

'Every language gets the writing system its users can process'

Exploring the relation between the **linguistic** and **processing fits**

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Some writing systems are better than others.^[1]

Every language gets the writing system it deserves.^[2]

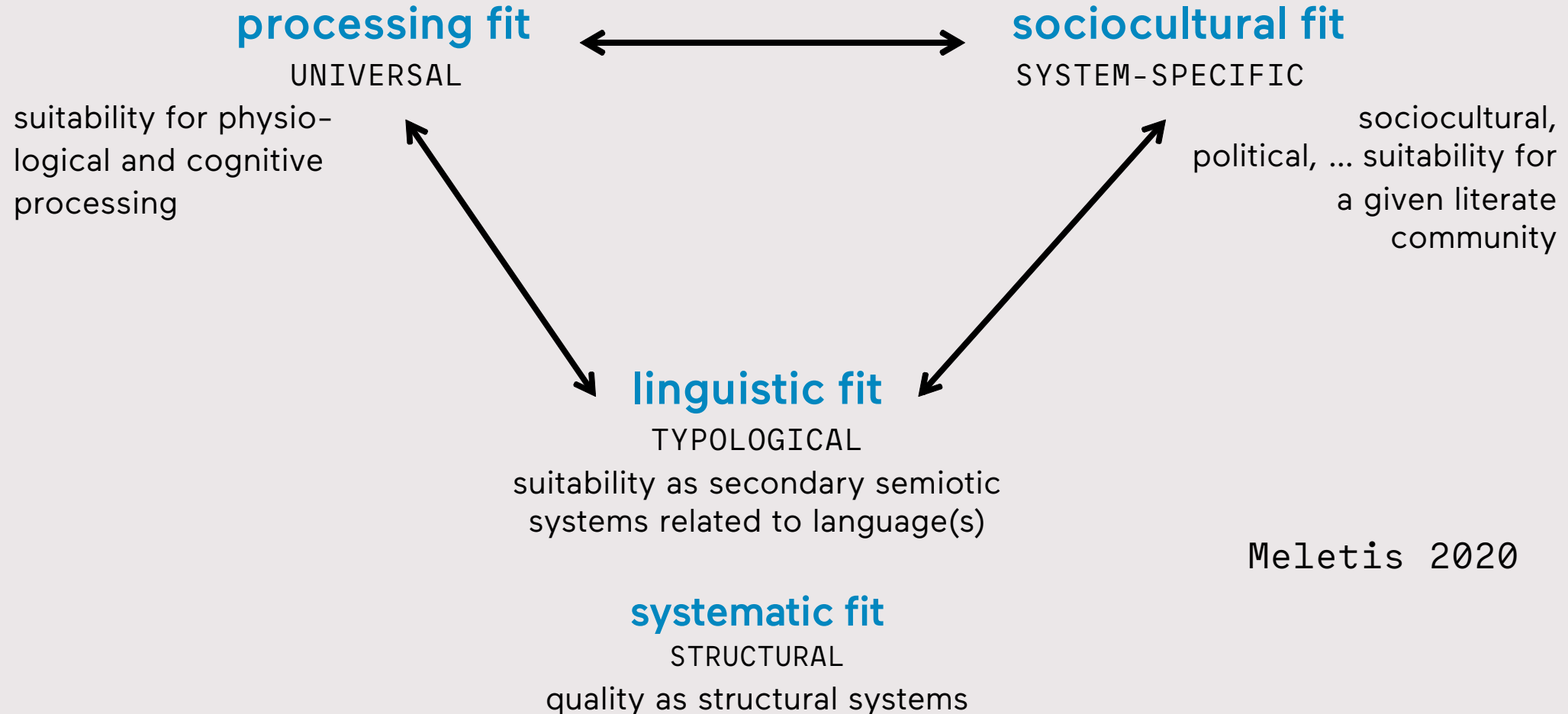
[1] Rogers, Henry. 1995. Optimal Orthographies. In Insup Taylor & David R. Olson (eds.): *Scripts and Literacy: Reading and Learning to Read Alphabets, Syllabaries and Characters*, 31-43. Dordrecht u. a.: Kluwer Academic Publishers. [from page 31]

[2] Frost, Ram. 2012. Towards a Universal Model of Reading. *Behavioral and Brain Sciences* 35. 263-329. [from page 266]

'Big' (research) questions

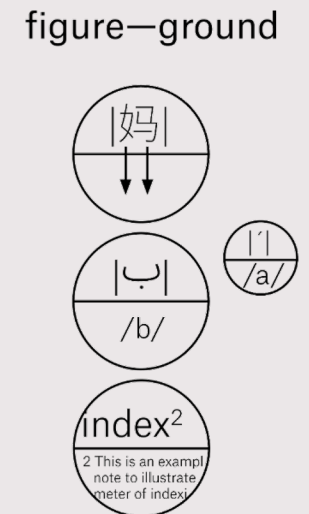
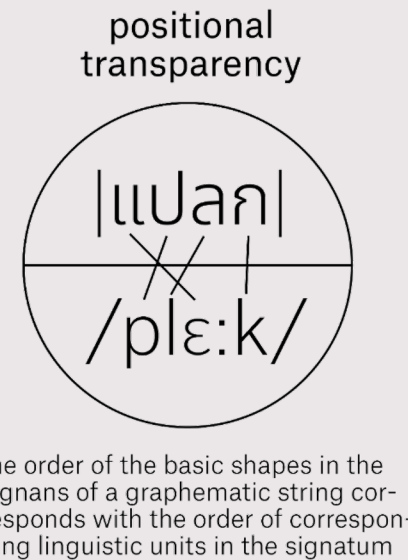
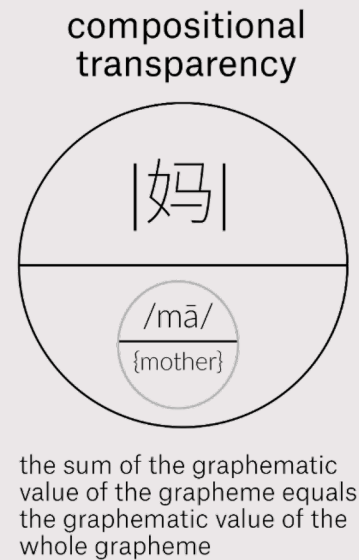
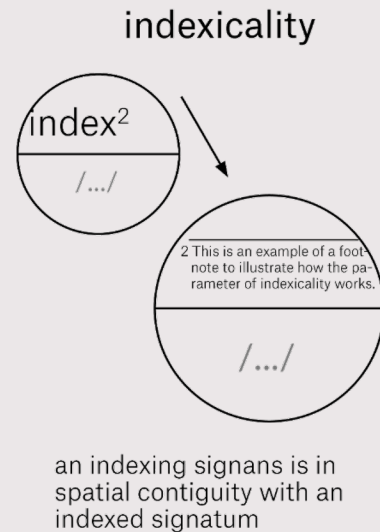
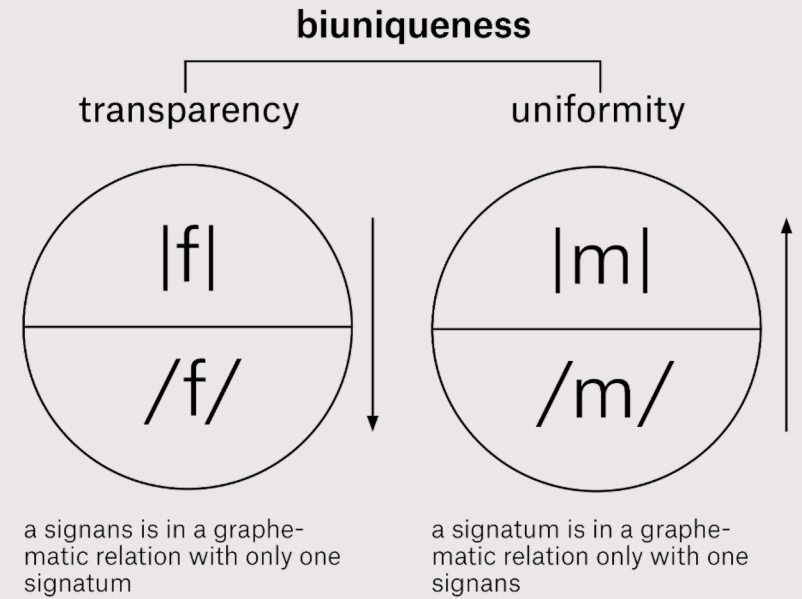
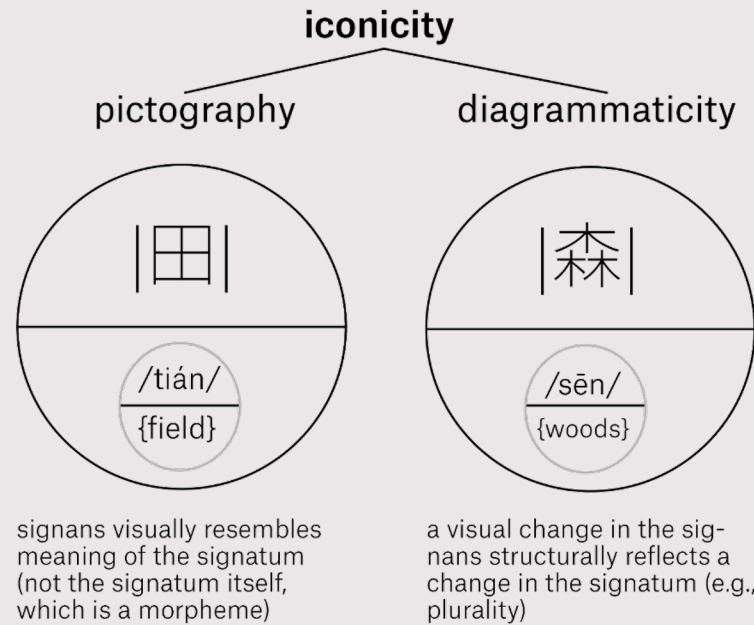
- **Diachrony:** How has processing pressure influenced the evolution of writing systems?
- **Synchrony:** How does the structure of writing systems affect cognitive processing?
- **Universality:** Are there cognitive universals in writing?
- **Sociolinguistic factors:** How does the sociocultural fit interact with the linguistic and processing fits?

Explanation: Multiple perspectives



Meletis 2020

Semiotic parameters: linguistic and processing fits



based on
Meletis 2020

Diachrony: Iconicity

- increasing loss of **pictography** (imagic iconicity)
 - due to the cost of pictographic ‘writing’, its limits for representing language, and standardization (Morin 2023)
 - remains in remnants (e.g., in Chinese) and is coming back (?) in the form of increased pictoriality (e.g., in the form of emojis)
- other forms of iconicity (esp. **diagrammaticity**) are possibly increasing as humans tend to make systems of things (cf. Watt 1983); they are underresearched
 - relevance of the systematic fit and the truly ‘internal’ systematics of writing systems as their own systems

Synchrony: Figure–ground

- **spatiality** as the dominant organizational principle in writing, at multiple levels (Harris 2005)
 - gestalt psychological parameter figure–ground also works at multiple levels, captures difference in graphic salience and studies corresponding functional differences
- writing has afforded segmentality, but that ought not detract from its complex spatial arrangements and combinatorial systematics
- underdeveloped concept of **graphotactics** (especially from a comparative perspective)
- **blank spaces**: unspaced vs. spaced writing systems
- other manners: capitalization (most alphabets), script alternation (Japanese), size differences between mostly vowel and consonant graphemes

Universality: Extension/mixing of levels

- the relations between the graphic modality and 1. the spoken modality as well as 2. the levels of an abstract language system (morphology, syntax, ...) are complex and subject to change
 - a concept like 'dominant level of representational mapping' is necessarily reductive (Joyce/Meletis 2021)
- communicative needs lead to **extension** processes: semantic extension and phonetic/phonological extension (see Handel 2019)
 - these can be observed in most original developments of writing systems as well as in adaptations of writing systems by languages that they were not devised for (e.g., Chinese → Japanese, Sumerian → Akkadian)

Sociolinguistic factors: Sociocultural fit

- concerns 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 as well as **literacy practices**
- 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/culture allow it?) 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 discourse(s)?

Sociolinguistic factors: Sociocultural fit

- (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 subordination)
- technological affordances (e.g., Unicode encoding for scripts)
- pluricentricity 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)

Consequences for a (cognitive) grapholinguistics

- must be **interdisciplinary**, with stronger ties between disciplines
- must establish **uniform concepts** that can accommodate multiple perspectives
- we can and should try out **different theoretical paradigms** and frameworks, 'writing' as a topic is very versatile, showing that writing is language
 - Construction Grammar (Ungerer & Hartmann 2023), usage-based approaches (Schäfer 2023), Naturalness Theory (Meletis 2020)
- **avoiding 'deadly sins'** (Dąbrowska 2016) of cognitive grapholinguistics
 - like focusing on 'outliers' such as English (Share 2008) and ignoring grapholinguistic diversity and variation (Kim & Tjuka 2024)

Thank you for your attention!

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