Amsterdam, October 19, 2023

The concept(s) of STYLE

in an evolutionary linguistic framework

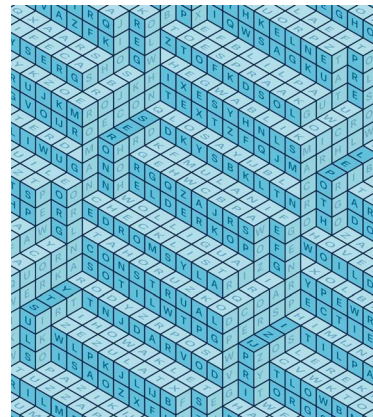## Arie Verhagen

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Overview

- Advance warnings (managing expectations…)
  - scratching the surface of several complex issues to make a simple point
  - (for the theory of perspective taking, see Verhagen 2023)

- Defining Style
  - limitations (problems?)
- Scientific terms: problem of metonymies
  1) case study of *Evolution*
  2) introducing evolutionary thinking
- Evolutionary linguistics
- Style and variation
- Conclusion

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"STYLE"?

Definition and mechanisms in
Stukker & Verhagen (2019)

Stijl, taal en tekst

STILISTIEK OP TAALKUNDIGE BASIS

LEIDEN UNIVERSITY PRESS
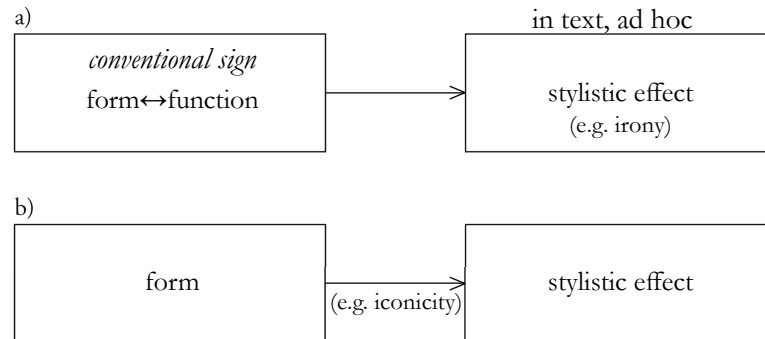
Ninke Stukker en Arie Verhagen

Defining "style"

- Toolan (2014: 13; 15) – on the theory and philosophy of stylistics
  - "… I will not discuss style itself, as a concept or theory…"
  - "It is stylistics that undertakes to be precise, analytical and verifiable about the grammar that underlies and creates the literariness effects which in turn induce readers to reach for such complex evaluative terms as *shambling, strident, alienated, terse, passionate, placid* and so on."

- Stukker & Verhagen (2019: 29)
  - "A particular combination of construals in a coherent collection of linguistic utterances"
    - *construal*: different representations of the same object of conceptualization
    - *coherent:* same text, same author, same genre, …

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Different mechanisms

- Stukker & Verhagen (2019: 31)
  - Forms, functions, and effects

a)

| *conventional sign* form↔function | → | stylistic effect (e.g. irony) |

in text, ad hoc

b)

| form | (e.g. iconicity) → | stylistic effect |

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Different mechanisms

BOOM
KETTLEDRUM
FLAT

everything
O_h_____O_h

racing again violins cellos basses brass triangle
drums KETTLEDRUMS
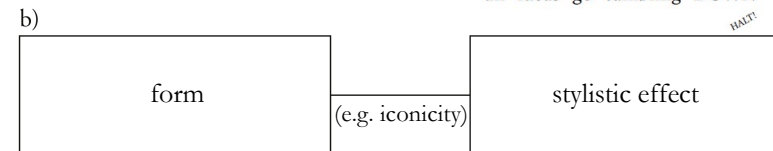racing running racing running racing RUNNING
STOP!
drama in full battle tarts snakes throwing themselves at honourable
gentlemen the family falters the factory falters
honour   falters   lies   there
all ideas go tumbling DOWN

HALT!

b)

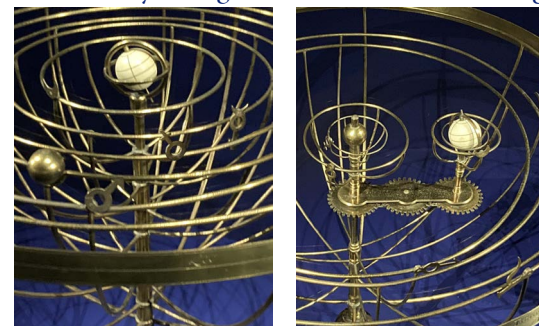| form | (e.g. iconicity) | stylistic effect |

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Lexical semantics

- Instance of a much more general point: metonymies
  - *school* as an institution, *school* as a building
  - different causal processes: *explanations* of one differ from those of the other

- In addition: yet more senses of *style*
  - In *verb-framed* languages ("V-languages") path is expressed by the main verb in a clause ('enter', 'exit', 'ascend', etc.), whereas in *satellite-framed* languages ("S-languages") path is expressed by an element associated with the verb ('go in/out/up', etc.). […] The aim is to come to a fuller explanation of the ways in which languages differ in *rhetorical style*. (Slobin 2004: 219-220)

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Lexical semantics in science

- In science (aiming at explanation): sense dependent on theory
  - theory change → lexical semantic change

Newton

Mass & energy are very different things.

Einstein
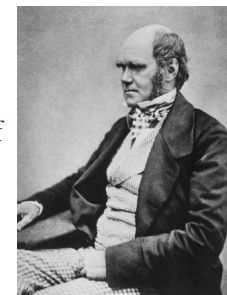
Mass & energy are interchangeable:
$E = mc^2$

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METONYMIES IN SCIENCE

A lexical-semantic and philosophical project – the case of *Evolution*

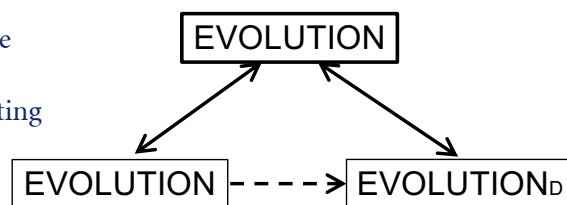## Darwin and scientific semantic change

Evolution

1. Variation (in a population of replicators, e.g. organisms)
2. Selection: variant with feature F has higher chance of being replicated than variant without
3. Heritability: features are passed on reliably in replication ('offspring resembles parents')
→ Frequency of F in the population will increase, cumulatively

1) change of relative frequencies of variants in a population, over generations
2) through natural selection

Scientific and semantic change

- In a particular community of scientists
- "evolution": from
  - process of gradual change
- to
  - process of change exhibiting the logic of Darwin's algorithm

EVOLUTION

EVOLUTION - - - -> EVOLUTIOND

- EVOLUTIOND is an extension of EVOLUTION
  - Gives rise to (implicit) schematic notion EVOLUTION

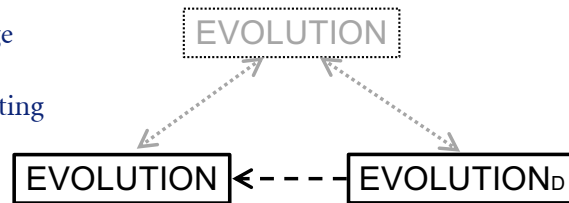## Given a theory, terms have a precise meaning

- 'Evolution' of solar system: variation (objects of different size, composition and position) and (blind) selection (some have more chance of 'surviving').
- But no replication, so not 'Darwinian'

Scientific and semantic change

- In a particular community of scientists
- "evolution": from
  - process of gradual change
- to
  - process of change exhibiting the logic of Darwin's algorithm

EVOLUTION

EVOLUTION ◄ - - - - EVOLUTION$_D$

- Specific sense becomes conventional, in some communities (other uses as extensions)

Population thinking

- Darwinian evolution:
  - Change in relative frequencies of variants in a population, over generations
  - "Populations evolve, individuals are selected"
  - Not preprogrammed, unlike *development*: "growth", "life history"
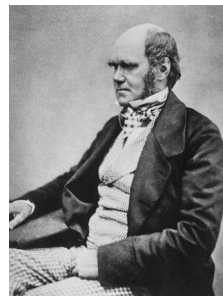

Darwin's algorithm: "substrate neutral"

Evolution
1. Variation (in a population of replicators)
2. Selection: variant with feature F has higher chance of being replicated than variant without
3. Heritability: features are passed on reliably in replication
→ Frequency of F in the population will increase, cumulatively

- Other instances than living beings
  - culturally transmitted information units (Dawkins' 'memes'), conventions (evolutionary game theory), scientific knowledge, technical practices, …, and languages
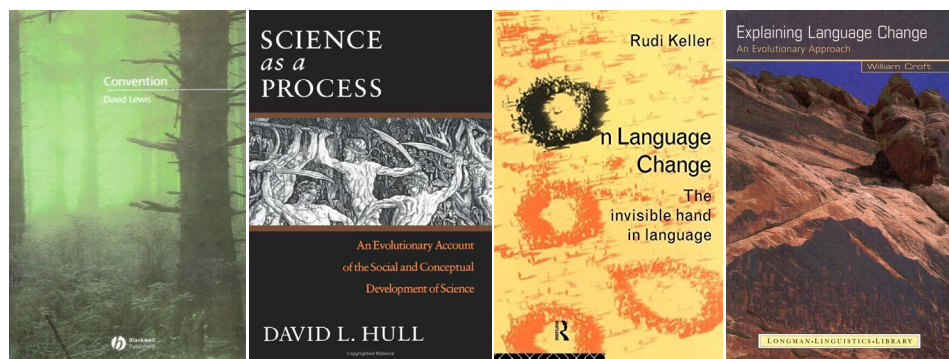

"… curiously the same …"

The formation of different languages and of distinct species, and the proofs that both have been developed through a gradual process, are curiously the same. […] We see **variability** in every tongue, and new words are continually cropping up; but as there is a limit to the powers of the memory, single words, like whole languages, gradually become extinct. As Max Müller has well remarked:—"A struggle for life is constantly going on amongst the words and grammatical forms in each language. **The better, the shorter, the easier forms are constantly gaining the upper hand, and they owe their success to their own inherent virtue.**" To these more important causes of the survival of certain words, mere novelty may, I think, be added; for there is in the mind of man a strong love for slight changes in all things. **The survival or preservation of certain favoured words in the struggle for existence is natural selection.** [Darwin 1871: 59-61]

- Gradual emergence through unintentional selection of variants

20th century: Generalized evolutionary theory

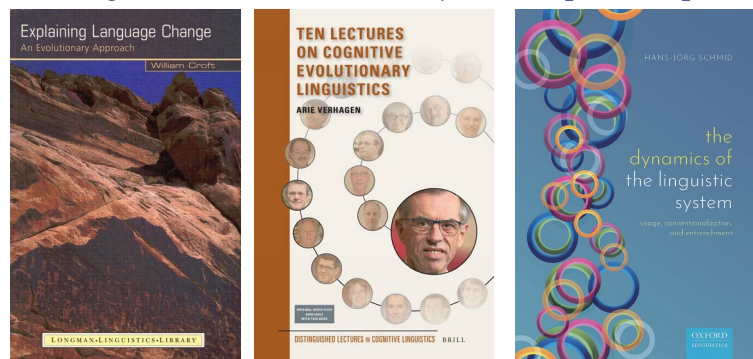Lewis (1969)   Hull (1988)   Keller (1994)   Croft (2000)

EVOLUTIONARY LINGUISTICS

More metonymies – *grammar, meaning, …*

Evolutionary linguistics

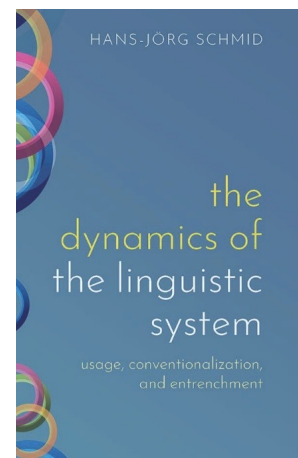- "Usage Based" – "Evolutionary", "Complex Adaptive System"

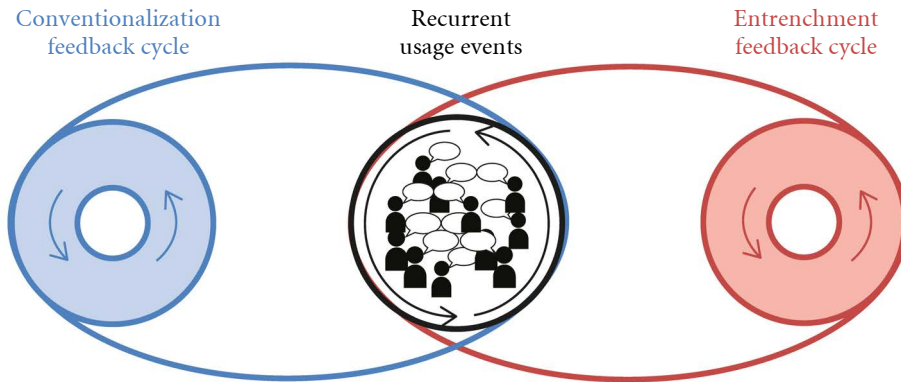Croft (2000)   Verhagen (2021)   Schmid (2020)

"Entrenchment-and-Conventionalization"

- Conventionality
  - is a population level phenomenon (cultural evolution, language history)
- Entrenchment
  - is a psychological, individual level phenomenon

- Both driven by recurrent usage, both unintended results of goal-directed action
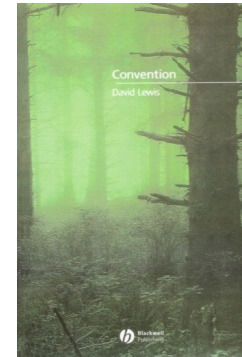 - A language as a collection of conventions is of the first type

"Entrenchment-and-Conventionalization"

Conventionalization feedback cycle

Recurrent usage events

Entrenchment feedback cycle

Different phenomena, causally connected

Conventions
- Culturally evolved, shared resources for solving recurrent communication problems in a community
- Comprise *mutual expectations* (**rules, norms**)
- Equally useful for frequent and infrequent communication tasks

Entrenchment
- Ontogeny: result of repeated individual experience
- Comprises routines (habits)
- Especially useful for frequent tasks: grammar

The meaning of terms, given theories

Cognitive science
- *Convention*
- *Habit*

- …

Biology
- *Development*
- *Evolution*
- …

Linguistics
- *Meaning*
  - Speaker (signal)
  - Community (signs)
- *Grammar*
  - Knowledge (routines)
  - Rules/norms
- …

- How does *Style* fit in, in this way of thinking?
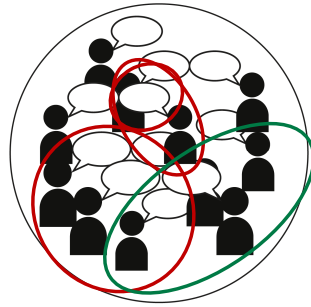 - Individual level? Habits?
  - Population level? Conventionality?

"STYLE" AND VARIATION

in evolutionary linguistics

Styles (1)

- Given a language, i.e. a set of conventions of a community
  - Style of a text: "style", a determinant of discourse interpretation and evaluation
  - Personal style: ≈ habits (cf. 'idiolect'), interpretable (and usable) as signal of individuality

  - Style of a genre: conventions for a particular kind of 'language game' (implies a community)
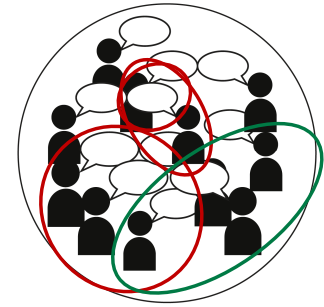
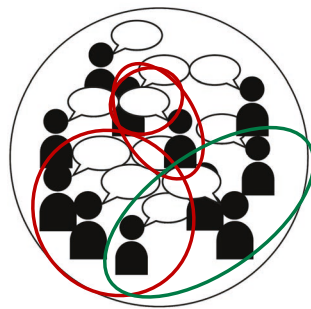Common: predicated on **variability**

Variability and construal

- Within a language
  - Linguistic items (replicating units) allowing different construals of the same OC, in some domains
    - subordinate/basic/superordinate categories, *tu/vous*, …
    - active/passive, direct/indirect causation, coordination/subordination, …
  - Style: several items combined, recognizably, interpretable
- Combinations replicated together
  - possibly conventionalized, in particular subcommunities
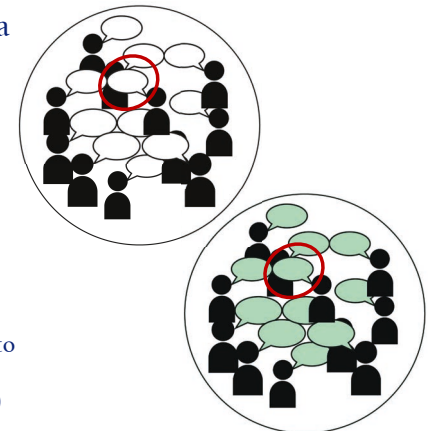
Variability and construal

- Combined replication → style as a causal factor in the cultural evolution of a language

Variability and construal

- Combined replication → style as a causal factor in the cultural evolution of a language
- "Style" cross-linguistically
  - In *verb-framed* languages ("V-languages") path is expressed by the main verb in a clause ('enter', 'exit', 'ascend', etc.), whereas in *satellite-framed* languages ("S-languages") path is expressed by an element associated with the verb ('go in/out/up', etc.). […] The aim is to come to a fuller explanation of the ways in which languages differ in *rhetorical style*. (Slobin)

CONCLUSION

Conclusion

- Style as a concept
  - "interpretable variation"
    - independent of distinction between population and individual level (conventional/personal)
  - → observable only with access to the variation
    - not accessible from within a community sharing conventions

- Linguistic style as (combination of) construal(s)
  - remains useful as definition (even cross-linguistically 😀)
  - is a factor in the cultural evolution of a language, especially through combined replication of linguistic variants

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