II. Noun Classes and Nominal Structure

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A. Nouns: Conceptual Characterization

(1)(a) Contrary to standard linguistic doctrine, CG claims that **basic grammatical categories**, in particular noun and verb, have semantic definitions valid for all members.
(b) **Conceptual archetypes:** general notions reflecting fundamental aspects of human experience, such as 'object', 'action', 'event', 'motion', 'property', and 'location'.
(c) Archetypes function as the **prototypes** of basic categories: 'object' for nouns (e.g. *cup*), 'event' for verbs (*break*), 'property' for adjectives (*blue*).
(d) Characterizations valid for all category members must be highly **schematic**, abstracting away from any specific conceptual content. They consist in **basic cognitive abilities**.

(2) The schematic CG definitions reflect a general hypothesis as to why certain grammatical notions (like noun, verb, subject, object, possessive) are fundamental and possibly universal:
(a) Each such notion can be characterized semantically in terms of both a *prototype*, valid for central instances, and a *schema* instantiated by all instances.
(b) The prototype is an experientially grounded *conceptual archetype* (e.g. physical object). The schema resides in *basic cognitive abilities* (such as grouping).
(c) The basic abilities are initially manifested in the corresponding archetypes; presumably innate, they make it possible for structured experience to occur in the first place.
(d) At a later developmental stage, these same abilities are extended to other domains of experience, giving rise to non-prototypical instances.

(3)(a) A **conception** (any kind of experience) consists in processing activity. An **entity** is anything we are capable of experiencing or apprehending.
(b) We can only be aware of so much at any one moment: a limited **scope of awareness**.
(c) The conception of multiple entities in the same scope of awareness is a single, complex experience (as opposed to separate, unrelated experiences).
(d) Such entities are generally *conceived in relation to one another* through **connecting operations**. These constitute the apprehension of a **relationship** (itself an entity).

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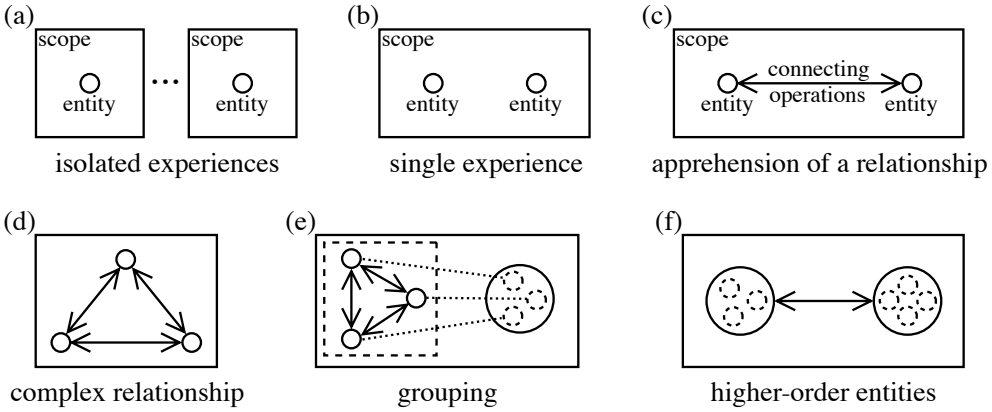
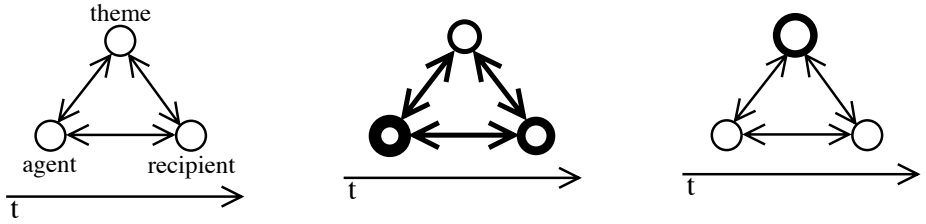


(5)(a) A complex conception usually represents multiple **levels of organization**, whereby the structure at one level is the basis for a structure that emerges at another, "higher" level.
(b) In **grouping**, a set of connected entities are conceived as a *single entity* for higher-level purposes. The resulting group can be connected to others through further operations.
(c) This many-to-one reduction facilitates processing: [7429153861] vs. [742]-[915]-[3861].

(6)(a) We can **focus attention** on any facet of a conception, e.g. a single entity, a component relationship, a complex relationship, or the higher-level entity obtained by grouping.
(b) Something conceived as a single entity—either intrinsically (like a point of light) or as the result of grouping (like a team)—is referred to as a **thing**.
(c) A relationship is **conceptually dependent** on the entities it connects, requiring them for its manifestation. The connected entities are part of the relationship.
(d) When a relationship is made the focus of attention, the connected entities receive some prominence as well. There is usually a **primary focus** and often a **secondary focus**.

(7)

(a) act of transfer (b) *give* (V) (c) *gift* (N)



(8)(a) Only these fundamental cognitive abilities figure in the CG definition of basic categories.
(b) The members of grammatical categories are **expressions**. These are **symbolic** in nature, consisting in the pairing of a *semantic structure* and a *phonological structure*.
(c) An expression's category depends on its **profile**, i.e. its *semantic focus of attention*. It is the expression's *conceptual referent*—the entity it designates within the content invoked.
(d) An expression profiles either a *thing* [as defined in (6)(b)] or a *relationship*.

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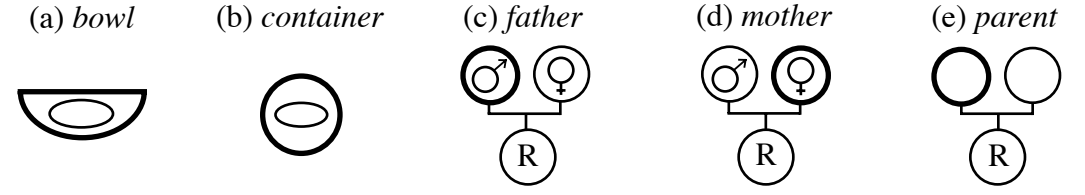
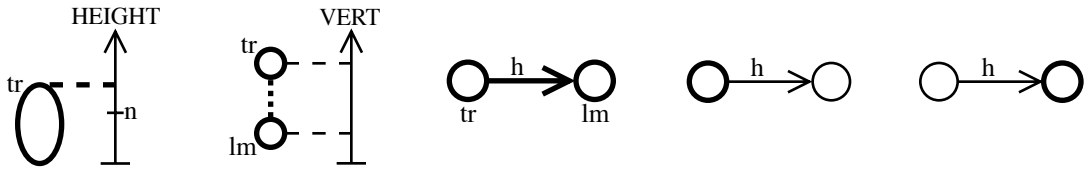
(a) *bowl* (b) *container* (c) *father* (d) *mother* (e) *parent*



(f) *tall* (g) *above* (h) *hunt* (i) *hunter* (j) *prey*

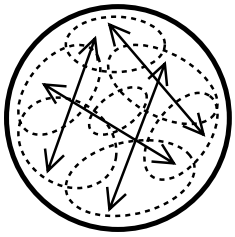


(10)(a) A noun profiles a **thing**. A verb profiles a **process** (a relationship followed through time). Adjectives and prepositions profile **non-processual relationships**.
(b) The *primary focal participant* in a profiled relationship is called the **trajector** (tr). A *secondary focal participant* is called a **landmark** (lm).
(c) A **subject** is a nominal expressing a trajector. An **object** expresses a landmark.
(d) Adjectives and adverbs profile non-processual relationships with a trajector but not a focused landmark. A preposition does have a focused landmark.

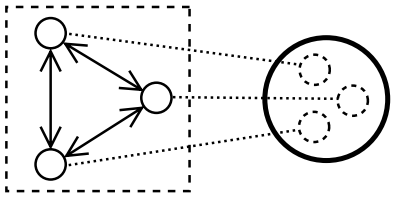
(11)(a) A noun profiles a **thing**, defined abstractly by its unitary nature ("oneness").
(b) Since the world as we experience it is mentally constructed, even entities whose oneness seems inherent result from grouping activity at some level.
(c) An object (e.g. a *rock*) consists of physical substance distributed through a continuous region in space. Its conception requires that this continuity be apprehended.
(d) The mental activity serving to register continuity amounts to *connecting operations* whereby arbitrary "patches" of substance are grouped to form a single entity.
(e) Object nouns are prototypical because the grouping is so basic and automatic that we are usually unaware of constitutive entities—oneness predominates at the conscious level.

(12)

(a) Object Noun



(b) Group Noun



(13)(a) A large number of nouns clearly do refer to groups: *team*, *stack*, *set*, *class*, *choir*, *orchestra*, *alphabet*, *orchard*, *forest*, *convoy*, *fleet*, *archipelago*, *herd*, *flock*, *mob*, *crowd*, *audience*, *cluster*, *bunch*, *array*, *library*, *anthology*, *collection*, *trio*, *quartet*, *chord*, *list*, *roster*, *lexicon*, *vocabulary*, *constellation*, *galaxy*, *family*, *tribe, committee*, *assembly* ...
(b) For these we have to recognize two levels of conceptual organization related by grouping:
(i) The component entities are discrete and individually discernible.
(ii) A group noun construes them as a single entity: *a team*, *one team*, etc.

(14)(a) Prototypical **mass nouns** are terms for physical substances: *water*, *blood*, *wine*, *meat*, *flour*, *butter*, *wood*, *steel*, *glass*, *air*, *sand*, *clay*, *leather*, *cloth*, *plastic*, *paper*, *gasoline* ...
(b) A substance occupies space but has no inherent size or shape. It is conceived as being uniform throughout, any portion being the same as any other.
(c) Taking any portion of a mass, or adding more to it, yields another instance of the same substance type: ***the wine*** *in that bottle*; ***the wine*** *in this glass*; ***the wine*** *in those bottles*.
(d) **Count nouns** can occur with the indefinite article *a* or the number *one*: *a bottle*; *one bottle*. Mass nouns do not: **a leather*; **one gasoline*.
(e) **Countability** is not the same as the **oneness** characteristic of nouns in general.

(15)(a) Countability depends on **bounding**: an inherent limit on the extent of an instance, so that we can tell where one ends and another begins. [*another bottle*; *two bottles*; **more bottle*]
(b) A mass can be expanded indefinitely, never reaching completion so that further expansion constitutes another instance. [*more gasoline*; **another gasoline*; **two gasolines*]
(c) Despite the absence of inherent bounding, a mass represents a grouping (hence a single entity) by virtue of its component entities being connected and functioning as a whole.
(d) For a given patch of substance, the connecting operations consist in the registration of **spatial continuity** as well as an assessment of **qualitative uniformity**.
(e) A certain **quantity** is needed for a substance to manifest its properties or serve a function. The amount doing this does it as a whole, functioning as a single entity for this purpose.
(f) A substance is characterized by quality, so spatial distribution is not essential. Spatially discontinuous patches of substance can still be grouped by qualitative uniformity.

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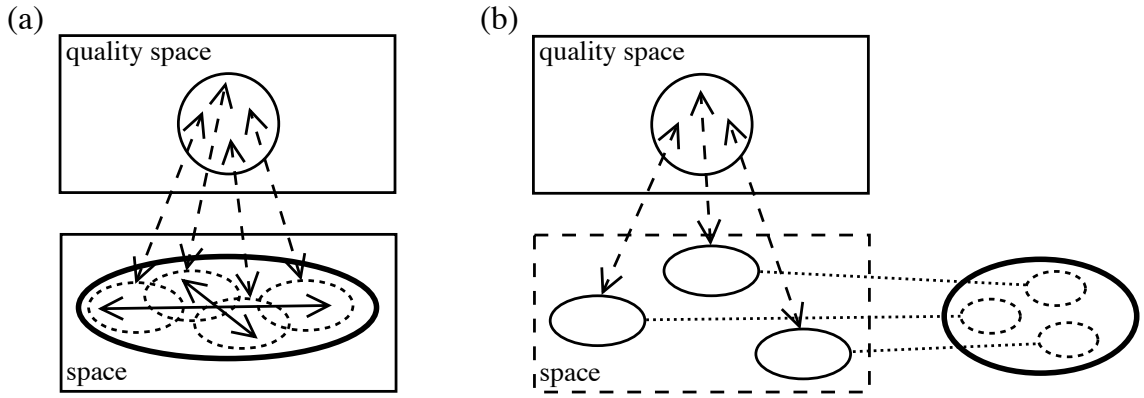

(17)(a) **Plural nouns** (*bottles*, *dogs*, *ideas* ...) derive from count nouns: *bottles* = *bottle* + *-s* PL.
(b) Plurals function as mass nouns (e.g. *a lot of {wine / bottles}*; *most {wine / bottles}*) but are special in some respects (e.g. *that wine* vs. *those bottles*; *much wine* vs. *many bottles*).
(c) A count noun names a **type** with multiple **instances**. A nominal (e.g. *that bottle*) refers to an instance and indicates how the profiled instance relates to the **ground** (G).
(d) A plural mass is obtained by grouping count-noun instances connected based on their common type. It is a mass because there is no inherent limit on the number of instances.
(e) A plural differs from a substance noun because its components are discrete and salient. It differs from a group noun (e.g. *team*) because its referent is unbounded.

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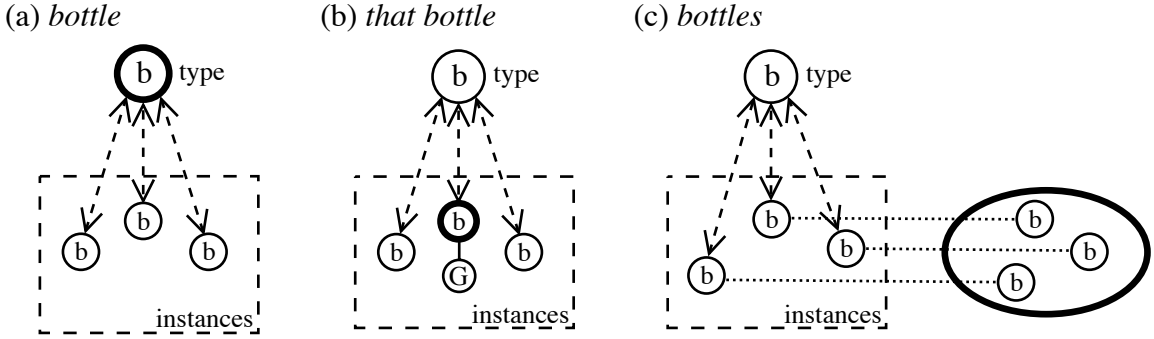


(19)(a) Since the CG characterizations do not refer to space (but to general notions like grouping, bounding, and type), they readily extend to nouns designating abstract entities.

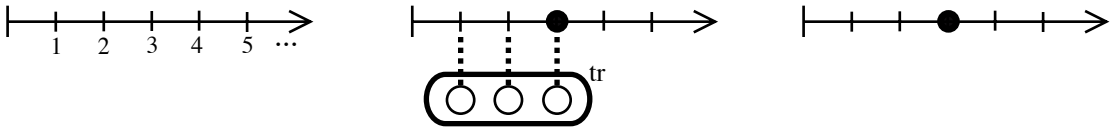
(b) ADJ: ***three*** *bottles* N: ***Three*** *is odd.* ***Three*** *is less than five.* ***Three*** *plus four is seven.*

(c) ADJ: ***blue*** *cup* PROPER N: ***Blue*** *is her favorite color.* COUNT N: *This* ***blue*** *will be perfect for the bedroom.* MASS N: *There's a lot of* ***blue*** *in this painting.*

(d) V: ***run*** AGENT N: ***runner*** EVENT N: *She had a good* ***run***. MASS N: *There's a lot of* ***running*** *in this neighborhood.* PROPER N: ***Running*** *is good for you.*

(20)

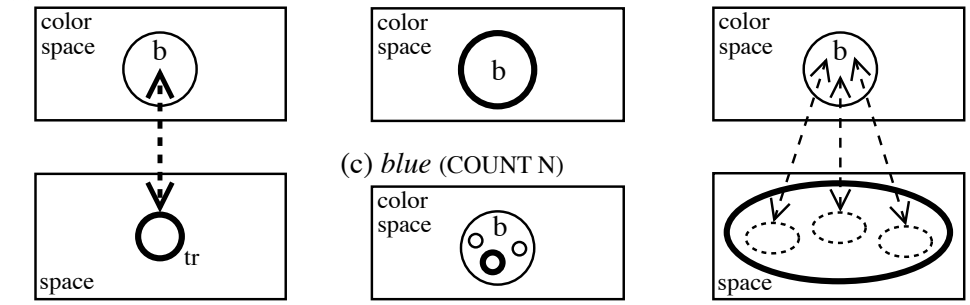
(a) Number Series (b) *three* (ADJ) (c) *three* (PROPER N)



(21)

(a) *blue* (ADJ) (b) *blue* (PROPER N) (d) *blue* (MASS N)

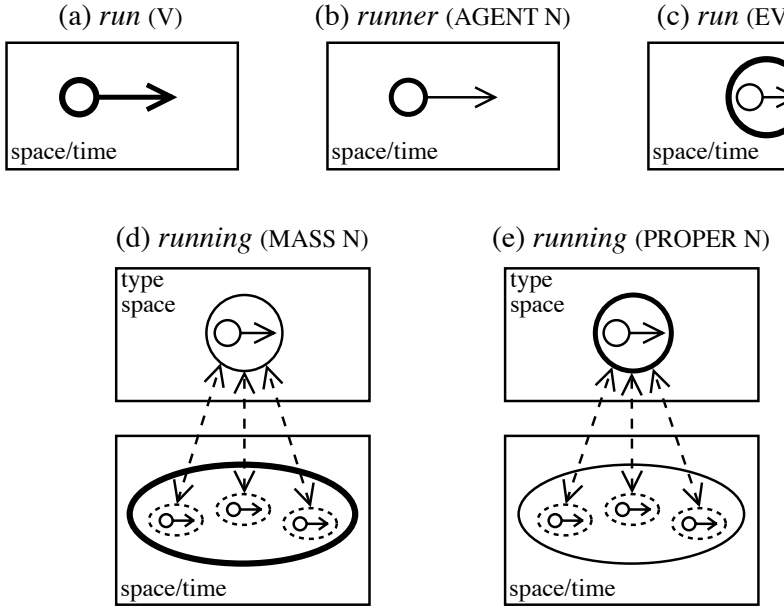
(c) *blue* (COUNT N)



(22)

(a) *run* (V) (b) *runner* (AGENT N) (c) *run* (EVENT N)

(d) *running* (MASS N) (e) *running* (PROPER N)

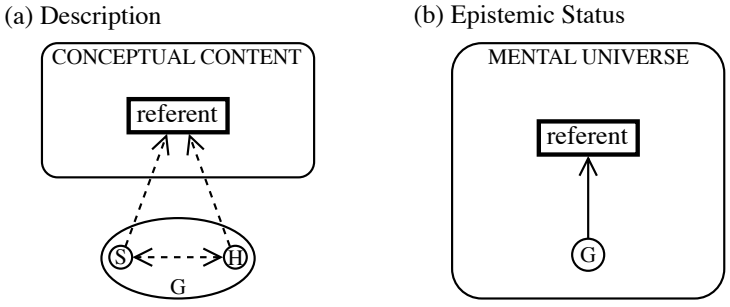


B. Referential Function

(23)(a) Language serves the *general function* of **symbolic expression** for purposes of interaction, communication, and thought. Linguistic elements have more specific functions.
(b) Nominals and clauses have a **referential function**. They let us refer to particular facets of our **mental universe**, which encompasses everything we are capable of conceiving.
(c) They occur in **discourse**, which has the interactive function of **conceptual coordination**: augmenting the shared knowledge and intersubjective awareness of the interlocutors.
(d) The basic discursive unit is a **clause**. A discourse often consists in a series of clauses (typically grouped into larger structures), but seldom just in a series of nominals.

(24)(a) A clause refers to an **occurrence**, i.e. something that *occurs* (or happens). It is a relationship that **exists** in **time**, having a **temporal extension**. (Analogously, an **object** exists in **space**, having a **spatial extension**.)
(b) The *referential function* has two component *subfunctions*. Both involve the **ground** (G), i.e. the interlocutors, their interaction, and their immediate circumstances.
(c) Via **description** of the referent the interlocutors achieve intersubjective awareness in the form of **shared conceptual content** and a **joint focus of attention** within it.
(i) The focused entity is the **profile**. It is the **conceptual referent**—the *referent within the conceptual content* evoked by the description.
(ii) For a clause the profile is a **process**: an occurrence scanned sequentially through time.
(d) **Epistemic status** concerns the place of the profiled occurrence in the interlocutors' mental universe: temporal location and status as real vs. imagined.
(i) These help to distinguish the profiled process from others with the same description.
(ii) Epistemic status pertains to *reference within the interlocutors' mental universe*—which particular occurrence is at issue, out of all conceivable occurrences.

(25) Referential Function



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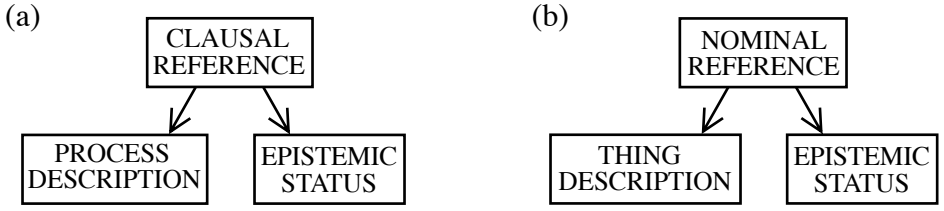

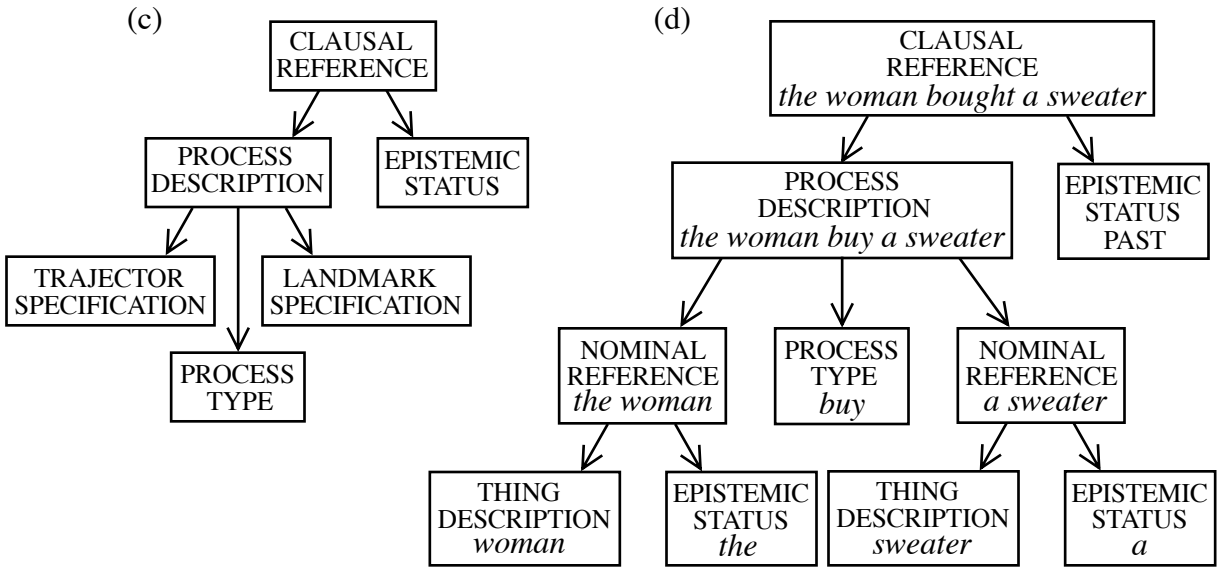

(27)(a) Reflecting the nature of our experience with objects and events, nominals and clauses differ in their **primary epistemic concerns**—what is mainly *at issue*.
(b) Since objects endure, and many objects have the same basic description, for nominals the main concern is **identification**—which particular object is being referred to.
(c) Events are transient and contingent, and we are seldom faced with multiple events with the same full description, so for clauses the main concern is **existence**—whether the event referred to actually occurs.

(28)(a) The *raison d'être* for grammar is to **implement semantic functions**, which are more basic and more consistent than their implementations.
(b) The **referential** function is fundamental, the *raison d'être* for nominals and clauses.
(c) **Description** and **epistemic status** are subfunctions of the referential function. One **strategy** for their implementation is *separate symbolic expression*.
(d) Lexical nouns and verbs are the **baseline** for the descriptive subfunction. Nominals and clauses constitute **grammatical elaborations** of nouns and verbs.
(e) A key *dimension* of elaboration is the *specification of epistemic status*. This elaboration is effected by **grounding elements**, which relate the referent to the ground.

(29)(a) Clausal grounding elements (e.g. tense and modality) mainly pertain to **existence**, and nominal grounding elements (e.g. determiners) to **identification**.
(b) The term **grounding** alludes to either an *overt grounding element* (narrow sense) or to the *semantic subfunction* of epistemic status (broad sense).
(c) Nominals and full clauses are all **grounded** in the broad sense, but an explicit grounding element is not the only strategy for conveying epistemic status.
(d) The **grounding function** has to be distinguished from the **baseline grounding value**.
(i) For clauses, *existence* represents the baseline value. But clauses marked for non-existence (e.g. by a modal) are still grounded (having a specified *existential status*).
(ii) For nominals, *identification* is the baseline status. But indefinite nominals are still grounded, as being unidentified is one kind of *identificational status*.

C. Basic Noun Classes

(30)(a) Supporting the meanings of linguistic elements is an open-ended **conceptual substrate**.
(b) As the basis for its meaning, a given element invokes certain portions of the substrate; these constitute the **maximal scope of awareness** (MS) for that purpose.
(c) Central to MS are the ground (G) and the **objective scene** (OS), i.e. the situation being described. Metaphorically, the ground is "offstage" while OS represents the "onstage" content being attended to. The profile is the focus of attention within OS.
(d) Also in MS are relevant aspects of the context, background knowledge, and the discourse.

(31)(a) The **semantic function** of a nominal (its schematic semantic characterization) is to direct attention to a particular thing selected from all those we are capable of conceiving.
(b) This function is **interactive** and **intersubjective**. The **intended result** is that the referent is established momentarily as the focus of attention for *both interlocutors*.
(c) There are alternate **referential strategies**, involving different kinds of nouns and nominal structures. Requiring different **mental capacities**, these are organized in **strata**.

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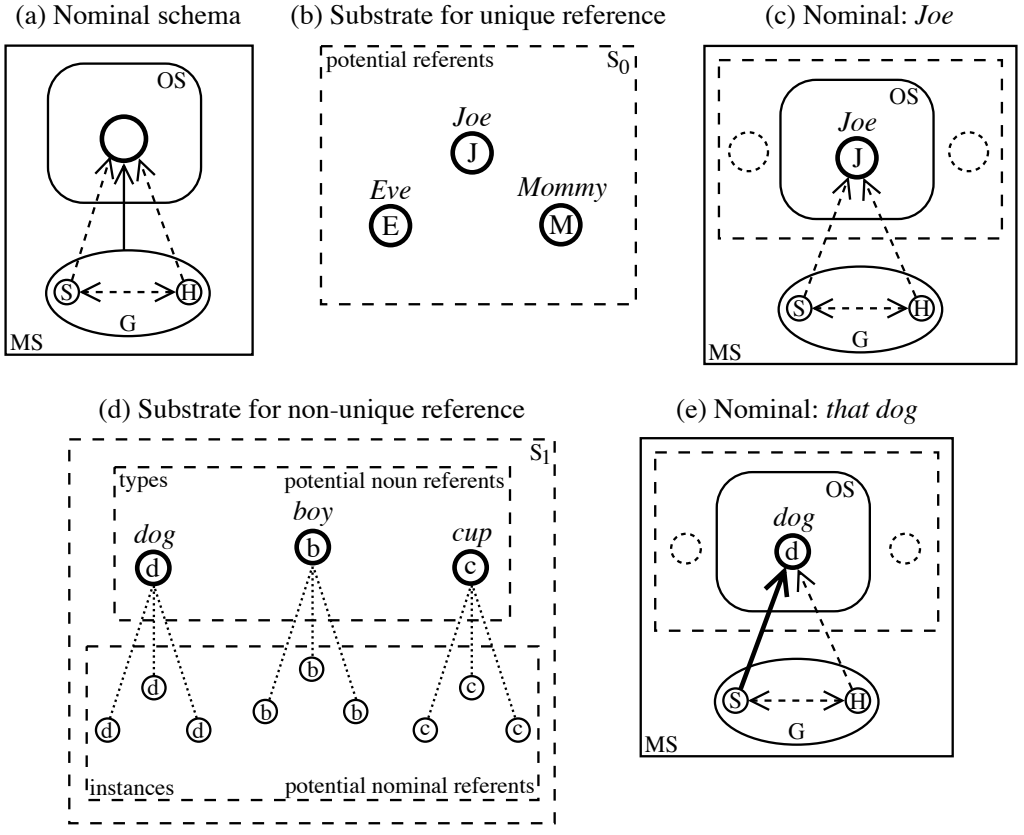

(33)(a) The baseline strategy, at S_0, is **unique reference** via **proper names**.
(b) It relies on the fundamental *capacity* to distinguish and recognize individuals.
(c) The *conceptual substrate* is a set of known individuals, each with a different name.
(d) Using the name is sufficient to direct attention to the intended referent (joint mental "capture"). A proper name can thus stand alone as a nominal with referential function.

(34)(a) The strategy at S_1 is **non-unique reference** via **count nouns** and **grounding**.
(b) It reflects the *capacity* for abstracting a **type** comprising what is common to its **instances**.
(c) The *substrate* includes both symbolized object types and the instances they subsume:
(i) The types constitute the range of potential **noun referents**.
(ii) Their instances constitute the range of potential **nominal referents**.
(d) Non-unique reference has **type specification** and **grounding** as *component subfunctions*.
(e) The baseline grounding strategy is **pointing**. Demonstratives often incorporate a physical pointing gesture: *I like that [☛]dog*. Their meanings consist in *abstract pointing*.

(35)(a) **Mass nouns** refer to **substances**. They can employ the strategy of either *unique* or *non-unique reference*, making them analogous to either proper names or count nouns.
(b) When it names a substance as an **undifferentiated whole** (the referent being **maximally inclusive**), a mass noun is itself a nominal: *Eve dislikes milk*; *Milk is good for you*.
(c) A substance occurs in space but it is characterized by **quality**. When viewed in *qualitative* terms (abstracting away from spatial manifestation), a mass noun referent is *unique*.
(d) The **totality** of the substance (e.g. all milk) is called its **maximal extension** (ME). This is an imagined entity (mentally constructed)—not something actually found in the world.

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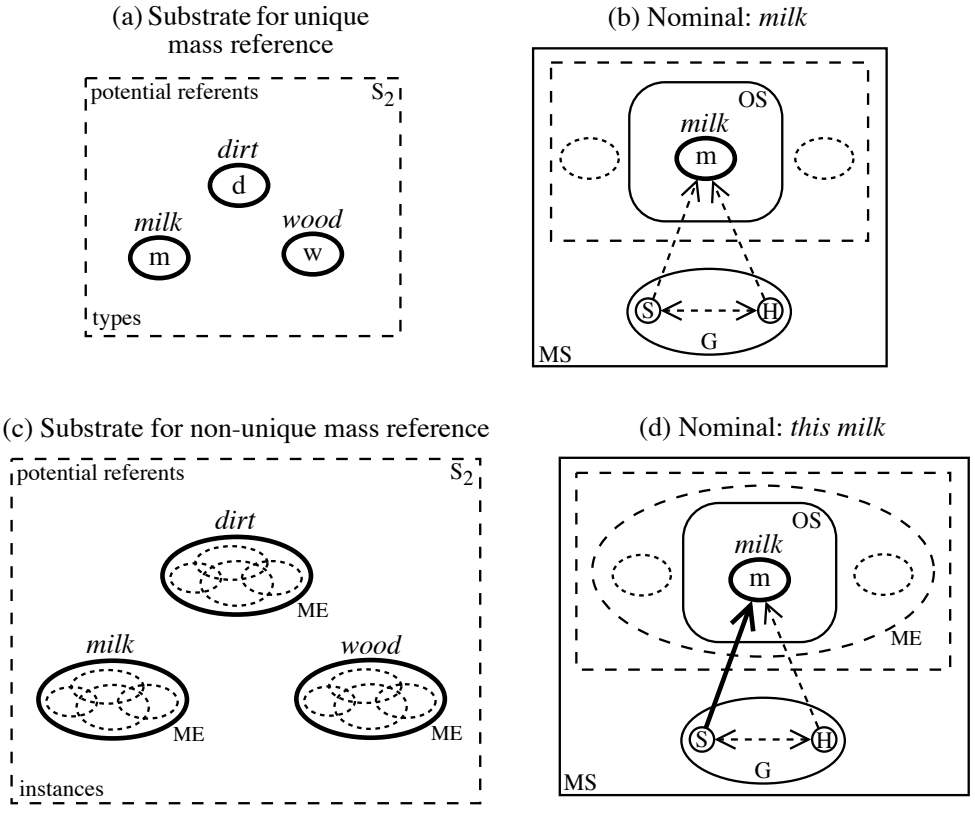

(37)(a) Mass nouns are analogous to count nouns when they designate **limited quantities** of a substance. In this case they occur with grounding elements: *this milk*; *my milk*.
(b) The qualitative characterization is then a **type specification**, and any portion of the substance is an **instance** of the type. Hence the strategy of *non-unique reference*.

(c) Instances arise through **delimitation** of the maximal extension, some portion being singled out for individual attention. Grounding elements are a basic means of doing this.
(d) Additional resources at this stratum (S_2) are the capacity to conceptualize a nominal referent in purely qualitative terms, to delimit a substance which lacks inherent bounding, and to conceive of its maximal extension (a mental construction).

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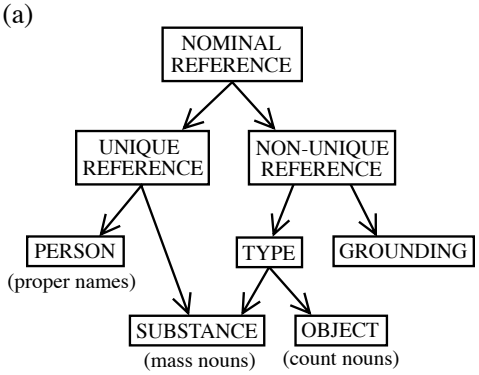
(a)



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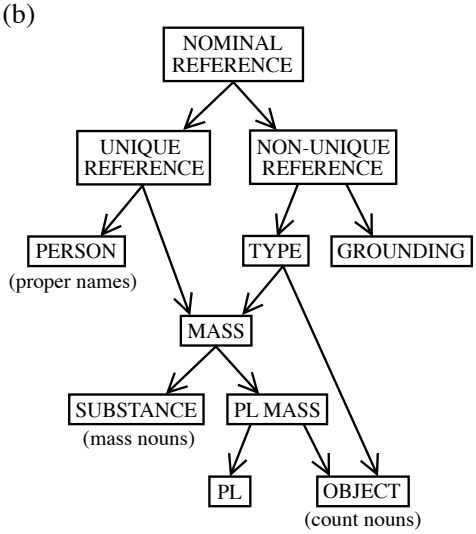
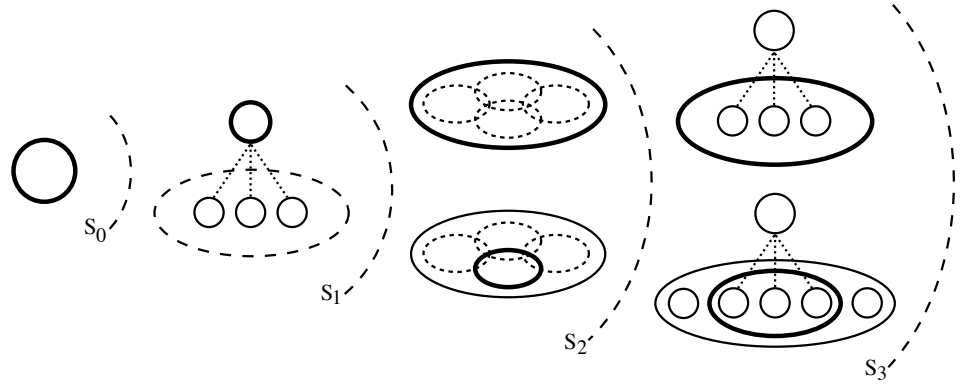


(39)(a) **Plural nouns** represent a higher stratum, S_3, because they **blend** the properties of objects and substances, conceiving of multiple objects as a substance-like mass.
(b) The result is a **higher-order type**: DOG is a type of object, DOGS is a type of mass.
(c) Although many substances have discernible **particles** (*dirt*, *sand*, *grass*, *gravel*, *spaghetti*), mass nouns construe them as being homogeneous and effectively continuous.
(d) The "particles" are more salient with plurals because they derive from count nouns which name them individually: *a little gravel* [small volume] vs. *a few pebbles* [small number].
(e) Accordingly, plurals behave grammatically like other mass nouns in some respects (*a lot of {milk / dogs}*), but differently in others (*this milk* vs. *these dogs*).
(f) Like other mass nouns, plurals refer to either the maximal extension (like a proper name) or a delimited portion (instance of a type): *She likes dogs* vs. *Those dogs look dangerous*.

(40)

(a) Proper name (b) Count noun (c) Mass noun (d) Plural noun



D. Nominals: Functional Organization

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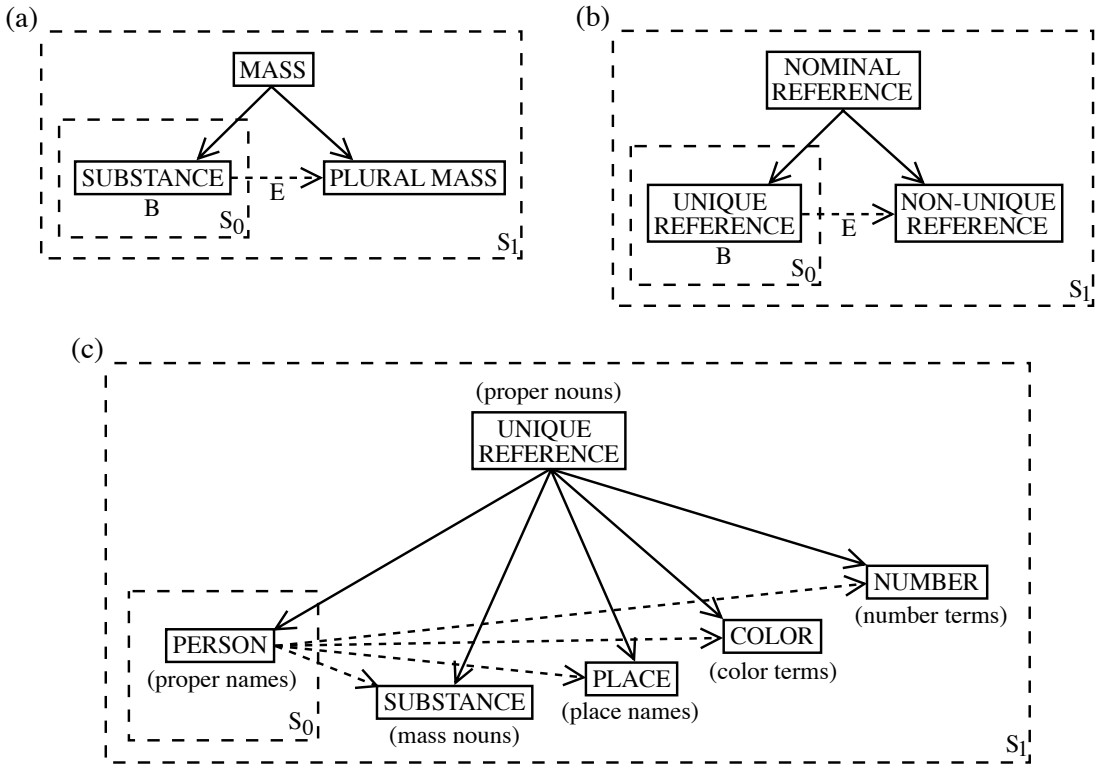


(42)(a) In *global* terms, person names are the baseline for NOMINAL REFERENCE: they require minimal conceptual resources and directly fulfill the referential function.

(b) *Locally*, they are the baseline for UNIQUE REFERENCE. Also instantiating this subfunction are labels for substances (*wine*), places (*Lublin*), colors (*blue*), and numbers (*seven*).

(c) These differ in concreteness (*Joe* > *blue* > *seven* > *justice*), symbolic complexity (*Joe* vs. *Barack Obama*; *seven* vs. *thirty seven*), and specificity (*meat* > *pork* > *ham*).

(d) Still, they all incorporate the supposition that they name a **specific unique thing** in our mental universe: *unique* in that only one thing bears the label (which is thus sufficient to evoke it); and *specific* in having conceptual content distinguishing it from others.

(43) Uniqueness represents an idealization that may or may not conform to reality. When it does not, the noun is construed as describing a type with multiple instances:

(a) Multiple people in the relevant social group happen to have the same name:
There were four Davids on the soccer team I coached.

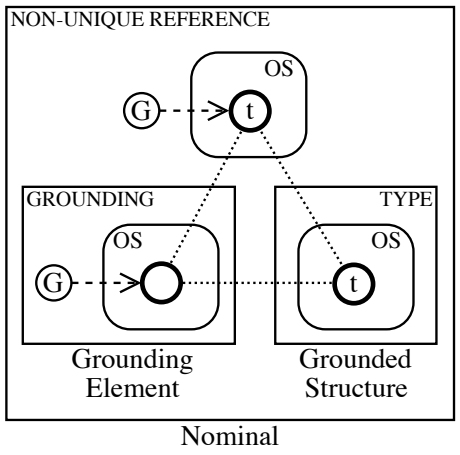
(b) A substance term is used for a particular (non-unique) variety:
That wine is very cheap but suitable for teenage parties.

(c) A color term is used for a particular shade of the basic color:
This blue would be perfect for our bedroom.

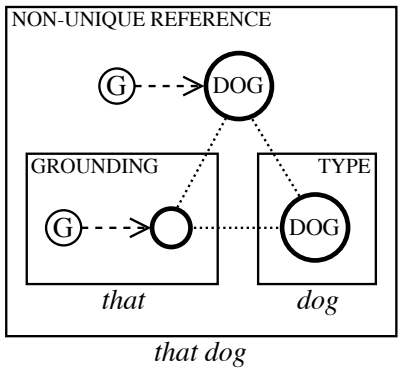
(d) Multiple visual instantiations of the symbol for a number:
All the sevens in this book are colored red.

(44)

(a)



(b)



(45)(a) Expressions like *that dog* represent the **baseline** for the pattern GROUNDING ELEMENT + GROUNDED STRUCTURE. However, each component (demonstrative and count noun) is part of a vast system whose exponents vary in their nature and degree of complexity.

(b) For **grounding**, alternatives include articles (*the dog*, *a cup*, *sm milk*), various sorts of quantifiers (*all wine*, *many dogs*, *seven cups*), and possessives (*Helen's cat*).

(c) Possessives and numbers provide an unlimited range of complex options: *my wife's cousin's mother's neighbor's cat*; *With 9 lives each, 832 cats have 7488 lives in total*.

(d) We also find a variety of quantifying constructions (*a pint of milk*, *all those cats*, *many of his friends*), and certain core quantifiers are internally complex (*a few*, *a little*, *a lot of*).

(46)(a) **Core grounding elements** have only minimal descriptive content, e.g. OBJECT (*a*), MASS (*sm*), PLURAL MASS (*few*), SUBSTANCE (*little*), or just THING (*the*).

(b) Even with a highly schematic type description, they can function as nominals (without a separate grounded structure) to the extent that they single out a particular instance.

(c) For demonstratives, even a schematic type (like PLURAL MASS) is enough for pointing to single out the intended referent: *I want those [☛]*.

(d) A number of other grounding elements can stand alone as nominals when a type has already been established in the prior discourse: *[Do you like **cats**?] {**Most** / **Some**} are lazy. {**Several** / **Three** / **A few**} are sleeping on the porch. **Joe's** are sleeping on the bed*.

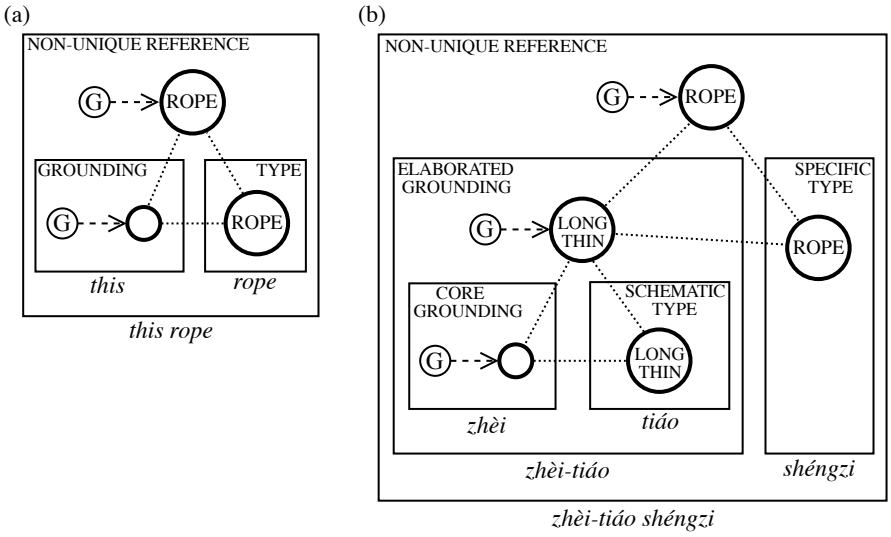
(47)(a) **Classifiers** (e.g. Mandarin *zhèi-tiáo shéngzi* [this-CLSF rope] 'this rope') are part of an **elaborated grounding system**.

(b) Across languages, they occur with grounding elements, such as demonstratives, numbers, and possessives. They are more tightly bound to these elements than to the lexical noun.

(c) These elaborated grounding elements can often be used anaphorically [cf. (46)(d)].

(d) While elaborated grounding assumes more of the descriptive burden, the specified types are still quite schematic, requiring further specification by the grounded structure.

(48)



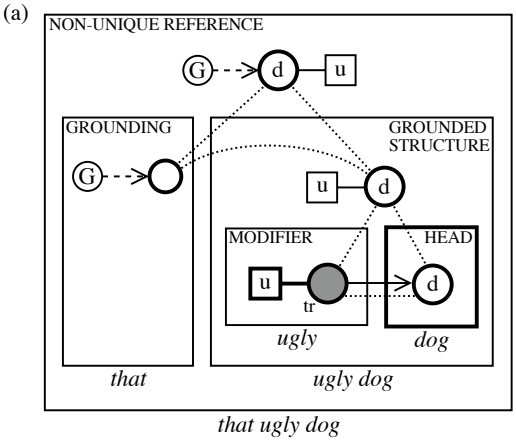
(49)(a) In a baseline nominal (e.g. *that dog*), the noun functions as both the **grounded structure** —the one that grounding applies to—and the **head noun** (or **lexical head**).

(b) The head is the *main element* in the sense of providing most of the *descriptive content*—conceptually it is the **substantive** element (the baseline for describing the referent in OS).

(c) In regard to constructions, the term *head* also indicates the component structure whose profile is profiled as well by the composite structure—the **profile determinant**.

(d) In a grounding construction, both elements are heads since their profiles correspond.

(50)



(b)

GROUNDING	GROUNDED STRUCTURE
that	(***dog***)$_{S_0}$
that	(*ugly* (***dog***)$_{S_0}$)$_{S_1}$
that	((*ugly* (***dog***)$_{S_0}$)$_{S_1}$ *across the street*)$_{S_2}$
that	(((*ugly* (***dog***)$_{S_0}$)$_{S_1}$ *across the street*)$_{S_2}$ *that's barking at us*)$_{S_3}$

(51)(a) The term **lexical head** is inappropriate given the CG definition of **lexicon** as the set of *fixed expressions* in a language (lexical **units**).
(b) Instead of a unit, the head noun can be a new expression: *that ugly **floop** across the street*.
(c) Instead of a simple noun, it can be a complex expression of any size: *spaghetti > spaghetti factory > spaghetti factory site > spaghetti factory site selection > spaghetti factory site selection committee > spaghetti factory site selection committee chair*.
(d) An entire complex structure of this sort can function as head noun: *that ugly **spaghetti factory site selection committee chair** from Chicago that we just elected*.

(52)(a) In English, the head noun has two dimensions of elaboration: *intrinsic* and *extrinsic*.
(b) **Extrinsic elaboration** is done by modifiers, so the profile is the same at each stratum. Modifiers *supplement* the head noun's descriptive content, but the referent of the full expression is still an instance of the basic type it specifies.
(c) **Intrinsic elaboration** pertains to the head noun's *internal structure*: it **creates** the basic type. It does so through *compounding* and *morphological derivation* (rather than modifiers). Each step along the elaborative path results in a **change of profile**.
(d) The profile established at the **highest stratum** through *intrinsic* elaboration functions as the **baseline** for describing the nominal referent through *extrinsic* elaboration.

(53)(a) A compound exhibits B/E layering. The first element is a **reference point**: a baseline for interpreting the second element, which imposes its profile on the composite whole.
(b) ***spaghetti** > (spaghetti) **factory** > ((spaghetti) factory) **site** > (((spaghetti) factory) site) **selection** > ((((spaghetti) factory) site) selection) **committee** > (((((spaghetti) factory) site) selection) committee) **chair***
(c) Morphological derivation is also a case of B/E layering. The stem is the baseline: the substantive point of departure for deriving another category by imposing another profile.
(d) ***teach*** [V] > *(teach)**er*** [N] ***forget*** [V] > *(forget)**ful*** [ADJ] > *((forget)ful)**ness*** [N]
(e) Pluralization is a special case of morphological derivation: ***dog*** [COUNT N] > *(dog)**s*** [PLURAL MASS NOUN]. *Those dogs* profiles an instance of *dogs* (not instances of *dog*).

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