

# Grapholinguistic wars

HOW THREE ARGUMENTS
REFLECT AN EMERGING
DISCIPLINE'S CORE QUESTIONS

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#### Context

- grapholinguistics (from established German, Schriftlinguistik') is an interdisciplinary field that centers on the study of writing
  - since writing is commonly defined as the graphic representation of language (i.e., one modality of language), linguistics is at the core of the field
  - designation is debated; alternative designations are: grammatology, graphology, graphonomy, writing systems research
- it is still an emerging field and more or less established depending on the academic region
  - less established in the Angloamerican realm, certain scholars (e.g., Peter T. Daniels) are exceptions  $\rightarrow$  diachrony, typology, individual descriptions
  - well-established in the German-language realm (e.g., existence of a community, certain degree of institutionalization, etc.)  $\rightarrow$  synchrony, general description (although alphabetically biased)

### Disputes as starting points of historiography

- lack of historiography ≠ lack of history
- challenge of working on a 'first' historiographic account of an incoherent and heterogeneous field
  - which is, again, biased by being restricted to publications in certain languages (in this case English and German)
  - cf. also Spitzmüller (2013) [in German] or Daniels (2010)
  - planned project: edited volume bringing together different
     grapholinguistic traditions (linguistically, methodologically, disciplinarily)
- disputes as points of reference

## First Dispute: Daniels vs. Herrick (1/2)



- context: Peter T. Daniels gives a paper called *Is a structural graphemics possible?* at LACUS
   Forum 18 (1991), Earl M. Herrick responds with *Of course a structural graphemics is possible!* at LACUS Forum 21 (1994); two more (less interesting and content-focused) replies follow in the same proceedings (Daniels 1994, Herrick 1994b)
- starting point: "There cannot be a structural graphemics." (Daniels 1991: 528); "no attempt should be made to apply emic terminology to writing" (534)
  - argues both **structurally** (there cannot be a grapheme without a "detailed, explicit theory of graphemics, graphetics, allographs, maybe archigraphemes and other accoutrements of emic theory", 528) and **psycholinguistically** ("Writing is a product of human ingenuity (which we might as well consider limitless), not human evolution (which is constrained by everything that has evolved before, and by the environment as well", 534)
  - focus is on the unfeasibility of the grapheme, for various reasons (how can one explain lowercase and uppercase letters, ligatures, Chinese characters?)

#### First Dispute: Daniels vs. Herrick (2/2)

- 'attack': "Of course a structural graphemics is possible!" (Herrick 1994's title)
  - "the graphemics of a language should be described entirely on its own terms" (421)
  - "the 'graphemic grapheme' is a genuine linguistic unit, just as the phoneme is, and that the 'phonological-fit grapheme' is a secondary unit which simply describes a relationship between two kinds of genuine linguistic units" (417)
  - "if our brains have evolved a general reasoning power which can handle all those kinds of relationships that occur throughout language, and if this reasoning power includes, among other things, the power to distinguish between the emic and the etic—between differences that matter and differences that do not matter, then any human can learn both a writing system and a phonology of any language" (423)
- Daniels (1994: 430): "Graphemic graphemes are the stuff of art history and typefounding and calligraphy. Phonological-fit graphemes are part of linguistics."
- this debate is somewhat of an enlightening misunderstanding that reproduces an important global discussion at an individual level (and in a seemingly oblivious context)

## Dependence vs. autonomy

- in German-language Schriftlinguistik, the dependency or (relative) autonomy of writing from speech had been discussed for quite a while (cf. dependency vs. autonomy hypothesis, Dürscheid 2016), with a spike in the number of related publications in the 1980's
  - Forschungsgruppe Orthographie (founded 1974 in the GDR) as 'dependentialists' vs. Studiengruppe Geschriebene Sprache (founded 1981 in the FRG) as 'autonomists'
  - center of the discussion is also the conception of the grapheme
  - matter of perspective: are we interested in how language (mainly phonology) is encoded in writing (= Daniels)
     or are we interested in how writing encodes language (and not just phonology, = Herrick)?
  - Daniels refers to German literature, but not to the pertinent discussion (e.g., Kohrt 1985)
  - Herrick appears as an outlier in the Angloamerican treatment of writing in linguistics but is very much in line with structuralist German grapholinguistics
- core question: is writing a subject that should be studied by linguistics or not? (And how?)

### Second Dispute: Watt vs. Brekle (1/2)



- context: volume edited by W.C. Watt (an American scholar) called Writing Systems and Cognition (1994); Herbert E. Brekle (a German typographer turned linguist) comments on the 'historicogenetic theory of the lettershapes of our [= Roman] alphabet' (part of the title of his article)
- starting point/'forceful attack' (Watt 1994: 96): "he [= Watt] presupposes the historico-morphological development of lettershapes to be a systematic process" (Brekle 1994: 129)
  - four forces of homogenization, facilitation, heterogenization, and inertia (Watt 1983)
  - "where and how are these four 'forces' anchored in empirical reality?" (Brekle 1994: 130)
  - "such a theory should also take care of economical, technical, and social factors which if only marginally may be relevant for the execution of writing acts and their products and their quasi evolutionary changes" (130, my emphasis)
  - "Watt tries to connect his 'homogenization force' with Darwinian or Neo-Darwinian principles" (134)
  - "It was the aim of my deliberations [...] to show the fruitfulness of a historico-cognitive approach" (137)

#### Second Dispute: Watt vs. Brekle (2/2)

- Watt's response is part of his introduction to one part of the volume, in which he introduces and comments on the papers
  - evidence for evolution: changes that older systems that have grown 'naturally' have undergone but not younger, invented systems (such as Cherokee or J.R.R. Tolkien's scripts); cf. also Wiebelt (2004) for extrinsic symmetry (cf. |b| vs. |d|)
  - cognitive reality of homogenization: misremembering
    - "someone who has forgotten such a feature value [...] may nevertheless remember the relevant generalization—say, 'Augmentations go to the right'; and that such a person in such a situation can then apply that generalization in an attempt to recover the forgotten value" (Watt 1994: 97); example: mirroring |J|, a typical mistake made by children
  - new research shows that the relevant factor is writing direction (cf. Fischer 2017)

## Cognition vs. culture

- or: systematicity vs. chaos, predictability vs. unpredictability, evolution vs. development,
   universality vs. diversity, description vs. explanation
- this dispute anticipates a later methodological schism due to what can be called a *cognitive turn*
- Dehaene (2009: 150, my emphasis): "In brief, our cortex did not specifically evolve for writing—
  there was neither the time nor sufficient evolutionary pressure for this to occur. On the contrary,
  writing evolved to fit the cortex. Our writing systems changed under the constraint that even a
  primate brain had to find them easy to acquire"; cautions against cultural relativism
- Downey (2014: 306) cautions against a "strong form of [...] neurological determinism" and highlights the importance of including anthropological perspectives in the study of writing
  - we should not (only) try to explain universals but the diversity found in writing systems (cf. also Meletis in press)
- both can be reasonably combined (cf. Morin 2018 for a study on cardinality in the shapes of the world's scripts)

#### Third Dispute: Primus vs. Rezec (1/2)

- context: Beatrice Primus' (2004, 2006) assumption of a fundamental formfunction correlation (= constructional iconicity) concerning the visual features of Roman letters and phonological features
  - e.g., that ascenders and descenders signal plosives
  - similar findings are (independently) arrived at by Fuhrhop/Buchmann (2009)
- starting point/attack: 2010 article in the Linguistische Berichte (an important linguistic journal published in Germany) by Oliver Rezec (who had written a grapholinguistic PhD thesis on a model of the German writing systems but is otherwise a journalist)
- responses by Primus (2011) and Fuhrhop/Buchmann (2011), to which Rezec (2011) replied again

## Third Dispute: Primus vs. Rezec (2/2)

- Rezec (2010), in his truly forceful attack (especially tonally), starts with discussing that Primus'
   'groundbreaking' finding has not been received (save for her colleagues' reception)
  - for him, the consensus is that letter shapes are arbitrary (with respect to their phonological correspondence)
  - he then presents different problems with Primus' analysis, the global ones of which include the fact that it does not
    account for actual substantiations of letters, that the Roman script is used for many writing systems with different
    phonological correspondences and that some assumptions seem to be guided by the desired outcome
- Primus (2011: 63) is baffled by the provocative style of Rezec's critique and the hyperbolic negative epithets and presents to readers the core of her proposal, which she sees misrepresented in Rezec's attack
- Fuhrhop/Buchmann (2011: 87, my translation) conclude: "We did not go into all of Rezec's individual points because our starting point was the two possible reactions to scientific work by colleagues, especially when it comes across as 'lonely', i.e., when someone risks something new.
   Rezec chooses the path of putting down, we choose the path of developing further."

#### Innovation vs. conservatism

- in this dispute, the question of iconicity vs. arbitrariness merely serves as a placeholder to negotiate truly innovative and provocative ideas
  - it is an adverse reaction to an idea that challenges the 'consensus'
  - (is the idea that letter shapes are motivated so crazy?  $\rightarrow$  cf. Hangul, Chinese)
- in the 'discipline', several important hypotheses remain understudied
  - another prominent example is Daniels' hypothesis of a primacy of the syllable in writing (cf. Daniels 1992)
- when old questions keep being rehashed (cf. the grapheme) and innovative ideas are ignored, this of course leads to a certain stagnation
- situation is made more challenging by different linguistic and methodological boundaries in interdisciplinary grapholinguistics (cf. Meletis 2021)

#### Conclusion

- disputes may seem like points in the development of grapholinguistics, but reflect crucial ongoing discourses in the young and still incoherent discipline
- conflicts that result from the forces of emancipating the field vs. integrating it into linguistics (and other disciplines)
  - treating writing as derivative of language or as its own system (why not both?)
  - divorcing diachrony from synchrony (both can inform the respective other)
  - favoring (structural) description over (extralinguistic) explanation (again, why not both?)
  - curbing innovation due to disciplinary conventions
- more historiographic work would be fruitful to sketch common threads, i.e., what has already been done, partially to make way for new ventures
- also, historiography shows (retrospectively) that there was a field despite the perception that there was none



# Thank you for your attention!

## References (1/2)

Brekle, Herbert E. (1994): Some thoughts on a historico-genetic theory of the lettershapes of our alphabet. In W. C. Watt (ed.), *Writing systems and cognition*, 129-139. Dordrecht: Springer.

Daniels, Peter T. (1991): Is a structural graphemics possible? *LACUS Forum* 18: 528-537.

Daniels, Peter T. (1992): The syllabic origin of writing and the segmental origin of the alphabet. In Pamela Downing, Susan D. Lima & Michael Noonan (eds.), *The linguistics of literacy* (= Typological Studies in Language, 21), 83-110.

Amsterdam, Philadelphia: John Benjamins.

Daniels, Peter T. (1994): Reply to Herrick. LACUS Forum 21: 425-431.

Daniels, Peter T. (2010): Writing in the world and linguistics. *Annual Meeting of the Berkeley Linguistics Society* 36.1: 61-90.

Dehaene, Stanislas (2009): *Reading in the brain: The new science of how we read.*London: Penguin.

Downey, Greg (2014): All forms of writing. Mind & Language 29.3: 304-319.

Dürscheid, Christa (2016): *Einführung in die Schriftlinguistik*, 5<sup>th</sup> edition. Göttingen: Vandenhoeck & Ruprecht.

Fischer, Jean-Paul (2017): Character reversal in children: the prominent role of writing direction. *Reading and Writing* 30.3: 523-542.

Fuhrhop, Nanna & Franziska Buchmann (2011): Buchstabenformen und ihre Relevanz für eine Schriftgrammatik. Erwiderung auf einige Thesen von Oliver Rezec. *Linguistische Berichte* 225: 78-88.

Herrick, Earl M. (1994a): Of course a structural graphemics is possible! *LACUS* Forum 21: 413-424.

Herrick, Earl M. (1994b): Reply to Daniels's reply. LACUS Forum 21: 432-440.

Meletis, Dimitrios (2021): On being a grapholinguist. In Yannis Haralambous (ed.), Grapholinguistics in the 21st Century. June 17–19, 2020. Proceedings, Part I (= Grapholinguistics and Its Applications; 4), 47–62. Brest: Fluxus Editions.

## References (1/2)

Meletis, Dimitrios (in press): Universality and diversity in writing systems. LACUS Forum 46.

Morin, Olivier (2018): Spontaneous emergence of legibility in writing systems: the case of orientation anisotropy. *Cognitive Science* 42.2: 664-677.

Primus, Beatrice (2004): A featural analysis of the Modern Roman Alphabet. *Written Language and Literacy* 7.2: 235-274.

Primus, Beatrice (2006): Buchstabenkomponenten und ihre Grammatik. In Ursula Bredel & Guinther Hartmut (eds.), *Orthographietheorie und Rechtschreibunterricht* (= Linguistische Arbeiten, 509), 5-43. Berlin, Boston: De Gruyter.

Rezec, Oliver (2010): Der vermeintliche Zusammenhang zwischen Buchstabenformen und Lautwerten. Erwiderung auf einige Thesen von B. Primus. *Linguistische Berichte* 223: 343-366.

Rezec, Oliver (2011): Der vermeintliche Zusammenhang zwischen Buchstabenformen und Lautwerten. Zweite Erwiderung. *Linguistische Berichte* 225: 89-100.

Spitzmüller, Jürgen (2013): *Graphische Variation als soziale Praxis. Eine soziolinguistische Theorie skripturaler ,Sichtbarkeit'* (= Linguistik – Impulse & Tendenzen, 56). Berlin, Boston: De Gruyter.

Watt, W. C. (1983): Mode, modality, and iconic evolution. In Tasso Borbé (ed.), Semiotics Unfolding. Proceedings of the Second Congress of the International Association for Semiotic Studies, Vienna, July 1979, Vol. III, 1543–1550. Berlin, Boston: De Gruyter.

Watt, W. C. (1994): Introduction. In W. C. Watt (ed.), *Writing systems and cognition*, 89-114. Dordrecht: Springer.

Wiebelt, Alexandra (2004): Do symmetrical letter pairs affect readability? A cross-linguistic examination of writing systems with specific reference to the runes. *Written Language & Literacy* 7.2: 275-303.