminence' and form part of a 'generally accepted canon' or 'coherent tradition'. Another solution is to use the term 'literary' to describe not qualities of a text, but a certain way of reading (Goldman, McCarthy and Burkett, 2015), such as might involve paying attention to surface textual features. The problem with this last strategy, as literary historians argue, is that it leaves unexamined the question of how particular reading conventions or strategies come to be associated with a literary reading in the first instance. While these are pressing problems,

they will not be directly addressed in the kind of study we are proposing, which aims only to test the effect of certain variables on an aspect of linguistic processing already posited to be significant in literary interpretation. Whether a given concept of authorial intention, such as that which may be sensitive to certain kinds of information about an author's biography, is *necessary* to an appreciation of a text *as literary*, or for a literary reading—these are certainly interesting and important questions. However, they would require a different kind of investigation from that which we aim to set out here.

We can gain a better sense of some of the challenges involved in a scientific study of authorial intention by turning next to the way this topic has been addressed in a sub-field of linguistics, cognitive poetics. We focus specifically on Stockwell's (2016) application of Text World Theory to literary texts, as well as by collaborative research by Stockwell and Mahlberg (2015). This research sets out what is claimed as a new, empirically-grounded way of integrating understandings of 'authorial design and intention' with 'readerly psychology or affect' (Stockwell and Mahlberg, 2015: 130). The focus of our critique will be whether that understanding *is* 'scientific' in the sense, for example, that Jacobs (2015b) has defined, and which involves robust behavioural data. Furthermore, evaluations will be made as to whether cognitive poetics does thereby represent a significant advance in our understanding of authorial intention as it relates to the generation of literary meaning.

### **3 Cognitive poetics and authorial intention**

Cognitive poetics' latest contribution to our understanding of authorial creativity and intention centres on what is termed 'mind-modelling'. This is defined as the capacity to imagine and maintain 'a working model of the characteristics, outlook, beliefs, motivations and consequent behaviour of others' (Stockwell and Mahlberg, 2015: 132; see also Stockwell, 2009: 140-144). Mind-modelling, then, is 'the sort of readerly-located framing of authorial intention' that is elsewhere referred to as 'hypothetical intentionalism' (Stockwell and Mahlberg, 2015: 132; see also Irvin 2006; Lahey, 2016: 54-56). What distinguishes mind-modelling is the status claimed for these readerly-created concepts of the author and authorial intention: they are understood as 'mental representations' which are 'co-produced in the mind of the reader by the author's choices in providing textual patterns'. As such they are the product of 'an actual psychological



process' (Stockwell, 2016: 150). The way we model the minds of fictional characters or of the authorial agents who create them is postulated as being continuous with the way we model the minds of actual people in our daily interactions. Mind-modelling is taken to be self-evident, cognitively speaking, with its most important characteristic being that it is an essentially imaginative or creative activity. This is because, as Stockwell puts it (2016: 150), we can never 'claim a truly telepathic accuracy either for real-life people or fictional minds'. We can note in passing that Stockwell and Mahlberg (2015) do not distinguish, or perhaps feel any need to distinguish, between the variants of hypothetical intentionalism discussed by Irvin (2006)—that is, 'postulated author hypothetical intentionalism' as opposed to 'actual author hypothetical intentionalism'. This is probably because they do not consider there to be any significant cognitive difference between how readers model the minds of implied authors as opposed to real or actual authors. However, the way Stockwell and Mahlberg (2015) deploy the concept of mind-modelling in their analysis of *David Copperfield* suggests that their usage is closer to 'actual author hypothetical intentionalism'. They assume that in the process of mind-modelling, the reader draws upon what they term 'the fame of Dickens the novelist, the original instalment structure of the published novel itself, and the material reality of the text in hand', all of which 'serve as reminders of the authorial mind' (Stockwell and Mahlberg, 2015: 142).

The issue which most concerns Stockwell and Mahlberg (2015), as cognitive linguists (rather than cognitive psychologists), is the specific role that language plays in the creative mind-modelling (whether of characters or of authors) that takes place when we engage with a literary text. Here it is the conventional nature of language which is key since it explains why readers in similar linguistic and cultural communities, despite idiosyncrasies of personal biography and life-experiences, will tend to model authorial intention (it is alleged) in broadly similar ways. Insofar as mind-modelling is assumed to be a process which is both top-down (informed by readers' prior knowledge and experiences, including those of real people) and bottom-up (determined by the specific linguistic structures of the text), it is the latter which takes priority in constraining, and thus helping us understand the social nature of, literary meaning:

Different readers will disagree about authors' minds, and readers will alter their models of authorial intentions over time. However, since authorial intention [...] is text-driven, and since readers exist socially in cultures and communities, there is, in general, a consensus for the most part, of what a particular text 'actually means'. There is, in other words, a preferred reading that is derivable from the mind-modelling that similar communities of readers create from similar authors.

(Stockwell, 2016: 151)

Stockwell (2016) is careful to explain that the aim of cognitive poetics is 'descriptive' not 'prescriptive' (an accusation which he raises against Irvin (2006), somewhat unfairly). In positing linguistic conventionalism as the mechanism by which literary meanings may be fixed, he is thereby not claiming that some readings are more correct than others. It is rather that linguistic conventionalism must be assumed to preserve the idea that literariness is social, and to rule out 'eccentric' readings and account for 'preferred' readings. He explains that 'any statement about a literary world has to have a textual correlate that is articulable and comprehensible to other readers' (Stockwell, 2016: 151).

Given these assumptions, the key focus for research, as Stockwell and Mahlberg (2015) see it, lies in identifying the linguistic features or patterns which determine how, in a given text, mind-modelling of authors takes place. To do this they use a corpus linguistics method, exploiting the ability of computer-generated searches to find patterns 'too subtle' to 'identify systematically by reading alone' (Stockwell and Mahlberg, 2015: 136). However, *only* using this method undermines their claims to rigour. By neglecting the kinds of behavioural data or verbal reports which might serve to support or falsify their mind-modelling hypothesis, they fail to put into practice the alleged 'cognitive scientific principle' (Stockwell and Mahlberg, 2015: 132) of cognitive poetics. Their methodology, that is, seems to be circular. A certain (and empirically untested) psychological process (mind-modelling) is invoked to explain the significance of, or to direct the researcher to the importance of looking for, particular linguistic patterns which are themselves taken as evidence for that self-same process (the assertion that mind-modelling is 'text-driven').<sup>3</sup> So we might ask: what kind of linguistic patterns, what

degree of such patterned-ness, as well as what degree of their recognition, would serve to negate specific observations of mind-modelling in cognitive poetic analyses? Stockwell and Mahlberg's (2015) reported corpus searches of *David Copperfield* certainly highlight some interesting linguistic patterns. These can be plausibly interpreted to suggest how the character of Mr Dick modelled by linguistically competent readers is likely to be that of a man with significantly reduced agency (see also Mahlberg and McIntyre, 2011). Equally plausible is their suggestion that other subtle linguistic cues are likely to direct such readers to transfer this information to the way they model the creative mind of the implied author ('Charles Dickens'). However, merely pointing up these patterns, along with suppositions as to how readers construe certain meanings from them, tells us nothing about what is actually going on in the mind, in the sense of how these patterns are processed in the reading of literary texts. Nor, indeed, do their findings prove—in an experimental sense—that the way we model authorship, and the way this concept is utilised in literary interpretation, is fundamentally 'text-driven', and that we can therefore best investigate it by using corpus analysis software.

In this respect, Stockwell's (2016) elaboration of the role of mind-modelling in relation to Isaac Rosenberg's lyric 'Break of Day in the Trenches' (for which there are two versions, the text published in the Chicago magazine *Poetry* in 1916 and the more widely-known text of the 1922 anthology edited by Gordon Bottomley) is instructive. As Stockwell points out, Bottomley revised Rosenberg's 1916 text in some significant ways and which he (Stockwell) judges makes for a 'better' poem, because it is more 'striking'. The question Stockwell then poses is: 'where does that leave "Rosenberg"—the authorial mind that I and many thousands of readers [...] have modelled as an authentic war voice'? When we discover that Bottomley was in some sense the poem's co-author, will this information not disrupt (Romantic) assumptions about the poem's expressive authenticity? Stockwell's (2016: 158) answer is that, on a literary level, this discovery does not matter since literary works are 'co-created by readers' and 'Rosenberg is a readerly creation too'. Stockwell explains that, because Rosenberg is a 'war poet', readers of his work are 'authorially predisposed to be sympathetic to the preferences of his texts' (Stockwell, 2016: 158). Therefore, whether the actual creator/creators of the 1922 text was/were not (or not straightforwardly) the tragic agent predicated of much First World War poetry (Rosenberg was killed on the front in 1918), the 'stylistic patterns in the work

are interpreted in a way that is consistent with this mind-modelled authorial view' (Stockwell, 2016: 158). Stockwell (2016: 158) further speculates that even if we discovered that the real Rosenberg was 'a closet militarist or was insensitive to his fellow soldiers' it would still not matter to our understanding of the meaning of the poem, which cannot reasonably be interpreted as jingoistic. According to Stockwell, authorial intention is not a fixed concept. Rather, it begins within the readers' culture which plays a part in shaping—yet does not necessarily determine—their interpretation of the stable stylistic patterns. To put it another way, like texts, authorial intention also has its own 'preferred reading'. Moreover, where there is dissonance between what Irvin (2006: 123) terms 'publicly available' information about real authors, on the one hand, and the elements of authorial mind-modelling derived from a text's linguistic features, on the other, it is the latter, according to Stockwell, that will drive interpretation that is not deemed 'eccentric':

Authorial intention is part of a reader's experience. It begins not at the moment of reading the text, but in the reader's culture: we are predisposed by culture and by experience to begin modelling an author's mind in particular ways. But those cultural and experiential predispositions cannot fly in the face of the text-driven conceptual and aesthetic structure of the work in front of you.

(Stockwell, 2016: 160-161)

Mind-modelling of authorial intention is considered in Text World Theory to be a 'discourse world' feature, and thus informed in part, and in some ways, by sociocultural background and individual predisposition. Nonetheless, for cognitive poetics, it is the linguistic make-up of a text which is posited as acting as the constraint which fixes interpretation (including constructions of authorial intention). It is thus the stylistic patterns that construct the text-world which remain the chief object of investigation.

What is at stake here, very broadly, is whether attention to stylistic conventions or structures will provide the fullest understanding of how, at a particular moment and within a particular culture, readers reach common interpretations of literary texts, given (as Stockwell 2016 notes) that the modelling of authorial intention may differ over time and from reader to reader. Stockwell unfortunately fails to provide any behavioural data

from actual readers for conscious or unconscious aspects of literary processing which might support his suppositions about the primacy of 'text-driven' structures in the generation of literary meaning. The question as to whether 'texts contain their own preferred readings as part of their extended textuality' (Stockwell, 2016: 159) thus remains an open one, and cognitive poetics can be judged not to have furthered the field of literary stylistics, at least on the issue of authorial creativity, in the manner that is claimed.

However, there have been efforts by other linguists to provide the kind of behavioural data that is missing from cognitive poetics' accounts of literary reading, including a revealing study by Mahlberg, Conklin and Bisson (2014). Although this study does not deal directly with the issue of authorial intention and authorial creativity, it sheds light on the assumptions that underpin literary stylistics, and the extent to which these are opened to examination in literary linguistic research programmes (such as that of the CLiC Dickens project). Mahlberg, Conklin and Bisson (2014) focused on addressing the methodological shortcomings associated with attributing literary significance to linguistic patterns on the basis of corpus findings alone. They thus used corpus tools in conjunction with eye-tracking and reader questionnaires to investigate how readers process certain word clusters (small sequences of words) posited as recurring more frequently in descriptions of the body-language of characters in fiction and verse, as compared to other genres, such as journalism. Their hypothesis was that these clusters function to provide 'the more general textual building blocks of narrative fiction' (Mahlberg, Conklin and Bisson, 2014: 373). Eye-tracking results showed that body-related word clusters derived from a corpus-generated search of Dickens's fiction were read faster than other parts of the text which, in keeping with general experimental findings from cognitive psychology, indicated that such clusters were 'stored as units in long-term memory'. They were therefore likely to be 'part of readers' literary competence that is built up through exposure to a number of literary texts' (Mahlberg, Conklin and Bisson, 2014: 383). The general cognitive findings drawn upon are: that repeatedly occurring sequences of words require less processing effort, when effort is measured, using eye-tracking, as the length of time the eye fixes on some linguistic features relative to others; and that frequently occurring sequences of words are stored in long-term memory. However, qualitative evidence from follow-up questionnaires indicated that

readers did not seem to exhibit conscious awareness of these clusters. Unless specifically prompted they did not recall language about the body when asked to recall basic character information. In what sense, then, can the speeded processing of these clusters and their storage in long-term memory be claimed as part of *literary* competence, rather than general linguistic competence?

Mahlberg, Conklin and Bisson (2014: 383) suggest that readers' inability to recall the linguistic details of the clusters is because 'body language is not perceived as the most important information in the extract'. In practice, they argue, the qualitative evidence is in line with the predicated 'contextualising functions of the patterns' (Mahlberg, Conklin and Bisson, 2014: 383), which is to present information 'in an inconspicuous way as part of a larger textual picture' (Mahlberg, Conklin and Bisson, 2014: 371). But this leaves unanswered the more pertinent question as regards furthering our understanding of *literary* processing: whether the storing of these clusters in long-term memory is merely part and parcel of a general cognitive function related to the processing of pre-fabricated, common or repeated phrases *per se*. Corpus searches may indicate that certain kinds of clusters—in this instance related to body-language—are more common in some literary texts than others. Psycholinguistic evidence may reveal that readers appear to process these body-language clusters in a manner that is similar to other kinds of word clusters. But taken on their own, these findings do not shine much light on literariness, except what is trivially true: that interpreting texts as literary involves general cognitive faculties (as we might expect). To show that the clusters related to body-language found in fiction are a *significant* element of how readers build their understanding of literary characterisation, or aspects of literary style, and that they represent a specific class of *literary* clusters, further studies would need to be conducted. The wording of the clusters would need to be manipulated to mimic sequences more common in non-literary texts, or other kinds of literary texts. The effects of both kinds of clusters would also need to be investigated over more 'natural' reading experiences and which involved the whole texts in which these clusters appear.

The limitation of this study-design, and that of Stockwell and Mahlberg (2015), is that the salience of particular linguistic patterns in respect of the generation of literary meaning continues to be assumed, rather than being part of what is being tested.<sup>4</sup> Here it is relevant that an initial supposition about the literary significance of body-language

clusters in Dickens's oeuvre was derived from comparative searches across some sections of the British National Corpus of just one body language cluster (*'his eyes fixed on the'*) (Mahlberg, Conklin and Bisson, 2014: 371). Corpus searches of the BNC undertaken on several of the clusters used by Mahlberg, Conklin and Bisson (2014) indicate that they have differing frequencies in spoken English. Some elements of the pattern recognition and increased reading times attributed to literary competence may therefore be the result of general linguistic competence. An additional and related problem concerns the way that body language clusters were defined as ROIs (regions of interest). Some were grammatically complete units (*'pressing his head between his hands'*) while others were more fragmentary (*'with his eyes fixed on the'*). And of the fragmentary clusters, some (e.g. *'with his hands in his'* and *'with his back to the'*) have more predictable collocates than others (e.g. *'with his eyes on the'*). The failure to take account of differences in collostructural relationships in processing times for body-language clusters may also have seriously distorted the results.<sup>5</sup>

While Mahlberg, Conklin and Bisson's (2014) study is valuable in recognising the importance of combining quantitative and qualitative analyses, it nonetheless exemplifies the difficulty, as identified by Kuiken (2016), of designing experimental studies of literary processing which avoid the problem of reverse inference. In this case, being able to show that the speeded processing due to body-language clusters' presence in long-term memory is due to the processing of texts as literary would necessitate demonstrating that this advantage was absent for the same sequences during the processing of non-literary texts.

#### **4 Towards an empirical study of authorial intention**

In a useful overview of cognitive approaches to literary interpretation, McCarthy (2015: 99) explains that reading literature 'requires not only understanding the literal meaning of the text, but also constructing a nonliteral interpretation of the text's deeper meaning'. The presupposition of author-centric approaches to literary meaning is that hypotheses about how and why texts are created are necessary for the appreciation of such deeper meaning—for what Vipond and Hunt (1984) term 'point-driven reading'; and that such hypotheses cannot be inferred solely, or perhaps even primarily, from a text's linguistic features. Instead concepts of authorial intention must be formed or hypothesised, at least

in part, by the knowledge and experience which readers bring to a text. This may include general ideas they hold about the nature of literary creativity (for example, that choices about language matter), as well as specific information about a particular biographical author or authors. It is significant that experimental evidence in the scientific study of literature is increasingly pointing towards the importance for literary interpretation of what McCarthy (2015: 105) terms factors ‘outside of the text itself’. As she summarises, some studies, notably on genre (Dixon et al., 1993; Miall and Kuiken, 1994, 1998) and comparing human to computational models of text recognition (Louwerse, Benesh and Zhang, 2008; McCarthy et al., 2009), have suggested that ‘inherent features of a text activate interpretive responses’ (McCarthy, 2015: 102). But other research has emphasised the importance of readers' prior expertise and expectations regarding the kind of text they are reading, including their beliefs about literature, in determining the knowledge, information, or schemas that are activated for meaning-making (Cook, 1994; Gibbs, 2001; Graves and Frederiksen, 1991; Peskin, 1998; Sanford and Emmott, 2012; Zwaan, 1993, 1994, 1996). Of special relevance, for our purposes, is research by Mason, Scirica and Salvi (2006) which shows that prior experience and expertise seem to affect readers' propensity to make interpretive inferences which utilise knowledge from what McCarthy (2015: 107) terms 'the world at large'. Also relevant is work by Schraw (2000) and by Schraw and Bruning (1996) which shows that transactional (as opposed to transmission) beliefs about literature, which are more likely to be held by literary experts, also seem more likely to involve an acknowledgement of the author as a creative agent.

#### **4.1 Embracing different perspectives**

As noted above, what needs to be understood in relation to the question of authorial intention is precisely how extra-textual information about the biographical author interacts with, in the sense of both modifying and being modified by, the concept of an implied author that may be activated by responses to specific linguistic features. That this is a dynamic process, likely to be highly dependent on the reading-context—the length of the text and duration of reading time—gives an added layer of complexity when designing an experiment to test this element of literary processing. The reader presented with isolated sentences or paragraphs, or even individual chapters, from a novel such as *Ulysses* or *Middlemarch* will likely develop (and be required to develop) very different



hypotheses about an authorial agent, as compared to the reader who encounters the entire text. Further complexities are presented by the likelihood that the construction of an implied author in literary reading will be sensitive to perceptions about both the status and kind of biographical information publicly available. Information about some kinds of authorial agents (such as textual changes which are made by editors as opposed to writers) may be evaluated differently, and thus differentially modify, the concept of the implied author. By the same token, information about general habits of composition, such as the multiple and simultaneous rewritings that Worthen (1991) has shown to be a feature of D. H. Lawrence's compositional habits, may be judged more relevant to a concept of authorial intention than information about an author's politics or personal life. Such information is likely to be particularly pertinent to interpreting the kinds of linguistic features that have been associated with strong defamiliarizing effects. In relation to this last issue, it also needs to be recognised that the details about biographical authors' creativity exhibited in scholarly editions, and thus the concepts of authorial intention they may give rise to, are not in themselves neutral or straightforward. This lack of neutrality is partly because a process of evaluation is always implicit in selecting which textual embodiments and which of those embodiments' textual variants are deemed worth bringing to readers' notice in the first instance, in the sense of being assumed to be creatively significant (Guy and Small, 2011; Guy et al., 2016). An initial and pressing task for any editor is to identify the materials with which she must engage: that is, the texts that 'belong' to a given literary work. Belonging, however, can be defined in various ways: most obviously, in relation to an idea of authorial agency and authority. Editors typically discount texts that are judged to be pirated or counterfeit, as well as textual variants brought about by other hands and without the explicit consent of the author, such as through processes of formal or informal censorship. Belonging is also defined in terms of an overarching abstract concept of 'the work'. Editors may disagree radically as to whether certain kinds of authorised texts—such as a writer's notebook jottings or information in her correspondence—are part of the creative process that gives rise to a given poem or novel.

In addition, textual variants themselves may be presented to readers in ways which imply distinct models of literary creativity. Traditional codex editions arrange variants hierarchically, in terms of how they show a development towards (or deviation

from) what is judged to be the 'best' text of a work. Creative value thus inheres in the choice of one variant over another. Creativity itself is represented as teleological—as the progressive realisation of an idea of the work. Genetic and hypertext editions, by contrast, typically aim to display textual variants as simultaneous possibilities. They thereby equate creativity with the principle of variation itself. The extent of any individual example of textual variability thus stands as a proxy for the fecundity of an author's imagination and propensity to experimentation (Joyce's writing practice being a paradigm case). We therefore need to be alert to the fact that the particular kind of editorial treatment afforded to a given writer, as well as the simple fact of being edited at all (writers of popular fiction are rarely the subject of text-editors' attention), may give rise to distinct notions of literary creativity. These issues are familiar, and a familiar source of controversy among the text-editing community. But no systematic studies have been undertaken either by linguists (nor indeed by editors) to ascertain how these different ways of modelling literary creativity impact on the way readers construct concepts of authorial intention when interpreting specific linguistic features. To return to Sopčák's (2007) study, it would be intriguing to know whether readers—expert or non-expert—made familiar with the entirety of Gabler's controversial (and almost incomprehensible) synoptic edition of *Ulysses* (Joyce 1984) would have evaluated the textual variants with which Sopčák (2007) presented them any differently from those who had encountered that work only via the text of the Penguin reading edition.

Information about biographical authors, including that which may seem most relevant to literary reading, such as evidence of writing practices and processes of revision, is available to readers in a variety of forms. Readers' familiarity with these forms is highly likely to affect how they use them. The visual complexity of Gabler's edition will speak differently to expert as opposed to non-expert readers. These circumstances suggest that trying to gain even the most basic empirical understanding of how information about the biographical author affects the processing of literary texts will be a challenging task. In what follows, and as emphasised earlier, we therefore aim to present only a starting-point for such investigations.

It has been observed by numerous commentators that the most robust results of empirical studies of literary processing derive from the use of mixed methods. Jacobs (2015b) and others have advocated combining conscious or experiential data derived

from readers' subjective verbal reports with data from unconscious behaviours. This is to take account of the unreliability of memory and biases introduced through particular kinds of task-setting and verbal prompts. There are several methodologies and technologies available for both sorts of measurements. For the former these include the use of rating scales and experiencing questionnaires (such as that developed by Kuiken, Campbell and Sopčák, 2012), as well as 'think-aloud protocols' versus post-reading data collection. The latter include on-line measurements of processing effort (through eye-movements via eye-tracking or blood-flow and electrophysiological responses in the brain via functional magnetic resonance imaging (fMRI) and electroencephalogram (EEG), respectively) and levels of emotional arousal (through pupil dilation using eye-tracking and skin conductance by measuring electrodermal activity (EDA)). Various processing models have been developed to describe general aspects of text comprehension (Radvansky and Zacks, 2014; Zwaan, Langston and Graesser, 1995; Zwaan, Magliano and Graesser, 1995; Zwaan and Radvansky, 1998), as well as of the comprehension of literary texts (Graesser, Singer and Trabasso, 1994; Jacobs, 2011, 2015a, 2015c; Sanford and Emmott, 2012; Virtue et al., 2006; Zwaan, 1996, 1999). The researcher thus has choices to make, and what matters, as Jacobs neatly puts it, is not an a priori commitment to any one method over another, but 'how well the method fits the question addressed and allows to test the hypothesis at hand' (Jacobs, 2015b: 162).

In this respect, a further common observation, relevant to all empirical investigations of literariness, but which has special pertinence to an investigation of authorial intention, concerns the difficulties involved in replicating natural reading conditions in an experimental setting. Some of the most intractable of these centre on the intrusive character of the technology used to measure unconscious behavioural data. The fact that, and as noted above, constructions of authorial intention seem particularly sensitive to the dynamics and duration of the reading process, as well as to the nature of the linguistic context, mean that EEG and fMRI are likely not the most appropriate technologies for investigating this issue. EEG/ERP is generally only used to measure brain activity in reaction to single word prompts with long presentation rates and intervals between words (typically an individual word presented for 200-300ms with a subsequent blank screen appearing for 300ms before the next word is presented). Although fMRI can be used to present more than single words, the temporal resolution of the technology

makes isolating the source (whether one word or several) that causes a change in blood flow difficult to determine. To pinpoint the source of an effect would also necessitate the unnatural presentation of a text, along the lines of what we see for EEG/ERP studies. Eye-tracking therefore offers the greatest potential. But it, too, has limitations which are not always fully acknowledged by literary researchers, and which are well illustrated in a study by Cop and her colleagues. Their monitoring of eye-movements for participants reading a single novel has provided a rich source of data that has been the focus of a number of papers (Cop, Dirix, Drieghe and Duyck, 2017; Cop, Drieghe and Duyck, 2015; Cop, Dirix, van Assche, Drieghe and Duyck, 2017; Cop, Keuleers, Drieghe and Duyck, 2015).

In their study, participants (monolingual English speakers and non-natives in their first language (Dutch) and second language (English)) read the entire Agatha Christie story, *The Mysterious Affair at Styles* (Dutch Title: 'De zaak Styles'), in four sessions of an hour and a half each while their eye movements were monitored. In the first session, participants read chapters one to four, in the second five to seven, in the third eight to ten, and in the fourth eleven to thirteen. The monolinguals read the story entirely in English, while the non-native participants read chapters one to seven in one language and eight to thirteen in the other. The participants were given multiple-choice questions to answer at the end of each chapter to ensure that they were reading for comprehension. To gain the most accurate results, eye-tracking equipment often requires the use of a chin and forehead rest, regular recalibration and presenting text so that it is double- or triple-spaced—all of which will be contrary to most participants' usual reading habits. In this study the Christie text was presented in black 14-point Courier New font on a light grey background. The text appeared in paragraphs and the lines were triple spaced. A maximum of 145 words appeared on a screen, spread over a maximum of ten lines. When readers came to the end of the screen they pressed a button to move onto the next one. Calibration was done at the outset and every ten minutes or more frequently if the experimenter deemed it necessary. It is easy to appreciate from this brief description how the abnormality of the experimental reading situation, even with a minimally-intrusive technology (as compared to EEG and fMRI), may affect readers' processing (especially, in this case, where a defining feature of the genre being studied is the building of suspense).

A further set of challenges for eye-tracking studies centre on the ecological validity of the texts or textual excerpts which are given to participants in experimental situations. To test the effect of different variables, texts often have to be artificially manipulated and removed from their original linguistic context (Bailey and Zacks, 2011; Graesser, Millis and Zwaan, 1997). To comply with the demand that scientific studies are replicable, researchers will usually be required to use texts that are freely and widely available. Often this means online sources such as Project Gutenberg ([www.gutenberg.org](http://www.gutenberg.org)), even though Gutenberg texts are not always accurate and their authority is not recognised by many literary critics and historians (a particular difficulty when, as with the CliC Dickens project, attention is being focused on fine-grained linguistic details). Even when authentic texts are used in eye-tracking experiments, care needs to be taken so that words/regions of analysis do not occur at the beginning and the end of a line, or just before or after punctuation. Thus, generally the first fixation on every line as well as any regressive fixations immediately following this fixation, are excluded, as they are most likely to be corrective saccades triggered when the return sweep falls short of the beginning of the line (Hofmeister, Heller and Radach, 1999). In addition, all data associated with words followed by punctuation are usually excluded from analyses to remove the influence of potential sentence 'wrap-up effects'—typically attributed to unfinished interpretive processing and updating of the discourse representation. However, if the linguistic phenomenon of interest falls in one of these regions, drawing clear conclusions from the data can be problematic.

Bearing in mind the various limitations and qualifications that attend the use of eye-tracking (and which are discussed in more detail in Conklin, Pellicer-Sánchez and Carrol, 2018), we can now return to the role of author biographies in readers' hypotheses about authorial intention, and ask how this element of literary processing might be illuminated using such technology.

If Stockwell (2016) is correct in his assertion that constructions of authorial intention are fundamentally 'text-driven', then we might expect that readers in shared linguistic and cultural communities who are given different information about a biographical author would nonetheless reach broadly the same interpretation of a given text. Likewise, and following Sotirova's (2014) derivation of authorial intention from a stylistic analysis of textual variants, we might also predict that if readers are presented

with variants of the same text, there will be no correlation between how they interpret these variants and whether they have extra-textual information about the agent responsible for generating them. In testing these assumptions, we need to keep in mind that there may be several factors involved in constructions of authorial agency, and thus the effect of several different variables will need to be examined, both individually and in combination. These may include the identity and assessment of the legitimacy of an authorial agent. Does it matter to readers—as text-editors assume—whether a linguistic feature has been created by the writer or by an editor, and in the case of the latter, with or without the writer's knowledge or permission? Also relevant may be prior knowledge about or exposure to an author's general creative practice (that is, whether an author's habits of composition form part of a reader's literary epistemology). We may also want to consider the impact of general knowledge about the publishing industry and the kinds of interventions typically involved in bringing a text into the public domain.

#### **4.2 Methodological approaches**

Empirical testing for the text-driven nature of authorial intention will involve examining whether there are correlations between eye-tracking data (which gives an indication of processing effort for selected ROIs), the kinds of information readers are given about a biographical author, and their subjective assessments of text comprehension and appreciation. Various tasks are involved in designing such studies. We set these out below, for readers unfamiliar with eye-tracking experiments.

The first, but by no means straightforward, task is to identify an appropriate group of participants. Experimental studies often try to establish the significance of text-driven aspects of literary processing, as opposed to the role of prior knowledge or expertise, by comparing the responses of expert with non-expert readers, when expertise is defined in terms of graduate versus non-graduate students. While there are numerous acknowledged limitations in drawing on university populations, convenient as they are, for this kind of research, there are notable problems with regards to investigating hypotheses about authorial intention. As Claassen (2012) conceded, expert readers' prior knowledge of academic debates about authorial intention may predispose them to respond to prompts to think about the topic in specific ways and to use specialised kinds of language. They may be influenced by the nature of the task-setting in a manner which

is different to those of non-expert readers, thus making comparisons between the two groups difficult. Moreover, even within expert groups, readers' epistemologies regarding authors' writing practices may be quite varied. Questionnaires will need to be carefully designed to overcome these potential distortions, and to ensure that any differences in processing can be attributed to controlled inputs, as opposed to other factors.

A second task is to select appropriate texts or extracts, given the constraints noted above for which reliable eye-tracking data can be gathered. The length and number of extracts or texts required in a study will depend on the research question(s) and linguistic phenomenon being investigated. It may be useful to involve creative writers in such a study, commissioning from them short literary works especially for the purposes of these experiments, to achieve greater control over the information inputs. Once the extracts are selected, the next stage is to establish the ROIs within them, in relation to which we can test readers' unconscious and conscious processing relative to different inputs—that is, to the different kinds of information about the biographical author outlined above. Given that literary reading seems to involve readers paying more attention to surface textual features (Zwaan 1993), it is a reasonable working assumption that concepts of authorial intention will be most operational, and thus most sensitive to modification by non-textual information, certainly at a local level, for areas of texts where the surface textual codes are complex or unusual and which are thus likely to require a high level of processing effort. However, it will also be worth running the same studies for texts which appear very simple in their surface textual features, such as the linguistic texts of some of Blake's *Songs of Innocence and Experience*. These might also provide interesting test cases to determine the kind of prior knowledge that might prompt a reader to look for deeper meanings. To date, most experimental studies of literature take as their subject poetry rather than prose, as short lyrics make it considerably easier to achieve ecological validity when studying the experience of reading the text of an entire literary work. Nonetheless, it is often in the interpretation of long works of prose fiction, especially those which hinge on the ambiguity of the narrative voice (such as in Forster's *Howard's End* or James's *Turn of the Screw*), that issues of authorial intention seem most pressing. In these cases, useful insights may still be gained by focusing initially on readers' processing of individual passages or narrative episodes. Whether concentrating on poetry or prose, establishing the validity of the selection of the ROIs in the chosen texts will involve

demonstrating that in the absence of any extra-textual information about a biographical author, the chosen ROIs do elicit more processing effort, as measured by the relative length of time the eye fixes on them (fixations), as compared to other elements of the text. Once the ROIs are defined, we can then conduct a series of studies to measure whether readers' processing of the ROIs is affected by prompts containing various kinds of information about the biographical author. If hypothesised concepts of authorial intention are being affected by such information, we would expect overall processing times to increase, with a more marked increase in the fixations on the ROIs, as readers mobilise this extra-textual information to help them make sense of the linguistic text. We would also expect increased readings times to correlate with readers' subjective reports about their comprehension and evaluation of the text. A further set of studies could then be undertaken with author-generated variants of the ROIs, where readers' subjective assessment of text comprehension will be elicited after they have been shown the variants, and in the presence and absence of various prompts concerning the biographical author. Here it is worth noting that while Sopčák (2007) argued for the use of author-generated variability, rather than artificially manipulating texts, to provide experimental studies with ecological validity, our proposed studies, however, will use author-generated variability to test the extent to which readers' understanding of the element of literary creativity that is assumed to be manifest in stylistic complexity is affected by the way an intending author is hypothesised. Thus, as before, if information about a real biographical author is significantly affecting the construction of hypotheses about an intending author, we would expect to see differences in processing times and reported text comprehension for the ROIs, depending on the prompt. In this latter case, it will be particularly significant to test what kinds of authorial information generate the greatest attention (measured by the longest fixation)—that is, whether being presented with evidence of authorial creativity, as well as with particular kinds of narratives about it, has any effect on the creative significance readers attribute to textual variants.<sup>6</sup>

## **5 Conclusion**

Clearly there are many challenges to conducting empirical research into hypotheses about the role of authorial intention in judgments about literary creativity. Yet the limitations of current linguistic research in this area, as we have tried to show, suggest



that establishing such research programmes will be a necessary step in furthering our understanding of this important but elusive aspect of literary processing. Bringing to bear on the descriptive analysis of literary stylistics, including those derived from corpus analyses, the full range of on- and off-line behavioural tools from empirical studies of literature also suggests a way to meet the demand made by Hakemulder and van Peer (2016) for greater scientific rigour in linguistic accounts of literariness.

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### **Notes**

1. The role of authorial intention in the interpretation of written texts is a broad area of enquiry in linguistics and philosophy. Our concern is with the narrower topic of how a concept of an author's creative intentions may be implicated in judgments about the kinds of linguistic features commonly associated with literariness.
2. We use the term '*work*' to refer to the abstract entity constructed by the reader's engagement with an individual material '*text*' or textual embodiment. Importantly, many literary works exist in multiple, different textual embodiments. These might include a first book edition, a library or collected edition, or a text which is printed in a magazine. A reader's concept of a given work will therefore depend on the specific embodiment by which he/she encounters it. This distinction between the concrete text and abstract work is routine among literary text-editors, whose concern, when multiple embodiments survive, is often to determine in which individual text the work is 'best' realised. This text/work opposition is not always observed, or observed in the same way, in literary linguistic analyses.
3. It may be that Stockwell and Mahlberg (2015) assume that such rigour is supplied through their linking of 'mind-modelling' to a concept of 'theory of mind' (or 'ToM').

However, in cognitive psychology ToM is a deeply contested concept which has not been empirically tested for the kinds of 'high level' mental processing invoked in the notion of 'mind modelling'. As Schaafsma et al. (2015: 65, 70) comment:

Usage of the term 'theory of mind' (ToM) has exploded across fields ranging from developmental psychology to social neuroscience and psychiatry research. However, its meaning is often vague and inconsistent, its biological bases are a subject of debate, and the methods used to study it are highly heterogeneous. Most crucially, its original definition does not permit easy downward translation to more basic processes such as those studied by behavioral neuroscience, leaving the interpretation of neuroimaging results opaque [. . . T]he project of reconstructing ToM [. . .] requires faith that there is indeed something distinctive about the core concept of ToM: our common way of understanding other people in terms of mental processes that cause their behavior (their desires, intentions, beliefs, and feelings).

4. The same might be said for a more recent study of the significance of unconventional punctuation in the poetry of E E Cummings. Gómez-Jiménez's (2017) identification of patterns in the punctuation irregularities that some earlier critics had dismissed as the result of eccentricity or immaturity is certainly suggestive of a hitherto underappreciated creative intent. However, it remains an open question as to whether readers recognise and respond to the hypothesised foregrounding functions, and thus whether these punctuation irregularities do contribute significantly to the 'pleasure' (and thus to an appreciation of the literariness) of the text in the manner suggested by Gómez-Jiménez.

5. We are grateful to Daniel Edmonson for sharing these insights with us following his reanalysis of Mahlberg, Conklin and Bisson's data.

6. Discussing all of the experimental design and methodological considerations for such studies is clearly beyond the scope of the current article. We therefore refer readers to Conklin, Pellicer-Sánchez and Carrol (2018) which provides a detailed overview of eye-tracking technology and the range of issues which need to be considered when applying it to the processing of written texts, including texts of literary works.

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