

Lecture 3 Architecture

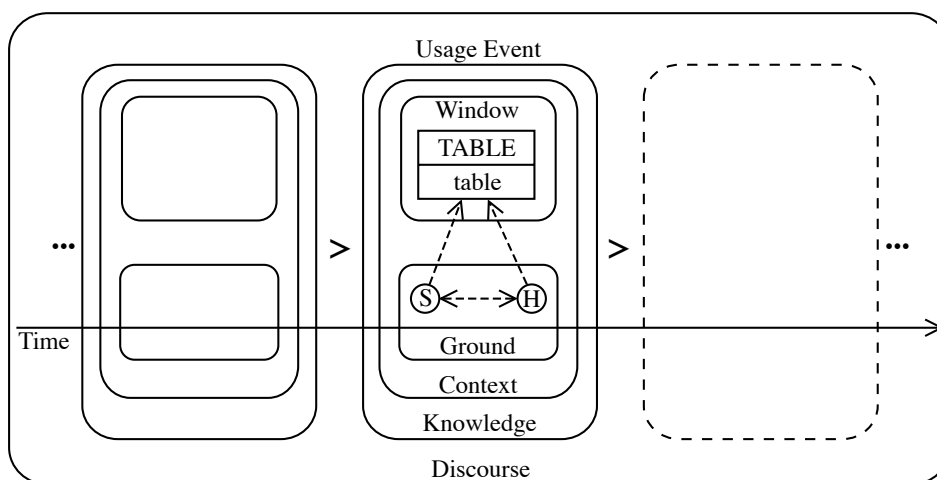
A. Overview B. Usage-Based Nature C. Axes D. Assemblies

A. Overview

(1) Central ideas

- (a) **Integration:** Insofar as possible, language is viewed as resulting from other, more basic phenomena (as opposed to being distinct and autonomous).
- (b) **Dynamicity:** Language is *organized activity* and thus occurs through time. Linguistic structure consists in *established patterns* of activity (**units**).
- (c) **Usage based:** Linguistic units are abstracted from **usage events** (instances of language use, in all their complexity) and employed in subsequent events.
- (d) **Interaction:** Language is learned and used in a social and discourse context. Consistent aspects of those contexts are retained by **conventional** units as part of their value.
- (e) **Cognitive semantics:** Meaning resides in **conceptualization**, the experiential side of cognition. It is *embodied* and *interactive*, a primary means of engaging the world.
- (f) **Function:** The **symbolic** and **interactive** functions of language give rise to more specific functions. Language structure is the *implementation* of functional organization.
- (g) **Restrictiveness:** Only *semantic*, *phonological*, and *symbolic* units can be posited. They must occur in actual expressions or arise from them by *abstraction* and *categorization*.
- (h) **Symbolic assemblies:** Lexicon and grammar form a continuum consisting in flexible, dynamic **assemblies of symbolic structures**. Grammar is inherently meaningful.
- (i) **Unification:** The same basic notions apply to all aspects of language structure. Compatibility is expected with other fields of linguistic study and other disciplines.

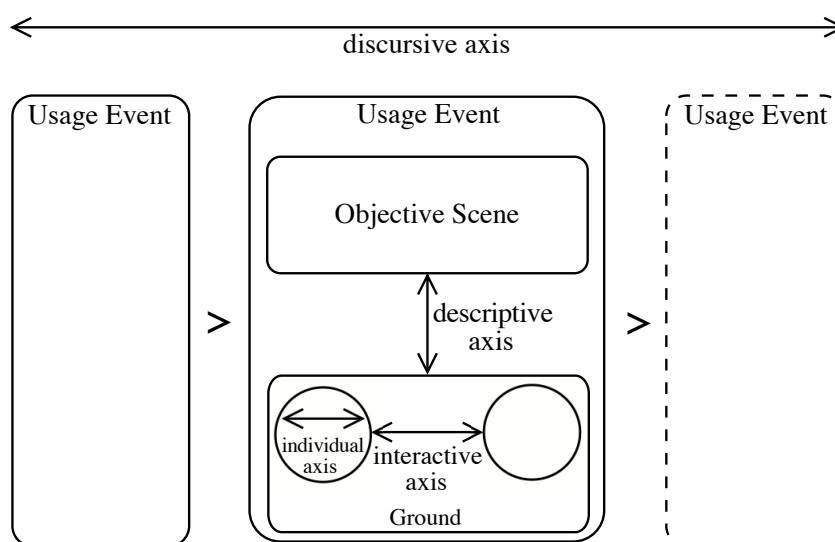
(2)



- (3)(a) In a symbolic relationship, either the form or the meaning serves to **activate** the other. The result is that both are momentarily active in a **window** of attention.
- (b) The **interlocutors**—speaker (S) and hearer (H)—apprehend the expression (--->) and interact with one another (<--->). This constitutes the **ground** (G).

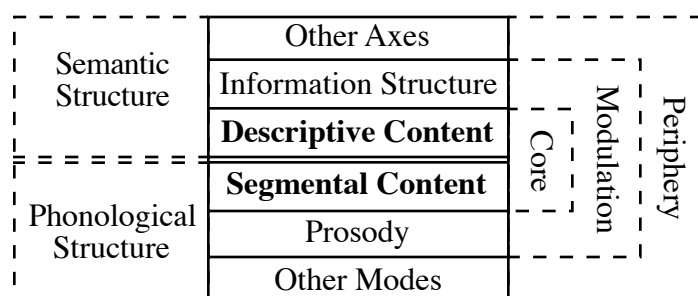
- (c) The interaction takes place in a physical, social, cultural, and discourse **context**. There is no precise boundary between linguistic and contextual meaning (semantics and pragmatics), or between the context and relevant background knowledge.
- (d) Usage events occur sequentially to form a coherent **discourse**. One facet of the relevant context is how the **current** usage event relates to both prior and subsequent ones.
- (e) While the content in the current window is the **focus of attention**, everything in (2) falls within the **scope of awareness** and is part of the **substrate** supporting an expression.
- (4)(a) **Individual axis:** It is individuals who acquire language, serve as the repository of language structure, and carry out linguistic activity (even when acting in concert).
- (b) **Interactive axis:** The speaker and hearer interact with one another. Even when unexpressed, relationships along this axis are essential to semantics and grammar.
- (c) **Descriptive axis:** This involves relationships between the interlocutors and the **objective scene** (the situation being described), accessed through windows of attention.
- (d) **Discursive axis:** Along this axis are relationships among the successive usage events comprising a discourse. There is no definite boundary between discourse and grammar.

(5)



- (6)(a) The symbolic function of language requires *semantic, phonological, and symbolic structures*. Broadly defined, these cover all aspects of linguistic structure.
- (b) At each pole we can recognize a **core** and more **peripheral** structures. The core has more conceptual or phonological *substance*, and thus has greater inherent salience. It is **onstage** as the *primary object of conception* within the overall scope of awareness.
- (c) The semantic core comprises **descriptive content** (serving to characterize the objective scene). The phonological core comprises **segmental content** (vowels, consonants).
- (d) At each pole there are structures which **modulate** core content and **depend on** it for their manifestation: **information structure** and **prosody**.
- (e) The core represents the **descriptive axis** and the **auditory mode** (sounds). At the periphery (at least in relation to this core) are structures pertaining to **other axes** (individual, interactive, discursive) and **other modes** (gesture, facial expression, body language).

(7)



(8) **A:** *Sally washed the dog?* <raised eyebrows> **B:** *Nó!* <fist pump> *She washed the cat.*

(a) Segmental symbolization of descriptive content:

[[SALLY]-[Sally]] [[WASH]-[wash]] [[DOG]]-[dog]] [[CAT]-[cat]]

(b) Prosodic symbolization of information structure:

[[NEW INFORMATION]-[´]] [[OLD INFORMATION]-[ˇ]]

(c) Segmental symbolization of discursive notion:

[[NEGATIVE ANSWER]-[no]]

(d) Prosodic and gestural symbolization of expressive content (individual axis):

[[EMPHASIS]-[! <fist pump>]]

(e) Prosodic and facial symbolization of interactive notion:

[[QUESTION]-[? <raised eyebrows>]]

(9)(a) Structures combine with others to form more complex structures. There are three basic modes of combination: **symbolization**, **composition**, and **categorization**.

(b) These are **connecting operations**. They **group** the structures they apply to, creating a single, higher-level structure which can participate in further connections and groupings.

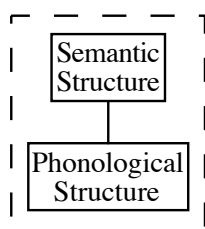
(c) The established structures of a language—**conventional units**—constitute a vast **assembly** of connected structures. In a *usage event*, some of these units are *activated*.

(d) The **expression** produced in a usage event is an *assembly* comprising both *activated units* and *new structures* based on them.

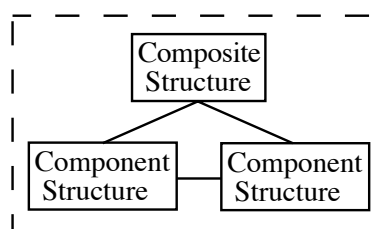
(e) Lexicon, morphology, syntax, and discourse form a *continuum* consisting in **assemblies of symbolic structures**.

(10)

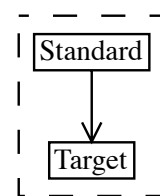
(a) Symbolization



(b) Composition

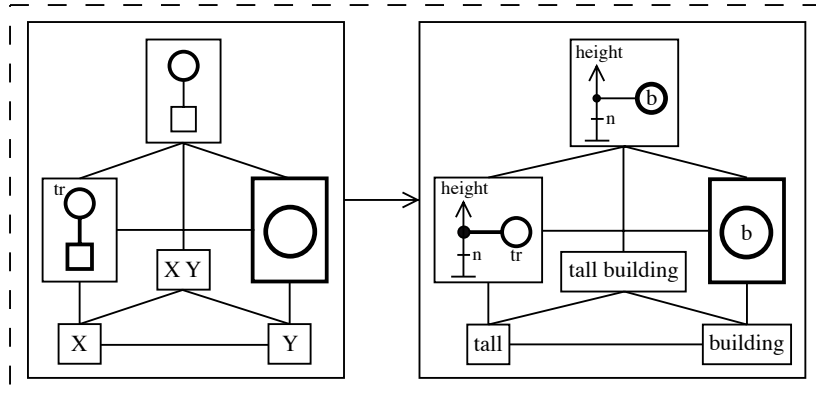


(c) Categorization

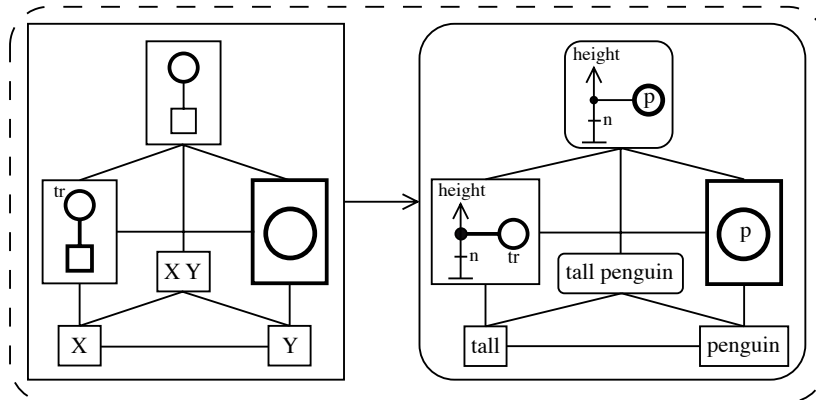


(11)

(a) Unit Expression



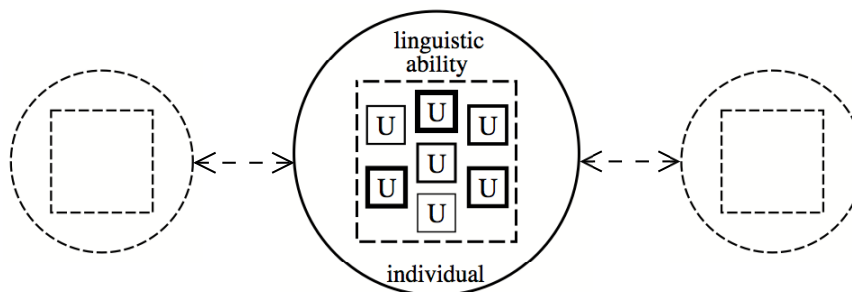
(b) Novel Expression



B. Usage-Based Nature

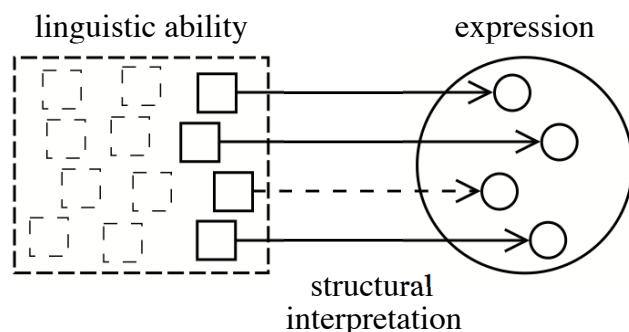
- (12)(a) A language is a set of **conventional linguistic units**—established patterns of activity standard in a speech community. They are learned through usage and guide later usage.
- (b) Language is learned and used in **social interaction**, and its structure reflects its interactive function. Still, it is learned and used by **individuals**.
- (c) Due to its interactive basis, the units controlled by the individuals comprising a speech community are similar enough to allow effective communication.
- (d) A language is not an *object* but a common array of *abilities*. Consisting in patterns of *activity*, linguistic units, structures, and expressions are things that *happen*.

(13)



- (14)(a) For the sounds and conceptions of a usage event to count as an instance of language use, they have to be **interpreted** as manifestations of linguistic units.
- (b) Units are *activated* for their *categorization*. These categorizing relationships are the expression's **structural interpretation** in regard to the language.
- (c) Both interlocutors engage in this categorizing activity, referred to as **coding**.
- (d) Many categorizing units are activated for interpreting an expression, each pertaining to some facet of its structure. A particular target conforms to the categorizing unit either fully (\rightarrow) or only partially ($---\rightarrow$).

(15)



(16) Some units inherent in *the cat*:

- (a) Semantic: [DEFINITE] [CAT]
- (b) Phonological: [ðə] [kæt] [ð] [ə] [k] [æ] [t] [CV] [CVC]
- (c) Symbolic: [[DEFINITE]/[ðə]] [[CAT]/[kæt]] [[ARTICLE]-[NOUN]]

(17) Fundamental cognitive phenomena

- (a) **Automatization**: An activity is rehearsed and mastered to the point that its execution is automatic. It undergoes *entrenchment*, becoming a *unit*, e.g. (obama) > [obama]. Entrenchment correlates with ease of activation and execution—a familiar task is easier than a novel one. Well-entrenched units function as **attractors**.
- (b) **Abstraction**: The emergence of a unit through reinforcement of the features shared by multiple structures. Being limited to what they have in common, the resulting unit is **schematic** relative to these structures, i.e. characterized with less precision and detail. A schema is *immanent* in (“lies within”) its instantiations, not a separate structure.

$(CAT^1), (CAT^2), (CAT^3), (CAT^4) > [CAT]$

- (c) **Comparison**: Activating one structure, the **standard**, as the basis for assessing another, the **target**. In *categorization*, the standard is a unit while the target may be novel. The target can either conform to the standard ($S \rightarrow T$) or conflict with it in some way ($S ---\rightarrow T$).

Recognition: $[CAT] \rightarrow (CAT^5)$ Extension: $[CAT] ---\rightarrow (TIGER)$

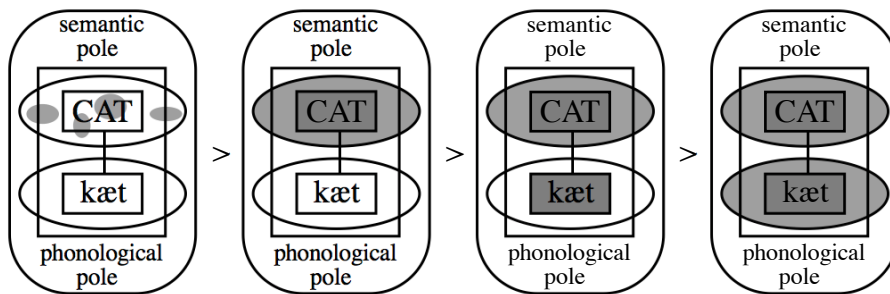
- (d) **Combination**: Structures being combined into structures of greater complexity. In *association* they merely co-occur since one activates the other, e.g. in symbolization: $[[CAT]/[cat]]$. In *composition*, **component structures** undergo **conceptual integration** to form a **composite structure** that is more than just the sum of its parts.

Composition: $[[Obama]-[care]]$ Entrenchment: $[[Obama]-[care]]$

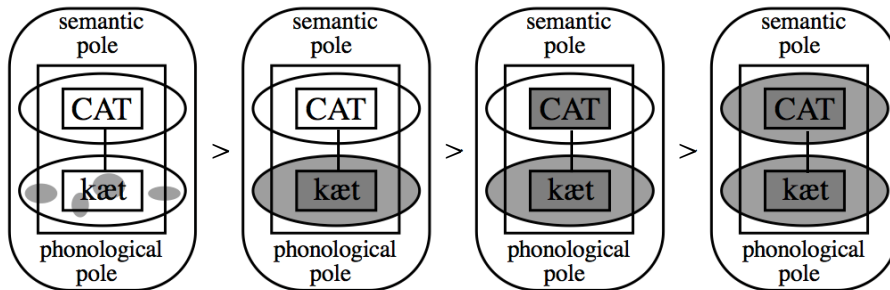
- (18)(a) In *categorization*, S is fully or partially immanent in T. In *composition*, component structures are fully or partially immanent in the composite structure. In *symbolization*, the two poles are fully immanent in the symbolic structure they jointly constitute.
- (b) This **overlap** is an essential factor in language processing, as activation tends to spread from one structure to another that overlaps with it.
- (c) In categorization, initial processing of T tends to activate a categorizing unit (S) based on overlapping features. Once activated, S “captures” T, imposing its own organization on it. T is then **apprehended as** an instance of S.
- (d) In symbolization, either the semantic or the phonological pole can activate the other (**encoding** vs. **decoding**). The end result is the same (**coding**).

(19)

(a) Encoding

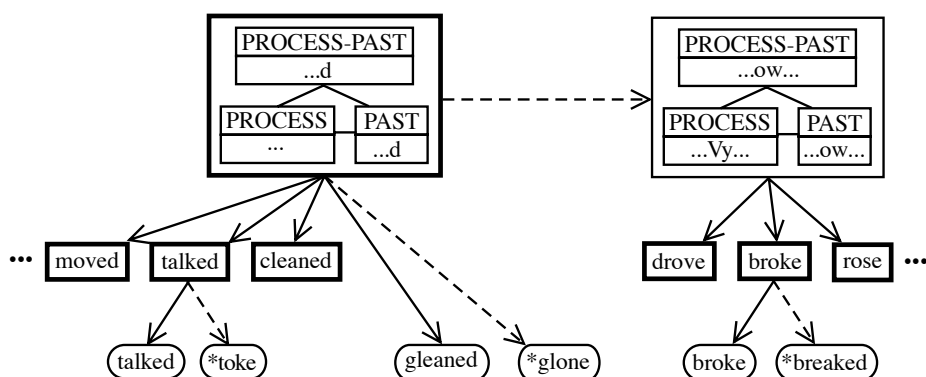


(b) Decoding



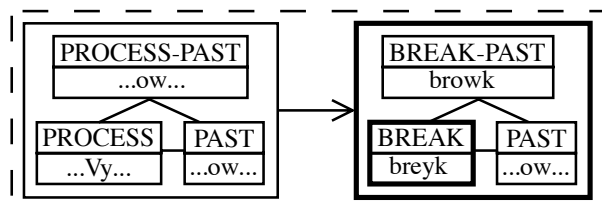
- (20)(a) Units that share features with a target tend to be activated and **compete** for the privilege of categorizing it. They are **mutually inhibitory**. The **winner** captures the target.
- (b) Factors determining the winner include entrenchment, prior activation level, activation from associated elements, and extent of overlap with the target.
- (c) In the competition for activation, specific structures have an advantage over schematic ones because their additional content gives them greater potential for overlap.
- (d) An expression is **well-formed** (conventional, “grammatical”) to the extent that the categorizations involve *recognition* rather than *extension* [(17)(c)].
- (e) Usage leads to **change**: existing units are either reinforced or decay, and new units arise through the repeated occurrence of combinations and extensions.

(21)



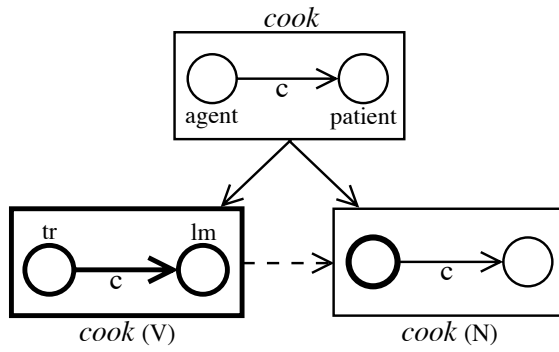
- (22)(a) A grammatical construction is a **complex category**: not a single structure, but an assembly of schemas, subschemas, and instantiating expressions.
- (b) Low-level patterns and specific expressions are at least as important for language structure as general, productive rules (well-entrenched high-level schemas).
- (c) The usage-based approach solves the problem of **distribution**: specifying which elements occur in particular constructions.
- (d) Knowing that *break* forms its past tense in a specific but “irregular” way is just a matter of *broke* being a well-entrenched conventional unit.
- (e) The specific form *broke* **preempts** the otherwise expected *breaked* by consistently winning the competition for activation.

(23)

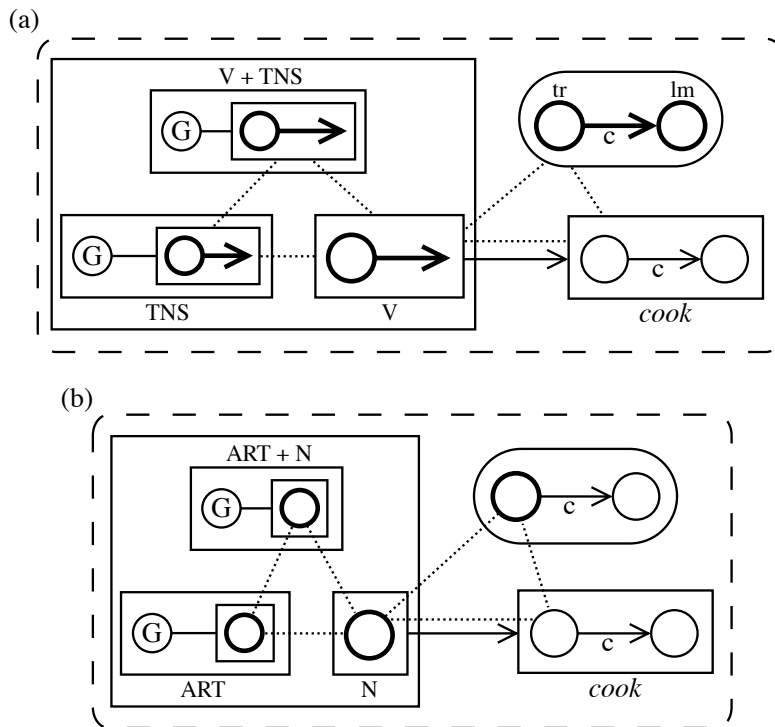


- (24)(a) *Broke* is both a **grammatical** unit (instantiating a constructional schema) and a **lexical** unit (a partial specification of how *break* behaves grammatically—an *extrinsic* property).
- (b) Abstracted lexical units include schematized representations of any constructions they commonly appear in. These **structural frames** are part of their characterization.
- (c) A lexeme appearing in multiple frames is more deeply entrenched than any one of them. It achieves a degree of cognitive autonomy through progressive **decontextualization**.
- (d) Conversely, constructional schemas instantiated by many lexemes are progressively reinforced and become more easily activated for use in new expressions.
- (25)(a) A lexeme’s grammatical use also shapes its **meaning**, particularly in regard to profiling.
- (b) Though schematic, constructional schemas are meaningful and make their own semantic contribution to complex expressions. This is called **constructional meaning**.
- (c) A construction can override a lexeme’s established categorization, potentially giving rise to a new, extended sense. [*He sneezed.* ---> *He sneezed the napkin off the table.*]
- (d) Certain constructions systematically rely on constructional meaning for limited (but essential) content not contributed by overt elements.

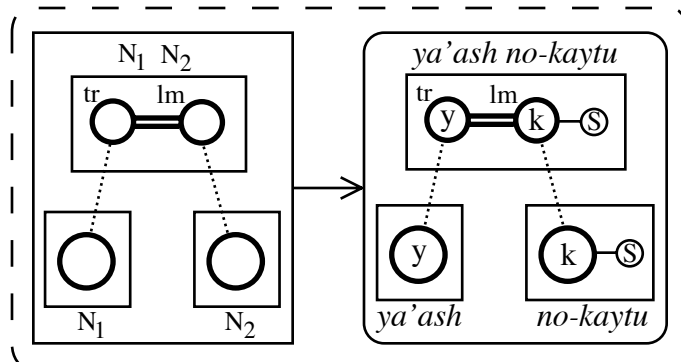
(26)



(27)



(28) Luiseño: *Wunaal ya'ash no-kaytu*. (that man my-enemy) 'That man is my enemy.'

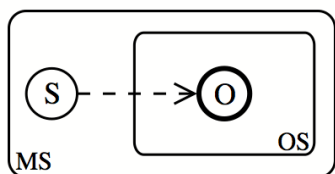


C. Axes

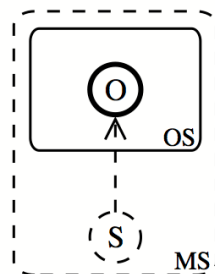
- (29)(a) Individual > Interactive > Descriptive > Discursive
- (b) Each axis presupposes the one that precedes, representing a particular application of it.
 - (c) Multiple axes figure in the characterization of particular linguistic elements:
 - (i) *Pornography* and *smut* are equivalent descriptively, but differ in **affect** (neutral vs. negative), a matter of individual expression.
 - (ii) An imperative (e.g. *Go home!*) both describes an event and incorporates the interactive force of giving an order.
- (30)(a) Certain sound-producing activities, e.g. a laugh or a cry of pain, are primarily **individual**; they *express feelings*, as opposed to *describing situations* for an interlocutor.
- (b) They are still **symbolic** in the broad sense of associating sounds with mental experience.
 - (c) They are **linguistic** to the extent that they employ the standard sounds of a language and have conventional meanings (e.g. *Ow!* indicates greater pain intensity than *Ouch!*).
 - (d) They are **interactive** to the extent that they communicate one's experience and are intended to have a certain effect on the interlocutor (e.g. to elicit empathy).
- (31)(a) Expressions like *hello*, *yes*, and *please*, are primarily **interactive**. They employ the basic sounds of the language and have specific, culturally-grounded meanings.
- (b) They are symbolic but non-descriptive. Their meaning consists in the apprehension of a **social routine** which is **enacted** through their utterance.
 - (c) Their main function is **manipulative**, being intended to elicit a response (a verbal one, a non-verbal action, or a change in mental or emotive state).
 - (d) Minimally, the speaker expects the listener to attend to what is said and apprehend it in accordance with the conventions of the language. This is the **baseline response**, being inherent in the very nature of linguistic interaction.
- (32)(a) The **communicative** function of language depends on its **symbolic** and **interactive** functions (the latter including expressiveness, manipulation, and social communion).
- (b) Linguistic interaction depends on a number of individual **capacities**: fine discrimination of facial expressions; following the direction of another's gaze; reading another's intentions; mental simulation of another's experience.
 - (c) These capacities give rise to **intersubjectivity**: a conceptual co-alignment, such that each interlocutor to some extent shares the other's experience or at least apprehends it.
 - (d) Intersubjectivity is a key factor in **description**, which incorporates the interactive function and the baseline response.
- (33)(a) **Intersubjectivity** presupposes **subjectivity**, which presupposes a **subject**.
- (b) The **subject of conception** (S) is the locus of processing activity and mental experience. As such, it is "offstage" and implicit, attention being directed to a certain portion of the mental universe, called the **objective scene** (OS), or "onstage region".
 - (c) The **object of conception** (O) is the *focus* of attention within the objective scene. As such it is salient and usually made explicit. (As a special case, S can itself function as O.)
 - (d) S is said to be *subjectively construed*. O is *objectively construed*.
 - (e) With **intersubjectivity**, each conceptualizer (C) functions as both subject of conception and as object of conception for the other. Moreover, each simulates the other's experience (e.g. imagining how things appear from their vantage point).

(34)

(a) External View



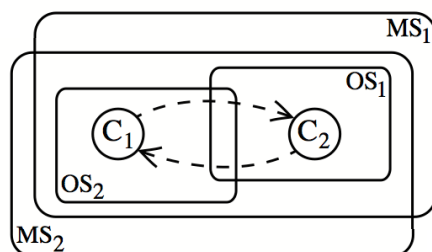
(b) Subject's View



S = subject of conception

O = object of conception;
focus of attentionOS = objective scene;
region of attentionMS = maximal scope
of awareness

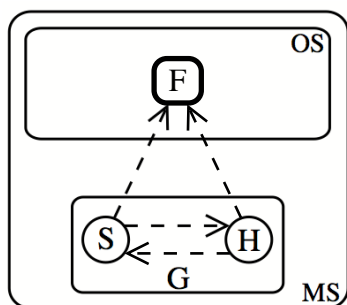
(c) Intersubjectivity



C = conceptualizer (S/O)

- (35)(a) **Description** involves conception along two axes: the interlocutors apprehend each other and their interaction (in the ground), as well as the onstage object of description (in OS).
- (b) Through linguistic symbolization, the speaker directs the hearer's attention to a particular onstage element—the expression's **profile**.
- (c) This momentary alignment in the scope and focus of attention is an essential component of the **intersubjectivity** achieved in successful language use.

(36)



S = speaker

H = hearer

G = ground

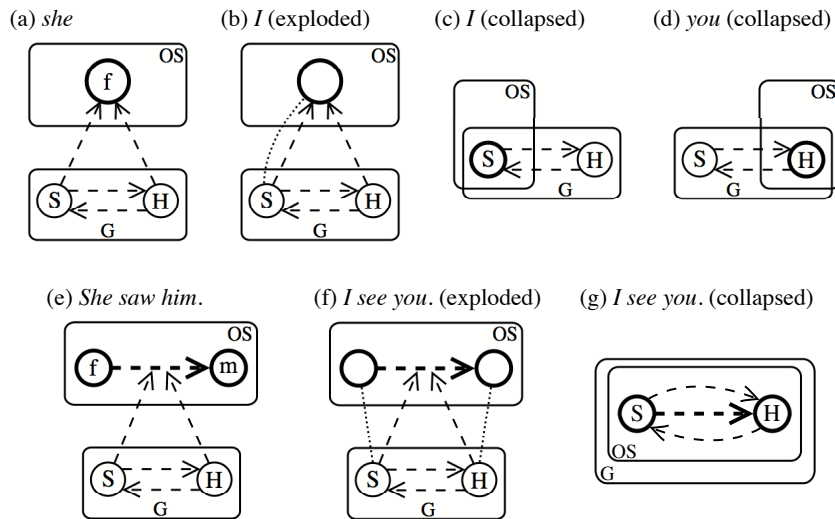
OS = objective scene (onstage region)

F = focus of attention (profile)

MS = maximal scope

- (37)(a) The **canonical arrangement** (though maybe not the most *frequent*) is for the ground and the objective scene to be basically distinct (e.g. *the cat*; *She bought an iPhone*).
- (b) Even then, the interlocutors and their interaction have a significant role in an expression's linguistic meaning. They are part of the supporting **conceptual substrate**.
- (c) Minimally, a unit's import includes the tacit recognition that it is used by speakers of the language, as a matter of established convention, in certain kinds of contexts.
- (d) Non-canonical arrangements, where G and OS overlap, are frequent and unproblematic. Alternate ways of dealing with the overlap result in subtly different meanings.

(38)



(39)(a) Although the speaker and hearer are subjects of conception, the pronouns *I* and *you* construe them objectively. Each interlocutor mentally simulates the other's experience (intersubjectivity) and is an object of conception from that standpoint.

(b) A pronoun profiles a **thing** (specifically a person). A verb or a clause profiles a **relationship** (specifically a **process**, i.e. a relationship tracked through time).

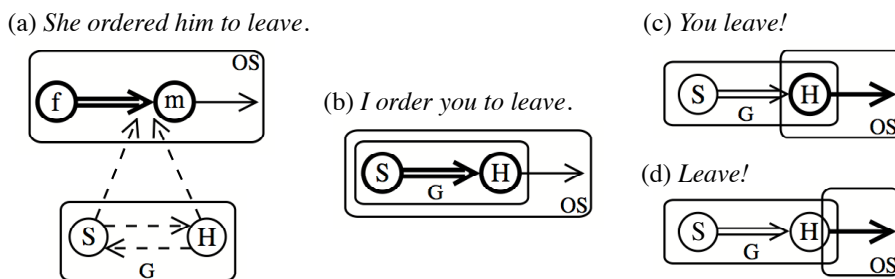
(40)(a) **Speech act**: An expression's interactive force (e.g. statement, question, promise, order).

(b) As a facet of the ground, speech act force is commonly left implicit (*I will leave*). As part of the objective scene, it is described by verbs like *state*, *ask*, *promise*, and *order*.

(c) In a **performative**, describing a speech act serves to perform it: *I order you to leave*.

(d) With imperatives, the speech act force is left offstage. The hearer can be construed objectively, as actor (*You leave!*), or else subjectively, as interlocutor (*Leave!*). Only the latter allows the intersubjective *please*: *Please leave*, but not **You leave, please!*.

(41)



(42)(a) The **interactive axis** is the relation between S and H in G. The **descriptive axis** is the relation between G and OS, the **situation being described**.

(b) The **discursive axis** is the relation between successive descriptions, each part of a *usage event*. A usage event can be of any size (e.g. a word, a clause, or a sentence).

(c) Since description incorporates interaction, a **discursive relationship** can pertain to either *descriptive content* (aspects of OS) or the *interaction* (in G).

(d) Some discursive factors: the **selection** and **packaging** of content, **order of presentation**, **connections** between expressions, **negotiation**, and **discourse management**.

(43) **A:** *Obama is a Muslim.* **B:** *No, he isn't.*

- (a) This mini-discourse comprises two **usage events** (or three, in a finer-grained analysis). The descriptive content is the conception of Obama being (or not being) a Muslim.
- (b) *Not* (*n't*) is primarily **descriptive**, serving to characterize the situation as described by B. *No* is primarily **interactive**, expressing B's disagreement with what A has just said.
- (c) **Selection** of content: A decides what to say in the first place. B decides what needs to be overtly expressed in this context, using *he* instead of *Obama* and omitting *a Muslim*. The alternative *No, he isn't a Muslim* would highlight *Muslim* as the point of contention.
- (d) **Packaging** of content: *No, he isn't* vs. *No he isn't* vs. *No, he is not* vs. *He is not*.
- (e) An alternative **order of presentation**: *No, a Muslim he isn't*, where *a Muslim* serves to **frame** (or **anchor**) the clause. It also makes an overt **connection** between the utterances.
- (f) The interlocutors **negotiate** the validity of the proposition *Obama is a Muslim*.
- (g) **Discourse management**: Falling intonation (period) signals completion of A's utterance, allowing B to respond. Suspended intonation after *No* (comma) indicates that the utterance is not completed and that B intends to continue.

(44) A common type of semantic change (**subjectification**) consists in shifting an element's domain of application from objective circumstances to the ongoing discourse itself:

- (a) *I didn't know her **then**.* > *I conclude, **then**, that he does not deserve to be promoted.*
- (b) *My car broke down **again**.* > ***Again**, he doesn't deserve to be promoted.*
- (c) ***Since** it was raining, they moved inside.* > ***Since** you're a linguist, what is a verb?*

D. Assemblies

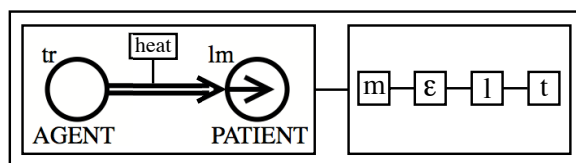
- (45)(a) Like a biological organism, language is too complex and multifaceted to be fully characterized in a single description or with a single representational format. It is important to be precise and explicit, but complete formalization is not a realistic goal.
 - (b) While useful for descriptive purposes, network-like diagrams are overly discrete, as structures consist in overlapping patterns of processing activity.
 - (c) A **language** comprises a vast *assembly* of conventional units, some of which are *activated* in a usage event. The **expression** produced is an assembly comprising both *activated units* and *new structures* based on them.
 - (d) Reference to **assemblies** of structures indicates both that the structures need to be recognized for analytical purposes and also that they do not exist independently, but always as facets of more elaborate patterns of activity.
 - (e) Assemblies exhibit various **dimensions of complexity**: ways in which they deviate from a canonical network (like a subway map) consisting of discrete *nodes* and pairwise *links* between them, all of equal status.
- (46)(a) Structures differ in their degree of **entrenchment** and **cognitive salience**.
- (b) They **overlap**, consisting in partially shared processing activity.
 - (c) Some structures are **complex**, incorporating simpler ones. Conversely, connected structures are grouped to form another structure of greater complexity.

- (d) There are **levels of organization**, such that certain structures — asymmetrically — provide a necessary basis for the formation of others (e.g. extensions from a prototype).
- (e) Assemblies exhibit both **hierarchy** and **seriality**, often involving the same elements.
- (i) (*Ann*) > ((*is* > *like*) > (*her* > *mother*)) (ii) (*Ann's*) > (*like* > (*her* > *mother*))
- (f) The same elements can be grouped simultaneously in alternate ways. Structures based on different factors (e.g. lexical, grammatical, and phonological) often cross-cut one another.
- (my lawyer's) ((looking) (the contract) (over))

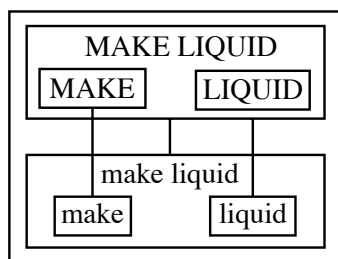
- (47)(a) **Symbolic assemblies** are so called because they fulfill the symbolic function of language.
- (b) However, not every unit or structure participates directly and individually in a symbolic relationship — some are exclusively semantic or exclusively phonological.
- (c) The semantic and phonological structures participating in a symbolic relationship can be extremely complex internally, with only the wholes connected symbolically.
- (d) With **composition**, there is symbolization at multiple levels of organization. Individual semantic and phonological structures are recognized within the composite whole.
- (e) A novel composite expression is fully **analyzable**: its components are necessarily activated and actively contribute to the formation of the whole.
- (f) With unit expressions, analyzability tends to diminish over time. The end result is a **morpheme** (a symbolic expression with no symbolic components).
- (g) Degrees of analyzability: *complainer* > *printer* > *computer* > *propeller* > *drawer*

(48)

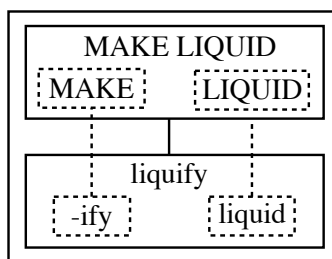
(a) Subsymbolic Structures



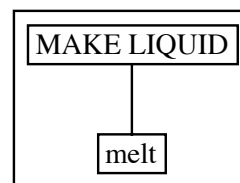
(b) Fully Analyzable



(c) Partially Analyzable



(d) Opaque



- (49)(a) **Unipolar** structures are exclusively semantic or exclusively phonological. They are established and recognized independently, without regard to the other pole.
- (b) **Bipolar** structures are established and recognized on the basis of participation in symbolic relationships. They need not coincide with unipolar structures, e.g. *potatoes*.
- (c) **Unipolar groupings**: ((pə) (téy) (towz)) **Bipolar groupings**: ((pətéytow) (z))
- (d) Coincidence with unipolar structures reinforces symbolic relationships. Non-coincidence tends to obscure them, as the symbolizing structure is not an independent grouping.

- (50)(a) Symbolization varies in salience based on degrees of analyzability, (non-)coincidence with unipolar structures, and inherent phonological salience of the symbolizing structure (segmental content > prosody > adjacency > mere co-occurrence).
- (b) Due to competition for symbolic resources, some notions are symbolized weakly if at all.
- (c) E.g. the grammatical relationship between head noun and relative clause is symbolized by prosody and adjacency in (i), but not at all in (ii):
- (i) ((**the package**) (**you've been expecting**)) (*just arrived*)
- (ii) ((**the package**) (*just arrived*)) (**that you've been expecting**)

References

- Austin, J. L. 1962. *How to Do Things with Words*. Cambridge, MA: Harvard University Press.
- Barlow, Michael and Suzanne Kemmer (eds.) 2000. *Usage-Based Models of Language*. Stanford: CSLI Publications.
- Collins, Allan M. and Elizabeth F. Loftus. 1975. A Spreading-Activation Theory of Semantic Processing. *Psychological Review* 82.407-428.
- Croft, William. 2001. *Radical Construction Grammar: Syntactic Theory in Typological Perspective*. Oxford: Oxford University Press.
- Feldman, Jerome A. 2006. *From Molecule to Metaphor: A Neural Theory of Language*. Cambridge, MA and London: MIT Press/Bradford.
- Frank, Roslyn M., René Dirven, Tom Ziemke, and Enrique Bernárdez (eds.) 2008. *Body, Language and Mind*, vol. 2, *Sociocultural Situatedness*. Berlin and New York: Mouton de Gruyter. *Cognitive Linguistics Research* 35.2.
- Goldberg, Adele E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago and London: University of Chicago Press.
- Harder, Peter. 1996. *Functional Semantics: A Theory of Meaning, Structure and Tense in English*. Berlin and New York: Mouton de Gruyter. *Trends in Linguistics Studies and Monographs* 87.
- , 2010. *Meaning in Mind and Society: A Functional Contribution to the Social Turn in Cognitive Linguistics*. Berlin and New York: De Gruyter Mouton. *Cognitive Linguistics Research* 41.
- Johnson, Mark. 1987. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago and London: University of Chicago Press.
- Langacker, Ronald W. 1997. Constituency, Dependency, and Conceptual Grouping. *Cognitive Linguistics* 8.1-32.
- , 2000. A Dynamic Usage-Based Model. In Michael Barlow and Suzanne Kemmer (eds.), *Usage-Based Models of Language*, 1-63. Stanford: CSLI Publications.
- , 2001. Discourse in Cognitive Grammar. *Cognitive Linguistics* 12.143-188.
- , 2005. Construction Grammars: Cognitive, Radical, and Less So. In Francisco J. Ruiz de Mendoza Ibáñez and M. Sandra Peña Cervel (eds.), *Cognitive Linguistics: Internal Dynamics and Interdisciplinary Interaction*, 101-159. Berlin and New York: Mouton de Gruyter. *Cognitive Linguistics Research* 32.
- , 2006. On the Continuous Debate about Discreteness. *Cognitive Linguistics* 17.107-151.
- , 2008. *Cognitive Grammar: A Basic Introduction*. New York: Oxford University Press.

- , 2009a. A Dynamic View of Usage and Language Acquisition. *Cognitive Linguistics* 20.627-640.
- , 2009b. Constructions and Constructional Meaning. In Vyvyan Evans and Stéphanie Pourcel (eds.), *New Directions in Cognitive Linguistics*, 225-267. Amsterdam and Philadelphia: John Benjamins. Human Cognitive Processing 24.
- , 2010. How Not to Disagree: The Emergence of Structure from Usage. In Kasper Boye and Elisabeth Engberg-Pedersen (eds.), *Language Usage and Language Structure*, 107-143. Berlin and New York: De Gruyter Mouton. Trends in Linguistics Studies and Monographs 213.
- , 2012. Substrate, System, and Expression: Aspects of the Functional Organization of English Finite Clauses. In Mario Brdar, Ida Raffaelli, and Milena Žic Fuchs (eds.), *Cognitive Linguistics between Universality and Variation*, 3-52. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Searle, John R. 1969. *Speech Acts: An Essay in the Philosophy of Language*. London and New York: Cambridge University Press.
- Sweetser, Eve E. 1990. *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press. Cambridge Studies in Linguistics 54.
- Tomasello, Michael. 2003. *Constructing a Language: A Usage-Based Theory of Language Acquisition*. Cambridge, MA and London: Harvard University Press.
- Tomasello, Michael, Ann Cale Kruger, and Hilary Horn Ratner. 1993. Cultural Learning. *Behavioral and Brain Sciences* 16.495-552.
- Traugott, Elizabeth. 1982. From Propositional to Textual and Expressive Meanings: Some Semantic-Pragmatic Aspects of Grammaticalization. In Winfred P. Lehmann and Yakov Malkiel (eds.), *Perspectives on Historical Linguistics*, 245-271. Amsterdam and Philadelphia: John Benjamins.
- Verhagen, Arie. 2005. *Constructions of Intersubjectivity: Discourse, Syntax, and Cognition*. Oxford: Oxford University Press.
- Ziemke, Tom, Jordan Zlatev, and Roslyn M. Frank (eds.) 2007. *Body, Language and Mind*, vol. 1, *Embodiment*. Berlin and New York: Mouton de Gruyter. Cognitive Linguistics Research 35.1.