

Substance(s) and the rise and imposition of structure(s)

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Overview

- 0. Introduction
- 1. The rise and fall of structure
- 2. Substance as the object of structuring processes
- 3. Structure in society, mind and utterance
- 4. Structure and variation
- 5. Conclusions

Introduction

- Main points:
- Substance is (simply!) the stuff that a kind of structure can be imposed on – hence the distinction between substance and structure is relative to the type of structure that constitutes the target of inquiry
- There are three crucial language-imbued 'substance types': community cultures, minds, and usage events; 'a language' as we usually understand it is the set of equivalences between them (in a given population)
- This reorganization removes the dichotomy between 'usage' and 'structure' – there is structure in usage as well, which is not quite the same as structure in minds and communities

Introduction

- 'Content substance' in the form of a universe of potentially conveyable shared meaning is a precondition for the rise of a language (cp Tomasello 2008)
- A language begins when *sameness-of-meaning* is associated with linguistic expressions: Exemplars in individual minds are presupposed, but only become linguistic when subsumed by a category
- Establishing categories of sameness is the basic (top-down) structuring operation that a language imposes on content substance
- This is also a precondition for variational analysis – making the language system part of the *substance* domain of variational linguistics

1. The rise and fall of structure

- Danish Functional Linguistics (cf. Engberg-Pedersen et al. 1996) has a structuralist heritage, reflecting the interweaving of structure and function in the European linguistic tradition, cp Haspelmath (yesterday).
- A functional-cognitive approach needs to re-assess the role of structure
- The first step, which has been uniformly reflected in the papers of this conference, is to reverse the direction of inquiry: instead of taking structure for granted and then looking for functional-cognitive substantiation, the point of departure is the substance domain under investigation
- This enables structure(s) to have an essential role without being autonomous – but the polarized atmosphere has prevented a constructive discussion

1. The rise and fall of structure

- The reified role of structure in linguistics is partly due to the very special ontology of languages
- Languages exist in different substances and locations – at least three are crucial:
- The community, the individual mind, and actual usage
- Once you have set the target of describing 'a language', (or even worse, 'language') as a unified object of description, you are forced to *abstract* from such differences
- This way language in itself comes to be seen as an abstract structure 'underlying' all these 'manifestations'
- The very object of description gets imbued with abstraction before the analysis has even started

1. The rise and fall of structure

- Instead of starting with an assumed *unified* object manifesting itself in different forms, we should start with *different* objects and look for equivalence relations between them
- This step is analogous to the step from universal grammar to radical construction grammar (Croft 2001)
- But I think the imposition of sameness relations is a necessary corrective to a purely bottom-up directionality of inquiry

2. Substance as the object of structuring processes

- Substance in an Aristotelian perspective: The concepts of *ousia*, *hypokeimenon* and Aristotle's theory of how objects undergo change
- An Aristotelian approach allows a perspective where structure is seen as something that may be *added* to an independently existing 'substance'
- Two possible perspectives on this 'before-and-after': real dynamic change and descriptive thought experiments

2. Substance as the object of structuring processes

- Structural properties can be understood as imposed upon pre-existing substances
- If you order a copy of a latchkey, the shopkeeper takes a *substance* (a blank) and imposes the relevant structure on it
- A babbling baby begins by producing unstructured sound *substance* – but gradually imposes structure(s) on it
- Structure in the sense of 'structuredness' can be a universal design feature of human language without any *specific* structures being universal (cp. Radical Construction Grammar)

2. Substance as the object of structuring processes

- Two basic substance domains are presupposed in order to be able to speak of linguistic structure at all (cf. Hjelmslev 1943):
- *Content* substance in the form of conveyable meaning (=potential communicative functions)
- *Expression* substance in the form of behaviours that can convey it
- Content substance is the foundational stratum: it cannot be replaced with anything else (while several expression substances are available)
- The latter is a functionalist change from Hjelmslev!

2. Substance as the object of structuring processes

- In accordance with the dynamic Aristotelian perspective, it is useful to see structures as arising and crumbling all the time from Olduvai Gorge until today (cf also Croft 2000)
- But in between arising and crumbling, structures are real
- Analogously with structural categories in biology – the Panda's 'thumb' is a maxillary bone that was readapted, cp Gould

2. Substance as the object of structuring processes

- The analysts's task is to capture structure that is already there (rather than impose it)
- In this respect, linguistic objects of description are no different from all other objects (solids, governments, or weather systems)
- The key operation is a pincer movement: uncover relevant regularities and assign a conceptual category label to them
- Such category labels are never in themselves 'true' (not even descriptive categories!) – but they may grasp structures more or less adequately

2. Substance as the object of structuring processes

- The analyst works by trying to apply categories to the object of description (as working hypotheses)
- But he must demonstrate that his descriptive categories 'carve nature at the joints' (capture similarities between phenomena that his categories subsume, and differences that correspond to his distinctions)
- Without such *validation* of descriptive categories, phlogisticated accounts would spread uncontrollably
- Hjelmslev (1943) captured this duality by saying that the descriptive metalanguage must be 'arbitrary but appropriate'

3. Structure in society, mind and interactive events

- Structuring is essential in societies as well as minds and interactive events:
- In societies, institutional structures determine collective action potential (cf. 'failed states': are functions like education and taxation achievable?)
- In individual minds, neurocognitive structures determine individual action potential (riding a bicycle, playing the violine, speaking)
- In interactive events, actual discursive moves may succeed or fail depending on successful structuring ('getting your act together')

3. Structure in society, mind and interactive events

- Language structure in a society/population is an institutionalized *system* (analogous to the education system). Systems are underpinned by 'cultural laws' that are superimposed upon natural laws (cp Searle on 'status functions')
- Language structure in the individual mind is a *competency* (with a $-y$), enabling the user to draw on the cultural laws for assigning meaning to expressions
- Language structure in actual utterances is a complex interactive *event* structure

3. Structure in society, mind and interactive events

- The classic hypostatization saw a language as the same object, but manifested in mind, society and actual events (to the extent actual events differed, it was merely 'performance' / 'accidents de la parole')
- But if we start with the different substance domains, we would assume there were differences associated with the nature of the substance:
- To take an example: language in the speaker's mind must be set up so that linguistic meanings are closely linked with rapid and efficient *procedural* operations – *conceptualization* (the keyword in cognitive linguistics for the stuff language is made of) is not sufficient
- This does not apply in the same way to the structure of the language in a written *text*

3. Structure in society, mind and interactive events

- The basic 'sameness' that all social systems depend on is shared 'content' categories
- If we don't agree what pieces of paper count as money, payment won't work
- This property is not inherent in each exemplar on its own – it is conferred by shared 'status functions', cf. Searle
- Some categories have a natural basis ('natural kinds') – but the study of linguistic categories consists in finding out what categories different 'cultural laws' impose on 'exemplars' of community life
- Honorifics is an obvious example of linguistic categories that presuppose culture-specific categories enforced top-down

3. Structure in society, mind and interactive events

- At the level of competency, the semantic structure must be part of a well-adapted individual's cognitive system
- This means that proposed categories are 'psychologically real'
- But if the target is cross-linguistic, typological categories, we are not describing something inside an individual mind, but something that inherently involves an act of comparison between several individuals ('comparative concepts', cf. Haspelmath)

3. Structure in society, mind and interactive events

- Two levels of comparison are possible:
- One goes directly from content substance to cross-linguistic categories: How would speakers of different languages express meaning 'X'? (cp questionnaires)
- This presupposes cross-linguistic sameness of content substance, which is realistic in some cases (spatial relations) and less so in other cases (honorifics)
- The second compares (aspects of) language systems: in addition to content substance, generalizations over structures ('strategies', cp Croft) are presupposed
- In this operation, structural generalizations *within* a language are input to the operation of discovering structures *across* languages
- These generalizations are only visible to the linguist, not the speakers of individual languages - but categorizations in other sciences (e.g. categories of biological organisms) have the same problem

3. Structure in society, mind and interactive events

- The account suggested here entails that structure exists also in actual usage, instead of being the antonymic opposite, as in 'language structure vs language use'
- This classic opposition is based on the idea of language as underlying monolithic structure that is 'manifested' in use
- If usage is regarded as a substance domain, we can ask what structuring occurs in actual usage as opposed to structuring of social conventions and cognitive competencies

3. Structure in society, mind and interactive events

- The substance domain is situational interaction (but by assumption a shared universe of conveyable meaning is part of the situation)
- The structure that is imposed is *partly* recruited from conventions and competency
- But what is imposed are the *actual* structural elements used by the speaker, not the whole *potential*
- This process of structuring is known as 'articulation' or 'formulation', cp Keizer & ten Wolde (yesterday) – which imposes a pattern that changes the situational potential

3. Structure in society, mind and interactive events

- As in the case of competency, the structure that is imposed depends on the properties of the available substance
- While competency needs to interweave with procedural wiring, actual utterances need to interweave with situational factors
- Utterance structure therefore has systematic differences from cognitive structure or institutional structure (as pointed out in conversational analysis)
- But this does not entail that conventions and competencies are figments of imagination, as sometimes suggested in CA

3. Structure in society, mind and interactive events

- The collective arena (=community) is fundamental to the rise of human languages
- Ways of conveying meaning can only exist in a community of at least two – one individual is not enough
- The community as such has to exist before it can be enriched by the rise of a language in it.
- More specifically, a 'substance' of conveyable meaning has to exist in the population before linguistic structure can be imposed upon it – so 'meaning competency' has to come first
- Imposing linguistic structure creates an institution – and the **linguistic** competency of individuals cannot precede the formation of the institution: before there is a 'langue', an individual cannot 'know' it

3. Structure in society, mind and interactive events

- This is not a paradox, but an evolutionary spiral
- Cultural niche construction (cp Deacon 1997) means that human beings create a cultural environment (including a language system) - to which they then adapt (by acquiring it)
- This means that there are two interlinked processes going on between individuals and the community: a top-down process where individuals aim for a target in social space, and a bottom-up one in which individuals produce communicative innovations
- This is a difference in the causal setup of cultural niche evolution compared to genetically driven evolution

4. Structure and variation

- The fundamental substance domain of variational linguistics is community practices, not the mind
- Geographical variation can in principle exist without being represented in the individual mind at all
- Structure in the geographical substance domain may take the crude form of lines on a map signalling borders between variants
- Here, too, structure can be understood as imposed on a substance that might not have it – or might lose it again, cp. obsolete dialect maps

4. Structure and variation

- But the Labovian standard case is one in which variation also enters into the patterns of speech of individual speakers
- Using or not using postvocalic $-r$ (to take a classic example) is also an aspect of individual competency
- It represents a individual adaptation to a variational parameter in the community

4. Structure and variation

- Variational linguistics is often seen as an alternative to structural linguistics
- In fact, Labovian variational linguistics can only be understood as a form of structural analysis – superimposed on a previous layer of structural analysis
- Hence, it operates upon a linguistic 'substance' that includes structural categories (the language 'system')
- Otherwise there would be no way to distinguish the \emptyset variant of postvocalic $-r$, as in the pronunciation [pɑ:t] for 'part', from simple non-occurrence of the $-r$ phoneme in the morpheme - as in the pronunciation [pɑ:θ] for 'path'

4. Structure and variation

- Ignoring variation as part of structure was due to the structuralist obsession with monolithic structural simplicity ('elegance'): The more you ignore, the neater structures you get
- Variation (from that point of view) clutters up structural simplicity
- But it has the same duality as ordinary structure: it establishes relations of sameness and difference in community life, to which individuals adapt
- A so-called structural description that ignores variation is simply incomplete

4. Structure and variation

- There is also another type of variation, which may be called 'fluctuation'
- Fluctuation does not impose new distinctions, but constitutes a limitation on the force of structural distinctions (primarily in actual usage, but derivatively also in system and competency)
- As pointed out by Croft (e.g 2009), often a range of variational alternatives can encode the same content, so differences may not matter
- But *situational* non-distinctness is not the same as non-distinctness in terms of *system* or *competency*
- And fluctuation (which *blurs* distinctions) is different from Labovian variational patterns (which *impose* distinctions)

4. Structure and variation

- The basic directionality of change is bottom-up (from usage to system and competency)
- But the strictly bottom-up pathways meet up with top-down mechanisms
- In the social arena, hierarchical selection pressures impose forms of standardization (also in social networks on the web)
- In the ontogenetic perspective 'lazy learning', consisting only in storage of usage exemplars, is supplemented by generalizations, minimally in the form of identifying word types (cf. Kapatsinsky 2014), i.e. 'samenesses'.

5. Conclusions

- Following Aristotle, we can be precise about structural properties only by profiling them against those substances which they structure
- Three crucial substance domains for language are the speech community, the human mind and actual communication
- Each of these has different features - but they share enough content structure to avoid Babel

5. Conclusions

- Community-level meaning is based on Searlean 'status functions' ('cultural laws')
- These exert selection pressure shaping individual competencies - tending to make e.g. Englishmen more liable than Danes to operate with categories like *solicitor* and *Lord*
- Usage events draw on competencies, but also on situational needs (that exert their own selection pressures)
- Structure in the sense that is shared between the three is built on 'sameness' relations between expressible substance meanings
- These partly emerge from below (everyday experience) and are partly imposed from above (like peerages)

5. Conclusions

- Cross-linguistic categories have no correlate in the community (including individual minds adapted to community life).
- They may be more or less directly applicable to community-specific instantiations – but this is not necessary for them to be appropriate (cp honorific systems in Japan vs. Denmark)
- Their appropriateness depends on the same criteria for appropriate generalization that apply to other sciences from physics to political science

5. Conclusions

- Variational analysis within a given community has the language *system* as part of its substance domain
- Without the structural category of 'post-vocal –r', variational structure could not be established
- Variational linguistics is the continuation of structural analysis in a new substance domain

5. Conclusions

- Language as usage is the basic activity without which none of the above would have arisen
- But once language systems and individual competencies have arisen, by an evolutionary spiral they get presupposed by actual individual utterances
- As sources of top-down pressures, they counterbalance the purely bottom-up forces even if the latter remain basic

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