

# Types of iconicity in phonographic writing systems

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# Goals

- to reintroduce iconicity as **an important object of study** in grapholinguistics
- to present some **intricacies of investigating iconicity** in (phonographic) writing
- to argue for the **explanatory force** of iconicity in **reconstructing the history of writing**

based on Meletis, Dimitrios. in press. Phonographic writing systems. In Olga C. M. Fischer, Pamela Perniss & Kimi Akita (eds.), *Oxford Handbook of Iconicity in Language*. Oxford: Oxford University Press.



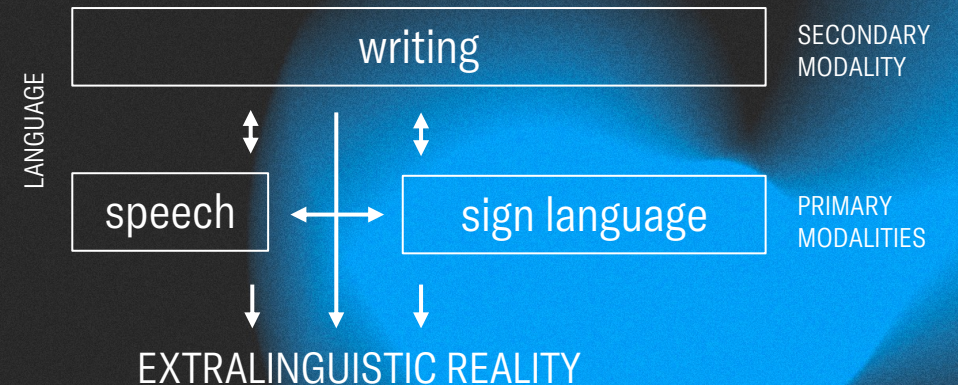
# Iconicity

- writing is often disregarded in discussions about iconicity [Hodge & Ferrara 2022]
- iconicity as a **matter of degree** that is dynamic and dependent on interpreters/observers – it is not an inherent structural feature but is constituted in semiosis [Nänny 1999: 174]
- any investigation of iconicity in writing is an **analysis of iconicity in symbolic signs** that derive their function(s) through **convention(alization)** [Nöth 2001: 19]



# Complex relations—Multi-iconicity

- writing as a **secondary semiotic system** → written units relate not directly to extralinguistic referents (or abstract concepts of these) but are associated with (other) **units of language** that are primarily spoken (or in rare cases signed)
- narrow definition of writing: **only ‘glottography’ as writing** (vs. ‘semasiography’)
- writing may be iconic with respect to [1] **itself**, [2] **the other modalities of language**, or [3] **extralinguistic referents** (bypassing the linguistic units in between)





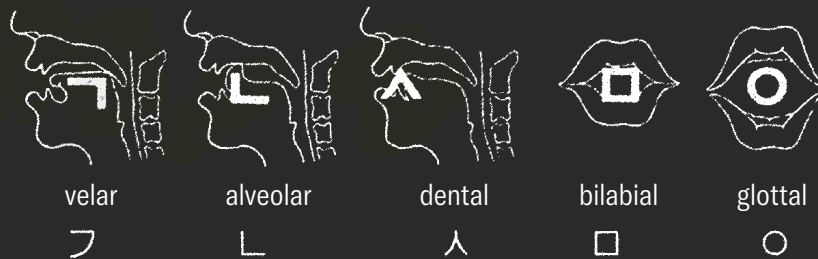
# Iconicity in writing—Morpho- vs. phonography

- **double articulation** (or dual patterning):
  - morphemes have meanings that can potentially be depicted
  - phonological units (features, phonemes, syllables) are **meaningless, empty, ‘cenemic’**; thus, iconicity in phonography (or phonographic iconicity) functions at a different level than in morphography, at least in the case of the most salient and well-studied type of imagic iconicity
- question: **What kinds of iconicity are possible and actually observable in primarily\* phonographic writing systems?**
  - \*this typological label concerns the segmental level that is relevant for the typological category of a writing systems; at ‘higher’ levels, in phonographic systems, too, what is written is morphological, lexical, syntactic, etc. units



# Imagic iconicity ≈ Pictography

- “the sign evinces an immediately perceptible similarity to its object of reference” [Nöth 2001: 21]
- phonological units are **just ‘form’**, and in the acoustic medium, i.e., a different medium of transmission from that of writing
  - also: different primary dimensions (time for speech, space for writing)

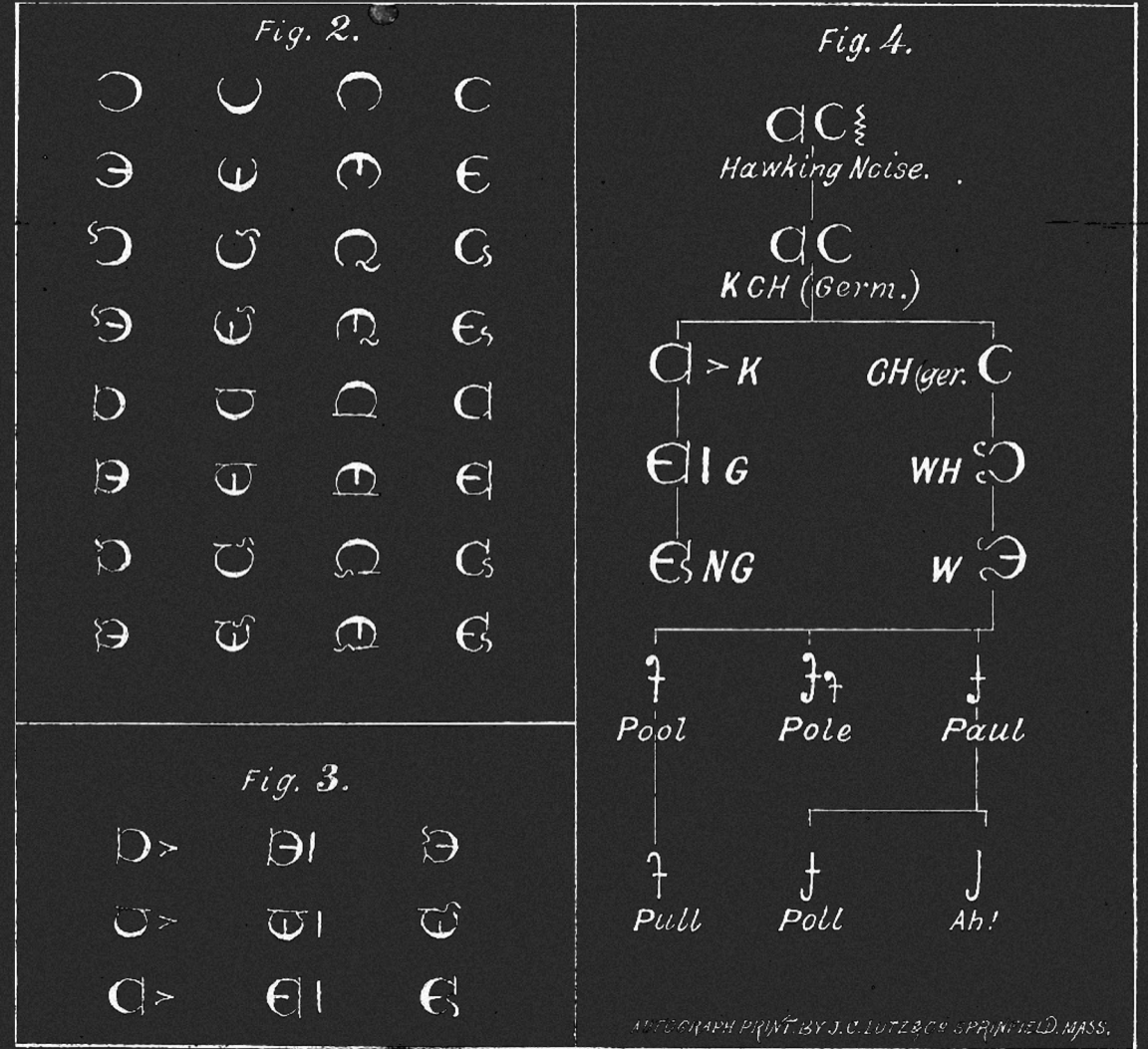
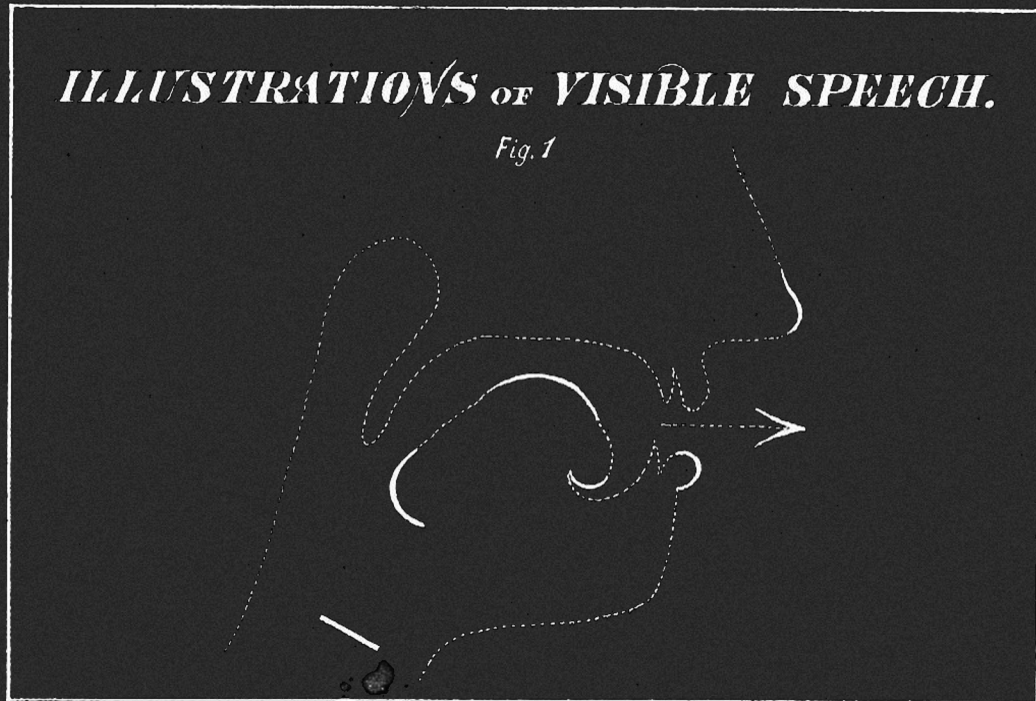


## KOREAN HANGUL

- such a prominent feature it has fueled typological confusion (surrounding a ‘featural’ type, cf. Sampson 1985)
- shapes depict not sounds but **visually approximate places, modes and/or organs of articulation** involved in their production
- imagic iconicity at a **metalevel** (and from the perspective of production): (metalinguistic) **awareness or explicit knowledge** of how a sound is produced is necessary to recognize this iconicity
- not completely coherent: direction is switched from sagittal (velar, alveolar, dental) to frontal (bilabial, glottal) – **‘directional iconicity’** [Kim 2011]
- **syllable blocks** also a type of imagic (or metaphoric?) iconicity, echoing sinography



# Imagic iconicity





# Dependency reversal—Letters in word formation

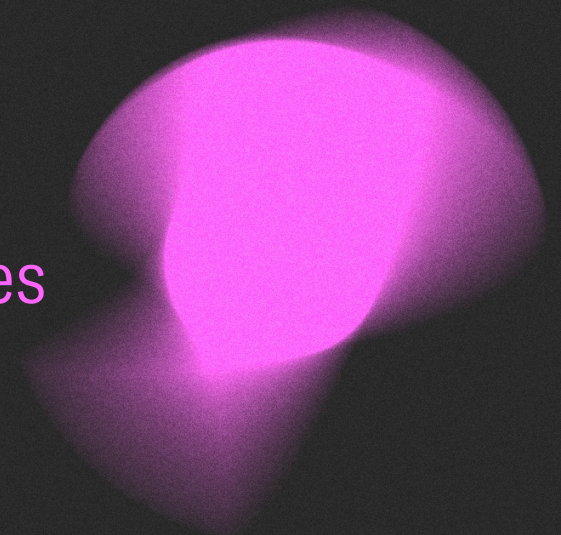
**word formation strategy** referring to the **shapes of units of writing** (see, for example, Brekle 1981); their functionalization as letters has made them available to us as **palpable cognitive categories**, increasing the resources available for verbalizing our visual perception

- **English** *s-curve*, *T-shirt*, *U-turn*, *V-engine*, **German** *O-Beine*, **French** *décolleté en V*, *jambes en X*, **Portuguese** *curva em S*, **Greek** σε σχήμα Π, γάμμα γωνία, **Russian** Д-образный, **Chinese** 田字格 *tianzige*, “field-shaped” (circular example), **Japanese** Vネック



# Writing as a visual sign of our cognition

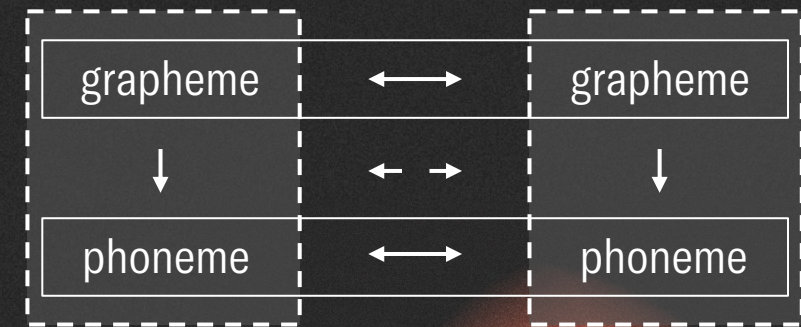
- the Changizi et al. (2006) study, again
  - visual configurations of natural scenes were found in the topological configurations of shapes in the world's scripts “because that is what we have evolved to be good at visually processing”  
[Changizi et al. 2006: E117]
  - shows that visual perception imprints on writing, constituting an abstract form of exophoric imagic iconicity
- writing as iconic with respect to the (visual) cognitive abilities of humans
  - also Morin 2018: the preference for cardinal strokes





# Diagrammatic iconicity $\approx$ Systematicity

- “the similarity between the sign and its object is only a structural or relational one” [Nöth 2001: 21]
- strongest manifestation: **visual similarity being correlated with linguistic/functional similarity**
  - example: <m> and <n> have similar shapes and both represent nasals
  - visual ‘length’ of syllable boundaries across writing systems (in Roman, Greek, Armenian scripts); in general: **vowels vs. consonants in segmental writing systems**
- focus on **endophoric iconicity** on two levels/axes
  - [1] within the writing system (syntagmatic?) and [2] between the writing system and other linguistic structures in a language (paradigmatic?)
- segmental transparency as a focus of psycholinguistic research on literacy
  - but systems are arguably stronger if not every segment is holistically individual, i.e., if there are **systematic shared features (featurality? to what degree?) and thus subsets**





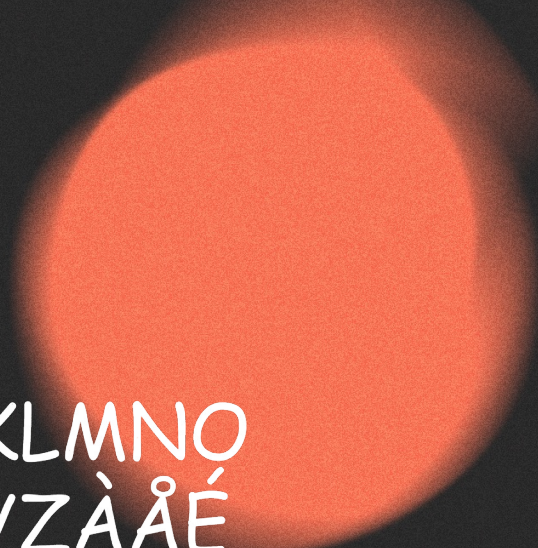
# More musings about diagrammaticity

- tight connection between cognition and diagrammaticity [Krämer and Ljungberg 2016; Dingemanse et al. 2015]
- diagrammaticity as the **product of (unconscious) homogenization** of units in a writing system [Watt 1983; Treiman & Kessler 2011] – diagrammaticity in language as **systematicity** [Haspelmath 2014]
  - this should happen without units collapsing, however; how much similarity is too much similarity?
  - **how** are systematic subsets (e.g., vowels vs. consonants) formed in this process?
  - also at the ‘purely’ material level, e.g., typography [Sanocki & Dyson 2012]
- in this diachronic, ‘evolutionary’ perspective, **time and (degree of) use** are of relevance (cf. *invisible hand theory*, Keller 2014)
  - distinguishing older from newer systems and ‘naturally grown’ systems from consciously designed ones (such as Hangul) – including the features found in them (such as iconicity)



# Metaphoric iconicity ≈ Indexicality

- is the loosest type of iconicity; it is “mediated iconicity” as the “ideas conveyed by the sign and the idea of its object are mediated by a third idea” [Nöth 2001: 21]
- depends on specific (cultural, ...) knowledge
- example: ‘fontroversies’ [Murphy 2017] show that lay users are aware of the indexical potential of written materiality and care about it, so much so that they engage in vocal metapragmatic negotiations about it



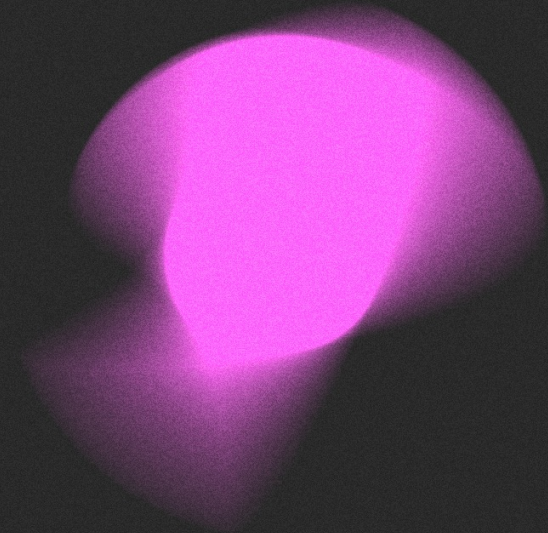
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# Evolution of iconicity in writing—The gist

- similar to language [Dingemanse et al. 2015]
- **imagic iconicity** practical in the **initial creation and dissemination of signs**, impractical in actual usage (and unsuited for a full representation of languages)
- here, **diagrammatic iconicity** takes over as a systematizing force, **bringing similarities into a system of (increasingly) arbitrary signs**
  - diagrammaticity drives, helps, and coincides with conventionalization and standardization
  - standardization as a problem of graphic codes? [Morin 2023]
- **metaphoric iconicity** is then relevant in the **adaptation and use of writing systems** since they are never created/adapted or used in a vacuum





# So what?

- because writing systems are ‘language-like objects’ (or just language), many more concepts illuminating in general linguistics (e.g., allophony, allomorphy) and semiotics should also be illuminating in grapholinguistics, especially from explanatory—both synchronic and diachronic—perspectives (*Why are writing systems the way they are?*)
- to uncover their potential, writing systems should be studied independently (in addition to studying their relations to languages)
  - we should focus more on relations between units within writing systems



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