III. Nominal Grounding
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A. Identification

(1)(a) A *nominal* serves a **referential function**: it allows the interlocutors to focus their attention on a *particular thing* out of all those we are capable of conceiving.
   (b) That thing is the nominal's **profile** and also its **referent**:
      (i) The term *profile* indicates its status as the momentary focus of attention (the target of *joint attentional capture*).
      (ii) The term *referent* indicates that it has some place in our mental universe—it is external to the nominal, which *refers* to it (achieving *coordinated mental reference*).
   (c) The referential function is **intersubjective**: the speaker and hearer direct their attention to the *same referent* and *realize* (via mental simulation) that it is the same for both of them.
   (d) For joint attentional capture, the interlocutors must apprehend some *relationship* connecting them with the referent; this constitutes **grounding** (in a broad sense).

(2)(a) As defined in CG, every nominal has a referent: a particular thing in our mental universe.
   (b) With a narrow definition of *referent*, limited to actual real-world entities, many nominals are commonly said to be **non-referential**:   (i) ***A tiger*** *has **stripes***. (ii) ***Nobody*** *will ever admit that **he** is wrong*. (iii) *He is hoping to find **a new job***. (iv) ***Any woman*** *wants **a diamond ring***. (v) *If I had **a pet snake**, I would try to catch **mice** to feed **it***.
   (c) This narrow definition is inappropriate for linguistic purposes. The real world is only *one* facet of our vast mental universe; we can and do talk about *any* facet of it.
   (d) Even with negation, we conceive of the profiled thing and establish it as a referent in the discourse. It can then be referred to with a pronoun (used for specific, identified things).

(3)(a) Besides what we call the "real world", our **mental universe** includes an immense inventory of *mental constructions* (e.g. metaphors, blends, generalizations, projections, hypothetical situations), as well as the imagined worlds of stories, films, myths, etc.
   (b) While we each have our own mental universe, there is enough *overlap* to serve as a "common ground" for communication. It provides a **shared conceptual substrate**.
   (c) This substrate is an immensely complex **structure**, much of which is basically **stable**. It serves as a framework for apprehending and interpreting additional phenomena.

(4)(a) Nominal reference depends on the substrate. Without it there is no basis for talking about a **particular** thing or saying that the interlocutors direct attention to the **same** thing.
   (b) A referent is **identified**—distinguished from others—by its **place** in the substrate. It is embedded in a vast web of **connections** defining its place and allowing it to be accessed.
   (c) The basis for identification is a **path**—a series of connections—leading from the conceptualizer (the *origin*) to the referent (the *goal* or *target*). Metaphorically, the conceptualizer "follows" this **connecting path** and "reaches" the target.
   (d) Reaching it constitutes "mental capture". So for linguistic purposes, identification consists in *joint mental capture* by the *interlocutors*.

(5)(a) All nominals invoke a connecting path (*grounding* in the broad sense), but the details vary greatly, involving different facets of the substrate stable on different time scales.
   (b) **Unique reference** is usually based on **global** aspects of the substrate, which are stable over a long period of time for all members of the speech community (e.g. cultural models). The referent has an *established identity* (a *known place* in the substrate).
   (c) By contrast, **non-unique reference** is typically based on more **local** aspects of the substrate, notably the *immediate discourse context*.

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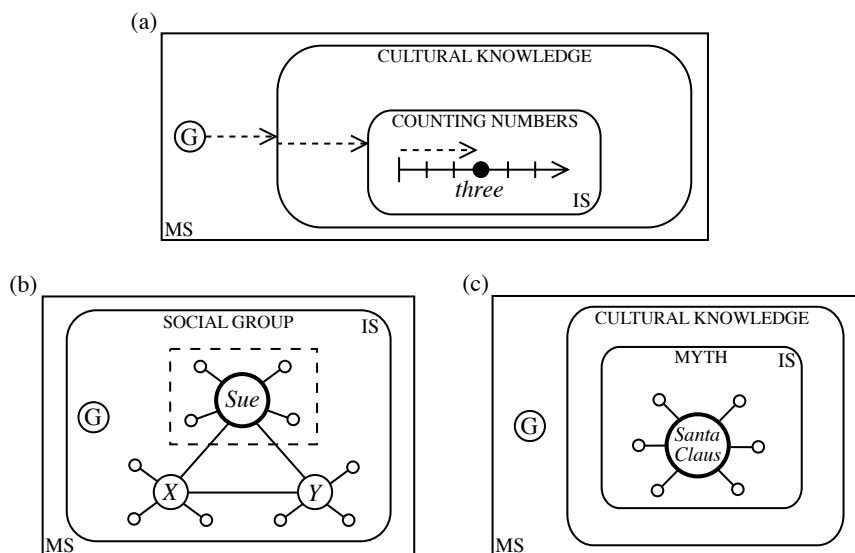
(7)(a) With **unique reference**, the noun itself is sufficient to identify the referent—identification (*grounding* in a broad sense) is inherent. G is invoked in *generalized* fashion.
   (b) By contrast, with **non-unique reference** the noun designates a type with multiple instances, all *candidates* to be selected as the nominal referent.
   (c) There are various means or *strategies* for identification. Most commonly these involve an *explicit grounding element*—**grounding** in the narrow sense.
   (d) Moreover, the basis for identification tends to be **local**, invoking **specific interlocutors** and the **current speech event**.
   (e) **Current discourse space** (CDS): everything intersubjectively accessible to the interlocutors as the basis for communication at a given moment in the flow of discourse.

(8)(a) In actual use, all grounding is local in the sense of being effected by the speaker and hearer in the current speech event. And even with unique reference it depends on the CDS.
   (b) Successful use of a proper name requires that the referent have a known place in the shared conceptual substrate accessible to both interlocutors. But it is not limited to them.
   (c) Typical cases of non-unique reference are local in the stronger sense that identification is crucially dependent on **particular features** of the current speech event.
   (d) In an actual *pointing gesture*, a **particular person** is pointing at a **particular moment** in a **particular direction**. The gesture itself is unique—a purely local occurrence.
   (e) Unique reference is achieved based on uniqueness of the gesture. Identification is crucially dependent on the local context.

(9) Being conventional in nature, an **act of pointing** [☛] is a kind of linguistic symbol.

    (a) S_0 and H_0 are the **actors** in this gestural "speech" event. G_0 is the ground.

    (b) Relevant portions of the CDS include the ground and the immediate physical context.

    (c) OS is the range of potential referents **currently onstage** (hence identifiable by pointing). Already within the interlocutors' *scope of awareness*, they have *immediate accessibility*.

    (d) FOC is the **focus of attention**. Successful reference consists in *joint attentional capture*. The referent's role as **target** constitutes its **identification** (place in the local substrate).

    (e) The pointing gesture (bold arrow) has **directive force** (double arrow): it induces the observer to direct attention to the proper target.
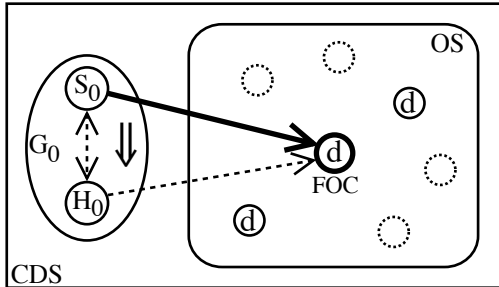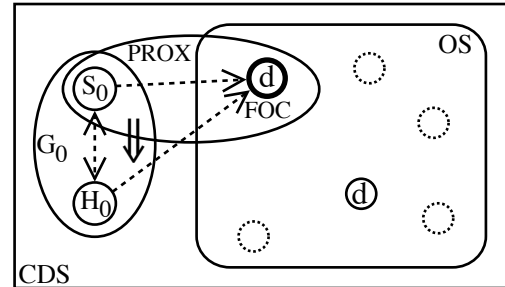
(10) Pointing gesture: *[☛]*
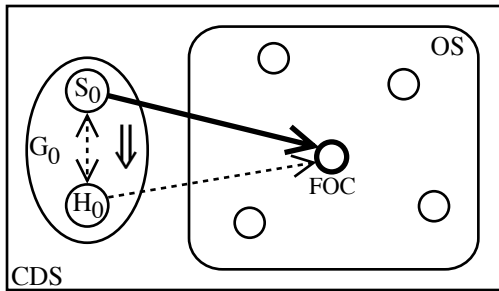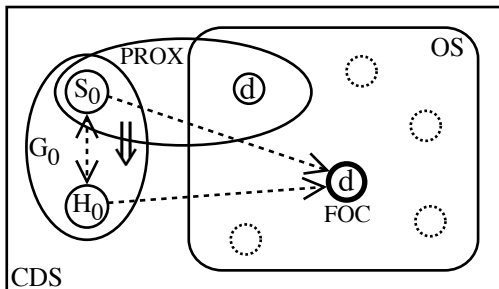

B. Definite Grounding

(11)

    (a) *that [☛] dog*   (b) *this dog*
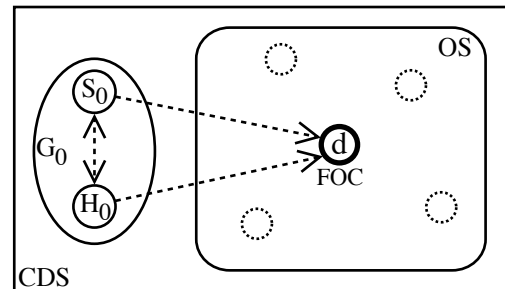

    (c) *that dog*   (d) *the dog*

(12)(a) Pointing is more precise when combined with verbal expression: *that [☞] dog*. The demonstrative symbolizes the referential action. The noun limits the range of candidates to (onstage) instances of its type.

(b) If there is only one demonstrative, it adds little to the pointing gesture. Languages always have more than one, the minimal system being a PROXIMAL vs. DISTAL contrast. By default, this distinction pertains to distance from the speaker.

(c) Whether minimal or elaborated, the demonstrative system contributes to identification by **partitioning** the set of candidates, thereby limiting the search to a subset.

(d) In context, this partitioning may be enough to identify the referent. Pointing is then not needed. Since many referents cannot be pointed to, the absence of pointing is the norm.

(e) ***This*** *dog* [the one I'm petting] *is friendly.* ***That*** *dog* [the one over there] *is vicious.*

(13)(a) ***This*** *chair is comfortable.* [proximity to S]   *Is* ***that*** *chair OK?* [proximity to H]

(b) ***This*** *table is too close to the door.* ***That*** *one would be better.*   [proximity to S and H]

(c) *Jill was starting to think that she would have to move—* ***this*** *chair was just too uncomfortable.*   [shifted perspective; proximity to Jill]

(14)(a) *She's very busy* ***this*** *week. She's getting married* ***this*** *Saturday.*   [proximity in time]

(b) *Is* ***this*** *tooth the one that hurts?*   [locus of interest; immediate concern]

(c) ***That*** *is {true / important / interesting}.*   [normal response to a statement]

(d) ***This*** *is {true / important / interesting}.* [speaker intends to consider the statement further]

(15)(a) The directive force is normally aimed at getting H to select the referent from the range of onstage candidates. Alternatively, it is aimed at putting a single candidate onstage.

(b) S and H are both looking at a dog: ***The*** *dog is ugly.*

(c) A dog is visible to S and H, but only S is aware of it: ***That*** *dog is ugly.*

(d) *In the bar I met a man named Felix.* ***This*** *Felix was an interesting character ...*
[focus of interest, no directive force]

(e) ***That*** *Obama is really {amazing / hurting the economy}.*
[distancing, reflecting either a positive attitude (he is awesome, he stands apart) or a negative one (I don't want to be associated with him)]

(16) Demonstratives exemplify the notion that all linguistic elements have at least some import with respect to four dimensions: **individual**, **interactive**, **descriptive**, and **discursive**.

(a) Matters like affect, distancing, and focus of interest are *individual*.

(b) Their grounding function of coordinating mental reference is *interactive*.

(c) They have at least minimal *descriptive* content (e.g. plural mass for *these*/*those*).

(d) They have the *discursive* function of indicating the referent's discourse status.

(17)(a) Demonstratives are said to be **definite**, as is the **definite article** *the*.

(b) The definite article can be thought of as a "bleached out" demonstrative: as shown in (11)(d), it neutralizes the proximal/distal contrast and lacks directive force.
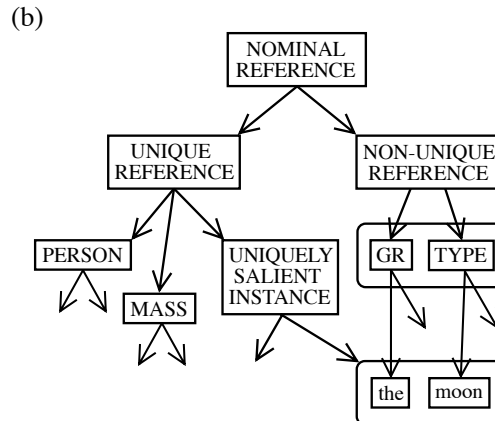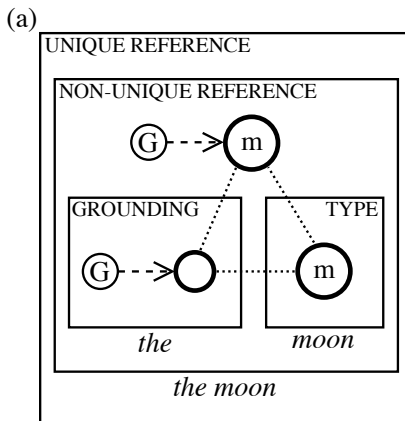
C. Articles

(18)(a) The **definite article** indicates that just *one instance* of the specified type is *immediately accessible* in the CDS: already *onstage* for both S and H (in their *scope of awareness*).
 (b) With just one candidate, the nominal's *type description* is enough to identify the referent.
 (c) Unlike demonstratives, the definite article **lacks directive force**. It does not *select* the referent from a set of alternatives, but simply registers its **contextual uniqueness**.
 (d) An **indefinite article** also lacks directive force, but indicates that the nominal's type description is **not** enough to identify the intended referent—either because there are *multiple candidates* (onstage instances of the specified type) or because there are *none*.

(19)(a) *In the yard I saw a dog and three cats. Jill was petting **the dog** and **a cat** (*the cat).*
 (b) *Jill was petting a black cat and a white one. **The white cat** was purring.*
 (c) ***The rare vase you bought at the auction** looks good on your desk.*
 (d) ***the first man** to have walked on the moon*
 (e) ***the only man** to have hit a golf ball on the moon*
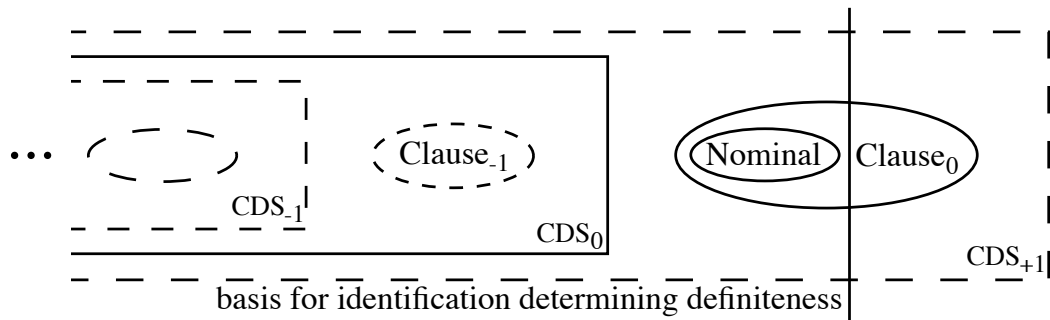 (f) ***the tallest man** to have played center for the Houston Rockets*

(20)(a) *Our basketball team keeps losing. **The center** (*the forward) isn't tall enough.*
 (b) *Are you **thé Hillary Clinton?***
 (c) *the sun, the moon, the atmosphere, the pope, the president, the government, the party*

(21)

(a)   (b)

(22)(a) Grounding is primarily **discursive**: it specifies a referent's *epistemic status*, which changes from moment to moment depending on the *current discourse space* (CDS).
 (b) A referent marked with the **indefinite article** *a* in one expression can take the **definite article** *the* in the next: *He was feeding **a dog** and a panda. **The dog** was really ugly.*
 (c) The article changes because the *substrate* changes, altering the referent's epistemic status.
 (d) Indefinite nominals are *grounded*, but their referent is said to be **unidentified**. However, grounding is based on *identification* (S and H focusing on the *same referent*).
 (e) The CDS is continually being **updated**. A nominal is definite or indefinite depending on whether or not the referent is identified at a *specific point* in the updating process.

(23)

... CDS$_{-1}$ ⟨Clause$_{-1}$⟩ CDS$_0$ (Nominal) Clause$_0$ CDS$_{+1}$

basis for identification determining definiteness

(24)(a) Each clause updates the CDS. Clause$_0$ is the current target. CDS$_0$ is its substrate.

    (b) Due to *conceptual autonomy*, a nominal has **functional priority** within the clause containing it. The clausal process is *conceptually dependent* on its participants.

    (c) The basis for assessing **definiteness** is therefore limited to the *immediate substrate*, CDS$_0$, and the content provided by the *nominal itself*.

    (d) Even if unidentified (hence indefinite) on that basis, the referent's role in the clause serves to identify it for *subsequent purposes*. It is an **established discourse referent** in CDS$_{+1}$.

    (e) The discourse itself is part of the **shared conceptual substrate**, so the very fact of occurring in a clause provides a nominal referent with a **place** in this substrate.
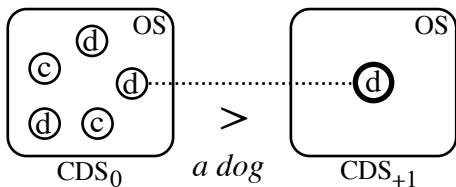
(25)

   (a) *Jill was petting a dog and a cat.*]CDS$_0$
      > ***The dog** looked friendly.*]CDS$_{+1}$
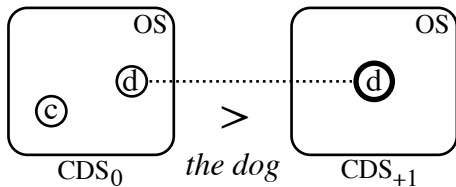
   (b) *Jill looked in the pet shop.*]CDS$_0$
      > *She saw **a dog**.*]CDS$_{+1}$
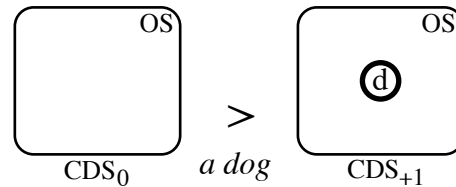
   (c) *I saw dogs and cats there.*]CDS$_0$
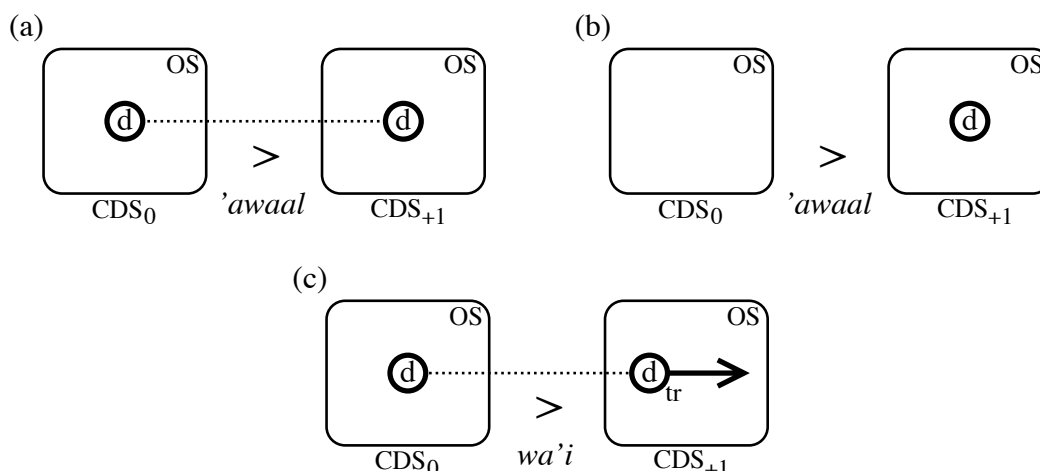   > *Jill was petting **a dog**.*]CDS$_{+1}$

   (d) *Jill was petting a dog.*]CDS$_0$
      > ***It** looked friendly.*]CDS$_{+1}$
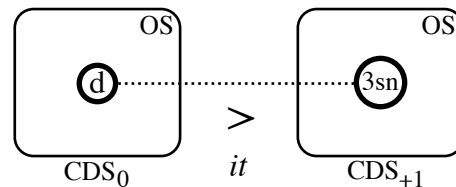
(26) *Noo=n 'awaal-i toow-q.   Wa'i-q.*   'I see {the / a} dog. It's barking.'   [Luiseño]
    I=1s dog-OBJ see-TNS   bark-TNS

(27)

(a)

OS d OS d

$>$ *'awaal*

CDS_0 CDS_{+1}

(b)

OS   OS d

$>$ *'awaal*

CDS_0 CDS_{+1}

(c)

OS d OS $d_{tr} \rightarrow$

$>$ *wa'i*

CDS_0 CDS_{+1}

(28)(a) COUNT N: *{the / a} lake*   MASS N: *{the / sm}{water / lakes}*
   (b) *He extinguished the cigarette by pouring **sm water** in the ashtray.*
   (c) *?They extinguished the campfire by pouring **sm water** on it.*
   (d) **They extinguished the forest fire by dropping **sm water** on it.*

(29)(a) Mass nouns can be used without an indefinite article: *They poured **water** on the fire.*
   (b) In such cases *delimitation* is inferred from the **event** the referent participates in.
   (c) The referent is grounded and quantified by the clause containing it, which overrides (or **elaborates**) the **baseline conception** of reference to the *maximal extension* (ME).
   (d) The result (in CDS_{+1}) is a delimited, identified instance of the type. Using the noun in the context of the clause fulfills the referential function of a nominal.

(30)(a) There are a variety of *grounding strategies*: unique reference, overt grounding element, discourse construction, inference from containing clause.
   (b) This reinforces the basic point that *semantic function* is more fundamental to grammar than specific *structural implementation*.

D. Virtual Referents

(31) The **actual/virtual** distinction is *relative*, not a strict dichotomy. There are dimensions and degrees of departure from the *baseline reality* of discrete physical real-world entities.
   (a) Many referents are **non-physical**, e.g. mental (*idea*), social (*law*), or abstract (*number*).
   (b) *Reality* can be defined as what has actually occurred. **Unreal**—because they have not (yet) been *realized*—are future occurrences (*He may win*) and conceived alternatives to reality, e.g. with negation (*He didn't win*) and counterfactuals (*If he had won* ...).
   (c) The **alternative worlds** of films, novels, or myths are part of our mental universe. We apprehend them and talk about them (*Santa Claus takes good care of his reindeer*).

(d) **Other minds**: we cannot directly share the outlook and experience of another conceptualizer, but can only imagine or simulate them. In *Jill is sure the world is flat*, the flat world is in a mental space representing Jill's (not the speaker's) view of reality.

(e) Various sorts of **mental constructions** involving virtual entities nonetheless pertain to reality and are useful in dealing with it. Examples are hypothetical situations (*If he wins we will celebrate*) and generalizations (*Every nominal has a referent*).

(32)(a) A virtual entity is imagined ("conjured up") for a particular local purpose, hence limited to the **mental space** established for that purpose.

(b) Nominals said to be "non-referential" are better described as having *virtual referents*:

  (i) **Generalizations**: *A tiger has stripes*; *Nobody will ever admit that he is wrong*; *Any woman wants a diamond ring so she can show it to her friends*.

  (ii) **Counterfactual conditional**: *If I had a pet snake, I would try to catch mice to feed it*.

  (iii) **Future** event entertained by **another conceptualizer**: *He is hoping to find a new job*.

(33)(a) With an indefinite article, the referent is **momentarily virtual** for the **hearer**. Based on just the *prior substrate* (CDS_0), H has no way to identify it (it "floats unattached").
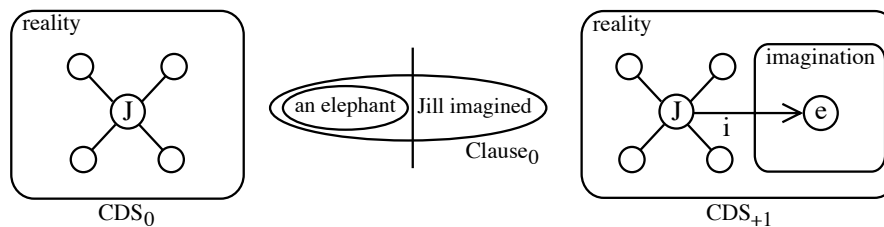
(b) $Clause_0$ provides a basis for connecting it to the substrate. The referent is then *identified*, but can either be actual or virtual: *Jill saw an elephant* vs. *Jill imagined an elephant*.

(34)

(a) *Jill saw an elephant.*
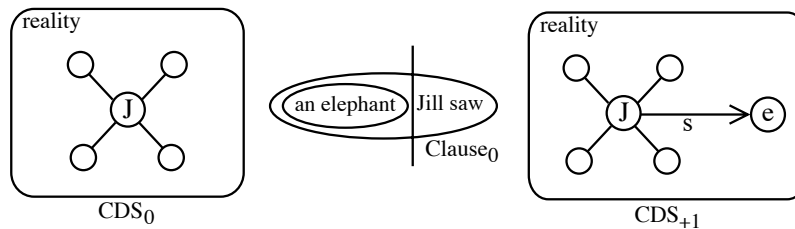
(b) *Jill imagined an elephant.*

(35)(a) The **definite/indefinite** and **actual/virtual** distinctions are related but not the same.

(b) Definiteness pertains to *identification* of a referent. It is based on what the interlocutors *know*—its **epistemic status**—and changes through discourse.

(c) The actual/virtual distinction (roughly, real vs. imagined) depends instead on whether the referent actually exists—its **existential status**. This does not change through discourse.

(d) All combinations are possible:

  (i) *Jill saw an elephant. It was very big.* [actual, unidentified > actual, identified]

  (ii) *Jill imagined an elephant. It was very big.* [virtual, unidentified > virtual, identified]

(36)(a) The *discourse itself* is part of the shared conceptual substrate (CDS), and as such it provides a means of identification.

    (b) Just by being referred to a referent has a *known place* in the substrate and is thus *identified* (hence definite) in the subsequent discourse.

    (c) Minimally, it is identified as the entity which has just been mentioned.

    (d) More importantly, it is identified through its role in the described situation.

(37)(a) **Baseline grounding**, as in ***Jill bought this vase***, is largely independent of the discourse and the content of the containing clause:

    (i) With proper names the referent has an **established identity** (a fixed place in the interlocutors' **shared prior knowledge**).

    (ii) With demonstratives the referent appears in the **immediate context**, where it can be pointed to or otherwise singled out.

    (b) Canonically the referent is an *actual*, *discrete*, *physical* entity: a person or an object.

(38)(a) At the opposite extreme are **grounding quantifiers** like *most* and *any*, as in ***Most dogs will eat any food***. These too are largely independent of the discourse context.

    (i) The referent is a **mass**, not a discrete entity.

    (ii) It is necessarily **virtual**, being conjured up to make a generalization.

    (iii) It is **abstract** in the sense that it has no spatial location.

    (b) Quantification constitutes an *elaboration* relative to baseline grounding, requiring additional conceptual resources.

(39)(a) Proper nouns and demonstratives are *definite* expressions. Quantifiers are *indefinite*.

    (b) Articles are in the middle: *the* is related to the demonstratives, *a* and *sm* to the quantifiers *one* and *some*. The articles are unstressed variants of their counterparts, without enough semantic or phonological substance to stand alone as nominals.

    (c) Unlike the extreme cases, which have a certain independence from the discourse, articles are **primarily discursive**.

(40)(a) *The tiger is a member of the cat family.*   [taxonomy]

    (b) **The tiger has stripes*.   [generic]

    (c) *All tigers have stripes*.   [universal quantifier]

    (d) *Tigers have stripes*.   [maximal extension; unique reference]

    (e) *A tiger has stripes*.   [generic; representative instance]

    (f) **Sm tigers have stripes*.   [generic]

(41) *A tiger has stripes.*
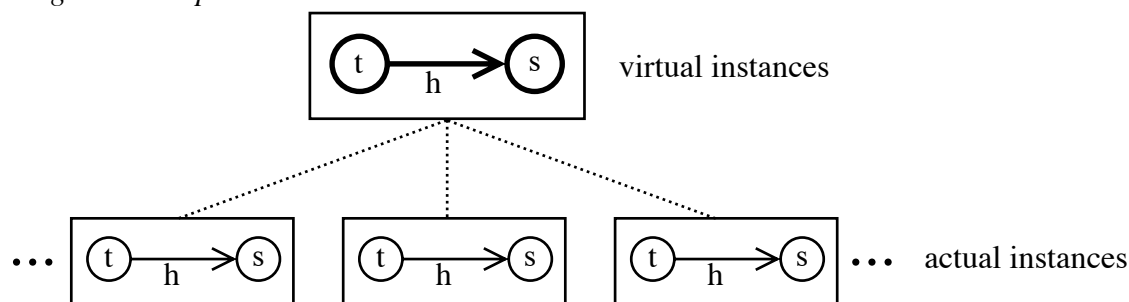
(42)(a) *A tiger has stripes* invokes **virtual** instances of *tiger*, *have*, and *stripes* in order to generalize over actual occurrences. The virtual instances are **representative** of actual ones but cannot be equated with any particular ones (they "float unattached").

(b) The nominals are **indefinite** because the profiled instances are simply "conjured up" in order to generalize. Having *no place in the prior substrate*, they cannot be identified.

(c) However, their role in this mental construction gives them a place in the substrate, making them definite in subsequent expressions: ***A tiger* has *stripes*. *It* counts *them* every day**.

(d) A valid generalization (*A tiger has stripes*) is "real" compared to an invalid one (*A tiger has feathers*): the situation it describes is an aspect of how our world actually works. It represents a *higher stratum* of reality (specific occurrences being the baseline).

(43)(a) Quantifiers with grounding as their main function are indefinite because their referents are necessarily virtual, e.g. *nobody*, *any woman*, *every nominal*, *most wine*, *some tigers*.

(b) They make generalizations concerning masses, for which identification tends to be problematic (though delimited instances can be definite: ***The guests** don't like **this wine***).

(c) Instances are usually not known individually or have an established identity. Masses being homogeneous, instances are basically equivalent and interchangeable. In practical terms, we are typically more concerned with quantity than with identification.

(44)(a) Grounding quantifiers incorporate *mental constructions* useful in dealing with masses. Only in a broad sense does their specification of *epistemic status* constitute *identification*.

(b) Baseline grounding and quantification can both be used in statements affording a degree of **epistemic control** (knowledge of the world), but different kinds of control:

(i) With baseline grounding, e.g. *This wine is made from grapes*, we learn something definite about a particular referent.

(ii) With a quantifier, e.g. *Most wine is made from grapes*, what we learn is only probabilistic but is a generalization with very broad applicability.

(c) These two sorts of identification differ in their **frame of reference**: *space and time* (real and conceptually more basic) vs. the *maximal extension* (virtual and more abstract).

References

Coates, Richard. 2006. Properhood. *Language* 82.356-382.

Dancygier, Barbara and Eve Sweetser. 2005. *Mental Spaces in Grammar: Conditional Constructions*. Cambridge: Cambridge University Press. Cambridge Studies in Linguistics 108.

Diessel, Holger. 1999. *Demonstratives: Form, Function, and Grammaticalization*. Amsterdam and Philadelphia: John Benjamins. Typological Studies in Language 42.

Diessel, Holger. 2006. Demonstratives, Joint Attention, and the Emergence of Grammar. *Cognitive Linguistics* 17.463-489.

Epstein, Richard. 1994. *Discourse and Definiteness: Synchronic and Diachronic Perspectives*. San Diego: University of California doctoral dissertation.

Epstein, Richard. 2001. The Definite Article, Accessibility, and the Construction of Discourse Referents. *Cognitive Linguistics* 12.333-378.

Fauconnier, Gilles. 1985. *Mental Spaces: Aspects of Meaning Construction in Natural Language*. Cambridge, MA and London: MIT Press/Bradford.

Fauconnier, Gilles and Mark Turner. 2002. *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.

Goldsmith, John and Erich Woisetschlaeger. 1982. The Logic of the English Progressive. *Linguistic Inquiry* 13.79-89.

Gundel, Jeanette K., Nancy Hedberg, and Ron Zacharski. 1993. Cognitive Status and the Form of Referring Expressions in Discourse. *Language* 69.274-307.

Hawkins, John. 1978. *Definiteness and Indefiniteness: A Study in Reference and Grammaticality Prediction*. London: Croom Helm.

Janssen, Theo A. J. M. 1995. Deixis from a Cognitive Point of View. In Ellen Contini-Morava and Barbara Sussman Goldberg (eds.), *Meaning as Explanation: Advances in Linguistic Sign Theory,* 245-270. Berlin and New York: Mouton de Gruyter.

Kirsner, Robert S. 1993. From Meaning to Message in Two Theories: Cognitive and Saussurean Views of the Modern Dutch Demonstratives. In Richard A. Geiger and Brygida Rudzka-Ostyn (eds.), *Conceptualizations and Mental Processing in Language,* 81-114. Berlin and New York: Mouton de Gruyter. Cognitive Linguistics Research 3.

Langacker, Ronald W. 1991. *Foundations of Cognitive Grammar*, vol. 2, *Descriptive Application*. Stanford: Stanford University Press.

Langacker, Ronald W. 1997. Generics and Habituals. In Angeliki Athanasiadou and René Dirven (eds.), *On Conditionals Again,* 191-222. Amsterdam and Philadelphia: John Benjamins. Current Issues in Linguistic Theory 143.

Langacker, Ronald W. 1999. Virtual Reality. *Studies in the Linguistic Sciences* 29.77-103.

Langacker, Ronald W. 2004. Remarks on Nominal Grounding. *Functions of Language* 11.77-113.

Langacker, Ronald W. 2005. Dynamicity, Fictivity, and Scanning: The Imaginative Basis of Logic and Linguistic Meaning. In Diane Pecher and Rolf A. Zwaan (eds.), *Grounding Cognition: The Role of Perception and Action in Memory, Language and Thinking,* 164-197. Cambridge: Cambridge University Press.

Langacker, Ronald W. 2008. *Cognitive Grammar: A Basic Introduction*. New York: Oxford University Press.

Verhagen, Arie. 1986. *Linguistic Theory and the Function of Word Order in Dutch: A Study on Interpretive Aspects of the Order of Adverbials and Noun Phrases*. Dordrecht: Foris.