Structural, psycholinguistic, and sociolinguistic typologies of writing

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Writing: System, use, ideology
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Why typologies? (*aka* So what?)

– writing is a complex structural, psychological, and social phenomenon that can and should be studied in detail from myriad perspectives (= particularistic view)

– however, for a comprehensive theory of writing, a **coalescence** of these perspectives is inevitable; many phenomena can only be explained through recourse to all these perspectives (= holistic view)

– there is often not only **no contact** between structural and usage-based perspectives (as well as between different usage-based perspectives), but also a mutual devaluation or complete dismissal ($\rightarrow$ reason for this workshop)

– typologies are **generalizations** (and sometimes reductionist simplifications) and should always be scrutinized; it is rather the process of attempting to typologize that is of value as it necessitates the **identification of core categories in a conceptualization of writing** (which uncover commonalities and differences between systems, cultures, etc.); how can typologies/criteria inform each other?

Structural typologies

– most typologies of writing (systems) thus far have centered on '**structure**' (and linguistic function)

   ∗ however, not the structure inherent in writing (= autonomous paradigm) but the relation between the basic units of writing and units of language (= dependentialist paradigm) → <mark>**dominant level of representational mapping**</mark> (JOYCE/MELETIS in press), **predominant organizing principle** (TRIGGER 1998)

– structural writing system typologies are predominantly <mark>**segmental**</mark>

   ∗ this means important non-segmental features are disregarded; e.g., that in alphabets such as German, the most important level of structural analysis is the written word rather than the grapheme (SCHMIDT 2018)

   ∗ there is a call for an inclusion of non-segmental types of organization (GNANADESIKAN 2017)

Psycholinguistic typologies

– the focus of psycholinguistic research has also been on the dominant level of representational mapping and how it affects <mark>reading processes</mark> as well as <mark>literacy acquisition</mark>

  ∗ phonocentric idea of **(phonographic) 'depth',** morphographic transparency and interaction between phonography and (secondary) morphography rather marginalized

  ∗ effect of other features of writing systems are not as intensively studied (cf. the ten dimensions of complexity, DANIELS/SHARE 2018)

  ∗ reading and writing as idealized (bundles of) processes rather than concrete realizations of literacy practices embedded in a given context

– as these typologies concern not only psychological aspects but also physiological aspects involved in production and perception, including the interaction with writing instruments and writing material, a more inclusive designation would be **processing typologies**

Structural and psycholinguistic typologies
possible criteria

graphetics

– visual complexity (at all levels, both qualitative and quantitative, both paradigmatic and syntagmatic, both individual and systematic)

  ∗ segmental complexity is influenced by size of inventory of a writing system/script, which is determined by the dominant level of representational mapping (cf. MITON/MORIN 2021)

– **spatiality**: spacing (between words but also between segmental units), directionality

– other possibilities: case, diacritics, ligatures, etc. (cf. scriptsource.org)

– dominant type of production (handwriting, typing, wiping)

graphematics

– 'orthographic' depth (KATZ/FROST 1992), i.e., graphematic transparency (system-inherent) and orthographic transparency (via external regulations); cf. for the difference HANDEL'S (2013) study on Chinese character simplification

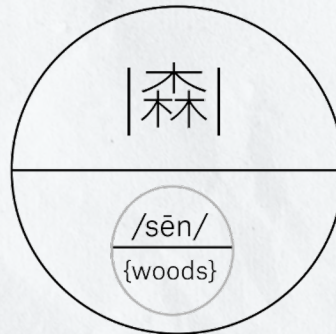– level interacting with/determining punctuation (prosody, syntax, etc.)

Semiotic criteria

iconicity

pictography

|田|
/tián/
{field}
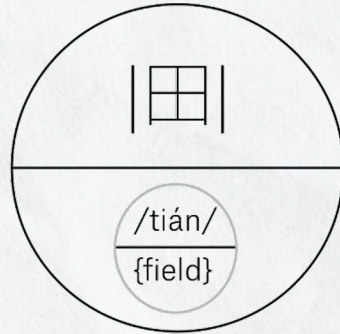
signans visually resembles meaning of the signatum (not the signatum itself, which is a morpheme)

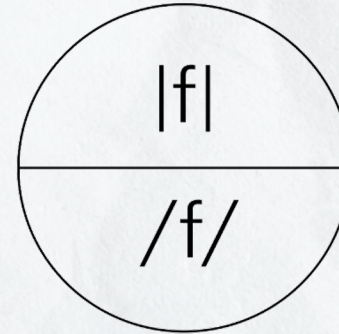### diagrammaticity

|森|
/sēn/
{woods}

a visual change in the signans structurally reflects a change in the signatum (e.g., plurality)

biuniqueness

transparency

|f|
/f/
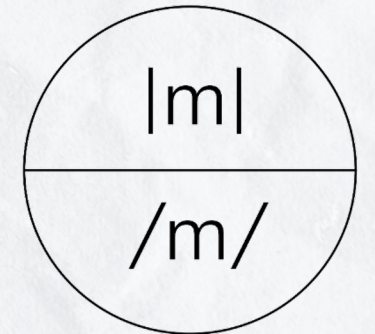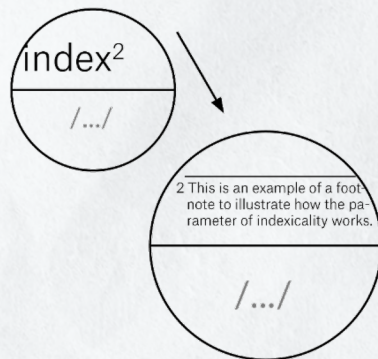
a signans is in a graphematic relation with only one signatum

uniformity

|m|
/m/

a signatum is in a graphematic relation only with one signans

indexicality

index[2]
/.../

2 This is an example of a footnote to illustrate how the parameter of indexicality works.
/.../

an indexing signans is in spatial contiguity with an indexed signatum

compositional transparency

|妈|
/mā/
{mother}
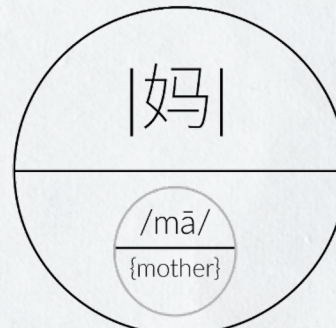
the sum of the graphematic value of the grapheme equals the graphematic value of the whole grapheme

positional transparency

|แปลก|
≠
/plɛ:k/
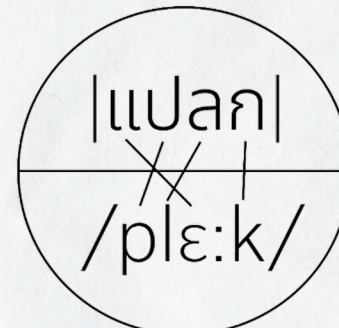
the order of the basic shapes in the signans of a graphematic string corresponds with the order of corresponding linguistic units in the signatum

figure—ground

|妈|

|ب|
/b/

|ا|
/a/

index[2]
2 This is an example note to illustrate meter of index

(MELETIS 2020)

Sociolinguistic typologies

– concern not (only) the system and its structure but the **literate culture/community** (i.e., its members) in which a system is embedded and being used

– center on **concrete realizations of literacy practices**, which are affected by **ideologies of writing**
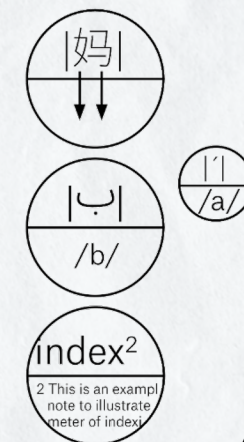
– as our social needs are most aware to us (and thus seem most pressing), sociolinguistic factors can override structural and psycholinguistic ones

– What is the potential for **(social) variation** in a given system? (Does the system allow it? The culture?) What are the **conditions of literacy** in a given literate culture?

  * structural constraints: **zone of social meaning** (not only graphematic but also graphetic), potential for **indexicality** (cf. SEBBA 2007)

  * constrained by linguistic policy, (internalized) top-down prescriptivism (also among members in the form of **grassroots prescriptivism**, cf. LUKAČ 2018), questions of agency

  * How much metapragmatic awareness is there and how is it reflected in discourses?

Sociolinguistic typologies
possible criteria (mutually interacting)

– (non-)integration of foreign material, i.e., **purism**

– visual and/or functional **cultural (un)specificity** (e.g., Roman script as unspecific)

* not only how a system is structured but also who created it (social hierarchies, hegemonies, dominance and subordinance)

– **technological affordances** (e.g., Unicode encoding for scripts)

– pluri**centricity** vs. monocentricity

– qualitative and quantitative **breadth of literacy practices**

– **attitudes** towards standard language (and orthography) and authorities of linguistic policy

– amount of **history**, i.e., age of a writing system and literacy practices in a given culture

– **biscriptality** (cf. BUNČIĆ 2016) and **contact phenomena** (cf., exemplarily, COULMAS 2014)

– types of **orthographic regulation** (community involvement, natural/artificial, codification, variability)

– **status** (alive, moribund, dead)

Idealized interaction of perspectives
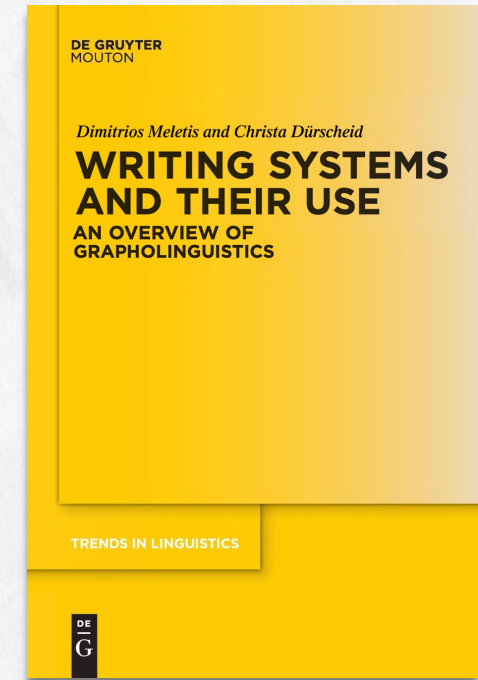
SYSTEM

USE

Structure

Structural linguistics

How is the system structured? →

How does processing (gradually, i.e., diachronically) affect the structure? (e.g., decrease of pictography)

How do literacy practices (and the processing involved in them) diachronically affect structure? +

How do ideologies affect structure? (e.g., by prompting change through orthography reforms) +

Processing

Psycholinguistics

How does the structure affect processing? (e.g., extrinsic symmetry) +

How is writing processed (produced and perceived)?

How do different literacy practices and their conditions and circumstances affect processing?

How do ideologies affect processing? (e.g., attitudes towards fonts or towards practices such as handwriting)

Practices and ideologies

Sociolinguistics

How does the structure affect literacy practices (or variation involved in them) and what are ideologies associated with (features of) structure?

How does processing affect practices, what are beliefs about and attitudes towards processing? (e.g., the difficulty of rules)

What literacy practices are carried out in a given literate community in which one system is/multiple systems are used?

What are the ideologies associated with the system? And with practices?

Conclusion and outlook

– consider as an example the **copy typists** on the cover slide

    ∗ **structure**: they use an alphabet, which facilitates the use of technology such as a typewriter

    ∗ **processing**: they copy by typing (which is automatized for them) while not looking at their own hands

    ∗ **sociolinguistics**: they copy type as a (collective) professional literacy practice devoid of agency

– diverse perspectives combined explain the 'bigger picture' not just for entire writing systems but also specific phenomena

– work on typologies as a comparative-contrastive endeavor can help by identifying and fleshing out criteria and uncovering central commonalities and differences between writing systems and literate cultures

– there is a continuing need to integrate diverse perspectives on writing into a larger unified theoretical framework (in addition to fine-grained particularist work from these perspectives)

DE GRUYTER
MOUTON

Dimitrios Meletis and Christa Dürscheid

WRITING SYSTEMS AND THEIR USE

AN OVERVIEW OF GRAPHOLINGUISTICS

TRENDS IN LINGUISTICS

DE
G̲

Meletis, Dimitrios & Christa Dürscheid (submitted): *Writing systems and their use. An overview of grapholinguistics* (= Trends in Linguistics. Studies and Monographs; 369). Berlin/Boston: De Gruyter.

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