



THERE HAD ALREADY BEEN A STRUCTURAL GRAPHEMICS.
REVISITING AND CONTEXTUALIZING A GRAPHOLINGUISTIC DISPUTE

DIMITRIOS MELETIS
University of Zurich, Switzerland

Abstract: Research on writing – or *grapholinguistics* – is steadily gaining traction as an accepted subfield of linguistics. While it is often labelled a ‘young’ field, we actually only lack awareness of its history. This paper aims to contribute to a selective preliminary historiographic account by discussing and contextualizing the main points of a dispute that encapsulates several pressing questions to this day relevant to the discipline: In a talk at a LACUS meeting, writing researcher Peter T. Daniels proclaimed that structural graphemics cannot exist since writing differs fundamentally from language and thus cannot be studied with the same (structural) tools and methods. In a response, Earl M. Herrick took the opposite stance, maintaining that writing is a system in its own right, exhibiting idiosyncratic features that can only be captured in an independent structural graphemic analysis. With their debate, the two scholars reproduced a preexisting schism at the center of the German tradition of grapholinguistics. To provide a belated context to their dispute, this paper will show how a structural graphemics had already been established in the German-language realm. On this basis, it will be argued that knowledge of the history of grapholinguistics outside of one’s own academic realm is essential for it to advance rather than stagnate by circling around the same questions.

Keywords: Grapholinguistics, writing systems, graphemics, graphematics, grapheme, structuralism, relationship between speech and writing, German linguistics, linguistic historiography, scientific dispute

1. INTRODUCTION. The year is 1991, mid-August – at the 18th LACUS Meeting hosted by the University of Michigan in Ann Arbor, Peter T. Daniels (1991) gives a programmatic talk titled ‘Is a Structural Graphemics Possible?’. Almost exactly three years later, in August 1994 at the 21st LACUS Meeting at the University of British Columbia in Vancouver, Earl M. Herrick (1994a) responds directly with his talk ‘Of Course a Structural Graphemics is Possible!’. In the proceedings of said 1994 meeting, in which Herrick’s response was published, Daniels (1994) replies to Herrick’s rebuttal, prompting another reply by Herrick (1994b). Their lively argument was seldom actually cited; if the metric considered is the number of citations registered by Google Scholar, Daniels’s original paper has been cited 24 times, and Herrick’s response seven.¹

¹ As for the replies, at the time of writing (September 2021), Daniels’s reply ‘Reply to Herrick’ (1994) has eight citations, Herrick’s second response ‘Reply to Daniels’s Reply’ (1994b) five.

This is unfortunate as their debate broaches several important aspects that are central to the study of writing to this day. So, thirty years later, based on a presentation² at the 47th LACUS Meeting hosted (due to the Covid-19 pandemic virtually) by the University of Toledo, and following in the footsteps of Daniels's and Herrick's major original contributions – polar opposites whose titles end in a question mark and an exclamation mark, respectively – this paper seeks to (re)contextualize the core question negotiated in them, i.e., whether there can be a structural study of writing systems, against the background that, in fact, even before their dispute arose, there had already been a structural graphemics – full stop.

First, in Section 2, Daniels's and Herrick's arguments relevant to a historiographic contextualization will be sketched. In Section 3, the focus will be shifted to a different scholarly tradition – German grapholinguistics – to show how these disputed issues had already been addressed in works published before and during the 1980s. Against this background, Section 4 concludes the paper by highlighting the value of a cross-cultural historiography of the study of writing and describing some of its desiderata.

2. THE DISPUTE. Peter T. Daniels is undeniably one of the world's leading experts in the study of writing systems; his decades-spanning contributions to the field occupy prominent space in important handbook entries on writing systems (see, e.g., Daniels, 2017) and have culminated (for the moment) in his extensive magisterial 2018 monograph *An Exploration of Writing* (Daniels, 2018). In this book, he maintains that the structural 'grapheme' is not a feasible unit in the study of writing (Daniels, 2018, pp. 164–171). This, notably, is a view he had first presented emphatically in his above-mentioned 1991³ LACUS talk that is of interest here. In the paper based on that talk, in fact, he answers the question posed by its title quickly and clearly in the very first paragraph when he proclaims that “[t]here cannot be a structural graphemics” (Daniels, 1991, p. 528). Select points of argument in arriving at this drastic conclusion are presented briefly here; they will be followed by a presentation of the gist of Herrick's rebuttal.

As mentioned, Daniels takes great issue with the use of the term 'grapheme', which is also at the heart of his argument that a structural graphemics cannot exist. Daniels argues for the unfeasibility of the concept mainly by emphasizing how the associated term had been used vaguely and inconsistently by the selection of authors that he cites, leading him to the claim that he has “not yet found one linguist using *grapheme* who has justified the term” (Daniels, 1991, p. 528, emphasis in original). Daniels's focus, thus, is not to discuss what *grapheme* (and, hinging on it, a structural graphemics) could be, but what it is *not*, since he holds that it cannot exist. Aside from some marginal definitions and/or uses of the term by both American and European scholars, Daniels specifically singles out German grapholinguists (cf. Section 3 below) before

² The talk was titled 'Grapholinguistic Wars: How Three Arguments Reflect an Emerging Discipline's Core Questions' and addressed two more disputes in addition to Daniels's vs. Herrick's argument (between W.C. Watt and Herbert Brekle – about the systematicity of the diachronic change of writing systems – and between Beatrice Primus and Oliver Rezac – about iconic form-function correlations in the shapes of Roman script postulated by Beatrice Primus). Due to reasons of space, only one of them can be covered in detail here; it was chosen due to its connection to LACUS. The remaining disputes will be addressed in a future publication.

³ Since I was not present at the talks, I am referring to the published papers in the proceedings. Note that following a suggestion by Daniels himself (cf. Daniels, 1994, p. 425), LACUS Forum articles are cited here with the date of the meeting and not the date the proceedings were published. Accordingly, the relevant papers are cited as Daniels (1991), Herrick (1994a, 1994b), and Daniels (1994) here although the first was published in 1993 and the latter three in 1995.

turning to Ernst Pulgram,⁴ a scholar “bridging European and American traditions” (Daniels, 1991, p. 531). This is noteworthy insofar as the title of one of Pulgram’s papers cited is ‘Phoneme and Grapheme: A Parallel’ (1951), with Daniels believing that “*phoneme* and *grapheme* are not parallel” (Daniels, 1991, p. 531, emphasis in original).⁵ Several of the remaining passages of the paper address rather random aspects that, according to Daniels, prove this; only a few of them will be mentioned here.

One problem mentioned by Daniels is allography, which, according to him, aside from graphetics, archigraphemes, and “other accoutrements” (Daniels, 1991, p. 528) would have to be accounted for in a detailed and explicit graphemic theory. The example he uses to illustrate the challenge of classifying allographs of a grapheme⁶ comes from the letters of English and the fact that they exist in lowercase and uppercase versions: “So English must have at least 52 alphabetic graphemes, which come in closely associated pairs. I know of no parallel phenomenon among phonemes” (Daniels, 1991, p. 531). One other challenge faced by a structural graphemics is to explain the functioning of digraphs: <th>, as Daniels (1991, p. 532) scrutinizes, can either be a grapheme (when it represents /θ/ such as in English <thanks>, for example) or two graphemes, as in <foothill>, where a <t> is separated from <h> by a morpheme boundary (cf. for a discussion of precisely this digraph Coulmas, 1989, pp. 51–52). Finally, one of the few non-alphabetic examples given in the paper is noteworthy as it seemingly further complicates the alleged parallelism of the phoneme and the grapheme: Daniels mentions Chinese characters and the fact that many of them consist of functional phonological and semantic subcomponents, prompting him to ask: “Which are the graphemes here? The 5000-odd distinct characters, or the few hundred components they can be analyzed into? Or even the limited set of brush strokes that the components are written with?” (Daniels, 1991, p. 533). Notably, all of these aspects are ‘just’ specific obstacles anyone attempting to provide a definition for *grapheme* would face rather than fundamental arguments against the general feasibility of such a concept or the structural study of writing in general.

As tempting as it would be at this point to respond directly to Daniels’s contentions, the most important of which was omitted here⁷ (cf. for several points Meletis, 2019, pp. 28–29), the focus of this paper remains his dispute with Herrick and how the points the two scholars propagated can be (re)contextualized against the background of graphemic publications that already existed outside of their immediate realm. Therefore, only the essence of Herrick’s rebuttal is presented now. It starts with the observation that for him, a graphemics is something different than for Daniels: “Daniels assumes that the graphemics of a language should be described in terms of the phonemics of its language; I assume that the graphemics of a language should be described on its own terms” (Herrick, 1994a, p. 413). It will be shown in the next section how this point echoes almost precisely a discussion central to (not only) German grapholinguistics. These two

⁴ Ernst Pulgram was also the president of LACUS for 1978–79.

⁵ Cf. yet another grapholinguistic contribution at a LACUS meeting in which precisely this question is discussed, David Lockwood’s (2001) ‘Phoneme and Grapheme: How Parallel Can They be?’. Interestingly, Lockwood is already mentioned by Daniels (1991) as having pointed him to Herrick’s work.

⁶ Even if here he is dismissive of allography, in a later publication he writes: “‘Allograph,’ however, remains useful for conditioned variants of lettershapes” (Daniels, 2017, p. 88; cf. also Daniels, 2018, p. 169). Admittedly, this refers to a different type of allography than the one constituted by capitalization (cf. Meletis, 2020b).

⁷ His main contention is – very simplistically stated – that the suffix *-eme* is related to the emic level, at which only unconscious phenomena are located (such as phonemes or morphemes, i.e., units of language). Since writing, according to Daniels, is conscious, there cannot be a *grapheme* or a *graphemics*. This is discussed in Meletis (2019) and Meletis (2020a, Section 2.2.1).

perspectives of graphemics also result in two different conceptions of the grapheme, Herrick argues, the first of which he terms ‘graphemic grapheme’ (which, in his own work, he refers to simply as ‘grapheme’, revealing his treatment of writing as an autonomous system) and considers a genuinely linguistic unit. As a unit inherent in writing systems, it reflects that graphemics is independent of a language’s phonology, whereas the so-called ‘phonological-fit grapheme’ (or ‘graphic image of a phoneme’) is “a secondary unit which simply describes a relationship between two kinds of genuine linguistic units” (Herrick, 1994a, p. 417), the (graphemic) grapheme and the phoneme. Crucially, the relationships or correspondences “between the written and spoken forms of a language are something to be described later and separately”, i.e., after its graphemics have been “described entirely on its own terms” (Herrick, 1994a, p. 421). And while this relationship is indeed important to a description of how writing functions as a modality of language, the different kinds of possible relationships (i.e., between graphemes and not only phonemes, but also syllables or morphemes) do not, per Herrick, themselves constitute writing systems but merely “ways in which the elements of a writing system and the elements of a phonology [and morphology, DM] can correspond to one another” (Herrick, 1994a, p. 423) – in other words, these relationships are indicative of generalized *types* of writing systems such as segmental, syllabographic, or morphographic writing systems.

As mentioned above, Daniels replied to Herrick’s rebuttal (cf. Daniels, 1994), to which Herrick responded again (cf. Herrick, 1994b). These two additional contributions do not add anything substantial to the debate, however, as the two scholars mostly reiterate their views of writing and argue they were misunderstood by their respective ‘opponents’. Indeed, their points of view seem to diverge so much that it is not surprising they could not convince each other in the context of these four papers. In this respect, one passage in Herrick’s (1994b, p. 432) second reply is striking: “Neither of us can expect to convert the other; the best that either of us can hope for is that the next generation of linguists will adopt our ideas, having found them the more plausible after looking at all of the facts.” It is remarkable because they actually would not have had to wait for the next generation. Instead, the structural graphem(at)ics⁸ that the two US linguists argued about had already been developed (quite uncontroversially) years earlier – in a different region of the world and (mostly) in works written in a different language.

3. GERMAN GRAPHOLINGUISTICS IN THE 1980s. In arguing against the grapheme, Daniels cites several marginal uses of the term before turning specifically to European scholars and their treatment of the concept (cf. Daniels, 1991, p. 529). Here, it is paramount to note that in referencing their edited volume (Nerius & Augst, 1988), Daniels explicitly mentions Dieter Nerius and Gerhard Augst, two prominent German linguists devoted to research on writing. Following this evidence that he is aware of German research on writing systems, Daniels moves on swiftly – not before adding *en passant*, however, that he has “not yet found a German scholar who has undertaken a definition of the unit *grapheme* itself” (Daniels, 1991, p. 529). This alone warrants a (very belated) contextualization of grapholinguistic⁹ research at the time.

⁸ ‘Graphemics’ and ‘graphematics’ are usually treated as synonyms. Since ‘graphematics’ (from German *Graphematik*) is more dominant in German grapholinguistics, I will use it when referring to the German research tradition. In the discussion of Daniels’s and Herrick’s argument, I will follow their usage in sticking to ‘graphemics’.

⁹ While *grapholinguistics* may not be an established English term (cf. also Section 4 below), the German original *Schriftlinguistik*, which was coined in Nerius & Augst (1988), is accepted and widely used as the designation for the interdisciplinary subfield of linguistics dealing with all questions pertaining to writing. (As a German synonym, Nerius & Augst mention ‘Grapholinguistik’, which likely served as the model for the English

Looking at the developments ‘across the pond’ (from a North American perspective) is an interesting endeavor insofar as in German-speaking countries, in the 1980s, there was a real ‘boom’ in the young field of grapholinguistics. Several important German works on graphematic issues were published in the course of that decade (and earlier), years before the dispute sketched in the preceding section took place. Among them is, strikingly, a 500-page treatise on the history of the concept and term *grapheme* that in detail describes and systematizes its many different occurrences and uses (cf. Kohrt, 1985), a monograph focusing on the graphic elements of written language, with references to the grapheme and other graphematic levels and units (cf. Gallmann 1985), and an important work in the development of an interdisciplinary German grapholinguistics that merges questions of the history of writing, the description and typology of writing systems, and the processing (specifically reading) of writing (cf. Günther, 1988). In the latter, *grapheme* is straightforwardly defined as “the smallest meaning-distinguishing unit in the writing system of a language” (Günther, 1988, p. 77, my translation). This definition is still accepted in German grapholinguistics and makes possible determining the graphemes of a language’s writing system using minimal pairs (cf. Fuhrhop & Peters, 2013) – at least in alphabets (cf. Meletis, 2019 for a cross-grapholinguistic proposal). And these are only some of the relevant works published in German prior to the 1990s. Crucially, two notable volumes were released in English, allowing an international dispersion of German graphematic scholarship: Firstly, Coulmas & Ehlich (1983), including some contributions referring to questions regarding the grapheme, and secondly, Augst (1986), which, among its papers, includes not only synoptic overviews of two of the German monographs mentioned above (cf. Kohrt, 1986; Gallmann, 1986) but also a paper by French linguist Nina Catach titled ‘The Grapheme: Its Position and Its Degree of Autonomy With Respect to the System of the Language’ (cf. Catach, 1986). The latter emphasizes that, of course, research concerning the grapheme and a structural graphematics was published not only in German but also in other languages, including French.¹⁰

The remarks in the preceding paragraph go to show that structural graphematic research not merely existed, but was indeed so popular in the germanophone realm that not only the *Forschungsgruppe Orthographie* was founded in East Germany (one member being the above-mentioned Nerius; for a short overview of the group’s history, see Nerius, 2013) but, roughly at the same time, West Germany also saw the formation of a second research group devoted to writing, the *Studiengruppe Geschriebene Sprache* (which included Hartmut Günther, Florian Coulmas, and Konrad Ehlich; cf. Günther, 1993). Interestingly, now, it is roughly the opposing views of these two groups’ members that are encapsulated in the arguing of Daniels on the one and Herrick on the other hand. For most members of the *Forschungsgruppe Orthographie*, the relationship between written units and – since the German writing system is an alphabet and, thus, phonographic – phonemes is at the center of graphematics. In contrast, the members of the *Studiengruppe Geschriebene Sprache*, much like Herrick, believe the structures of/in writing should be studied independently of speech – at least in a first instance. These two views and the traditions they are tied to will now be dealt with in more detail.

translation.) Note that using it here to refer to German research of the 1980s is accurate, whereas its use to refer to English writing-related works as well as researchers devoted to the subject of writing of that time is anachronistic but, in my opinion, justified in the context of a retrospective classification of cross-cultural research characterized by striking theoretical and methodological similarities.

¹⁰ Anis (1988) is an example of an important French publication touching on many issues of a structural graphemics (and giving a definition of *grapheme*). Cf. also the many relevant papers in Catach (1988).

Starting from the early 1970s, East German research was an important vehicle for the development of grapholinguistics in the entire German-speaking region. In the context of a discussion about structural graphem(at)ics it is paramount to mention its structuralist heritage: as Nerius (2013, p. 389) writes, the work of Czech structuralist Josef Vachek proved especially defining for East German research on writing. Vachek, as in general the Prague School, of which he was a member, did not treat writing as derivative of or subordinate to speech but as a (relatively) autonomous form of language. East German grapholinguists deemed this view more fitting than a “purely phonographic conception as it had hitherto been common” (Nerius, 2013, p. 389, my translation), an assessment that is startling when considering their phonocentric conception of the grapheme (see below). Notably, Vachek is also explicitly mentioned by Daniels (1991, p. 529, emphasis in original):

Vachek is well known for his insistence [...] that written language is not merely a representation of real language: that it is a coordinate system to be studied in its own right [...]. In this he is not wrong (and it is very important to keep apart two senses of *writing*, namely ‘writing system’ and ‘written language’) [...].

Two points in this quote are worth discussing in terms of the feasibility and usefulness of a structural graphem(at)ics: firstly, that Daniels feels the need to emphasize (and juxtapose with writing) ‘real’ language. What does he mean here – speech, or the entire abstract, amodal language system that is primarily substantiated in the spoken modality but comprised of different levels (phonology, morphology, syntax, ...)? In any case, putting it like this creates a dichotomy *real* language vs. *written* language, which of course insinuates that written language is *not* real language. Secondly, two senses of the very broad (and problematically so!) term and concept of ‘writing’ are justifiably distinguished: writing system and written language. This is essential in capturing the theoretical schism at the heart of Daniels’s and Herrick’s dispute: the crucial difference between them on the one hand and (most) East German grapholinguists and West German grapholinguists on the other is that Daniels and East German grapholinguists believe that only (or at least predominantly) written language is a phenomenon in its own right – but not the writing system. In other words, the language that is produced in writing, which is partially dependent on the features of writing (as a process and a product) – its syntactic structures (such as full, complex sentences), the lexis used, etc. – is worthy of a study independent of (or at least equivalent to) spoken language. The writing system, in contrast, meaning the basic units of writing, their combination, etc., *is* treated as dependent on ‘real’, i.e., spoken language according to Daniels and East German linguists. Why, then, do the latter still believe a structural graphem(at)ics is possible? Superficially, they posit the same thing as Daniels: that written units, including, for them, one type of ‘grapheme’, are dependent on ‘real’ language, in this case phonemes. This is where Daniels apparently does not see a need (or even possibility) for an independent structural study of writing termed ‘structural graphemics’. In his rebuttal to Herrick, he writes:

The many scholars who accept as given for some language some inventory of characters of a script – for English, say, the letters of the alphabet – and describe the relations between its sounds and their spellings (whether they call their analysis *graphemics* or not) are, in my opinion, doing what is necessary in the study of writing systems. (Daniels, 1994, p. 426, emphasis in original)

Describing the relations between sounds and spellings is precisely what East German grapholinguists focused on. Herrick as well as West German scholars, on the other hand, did not ‘accept as given for some language some inventory of characters’. Instead, the non-trivial discovery and study of the architecture of that inventory (in its own right) and its combinatory regularities was their main priority. For them, said inventory *is* the writing system, and it warrants being studied as a phenomenon independent of speech (or ‘real language’ in whatever sense). It is crucial to note that this autonomous approach does not negate Daniels’s accurate observations that speech is primary to writing, e.g., because it is acquired naturally without instruction; it is compatible with them. That an independent analysis of writing as its own system is ‘merely’ an (admittedly decisive) methodological decision based on a specific theoretical view of the relationship between speech and writing rather than the expression of axioms concerning an alleged functional autonomy of writing is captured aptly by Eisenberg (1988, p. 29, my translation):

The structural analysis of writing divorced from speech can make sense even when writing is functionally and genetically subordinate to speech in every respect. The postulate of a graphematics independent of phonology exists for the simple reason that because of it, a projection of the structure of speech to writing is avoided. This is necessary since otherwise structural features of writing could remain unseen.

This, of course, has immediate bearing on the conception of a unit called *grapheme*. While members of the *Studiengruppe Geschriebene Sprache* define it by analogy with the phoneme – as a distinctive unit that is discovered via written minimal pairs such as <time> and <dime> – the *Forschungsgruppe Orthographie*, as implied above, conceives of it basically as the written representation of a phoneme. According to the latter view, in <sing>, <ng> would be one grapheme because it ‘represents’ /ŋ/ (cf. Heller, 1980, p. 99); in the former view, it would be a sequence of two graphemes, since minimal pairs can be found for both <n> and <g>. Importantly, the *Studiengruppe Geschriebene Sprache* acknowledges that in the functioning of writing, correspondences between graphemes and phonemes are paramount – but they are exactly that, *correspondences* (so-called *grapheme-phoneme correspondences*). They are neither one-way representations nor dependencies. Independent units of writing are also assumed by (some members of) the *Forschungsgruppe Orthographie*, however, for example in Klaus Heller’s (1980) conception (cf. also Scharnhorst, 1988), which was published 14 years prior to Herrick’s: Heller assumes a *grapho-grapheme* (Herrick’s *graphemic grapheme*) as a unit of writing (albeit not a functional one, see below) and a *phono-grapheme* (Herrick’s *phonological-fit grapheme*) that is a unit of writing representing a phoneme.¹¹ The priority of a phonology-dependent view in this approach is underlined by the fact that ‘grapheme’ is treated as a synonym of ‘phono-grapheme’ (cf. Heller, 1980, p. 95). Günther (1988, p. 73) of the *Studiengruppe Geschriebene Sprache* fervently criticizes this division of the grapheme (specifically Burckhard Garbe’s approach as laid out in Garbe 1985¹²) and discards these terms

¹¹ Cf. also Ruszkiewicz (1976), where the two different ways of conceptualizing the grapheme had already been mentioned.

¹² The fact that Garbe was not an East but a West German linguist shows that assigning the two opposing views to East and West German linguists (or even the *Forschungsgruppe Orthographie* and the *Studiengruppe*

as ‘terminological monstrosities’ that in no way advance(d) our knowledge of the structure of the German writing system (cf. also Kohrt, 1986). Years later, when the establishment of a field ‘grapholinguistics’ reached a pivotal point with the publication of the first edition of Christa Dürscheid’s textbook *Einführung in die Schriftlinguistik* (‘Introduction to grapholinguistics’) in 2002, these two general and historically recurring views on the conception of writing and its relation to speech would be termed *dependency hypothesis* and *autonomy hypothesis* (cf. Dürscheid, 2016, pp. 35–42); Günther (1988, p. 72) had already called them *representational conception* and *distinctiveness conception*, respectively, emphasizing the respective posited main function of a unit conceived of as ‘grapheme’.

Herrick, now, with his focus on the structures inherent in writing, would have fit in perfectly with the German ‘autonomists’ of the *Studiengruppe Geschriebene Sprache*. Thus, from a retrospective historiographic point of view, the fact that he did not refer to German research in his publications and, vice versa, that his work was not on the map of German grapholinguists, can only be viewed as an unfortunate missed opportunity to build a bridge between two academic cultures. And considering a more personal level, researching writing in the US must have likely been a lonely enterprise, which of course also makes disagreements between the few people who did/do study it like the one addressed here all the more unfortunate. It is also important to note that even though with respect to his views expressed in the context of the dispute reconstructed here, Herrick may have slightly lagged behind developments in German grapholinguistics, he was (much) ahead of them in other respects: His idea of a unit *basic shape*, for example, an abstract graphetic unit storing the most important information on the appearance of a letter, character, etc. (e.g., the number of its components and how they are arranged/positioned with respect to each other), formulated in Herrick (1974), predated the first detailed account of the same concept in German grapholinguistics by over three decades (cf. Rezec, 2009), making Herrick a pioneer of the grapholinguistic subbranch of graphetics (Meletis, 2020a, Chapter 1).¹³ However, much like the dependentialists, he conflated the graphemes’ material substance with the graphemes as functional units of writing themselves – i.e., his graphemic graphemes (as well as the grapho-graphemes assumed by members of the *Forschungsgruppe Orthographie*) are simultaneously both graphetic and somewhat graphematic units. While the autonomists of the *Studiengruppe Geschriebene Sprache* acknowledged the materiality of graphemes, the theoretical status of this materiality remained relatively undifferentiated in their works (even though Günther, for example, advanced and advertised the subdiscipline of graphetics, cf. Günther, 1990) as they prioritized the graphematic (and ‘genuinely’ linguistic) function of lexical distinctiveness. It was Oliver Rezec (2009) who separated the three ‘identities’ of the grapheme into three distinct units: the material (and, thus, graphetic) unit of basic shape as the abstraction of concrete graphs, the grapheme as a genuinely autonomous functional unit of writing (for which materiality does not play a role), and the phoneme image as a unit capturing the relation between autonomous graphemes and phonemes of a language.

At this point it is also worth mentioning that Herrick (1994a, pp. 415–416, emphasis in original) – unknowingly, of course – foreshadowed and criticized future developments in German grapholinguistics that would shift the focus onto the unit of ‘letter’ (and away from the

Geschriebene Sprache) in such a generalizing manner can only be a simplifying idealization of dominant tendencies.

¹³ He also championed other methods of describing the material component of writing as early as in Herrick (1966); however, these ideas remain little-received.

more general grapheme, cf. Neef, 2005; Berg, Primus, & Wagner, 2016) by warning that “everyone who studies writing systems should realize that *letter* is a slippery term for which a self-evident meaning can never be assumed”. In any case, these select observations strongly suggest that both Herrick and German grapholinguists would likely have profited from an exchange of ideas.

Daniels, on the other hand, cannot as straightforwardly be put into a ‘dependentalist’ box. Even though German scholars adhering to the dependency hypothesis view writing as dependent on speech and focus on how speech is represented by writing (and not how writing represents speech),¹⁴ much like Daniels does, they still include in their proposals units they call ‘graphemes’ and refer to the field they engage in ‘graphem(at)ics’, thus explicitly positioning themselves in a structuralist paradigm that applies the same procedures to writing that had been successful in other linguistic subfields – primarily phonology.¹⁵ By contrast, Daniels argues conclusively that there cannot be a structural graphemics. Ironically, thus, despite being a linguist and devoting most of his research to writing, he believes that some of the central methods and tools of linguistics are not applicable to writing, which is why the two should (mostly) be kept apart. He is not alone in this, as evidenced by the warning uttered decades earlier by Charles E. Bazell (1956, p. 46): “[...] the idea should not be encouraged that [with the graphic side of language, DM] we have just another ‘substance’ of language, which should be submitted to the same processes of analysis as the ‘phonic substance’”. Notably, however, even proponents of a graphematics such as Kohrt (1986, pp. 88–89) scrutinize this process of borrowing procedures from phonology and applying them to writing, highlighting that this should not be practiced without careful reflection – echoing Daniels’s problem with an assumed parallelism of phoneme and grapheme (see above). And notably, a structural graphematics in which written units are not dependent on units of speech but the method of discovering written units essentially copies that of discovering units of speech is, ironically, still in a way very much dependent on phonology. A truly autonomous graphematics would seek independence in both respects.¹⁶

In conclusion, even if the belief that structural or even linguistic analyses in general cannot be applied to writing does not represent contemporary consensus, it is important to highlight that some of the more implicit criticism voiced by Daniels in his 1991 paper is valid: (1) that the term ‘grapheme’ should not be used carelessly, i.e., without a specific definition, and (2) that a concept of *grapheme* should evade alphabetocentrism by taking into account diverse types of writing systems. While in German grapholinguistics, definitions of the grapheme were and are more often provided than not (which is drastically different for the Anglo-American scholarly tradition, and, to name one example from a cross-disciplinary point of view, psychological

¹⁴ An anonymous reviewer asked how these two methods differ when the phrases used to describe them here are essentially the same (except for one being in passive and the other in active voice). To clarify: Studying how speech is represented by writing gives priority to speech and asks, e.g., how phonemes are encoded by units of writing. If this is the starting point of an analysis, genuinely ‘graphematic’ units, structures, or systematic features of writing that have nothing to do with representing speech cannot be discovered. By contrast, when studying how writing represents speech, we take the structures of writing as a starting point and ask how graphemes correspond with phonemes. In this sequence, *before* we address how writing is related to speech, writing may be studied as its own system and idiosyncratic structures may be found (cf. also Eisenberg’s 1988 quote above).

¹⁵ Cf. also Ehlich (2007, p. 728, my translation): “The terminologization [in grapholinguistics, DM] is the expression of an attempt to share in the value of what had been achieved in phonology with a fair degree of success.”

¹⁶ This was practiced by some British and Scandinavian linguists of the Copenhagen School (cf. Heller, 1980, pp. 79–80).

research into writing and literacy), the first critique remains to this day justified and accurate. In German grapholinguistics, ironically, the trend has even been, as mentioned above, to move away from the more easily generalizable grapheme and towards the ‘letter’, a concept intimately tied to alphabets (or at least segmental writing systems) and thus only one possible type of writing systems (cf. Meletis, 2017 for a version of this criticism). The bottom line is that if the grapheme is a unit that can be hypothesized for all writing systems, there must be graphemes in Chinese, Japanese, Arabic, etc., too. Generally, Daniels’s wide scope and his continuing efforts to consider the broadest variety of different writing systems in his research (see the chapters in Daniels, 2018) is laudable and should set a precedent. It is just that this should be complemented with a methodology (which, however, need not be structuralist in nature) that allows not only juxtaposing different systems but also comparing them and explaining their functioning with a unified set of concepts.

4. CONCLUSION: THE VALUE OF A HISTORIOGRAPHY OF GRAPHOLINGUISTICS. The questions discussed in Daniels (1991) and Herrick (1994a) appear so profoundly central to the study of writing that it would have been surprising had they not also been addressed somewhere else. One context in which this was indeed the case was German grapholinguistics. Thus, the main conclusion that can be drawn here is that one should be aware of (at least major) developments in the field when reflecting on such fundamental questions. In other words, one should study the field’s history. Of course, not everyone can be expected to speak and read German (and this is true for other languages as well), and it has been argued elsewhere that part of the responsibility for not being read lies with those who have not made their research more broadly available by publishing it (or at least its central findings) in English as well (cf. Meletis, 2021).¹⁷ It is very likely that the present paper is (both consciously and unconsciously) oblivious to many important grapholinguistic developments that have been published in other languages (such as Russian or Chinese). Recent exchange at international interdisciplinary conferences can only improve this situation.¹⁸

Thus, it is not merely a historiography of the study of writing that is of value but one that is – much more than this short contribution could be – extensive in its breadth concerning diverse regions of the world, their academic traditions and paradigms, as well as time. For an ever-evolving field such as grapholinguistics, which is still viewed as ‘young’ and ‘emerging’, it is worthwhile to point out that it has already accumulated considerable history. In addition, however, it is important also to acknowledge, systematize, and contextualize the very recent history of a field partially characterized by a lack of coherence and self-awareness on part of many of its stakeholders. Providing a clear, cross-cultural picture of grapholinguistics is essential in view of the continuing obscurity surrounding it. In a recent post on the blog *Language Log*,¹⁹ for example, Mark Liberman quotes a paper by Yannis Haralambous, organizer of a grapholinguistic conference series and editor of a grapholinguistic book series. Specifically, he cites Haralambous’ (2020, p. 12) definition of grapholinguistics followed by a remark on the

¹⁷ An anonymous reviewer noted that in the ‘pre-internet days’ in which the dispute discussed here happened, German literature would not have been easily accessible to American scholars. I am aware of this, but I still found it odd that Daniels (1991) explicitly mentioned central German grapholinguists (see Section 2), implying that he is obviously aware of them, but at the same time chose not to mention the germanophone structural graphematic tradition and associated noteworthy attempts of defining the grapheme.

¹⁸ Examples for such conferences are the workshop series by the *Association of Written Language and Literacy* and the new *Grapholinguistics in the 21st Century* series of biennial conferences.

¹⁹ <https://languagelog.ldc.upenn.edu/nll/?p=46324> (accessed 28 September 2021).

designation's novelty: "Grapholinguistics is the discipline dealing with the study of the written modality of language. At this point, the reader may ask some very pertinent questions: 'Why have I never heard of grapholinguistics?'" Liberman reacts to this by writing: "Speaking for myself, I'll answer: We've never heard of grapholinguistics because you just made up the word". While it is true that 'grapholinguistics' is a relatively new term,²⁰ the discipline associated with it is certainly not. Yet Liberman does not mention that discipline – or any research in the field that was not conducted or published in English, for that matter. Importantly, it is not of primary relevance what name such a field be given – be it *grapholinguistics*, *graphonomy*, *grammatology*, *philography*,²¹ etc. It is paramount that people be aware that it exists scattered over diverse scholarly traditions – which is the main task a historiography should take on. It is ironic that words and phrases such as 'historiography' and 'writing history' as well as the tasks associated with them rely on writing when the history of the study of writing remains largely unwritten – until now.

Daniels (1991, p. 534, emphasis in original) ended his paper with the drastic and final declaration that "[t]he notion of *graphemics* ought to be jettisoned, and with it the elusive – the impossible – concept of *grapheme*". With that, he negated an entire existing paradigm (or likely plural paradigms) of studying writing. I want to end this paper by concluding that as I have shown, in at least one tradition outside the anglophone realm, graphematics is a thriving field (to this day). The last word on the matter has not yet been spoken (or rather written), however, and I cannot wait to learn what other voices from ignored or dismissed academic traditions can bring to the (historiographic) grapholinguistic table.

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²⁰ As a side note, Liberman mentions marginal uses of the term 'grapholinguistics' unrelated to German grapholinguistics.

²¹ Philography was a possible designation suggested by Amalia E. Gnanadesikan and Daniel Harbour (p.c.).

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