



**From structure to context.
Decontextualization and recontextualization
in the history of linguistics**

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0 getting started

"Les grands courants de la linguistique moderne"
(Leroy 1963)

why don't they write books like that anymore?
because there are too many theories,
and we know which one is right anyway?

a reassuring, but not a very scientific attitude
-> how could we initiate an audience of novices to the theoretical
multiverse of linguistics? can we define a synthetic perspective that
is not just an enumeration of theoretical trends, but that fits them
into an insightful framework?



0.1 getting started: steps to take

my suggestion

- the development of linguistics shows a succession of decontextualizing and recontextualizing approaches
- in an interdisciplinary context, a similar pattern may be found in other branches of the cognitive sciences

→ TOC

1 the decontextualization of modern linguistics

2 the recontextualizing trend in contemporary linguistics

3 widening the perspective



0.2 getting started: warnings

this talk

- is part of a slowly developing reflection on the current situation of linguistics

-> some of you (viz. people with a background in Cognitive Linguistics) may have seen parts of the talk before

Geeraerts, Dirk. 2010. Recontextualizing grammar: Underlying trends in thirty years of Cognitive Linguistics. In E. Tabakowska, M. Choinski and L. Wiraszka (eds.), *Cognitive Linguistics in Action* 71-102. Berlin/New York: De Gruyter Mouton



0.2 getting started: warnings

this talk

- is not an study *in* linguistics, but a study *about* linguistics
i.e. it will be weak on examples,
but heavy with references to different subfields of linguistics
- > risky for the author (who is not an expert in most of the relevant fields) and for the audience (who may need more information than what the talk can provide)

0.2 getting started: warnings

this talk

- is a rational reconstruction,
i.e. it tries to find a developmental logic from the comfortable position of having temporal hindsight

-> the view you have from within on the purposes and motives of your preferred framework may be different from what I will present



0.2 getting started: warnings

this talk

- takes a bird's eye's view
but the bird is not an eagle (who sees all the details)
but rather a homing pigeon trying to find its way home
- > the evaluation criterion for the talk should be the success with which it charts the landscape and identifies existing directions:
is it useful to situate your approach to outsiders (like students),
and help them decide where they want to go?

1 decontextualization

the theoretical development of linguistics goes through three stages

structuralism

1916... De Saussure

model discipline: phonology

generativism (and formal grammar at large)

1955... Chomsky

model discipline: syntax

functional-cognitive approaches

1980... Halliday, Dik; Langacker, Lakoff e tutti quanti

model discipline: lexicon (?)



1.1 decontextualization: the main process

Saussurean structuralism

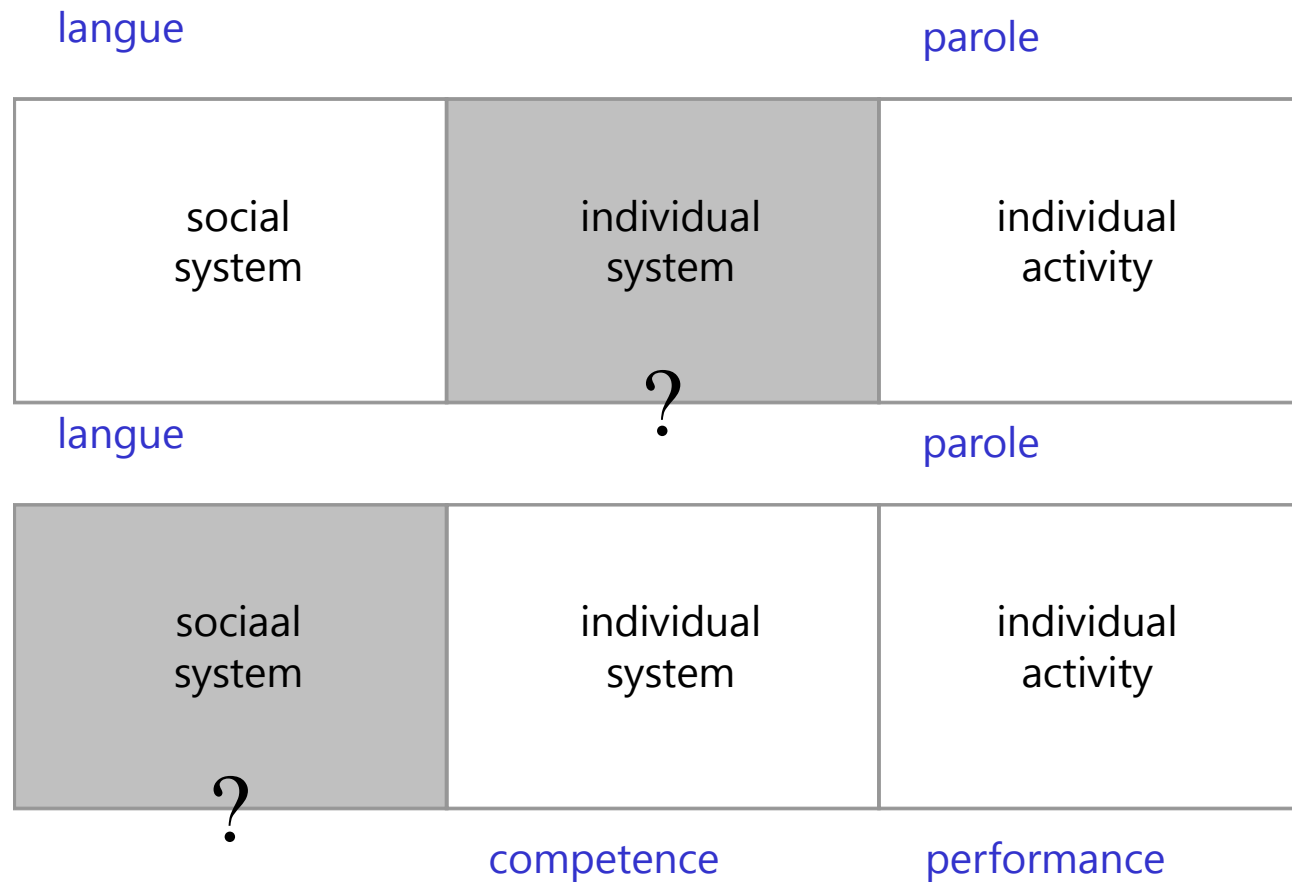
- defines a distinction between system (langue, a social phenomenon) and use (parole, an individual phenomenon)
- introduces a first aspect of decontextualization, by favoring langue over parole, and by thinking of langue as a homogeneous 'system'
- does not have much to say about the (inevitable) psychological bridge between system and use, i.e. the individual's knowledge of the system

1.1 decontextualization: the main process

Chomskyan generativism

- fills the Saussurean gap by introducing the notion of 'competence' as the individual's knowledge of the language system
- leaves a new gap by ignoring/neglecting the social nature of language

1.1 decontextualization: the main process



1.1 decontextualization: the main process

importantly, the lack of attention for the social dimension correlates with Chomsky's genetic view of language acquisition

the emergence of language in the child will have to find a different, viz. genetic basis, because it cannot be explained by language as social interaction: the argument against behaviorism

(this argumentation is flawed, though, because the behaviorist conception of interactive learning is not the only possible form that a 'social' conception of learning can take)

1.1 decontextualization: the main process

if language acquisition is primarily genetic rather than social, further effects follow:

- the crucial features of language will be formal, i.e. a syntactic rule system rather than semantics or lexicon
- if the core of language is a syntactic rule system, the application of that system in usage is secondary

→ 'grammar' becomes 'autonomous syntax', dissociated from
the discursive context of language use
the social context of interaction and variation
the cognitive context of meaning and experience

1.2 decontextualization: further effects

from a content perspective, the decontextualization trend translates into multiple oppositions:

system

innateness

universality

form

syntax

symbolic modelling

introspection

usage

interactive acquisition

variation and diversity

function and meaning

lexicon

probabilistic description

empirical observation

1.2 decontextualization: further effects

these dimensions are logically related

but why introspection?

cp. the Saussurean homogeneity of the linguistic system -> every speaker is a representative sample

1.2 decontextualization: further effects

from a disciplinary perspective, the demoted aspects of language do not disappear entirely: in the period 1960-1980, they emerge as independent disciplines, parallel to the development of formal grammar

language use -> pragmatics

language as social semiotic -> sociolinguistics

meaning -> formal semantics

1.2 decontextualization: further effects

typically, compared to contemporary developments, these approaches don't go all the way in terms of recontextualization:

- pragmatics (at least logical pragmatics) tends to see itself as a module in a modular grammar - and then characteristically argues about the proper delimitation of pragmatics and semantics
- sociolinguistics gives up the idea of 'variable rules'
- formal semantics maintains a fairly restricted view of meaning, to meet the requirement of formalizability

2 recontextualization

since the 1980s, a number of developments show a stronger form of recontextualization, viz. one in which the contextual elements are not investigated in parallel to the syntactic core of the grammar, but receive a central position in the grammar itself

two perspectives on this development:

- the disciplinary perspective: the emergence of functional-cognitive theories
- the content perspective: the reversal of the decontextualizing hierarchy

2.1 recontextualization: emerging disciplines

functional and cognitive models of language place meaning at the core of the description, and increasingly incorporate a contextualized perspective

e.g. Cognitive Linguistics

- the basic vocabulary of CL involves a set of semantic concepts: prototype, schematic network, conceptual metaphor, metonymy, conceptual integration, idealized cognitive models, frames and all sorts of construal mechanisms

2.1 recontextualization: emerging disciplines

- it assumes a contextualized notion of meaning: meaning in language is not isolated, but is integrated with other types of cognition:

existing categories -> polysemy

encyclopedic knowledge -> frames and ICM's

general cognitive capacities -> construal

- it assumes a continuum between syntax and lexicon
(with constructions as intermediate entities)

2.1 recontextualization: emerging disciplines

- it explicitly defines itself as a usage-based model, both theoretically (system and use are dialectically related) and methodologically (by starting from usage data)
- it incorporates social and cultural variation
situated embodiment and the sociocultural background of meaning:
'biocultural linguistics'
variationist studies with a focus on lectal variation (dialectal, regiolectal, sociolectal, stylistic variation):
'cognitive sociolinguistics'

2.1 recontextualization: emerging disciplines

note: these contextualizing features were not all present immediately; Cognitive Linguistics has gradually expanded its contextualizing scope

1987 Langacker: Foundations of Cognitive Grammar

1987 Lakoff: Women, Fire & Dangerous Things

1988 Rudzka-Ostyn (ed.), Topics in Cognitive Linguistics

1995 Goldberg: Constructions

1999 Croft: Radical Construction Grammar

2000 Barlow & Kemmer (eds.): Usage-based Models of Language

2007 Kristiansen & Dirven (eds.): Cognitive Sociolinguistics



2.1 recontextualization: emerging disciplines

note: the internal development of the 'peripheral' disciplines also shows signs of an increasing attention for context and an integration with the other disciplines

- formal semantics: Discourse Representation Theory (Kamp)
- sociolinguistics: Third Wave Sociolinguistics (Eckert)
- pragmatics: Contextualism vs Literalism (Recanati)

2.2 recontextualization: reversing the hierarchy

system

innateness

universality

form

syntax

symbolic modelling

introspection

usage

interactive acquisition

variation and diversity

function and meaning

lexicon

probabilistic description

empirical observation

2.2 recontextualization: reversing the hierarchy

re syntax

syntactic description lexicalizes

- a view of the lexicon as the repository of exceptions is replaced by the lexicon as inventory of partial generalizations
- the separation of rules and items is abolished by positing intermediate entities, specifically 'constructions'
- syntactic categories are shown to have properties (like prototypicality) that are similar to those of lexical ones

cp. Langacker 'the rule/list fallacy'

cp. construction grammar (Goldberg, Croft)

cp. exemplar-based phonology



2.2 recontextualization: reversing the hierarchy

re system

system and usage have a dialectic relationship: usage is based on an existing set of conventional patterns, but at the same time, usage events may change the patterns: language as a complex dynamic system

cp. Beckner et al. 2009 'Language is a complex adaptive system'

cp. Bybee on language change

2.2 recontextualization: reversing the hierarchy

re variation

variation is inherent in a conception of language as a complex dynamic system:

- intralinguistically, the notion of a homogeneous language community is inadequate to capture the social dynamics of language
- interlinguistically, an interest in typological diversity replaces the focus on universality

cp. Levinson & Evans 'The myth of language universals'



2.2 recontextualization: reversing the hierarchy

re acquisition

language is acquired

- through a social process in which interaction with the (human) environment plays a crucial rather than a subsidiary role
- through a process involving exemplar-based generalizations

cp. Tomasello, MacWhinney, Lieven ...

2.2 recontextualization: reversing the hierarchy

re method

in a system-oriented approach, any native speaker is a representative sample of the homogeneous system; but to get a grip on language as an inherently variable complex dynamic system, actual usage needs to be investigated

→ a methodological shift towards corpus-based and experimental approaches

cp. a wave of statistics for linguistics textbooks: Baayen, Gries a.o.

2.2 recontextualization: reversing the hierarchy

re modelling

instead of rule-based algorithmic symbolic descriptions, statistical modelling because increasingly important

- if you take the dialectic relationship between structure and use seriously, you need to take into account patterns of use (frequency and entrenchment)
- if you wish to investigate how diverse factors like meaning, structure, discourse and lectal variation interact, the sheer complexity of the phenomena calls for appropriate methods

2.2 recontextualization: reversing the hierarchy

- if we assume that factors like meaning, structure, discourse and lectal variation co-determine grammatical phenomena, then we cannot exclude a radical non-modular conception of grammar
- > a shift towards quantitative testing of hypotheses, specifically, a shift towards a multifactorial descriptive model of the grammar that does not a priori impose a distinction between various levels of analysis

2.2 recontextualization: reversing the hierarchy

e.g. the popularity of regression modelling

Grondelaers, Stefan, Dirk Speelman & Dirk Geeraerts. 2002. "Regressing on 'er'. Statistical analysis of texts and language variation". In A Morin & P Sébillot (red.), 6th International Conference on Textual Data Statistical Analysis 335-346. Rennes

what determines the presence of the particle er in Dutch adjunct-initial presentative sentences?

2.2 recontextualization: reversing the hierarchy

Een paar weken geleden was er ook geen maan

* Een paar weken geleden was ook geen maan

In Nederland zijn er meer symfonieorkesten

In Nederland zijn meer symfonieorkesten

? Op de plaats van de school staat er nu een bank

Op de plaats van de school staat nu een bank

2.2 recontextualization: reversing the hierarchy

a considerable number of relevant factors
of different types (internal / external)
whose impact is impossible to measure introspectively

-> a quantitative corpus-based investigation with a combination of
structural and sociostylistic explanatory variables:

adjunct type= temporal vs. locative
verbal specificity (general *to be* vs. intermediate specificity verbs
(*remain...*) vs. verbs of existence and appearance

region (Belgium vs. The Netherlands)
register (UseNet vs. popular papers vs. quality papers)



2.2 recontextualization: reversing the hierarchy

using corpus data, the presence of er can then be modelled statistically (with additional information on the strength of the model and the significance of the variables):

$$\begin{aligned} \text{logit } \underline{er} &= -3.8992 \\ &+ 3.6941 \text{ adjunct type} \\ &+ 4.2317 \text{ verbal specificity 1} \\ &+ 1.1831 \text{ verbal specificity 2} \\ &+ 1.2121 \text{ region} \\ &+ 0.9873 \text{ register 1} \\ &+ 0.4407 \text{ register 2} \\ &- 1.2791 \text{ adjunct type*region} \end{aligned}$$

3 wider perspectives

to get a good grip on the developments, we may take a few more chronological positions:

- future prospects
- the immediate past and the present
- the distant past and an eternal return

3.1 wider perspectives: a future convergence?

importantly, formal grammar itself is shifting in theoretical and methodological directions that correspond with the interests of 'recontextualizing' approaches

- the study of 'syntactic microvariation' looks at dialectal variation data as input for a theory of universal constraints and the structure of possible human languages
- instead of relying on single-individual grammaticality judgements, grammaticality judgements are increasingly studied by means of surveys subject to interrater agreement analysis (and possibly complemented by corpus data)



3.1 wider perspectives: a future convergence?

so, the approaches are becoming more comparable, but what would be needed for a direct comparison?

- linguists would have to agree on a methodology that is (maximally or locally) theory-neutral and that can then be used to decide among hypotheses and competing frameworks
- those frameworks would have to provide an operational, non-circular definition of their core concepts

e.g. regression models are excellent for comparing competing analyses, because they provide an objective measure of success; but what exactly would a concept like 'modularity' imply in a regression model?



3.2 the wider field: cognitive science

generative grammar rose to prominence as part of the Cognitive (read: anti-behaviorist) Revolution of the 1950s

- cognitive psychology

with the idea that knowledge is real as a mental representation (and not just as a stimulus-response pattern)

- information science

with a model, based on symbol manipulation, of that mental representation

- linguistics

with the idea that knowledge of language takes the form of precisely such a symbol-manipulating algorithm



3.2 the wider field: cognitive science

if we consider the other disciplines primarily involved in the Cognitive Revolution of the 1950s, it seems that they too are touched by types of recontextualization

- cognitive psychology moves away from a Cartesian, symbolical description of human cognition to an approach that has been characterized as “downward into the brain” and “outward into the environment” (Damasio a.o.)

3.2 the wider field: cognitive science

- AI and NLP

moves away from rule-based algorithms to probabilistic pattern recognition and statistical modelling

cp. Norvig, 'On Chomsky and the Two Cultures of Statistical Learning'

search engines, speech recognition, word sense disambiguation:
100% statistical

automatic translation, POS-tagging: statistical or hybrid

parsing: statistical, hybrid, or deterministic

3.2 the wider field: cognitive science

-> just like generative grammar was the linguistic element of the Cognitive Revolution of the 1950s, the recontextualizing approaches in contemporary linguistics may be the linguistic element of a Second Cognitive Revolution

3.3 the wider field: an eternal return?

the current debates re-enact a 19th century discussion

	the 19th century standard view	the 19th century oppositional view
the external perspective (the language)	Schleicher: the family tree model, presupposing internally homogeneous languages	Schmidt: the wave model, embodying lexical heterogeneity
the internal perspective (the grammar)	the neogrammarians: Ausnahmslosigkeit of sound change (a rule-based approach)	Schuchardt: ‘Ueber die Lautgesetze: gegen die Junggrammatiker’ (a lexicon-based model)

3.3 the wider field: an eternal return?

the current debates re-enact a 19th century discussion

	the conventional 20th century view	the emerging 21th century view
the external perspective (the language)	Saussurean / Chomskyan homogeneity of language	language as Complex Dynamic System
the internal perspective (the grammar)	“rules rule OK” “pure rules, poor lexicon”	“no rules, great constructions”



4 by way of conclusion

the decontextualization/recontextualization model provides a useful framework for a synthetic view of the history of linguistics

- it reveals an underlying logic in the succession of the major stages in the history of modern linguistics
- it yields a structured view of various developments in contemporary linguistics
- it identifies the different dimensions of current debates
- it helps us to see current developments in linguistics as part of a larger debate in the cognitive sciences and as involving a long-standing question within