# The semiotic stance*

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*Abstract*

*This essay argues that the pervasive twentieth century understanding of meaning — a sign stands for an object — is incorrect. In its place, it offers the following definition, which is framed not in terms of a single relation (of standing for), but in terms of a relation (of correspondence) between two relations (of standing for): a sign stands for its object on the one hand, and its interpretant on the other, in such a way as to make the interpretant stand in relation to the object corresponding to it own relation to the object. Using this definition, it reanalyzes key concepts and foundational arguments from linguistics so far as they relate to anthropology and psychology. Such terms include: concept, intentional state, motivation, ground, iconicity, speech community, norm, performativity, joint-attention, embodiment, intersubjectivity, agency, role, functionalism, pragmatics, social construction, realism, and natural language.*

*Keywords:   Semiotics; language; culture; mind.*

## 1.   Introduction

This essay enumerates, defines, and interrelates key semiotic terms. In part, this is done to provide a theory of semiosis and a metalanguage for doing semiotics; and, in part, this is done to argue against certain pervasive and erroneous assumptions about signs. While broadly Peircean in its framing, the point of this essay is neither to expound nor to espouse Peirce; rather, the point is to use his work as a starting off point to develop a theory of semiosis that can illuminate that ensemble of processes that usually fall under the headings of language, culture, and mind. Besides relying on Peirce's work, and taking several cues from key interpretations of his work (Colapietro and Parmentier, in particular), this essay

incorporates insights from linguistics, linguistic anthropology, and the philosophy of language more generally (Goffman and Jakobson, Frege and Wittgenstein, Austin and Brandom, *inter alia*). The key argument, from which the rest of the analysis necessarily flows, is that meaning should be understood not as a relation (of 'standing for') between a sign and an object (e.g. a word and concept), but as *a relation between two relations*. The key terms, in order of exposition, are: semiosis, sign, object, ground, concept, interpretant, semiotic agent, semiotic event, normativity, code, contact, semiotic community, function, motivation, semiotic framing, embodiment, embodied interpretants, social and intentional status, performativity, presupposition and creation, and natural language.

## 2.   Semiosis

Semiotics is the study of *semiosis*, or any process involving a particular relation between a sign, an object, and an interpretant. One of Peirce's most quoted passages offers a substantive definition of this process: 'A sign . . . is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the interpretant of the first sign. The sign stands for something, its object' (Peirce 1955: 99).

   Crucially, this definition involves three components: a sign (or whatever stands for something else); an object (or whatever a sign stands for); and an interpretant (or whatever a sign creates insofar as it stands for an object). See Table 1, column 1. This definition also seems to imply a commitment on Peirce's part to human interpreters (or 'somebody'), to addressed signs (or signs expressed with the purpose of creating an interpretant), and to mental interpretants (or interpretants being 'in the mind' of this human addressee). And somewhat confusingly, in Peirce's work at large the term sign is sometimes used to refer to this three-fold relation (among a sign, object, and interpretant), and sometimes used to refer to the first component of this three-fold relation (the sign per se). Indeed, to add even more confusion, the interpretant (as well as the object) is itself considered a sign — both in the wide sense (a three-fold relation) and in the narrow sense (the first component of this three-fold relation).

   In order to avoid such commitments, and minimize such confusions, a more formal definition of this three-fold relation will be used in this essay: *a sign stands for its object on the one hand, and its interpretant on the other, in such a way as to make the interpretant stand in relation to the object corresponding to it own relation to the object* (cf. *CP* 8.332; Colapietro

Table 1. *Summary of key distinctions*

|  | Third | Sign | Ground | Agency | Agent | Event | Community | Interpretant |
|---|---|---|---|---|---|---|---|---|
| Firstness | Sign | Qualisign | Iconic | Control | Signer | Sign Event | Substantive | Affective |
| Secondness | Object | Sinsign (token) | Indexical | Compose | Objecter | Object Event | Contrastive | Energetic |
| Thirdness | Interpretant | Legisign (type) | Symbolic | Commit | Interpreter | Interpretant Event | Reflexive | Representational |

(c)

Object  ⟵————————————  Interpretant

*correspondence*

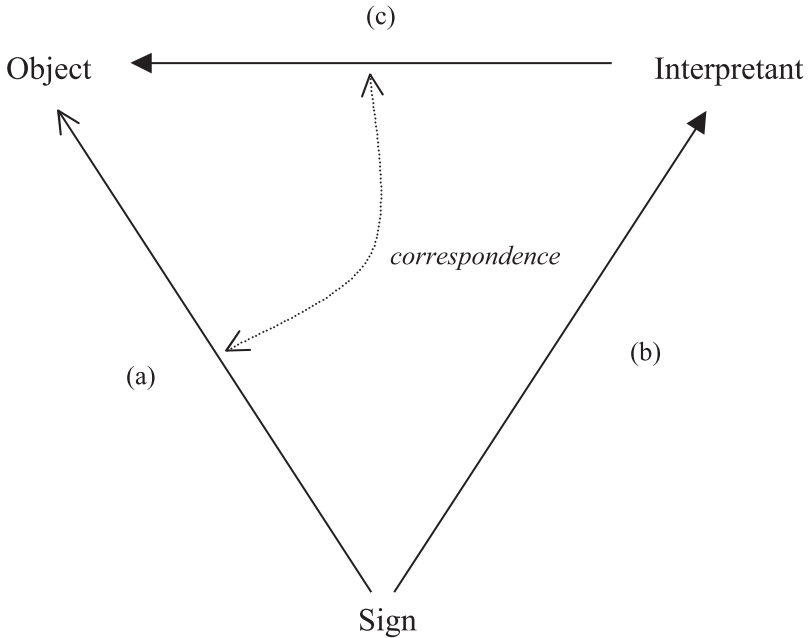(a)                                              (b)

Sign

Figure 1.    *Third formally defined. A sign stands for its object on the one hand (a), and its interpretant on the other (b), in such a way as to bring the latter into a relation to the former (c) corresponding to its own relation to the former (a).*

1989: 6).[1] This is a crucial definition, which will take some effort to unpack. Its logic is shown in Figure 1. For the moment, note that such a definition does not commit the user to addressed signs, human interpreters, or mental interpretants.

In what follows, the term *third* will be used to refer to this abstract relationship between three entities: a sign, an object, and an interpretant. The entities themselves will continue to be referred to as *components* of a third. And rather than say that an interpretant is also a sign, it will be said that any component of one third is usually a component of other thirds, such that what is a sign (or object, or interpretant) in one third is usually an interpretant (or sign, or object) in another third (and so on, indefinitely). The fact that a single entity can simultaneously be understood as sign, object, and interpretant will be called *semiotic framing*, an idea that will be generalized in section 16. Such terminological conventions will minimize both the ambiguity of using sign in a wide and narrow sense, and the ambiguity of saying that interpretants and objects are also signs (and so on, reciprocally).

Semiosis underlies many important practices that are not usually understood as semiotic. For example, *joint-attention* is a third. In particular, a child turning to observe what her parent is observing, or turning to look at where her parent is pointing, involves an interpretant (the child's change of attention), an object (what the parent is attending to, or pointing towards), and a sign (the parent's direction of attention, or gesture that directs attention). Joint attention is, in some sense, the exemplar of semiosis. It seems to occur mainly in human primates (and only beginning around 9–12 months age), and it is a condition of possibility for language acquisition and cultural socialization more generally (cf. Moore and Dunham 1995; Tomasello 1999, *inter alia*).

As exemplified by joint attention, this formal definition of a third provides a useful description of *intersubjectivity*: a self (or 'subject') stands in relation to an other (or 'object') on the one hand, and an alter (or 'another subject') on the other, in such a way as to make the alter stand in relation to the other in a way that corresponds with the self's relation to the other. Phrased in terms of pronouns: I stand in relation to it on the one hand, and to you on the other, in such a way as to make your relation to it correspond to my relation to it.

The *pair-part structures* of everyday interaction — the fact that questions are usually followed by answers, offers by acceptances, commands by undertakings, assessments by agreements, and so forth — consist of thirds in which two components (the sign and interpretant) are foregrounded. In particular, a type of utterance (or action) gives rise to another type of utterance (or action) insofar as it is understood to express a proposition (or purpose). As may be seen, signs and interpretants are usually the most visible or tangible components of a third; whereas objects (the propositions or purposes) are relatively invisible and relatively intangible. Somewhat paradoxically, then, the object is usually the least 'objective' component of a third; and the interpretant, which at first seems to be the most subjective or 'mental' component of a third, is as tangible as the sign itself.

As Mead famously noted (1934), any *interaction* is a third. For example, if I pull back my fist (first phase of an action, or the sign), you duck (reaction, or the interpretant) insofar as my next move (second phase of action, or the object) would be to punch you. Generalizing this, any interaction is a third whose sign is the first phase of a controlled behavior, whose object is the second phase of that controlled behavior (as revealed by the spatiotemporal location and physical form of the first phase), and whose interpretant is another's reaction (itself a third) which takes the second-phase of the controlled behavior into account (thereby likening it to a 'purpose' insofar as it is not yet actualized).

The constituents of so called 'material culture' are thirds. In particular, an *affordance* is a third whose sign is a natural feature, whose object is a purchase, and whose key interpretant is an action that heeds that feature (so far as it 'provides purchase'). An *instrument* is a third whose sign is an artificed entity, whose object is a function, and whose key interpretant is an action that wields that entity (so far as it 'serves a function'). An *action* is third whose sign is a controlled behavior, whose object is a purpose, and whose key interpretant is either another action that reacts to that action, an instrument that is realized by that action, or a subsequent action that incorporates that action. And, as will be taken up in detail in section 19, a *role* is a third whose object is a status, whose sign is an enactment of that status (itself often an action), and whose key interpretant is another's attitude towards that status (where this attitude is often itself a status).

*Third-party relations*, or what might be called 'transitive pecking orders,' are thirds. For example, if I know my relation to you in a social hierarchy (and hence behave accordingly — say, by making you defer to me at the food trough), and I know my relation to her in a social hierarchy (and hence behave accordingly — say, by deferring to her at the food trough), I may determine the relationship between you and her in a social hierarchy (and hence expect the two of you to behave accordingly — say, by assuming that you will defer to her at the food trough). Just as joint attention is a phenomenon unique to human primates, it has been hypothesized that third-party relations are relatively unique to primates more generally (cf. Tomasello and Call 1997).

The *commodity* is a third whose sign is a use-value, whose object is a value, and whose interpretant is an exchange value. In particular, borrowing terms from Marx, anything that can be used or consumed by humans in some way may be called a *use-value* (e.g., a loaf of bread, a jug of wine, two machetes); any use-value of a given quantity and unit may be exchanged for another use-value of a given quantity and unit, which may be called its *exchange-value* (e.g., a loaf of bread may be exchanged for three sticks of butter, a leg of lamb, or 100 sheets of paper); the fact that such radically different things as machetes, bread, butter, lamb, and paper can be proportionally equated in exchange is evidence that these things have different quantities of a common substance, which may be called *value*; finally, anything that has both use-value and value (where the latter is expressed in its exchange-value) is a *commodity*. To phrase all this in a semiotic idiom, if the object of a sign is that to which all interpretants of the sign conditionally relate (see section 4), then the value of a use-value is that to which all exchange-values of the use-value *collaterally* relate.

Finally, the *oedipal triangle* is a third. In particular, the boy comes to stand in relation to his mother in a manner that corresponds to, and is caused by, the way the father stands in relation to the mother. Here the sign is the father's desire (embodied, say, in the direction and tumescence of his penis); the object is the mother (as a possible destination of the father's directed and tumescent penis); and the interpretant is the change in the direction and tumescence of the boy's penis.

Notice from these examples that signs can be eye-directions, utterances, controlled behaviors, environmental features, artificial entities, erections, and use values; objects can be the focus of attention, states of affairs, propositions, purposes, functions, statuses, values, and sex objects; and interpretants can be other utterances, changes in attention, reactions, instruments, modes of heeding and wielding, and exchange values. Notice that very few of these interpretants are 'in the minds' of the interpreters; yet all of these semiotic processes embody properties normally associated with mental entities: attention, desire, purpose, propositionality, thoughts, value, and so on. Notice that very few of these signs are addressed to the interpreters (in the sense of purposely expressed for the sake of their interpretants). Notice that most objects and interpretants are themselves signs — and so the three-fold relationality continues indefinitely: every component of one third is simultaneously (and/or sequentially) a component of another third.[2] And finally, notice that in all of these examples the formal definition of a third holds: the interpretant stands in a relation to the object in a way that corresponds to how the sign stands in relation to the object, and because of the way the sign stands in relation to the object.

Semiosis, then, involves a relation between two relations — a relation, that is, between the relation between a sign and an object and the relation between a sign and an interpretant, *where the second relation arises because of the first relation*. This relationship between relationships, turning on both correspondence and causality, is fundamental to the present work. As may be seen, it maximally contrasts with the stereotypic definition of a sign — say, the Saussurean pairing of a *signifier* and a *signified* (1983 [1916]), whether understood as internally articulated (a pairing between a sound image and an idea) or externally articulated (a pairing between a word and a thing). That is, all definitions of a sign phrase it as a single relation ('a sign stands for an object'), not as a relation (of correspondence) between two relations (of standing for). Indeed, the typical focus on sign-object relations (or 'signifiers' and 'signifieds'), at the expense of sign-interpretant relations, and this concomitant understanding of objects as 'objective' and interpretants as 'subjective' — and hence the assimilation of meaning to mind, rather than grounding mind in meaning

— is one of the most fatal flaws of twentieth century semiotics. In contrast, the definition offered here provides a natural entry into topics as diverse as commodities and oedipal conflicts, joint attention of human infants and transitive pecking orders of non-human primates, intersubjectivity and discourse sequencing, *logos* and *Dasein*.


## 3.   Sign

The *sign* is whatever stands for something else. Sometimes it is referred to as a 'sign vehicle,' 'signal,' 'signifier', or 'carrier.' Any list of potential signs is endless: words, sentences, whistles, clucks, hand-gestures, facial expressions, directions of gaze, controlled and uncontrolled behaviors, artifacts, environmental features, animals, natural phenomena such as lightening, and so on. In such cases, a sign is some sensible entity, whose features may turn on any kind of quality: temperature, pain, color, texture, shape, size, proprioceptively accessible phenomena (orientation relative to gravity), relations between such qualities, and so on.

Stereotypically, signs are thought to have a number of properties. They are *sensible*: able to be known through some mode of the human sensorium (sight, smell, touch, and so on). They are *segmentable*: able to be parsed into a single, relatively cohesive, formal unit — for example, a word or phoneme, a gesture or facial expression, an artifact or living kind (cf. Saussure 1983 [1916]: 103). They are *stable*: having the same form, more or less, across tokens expressed by members of a sign-community over time. For example, the sounds of a language stay relatively the same over time. They are *persistent*: enduring after their expression in some selfsame sensible form over time. For example, the written word remains whereas the spoken word disappears as soon as it is uttered. They are *symmetric*: sensibly identical to the signer and the interpreter, the one who expresses the sign and the one who expresses the interpretant. For example, spoken language is maximally symmetric and a facial expression is maximally asymmetric, with sign-language being somewhere in the middle. And they are *compositional*: being built up of other signs (as whole to parts), and/or able to build up further signs (as parts to whole). For example, as words are made up of letters, sentences are made up of words.

Given the examples offered in section 2, it is clear that such stereotypic features need not hold. The one non-obvious example is sensibility. As will be argued in sections 18 and 19, under a particular semiotic frame, there are *embodied signs* — such as social statuses (being a mother or being a lawyer) and intentional statuses (believing it will rain or

fearing floods) — which may be loosely understood as normative dispositions to signify and interpret in particular ways, and hence only show up in patterns of signification and interpretation. In short, anyone of these stereotypic properties of a sign need not hold in any actual sign.

Peirce examined three kinds of signs, distinguished as a function of whether 'the sign in itself is a mere quality, is an actual existent, or is a general law' (Peirce 1955: 101). In particular, a *qualisign* (or '*quali*tative sign') is a quality that *could possibly* be paired with an object. A *sinsign* (or '*sin*gular sign') is a quality that *is actually* paired with an object (in some event). Sometimes these are referred to as *tokens*. And a *legisign* (or '*legi*slative sign') is a type of quality that *must necessarily* be paired with a type of object (across all events). These are sometimes referred to as *types*. For example, in the case of utterances, a qualisign is a potential cry (say, what is conceivably utterable by a human voice); a sinsign is an actual cry (say, a particular scream); and a legisign is a type of cry (say, screaming per se). In the case of instruments, a qualisign is some potentially artificed entity (say, whatever could be turned out on a lathe), a sinsign is some particular artificed entity used for some function (say, one of the posts on my grandfather's bed), and a legisign is a type of artificed entity used for a type of function (say, a post on a brand of bedframe). See Table 1, column 2.

Defined in this way, sinsigns presuppose qualisigns, and legisigns presuppose sinsigns. Indeed, sinsigns embody qualisigns; and legisigns are embodied in sinsigns. Furthermore, any sinsign that is an instance of a legisign, thereby constituting a token of a type, is a *replica* (for example, any actual instance of a post on a brand of bedframe, as a sinsign, is a replica of the brand of bedframe, as a legisign). And finally, while the replicas of any legisign are sinsigns, not all sinsigns are replicas of legisigns. That is, there are singular sign events — themselves still meaningful — which are not tokens of some preexisting sign type.

Just as Peirce called run-of-the mill sinsigns replicas, unreplicable and/ or unprecedented sinsigns, or sign events, may be called *singularities*. Since most sign events include a contingent multiplicity of simultaneous signs, most sign events are singularities in this sense. While semiosis is often considered a deductive process (one gets the meaning of a token through an abstract type; or one decodes a 'message,' or sign token, with a 'code,' or pairing of sign and object types), the fact that singularities are so common means that much of semiosis is actually an inductive process (one gets the meaning of a type through a token, or one gets the meaning of one token through other co-occurring tokens — perhaps only later abstracting to a type).

## 4. Object

An *object* is whatever a sign stands for. Peirce defines it as 'that which a sign, so far as it fulfills the function of a sign, enables one who knows that sign, and knows it as a sign, to know' (quoted in Parmentier 1994: 4). To avoid invoking intentional states such as knowing at this preliminary stage, and to avoid treating the object as 'objective' altogether, the definition to be used in this essay is as follows: *the object (of a sign) is that to which all (appropriate and effective) interpretants (of that sign) correspondingly relate*.[3] In this way, it is best to think of the object as a *correspondence-preserving projection* from all interpretants of a sign. It may be more or less precise, and more or less consistent, as seen by the dotted portion of Figure 2.[4]

For example, if a cat's purr is a sign, the object of that sign is the correspondence-preserving projection from the set of behaviors (or interpretants) humans may or must do (within some particular community) in the context of, and because of, a cat's purr: pick it up and pet it, stroke in under the chin, exclaim 'oh, that's so cute!', offer a sympathetic low guttural, stay seated petting it even when one needs to pee, and so on. Needless to say, humans tend to objectify such objects by glossing them in terms of physiology (say, the 'purr-organ' has been activated), emotion (say, 'she must be content'), or purpose (say, 'she wants me to continue petting her'). Similarly, saying that the object of an instrument is a
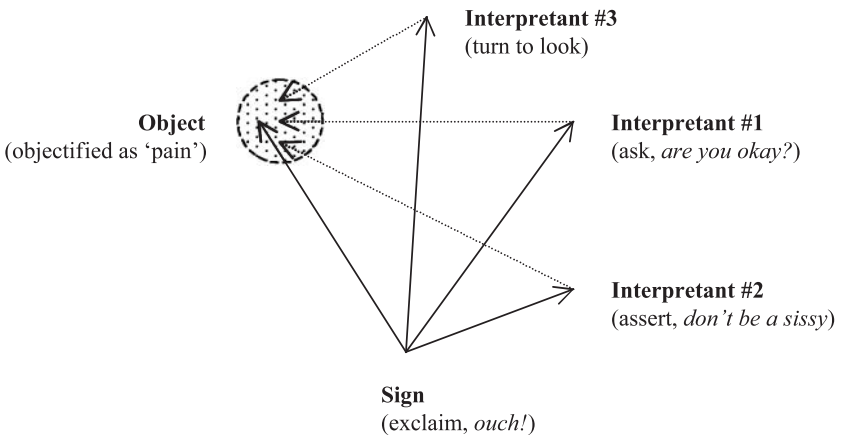


Figure 2.   *Object as correspondence-preserving projection. The object (of a sign) is that to which all interpretants (of the sign) correspondingly relate. It may be understood as a correspondence-preserving projection from all appropriate and effective interpretants.*

function means that a function is the correspondence-preserving projection from the ensemble of behaviors that one is entitled or committed to doing while wielding the instrument — where these commitments and entitlements are partially regimented by 'cultural norms' (in terms of what is appropriate and effective) and partially regimented by 'natural causes' (in terms of what is feasible and efficacious).

Objects, as the correspondence-preserving projections of interpretants, are relatively abstract entities by definition. They should not be confused with 'objects' in the Cartesian sense of *res extensa*. Nor should they be confused with 'objects' in the stereotypic sense of things that are continuously present to the senses, detachable from context, relative portable across contexts, and handy relative to the size and strength of humans (cf. Gibson 1986 [1979]: 33–36). Nor, relatedly, should they be confused with the 'things' that words seem to stand for — be they entities like Saussure's ox and tree, or be they 'persons, places, things, and ideas' as per the schoolmaster's definition of nouns. To reinforce this distinction, the term object (without scare-quotes) will only be used to refer to objects in this special semiotic sense; the term 'object' (with scare-quotes) will be used to speak of 'objects' in the stereotypic sense. Nevertheless, it should be emphasized that an 'object' may constitute the *raison d'etre* of an object, and thereby provide a rationale for all the interpretants of the sign that stands for that object — a point that will be returned to in section 15.

While the abstract nature of objects is clearly true for the constituents of 'material culture' (whose objects are purchases, functions, purposes, statuses, or values), it is less clearly true for words like *dog*, or utterances such as *the dog is under the table*, which seem to have 'objects' as their objects. In order to understand the meaning of such signs, several more distinctions need to be made. First, as mentioned in the last section, just as one may distinguish between sign tokens (or sin-signs) and sign types (or legi-signs), one may distinguish between *object tokens* and *object types*.[5] For example, an assertion (or a sentence with declarative illocutionary force — say, *the dog is under the table*) is a sign whose object type is a *proposition*, and whose object token is a *state of affairs* (or a 'narrated event').[6] A word (or a substitutable lexical constituent of a sentence — say, *dog* and *table*) is a sign whose object type is a *concept*, and whose object token is a *referent*. Finally, the set of all possible states of affairs of an assertion — or what the assertion could be used to represent — may be called an *extension*.[7] And the set of all possible referents of a word — or what the word could be used to refer to — may be called a *category*. See Table 2.

In sum, propositions and concepts are the object types that assertions and words have across contexts of use — or across utterances of the

Table 2.   *The objects of inferentially articulated signs*

| Sign | Object (Type) | Object (Token) | Object (Set of Tokens) |
|------|---------------|----------------|------------------------|
| Sentence | Proposition | State of Affairs | Extension (World) |
| Word | Concept | Referent | Category |

assertion or word; states of affairs and referents (which are often 'objective') are the object tokens that assertions and words have in particular contexts of use — or within a particular utterance of the sentence or word; and extensions and categories are the sets of states of affairs and referents that assertions and words have across contexts of use — or across utterances of the sentence or word (in the rest of this essay, when the term object is used by itself, no distinction is being made between object type and object token).

Unlike other object types (say, the general function of a hammer across wieldings, or the general cause of a scream across utterances), propositions and concepts are *inferentially articulated*. Loosely speaking, inferential articulation means that any interpretant of a sign is related to the sign, and/or to other interpretants of the sign, by logical relations. Equivalently, it means that in committing to the truth of a proposition (say, by uttering an assertion that expresses such a proposition), one commits to the truth of any proposition which logically follows from the expressed proposition.[8] In this way, one can use a proposition as a reason; and one can demand a reason for a proposition. And, hand in hand with this inferential articulation, unlike other object tokens (say, the specific function of a hammer as wielded on some particular occasion, or the specific cause of a scream uttered on some particular occasion), states of affairs and referents are 'objective' — in that there seem to be actual events that an assertion 'represents,' or actual things that a word 'refers to.' In short, sentences and words have the property of *aboutness* that characterizes intentional phenomena more generally — not only speech acts like assertions and promises, but also so called 'mental states' like beliefs and intentions. Inferential articulation and intentionality will be treated at length in sections 18–21.

With the foregoing points in mind, there are several ways to distinguish between *semantics* and *pragmatics*. For example, semantics is the analysis of the context-independent meaning of linguistic signs; pragmatics is the analysis of the context-dependent meaning of linguistic signs. Semantics deals mainly with symbols; pragmatics deals mainly with indices. And so forth. The problem with these kinds of definitions is that semantics is usually defined first, and pragmatics is then defined in terms of it — thereby becoming a kind of grab-bag of 'non-semantic' linguistic

meanings: deixis, speech acts, implicature, discourse, and so on (cf. Levinson 1983). As will be use here, pragmatics treats the meaning of linguistic signs in terms of their appropriateness in context and their effectiveness on context. Semantics treats that subset of pragmatics in which the meaning of utterances is inferentially articulated — or, equivalently, in which propositional and/or conceptual content is conferred upon the objects of signs. Equivalently, pragmatics treats practices of locuting; semantics treats the (propositional) contents of locutions (cf. Brandom 1994). In this regard, this essay has several working assumptions: 1) pragmatics is prior to semantics; 2) propositional content is prior to conceptual content; 3) the inferential nature of propositional content is prior to its representational nature; and 4) the propositional content of speech acts is prior to the propositional content of intentional states (cf. Austin 2003 [1955]; Brandom 1994; Dummett 1981 [1973]; Frege 1980 [1884]; Sellars 1997 [1956]; Wittgenstein 1953). Pragmatics in this sense will be treated in sections 19–21.

## 5. Ground

The *ground* is the relation between a sign and its object. It has two basic senses. First, there is the question of what kind of relation exists between a sign and its object. Famously, in the case of *symbols*, this relation is arbitrary, and is usually thought to reside in 'convention' (an idea that will be called into question in section 10). Examples include words like 'boy' and 'run.' In the case of *indices*, this relation is based in spatiotemporal and/or causal contiguity. Examples include exclamations like 'ouch' and symptoms like fevers. And in the case of *icons*, this relation is based in similarity of qualities (such as shape, size, color, or texture). Examples include portraits and diagrams. See Table 1, column 3. In addition to this more famous question, Peirce distinguished between two kinds of direction that this relation could have: representation and determination. In *representation*, the sign represents the object such that the object's being is dependent upon the sign's being. In *determination*, the object determines the sign such that the sign's being is dependent upon the object's being. These five relations — iconic, indexical, and symbolic on the one hand; representing and determining on the other — are important enough to warrant further discussion.

Peirce's notions of iconic, indexical, and symbolic relations are implicated in his notions of sign, object, and interpretant, and in his notions of firstness, secondness, and thirdness. In particular, there are at least four ways one can examine the differences and similarities between icons,

indices and symbols (see Parmentier 1994; Peirce 1955: 98–119). First, with regards to the focal component, in an icon the sign is focal; in an index the object is focal; and in a symbol the interpretant is focal. Second, with regards to the ground (in the first sense in which it was used above), in an icon the ground turns on firstness (quality, sense, possibility); in an index the ground turns on secondness (contrast, force, actuality); and in a symbol the ground turns on thirdness (mediation, understanding, necessity).[9] Third, in regard to necessary components, for an icon to be an icon all that is necessary is the sign (the object and the interpretant can be stripped away); for an index to be an index all that is necessary is the sign and object (the interpretant can be stripped away); and for a symbol to be symbol all the components are necessary (neither the sign, object, or interpretant can be stripped away). And fourth, in regard to relative inclusion, an icon need not have indexical or symbolic components. An index must have iconic components (thereby providing information about its object; or, trivially, its sign embodies a quality). And a symbol must have iconic and indexical components (thereby directing one's attention to something and providing information about it; or, trivially, indexing a code).[10] Notice, then, that insofar as any symbol has an indexical component, and any index has an iconic component, it is best to talk about iconic, indexical, or symbolic grounds, rather than to talk about icons, indices, and symbols per se. In this essay, the terms iconic-indices and indexical-symbols will be used to foreground the relativeness and inclusiveness of the above relations.

Peirce distinguished between immediate objects and dynamic objects. By the *immediate object*, he means 'the object as the sign itself represents it, and whose Being is thus dependent upon the representation of it in the Sign' (*CP* 4.536, cited in Colapietro 1989: 15). This is to be contrasted with the *dynamic object*, which Peirce takes to be 'the Reality which by some means contrives to determine the Sign to its Representation' (*CP* 4.536). In short, the dynamic object is the object that determines the existence of the sign; and the immediate object is the object represented by the sign. Immediate objects only exist by virtue of the signs that represent them; whereas dynamic objects exist independently of the signs that stand for them.[11] This is similar to the distinction between causal and descriptive theories of reference (see Kripke 1980; Putnam 1975), but generalized for all signs — not just signs with propositional content.

Importantly, every sign has both an immediate and a dynamic object, and hence involves both a vector of representation and a vector of determination. In certain cases, these immediate and dynamic objects can overlap — as least in lay understandings. For example, an interjection 'ouch!' or a facial expression of pain may be understood as determined

by pain (as their dynamic objects) and as representing pain (as their immediate objects): one only knows about another's pain through their cry; yet their pain is what caused that cry. Indeed, a *symptom* should really be defined as a sign whose immediate object is identical to its dynamic object. Dynamic objects, needless to say, often bear a primarily (iconic) indexical relation to their signs; whereas immediate objects often bear a primarily (indexical) symbolic relation to their signs.[12] However, just as any third is symbolic, indexical, and iconic, any sign is partially determined (having a dynamic object) and partially representing (having an immediate object). Stereotypically, however, one takes the grounds of signs to be symbolic and representing, rather than (iconic) indexical and determining.

As an aside, note that insofar as objects are often non-objective, being merely that to which all interpretants conditionally relate, one may speak in a certain fashion of iconic, indexical and symbolic relations between signs and interpretants. For example, wielding an instrument provides an interpretant of its function — say the way a hand grasps it — and is hence an iconic-index of the sign. That is, the shape of the instrument has qualities in common, and contiguities with, the hand that grasps it. Or, more carefully phrased, insofar as every interpretant is a sign (whose dynamic object is the sign-object relation that gave rise to it), most interpretants are iconic-indices of their dynamic objects.

There is a tendency to treat immediate objects (objects only known via the signs that stand for them) as dynamic objects (the 'real' entities causing the signs) — especially in the cases of the objects of thirds such as affordances, instruments, actions, and roles — i.e. things we call 'purchases,' 'functions,' 'purposes,' and 'statuses.' For example, the purpose of an action is often understood as causing the action (as it dynamic object), yet is only known by that action (as its immediate object); the status of a role is often understood as causing the role (as its dynamic object), yet it is only known by that role (as its immediate object). This tendency to treat immediate objects as dynamic objects is related to *fetishism* more generally.

## 6. Concept

This essay will not take up the details of conceptual structure — for which there is an enormous and ever growing literature (see Boyd 1991; Fodor 1998; Griffiths 1997; Keil 1989; Lakoff 1987; Putnam 1975; Quine 1969; Rosch 1975; Taylor 1995, *inter alia*). Nevertheless, several points should be kept in mind, and several terminological conventions should be established. First, by way of review, a *word* (label or term) is a particular kind

of linguistic sign (e.g., *bird*, *house*, *uncle*); a *referent* is an object token that a word refers to a given occasion of use (e.g., 'the *bird* over there'); a *category* is the set of object tokens a word may refer to, and is usually understood as some aspect of reality (e.g., the set of birds, houses, or uncles); and a *concept* is an object type, understood as a kind of psychological entity that is shared by speakers, and which is a condition for determining a referent (on a particular occasion of uttering a word) or a category (across occasions of uttering a word).[13]

Traditionally, concepts were understood in terms of a set of necessary and sufficient features which are binary, abstract, primitive, and universal (see Taylor 1995). For example, a bachelor is a never married, human, adult, male. As is well-known, such traditional theories foundered on questions such as graded membership (there are better and worse instances of a category: e.g., a robin is a better instance of a 'bird' than a penguin), and the existence of basic level terms (or privileged levels in a hierarchy of categorization: e.g., dogs and cats versus poodles and huskies or birds and mammals).[14]

In contrast to such classical understandings, modern theories of concepts are couched in terms of *prototypes* as some gestalt-like combination of salient features abstracted from previously experienced instances. For example, the prototype of a bird might include features such as feathers and beaks, as well as behaviors such as flying and singing, insofar as these are features and behaviors that birds are commonly experienced as having. Additionally, modern theories turn on *exemplars*, or cases in which a prototype is instantiated by a member of the category which is considered the 'best instance' of that category. For example, a robin is the exemplar of 'bird,' or Hugh Hefner is the exemplar of 'bachelor.' Another important insight is called the *theory view of concepts*, or the idea that one must have an implicit (though sometimes explicable) theory of the domain being categorized to determine which features (of some prototype) are to be used in selection, and how much weight to give to each feature.[15] And finally, these theories are intimately linked to *stereotypes*, or the set of beliefs speakers have about a referent or category. For example, 'bachelors' have untidy houses and read GQ on the john, or 'water' is a colorless and tasteless liquid that is good to drink (Putnam 1975).

In this way, concepts may be structured differently as a function of which ontological domain their categories belong to insofar as different domains are subject to different theories. Important domains include *artifacts* (or artificed entities conceptualized in terms of purposeful design or function — e.g., hammer and bicycle), *nominal kinds* (or sociological relations conceptualized in a manner close to classic concepts — e.g., mother

and bachelor), *taxonomic kinds* (or living kinds that have a rank and taxa structure, and which are often conceptualized as having an essence — e.g., cat and tree), and *natural kinds* (or categories that seem to correspond to distinctions in nature, including many taxonomic kinds, and around which theories are constructed — e.g., electron, zebra, water, and cloud). In particular, natural kinds are usually thought to be *projectable* (or induction permitting): properties of one member of the category, including a newly discovered property, may be projected onto other members of the category (Griffiths 1997: 174). In a realist mood, and following scholars such as Boyd (1991), Griffiths (1997: 173–176), Kitcher (1993: 172), and Peirce (1955: 251–268, 269–289), one might take natural kinds to be the categories of the terms in scientific theories that are projectable in the (temporal and probably imaginary) limit that scientific practices embrace all phenomena and all societies embrace scientific practitioners.[16]

   In this regard, it is worth reviewing Putnam's (1975) famous account of *the meaning of meaning*. For Putnam, a word's meaning is best understood as a (minimally) four-dimensional vector, turning on a stereotype (his version of a concept), a category, the ontological domain to which the category belongs (which would specify the theory relevant to the domain), and the grammatical patterns (or 'form class') in which the word is implicated (e.g., noun versus verb, mass-noun versus count-noun, etc.). In Putnam's example, the form class of *water* is mass-noun, its ontological domain is natural kind (perhaps even 'molecule'), its stereotype is a colorless and tasteless liquid that is good to drink, and its category is $H_2O$.

   Such a four-dimensional vector is the minimal structure necessary to account for a number of important features of meaning. For example, there is the relation between grammatical form and conceptual content (e.g., how morphosyntax constrains meaning). There is the transtheoretical and/or cross-linguistic status of categories (e.g., *pace* Kuhn, the concepts of different languages or scientific theories can delimit identical categories). There is the division of sociolinguistic knowledge (e.g., experts have different concepts for words like water or protein than lay-speakers, and speakers' appropriate use of words is often grounded — though long indexical chains — to this expertise). There is conceptual revision (e.g., the same category can be determined by different concepts, and/or different stereotypes, in different stages of a theory). And there is the contribution of the world to meaning (in two senses: categories can drive concepts, and categories can be determined by ostension and indexicality more generally — often by the establishment of an exemplar). Concepts will be taken up again in section 15, when motivation is discussed.

## 7.   Interpretant

An *interpretant* is whatever a sign creates insofar as it stands for an object. Peirce characterized the interpretant as the 'proper significate effect' of a sign (1955: 276), and said it was an 'equivalent or more developed sign' (1955: 99). As noted, insofar as most interpretants are themselves just signs, they too will stand for an object, and give rise to an interpretant. Hence, everything just said about signs is also true of interpretants. If the interpretant is itself a sign, one can ask what its object is. Properly speaking, and as seen in section 5, it has two objects: first, the relation between the sign and object which determines it (however weakly); and second, the object it represents. For example, regarding the oedipal triangle, the boy's standing in relation to his mother — itself the interpretant of the father's standing in relation to the mother — is a sign whose dynamic object is the relation between the father and mother (that caused it), and whose immediate object is the mother. See Figure 3. In this sense, from the standpoint of dynamic objects, every interpretant is necessarily a meta-sign; and semiosis is necessarily meta-semiosis.

There is often a conflation (even in some of Peirce's own writings — though terminologically, not conceptually) of interpreter, interpretant, and interpretation. This ambiguity is equivalent to conflating producer,
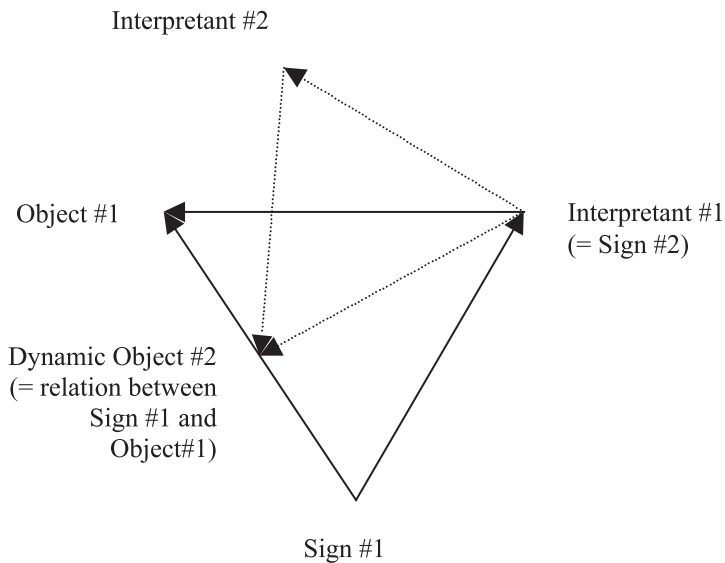


Figure 3.   *Interpretants as signs. Every interpretant (#1) of a sign (#1) is itself a sign (#2) whose dynamic object (#2) is the relation between the first sign (#1) and its object (#1).*

product, and production (or signer, sign, and signification). In what follows, distinctions will be made between that entity which expresses a sign or interpretant (called the signer and interpreter, respectively), the sign or interpretant so expressed, and the process of expressing a sign or interpretant (called signification and interpretation, respectively).

Finally, as mentioned in section 2, interpretants are often taken to be mental entities (say, a thought in the mind of the addressee), or another's response that is itself a verbal sign (say, an answer to a question). This is not correct: most interpretants are non-mental and non-verbal, and are embodied in actual behavior, the results of such behavior, or dispositions to behave more generally. Indeed, it may be argued that, for Peirce, it is not so much the case that thoughts are signs in the mind, but that mind is embodied and embedded in signs (see Colapietro 1989). This aspect of interpretants is so important for the present essay that sections 18 and 19 will be devoted to it.

## 8.   Semiotic agent

The *signer* is the entity that brings a sign into being — that is, brings a sign into being (in a particular time and place) such that it can be interpreted as standing for an object, and thereby give rise to an interpretant. It is often accorded a maximum sort of agency, such that not only does it *control* the expression of a sign, but it also *composes* the sign-object relation, and *commits to* the interpretant of that relation.[17] As will be used here, to *control* the expression of a sign, means to determine its position in space and time. Loosely speaking, one determines where and when a sign is expressed. To *compose* the relation between a sign and an object means to determine which sign stands for the object, and/or which object is stood for by the sign. Loosely speaking, one determines what a sign expresses and/or how this is expressed. To *commit* to the interpretant of a sign-object relation, means to determine what its interpretant will be. This means being able to anticipate what the interpreter will do — be the interpreter the signer itself (at one degree of remove), another (say, someone other than the signer), or 'nature' (in the case of causal rather than normative mediation). See Table 1, column 4. Phrasing all these points about residential agency in an Aristotelian idiom, the committer determines the end, the composer determines the means, and the controller determines when and where the means will be wielded for the end. In this way, one may distinguish between undertaker-based agency (control: when and where), means-based agency (composition: what and how), and ends-based agency (commitment: why and to what effect).

Notice, then, that there are three distinguishable components of a signer (controller, composer, and committer), corresponding to three distinguishable components of a third (sign, object, and interpretant). When the sign involves verbal behavior, and the signer controls, composes, and commits, the signer is usually called a 'speaker.' And when the sign involves non-verbal behavior, and the signer controls, composes, and commits, the signer is usually called an 'actor.' In both cases, responsibility for some utterance or action — some 'word' or 'deed' — is usually assigned as a function of the degree to which the signer controls, composes, and commits. And, as a function of this responsibility, the signer may be rewarded or punished, praised or blamed, held accountable or excused, and so on.

It should be emphasized that one part of agency will be seen to exist at the intersection of these dimensions of control, composition and commitment.[18] In particular, it may be shown that each of these three dimensions, or roles, is not usually simultaneously inhabited by identical, individual, human entities. For example, the signer need not be an individual (nor need be any of its individual components — controller, composer, committer). It may be some less than or larger than individual entity — say, a super-individual (e.g., a nation-state) or a sub-individual (e.g., the unconscious). The signer need not be human. It may be any sapient entity (e.g., a rational adult person or an alien life form with something like natural language), sentient entity (e.g., a dog or fish), responsive entity (e.g., a thermostat or pinwheel), or even the most unsapient, unsentient and unresponsive entity imaginable (e.g., rocks and sand as responsive only to gravity and entropy).[19] More generally, these signers may be distributed in time (now or then), space (here or there), unity (super-individual or sub-individual), individual (John or Harry), entity (human or non-human), and number (one or several).

For the moment, it is enough to focus on the last of these three dimensions. By *commitment* is meant that a signer can 'internalize' another's interpretant. Paraphrasing Mead (1934), one might say that the sign calls out in the signer the same response it calls out in the interpreter. More carefully phrased, to commit to the interpretant of a sign means that one is able to anticipate what sign the interpreter will express, where this anticipation is evinced in being surprised by, and/or disposed to sanction, non-anticipated interpretants.[20] An *addressed* third is one whose interpretant a signer commits to, and one whose sign is expressed for the purpose of that interpretant. Address may be *overt* or *covert* depending on whether or not the interpreter is meant to (or may easily) infer the signer's commitment and purpose. These distinctions (committed and non-committed, addressed and non-addressed, overt and covert) cross-cut

pretheoretical distinctions such as Mead's (1934) distinction between 'gesture' and 'symbol', and Goffman's (1959) distinction between signs 'given' and signs 'given off.'

Needless to say, the ability to commit to an interpretant of a sign — and thereby address one's thirds and/or dissemble with one's addressed thirds — turns on relatively peculiar cognitive properties of signers, social properties of sign communities, and semiotic properties of signs. For the moment, note how the introduction of commitment allows the notion of *intersubjectivity*, discussed in section 2, to be complicated. In particular, there are really three different species of intersubjectivity: 1) I stand in relation to it in a way that corresponds to how you stand in relation to it (mere correspondence); 2) I stand in relation to it on the one hand, and to you on the other, in such a way as to make you stand in relation to it in a way that corresponds to how I stand in relation to it (correspondence and causality); and 3) I stand in relation to it on the one hand, and to you on the other, in such a way as to make you stand in relation to it in a way that corresponds to how I stand in relation to it, and I commit to your standing in relation to it in a way that corresponds with, and is caused by, my relation to it (correspondence, cause, and commitment). In short, these three species of intersubjectivity may be contrasted as to whether *the relation between* my relation to it and your relation to it is grounded in firstness (correspondence), secondness (causality), or thirdness (commitment).

The *interpreter* is the entity that brings an interpretant into being as the proper significate effect of having interpreted a sign. See Table 1, column 5. Crucially, insofar as an interpretant is also a sign, an interpreter is also a signer — the interpretant they express can itself be interpreted. For this reason, everything just said about signers is true for interpreters, and need not be repeated. Only two additional points need to be made. First, while the interpreter is usually taken to be different from the signer, this is not true. Most signs are self-interpreted — that is, signers are the most consummate interpreters of their own signs. And second, as Goffman (1981 [1979]) developed at length, the interpreter is not necessarily the addressee. There are addressed and unaddressed recipients, ratified and unratified participants, and so forth. In the case of overtly addressed verbal signs, the interpreter may be called an 'addressee.' And in the case of overtly addressed verbal and behavioral signs, the group of interpreters may be called an 'audience.'

The *objecter* relates to the object as the signer and interpreter relate to the sign and interpretant, respectively. That is, it is the entity that brings the object (token) into being. While this term may sound odd, it should be remembered that insofar as affordances, instruments, actions, and roles

are thirds, most utterances that have states of affairs as their object tokens are really meta-signs. For example, an utterance like *the ball is on the table* is not only a sign with an object, but is also an interpretant of a sign. That is, the ball and the table are thirds — in particular, *instruments*, whose signs are artificed entities, whose objects are functions, and whose interpretant is the utterance that represents them. In this way, an objecter may be the artificer who brings a referent into being (e.g., an instrument). Or it may be an actor who brings a state of affairs into being (e.g., an action). Jakobson (1990b) called such stereotypic actors 'participants in the narrated event.'

## 9.   Semiotic event

*Semiotic events* are events (in the spatio-temporal sense that something can be said to have 'happened' at some point in space-time) in which a sign, object, or interpretant is expressed, and of which questions can be asked such as where, when, who, what, why, and how. Indeed, any semiotic event can be described using the terms provided in this article: sign, object, interpretant, ground, code, norm, community, and so on. In a narrow sense, Jakobson (1990a, 1990b) introduced the notions of speech event and narrated event to mean the event of speaking and the event spoken about, respectively. As the terms will be used here, a speech event is just a special kind of *sign event* in which the code is a natural language, the channel is verbal, and the object type is a proposition or concept. Analogously, a narrated event is just a special kind of *object event* in which the code is natural language, the channel is verbal, and the object token is a state of affairs or referent — indeed, as mentioned, for Jakobson the state of affairs *is* the narrated event. Finally, given that an interpretant is itself a sign, the idea of an *interpretant event* can be introduced. See Table 1, column 6. One reason interpretant events are usually neglected is that, in verbal communication, the sign event and the interpretant event are relatively identical (in spatio-temporal terms) in comparison to the object event.[21] (For example, my telling you something, and your understanding what I tell you (and/or responding to what I say), are relatively close in space and time in comparison to the event I tell you about — say, how I used to love petting marmots as a child.) By analogy with Jakobson's notation, the terms $E^S$, $E^O$, and $E^I$ may be used to refer to sign events, object events, and interpretant events, respectively.

Jakobson (1990b) originally introduced the ideas of speech event and narrated event to characterize *shifters*: grammatical categories, such as tense and person, that necessarily index the speech event in order to

represent the narrated event. Before moving on, the distinction between a shifter and a non-shifter should be more fully developed. A *shifter*, then, is third whose sign is grammatical (versus lexical), whose ground is indexical-symbolic, and whose object token is a referent (or state of affairs). Sometimes shifters are called 'indexical symbols,' but that is not right: they must be grammatical categories, not lexical ones; and they must have propositional and/or conceptual content. (Otherwise all words — indeed, almost all signs — would be shifters.) Person (I/you) and tense (is/was) are key shifters, as are spatial, temporal, and identifying deictics (here/there, now/then, this/that). These specify the spatial, temporal, or informational relation of a referent relative to the speech event. *Non-shifters*, for the term to have any meaning, are grammatical, referential, non-indexical symbols (they are not just any sign that is not a shifter, otherwise they would consist of all other signs). Examples include aspect, number, and gender. As will be seen, shifters play a key role in *displacement*: the fact than, in natural languages, object events can be displaced from sign events along dimensions such as space, time, person, and mode.

## 10.   Normativity

*Norms* are so important, and so often misunderstood, that they are worth discussing at length. When philosophers like Austin and Peirce formulate theories about speech acts and symbols, or anthropologists like Sapir speak about culture, they often make reference to convention. For example, Austin says that, in the case of speech acts, 'There must exist an accepted conventional procedure having certain conventional effect, that procedure to include the uttering of words by certain persons in certain circumstances' (Austin 2003 [1955]: 14; and see section 20). And Peirce says that, in the case of symbols, the relation between the sign and the object is based in 'law' or 'convention' (*CP* 2.254–2.265; Peirce 1955: 102). Clearly, both philosophers, like scholars more generally, are using 'convention' in an unmarked sense. In this essay, in contrast, convention will be used in a marked sense that explicitly contrasts with norms, rules, regularities, laws and traditions. As will be seen, norms are the most basic and important of these terms, so the discussion will begin with them.

As Brandom (1979) and Haugeland (1998) understand it, for an entity to have norms requires two basic capacities: it must be able to *imitate* the behavior of those around it (as they are able to imitate its behavior); and it must be able to *sanction* the non-imitative behavior of those around it (and be subject to their sanction).[22] As the term will be used in this essay (cf. Brandom 1994), sanctions can involve reward or punishment, and

reward or punishment can be specified in relatively normative terms (say, other norms that one is committed or entitled to follow if one abides by the norm or not), or in relatively non-normative terms (say, modes of pain or pleasure that befall one if one abides by the norm or not). Discipline is to punishment as normative sanctions are to non-normative sanctions. Terminologically, one can say norms are *regimented* by sanctions ( just as one can say that norms originate in imitation). Other than imitation and sanction, out of which can precipitate group-relative patterns of behavior, norms do not require capacities like language or rationality. Norms, however, do require *dispositionality*. In particular, to abide by a norm is to "[behave] in the manner required by that norm, and not merely by coincidence, but as the exercise of dispositions fostered by that norm" (Haugeland 1998: 149).

The term *practice* may be used to refer to any particular norm, and the term *performance* may be used to refer to any actual behavior that instantiates that practice (cf. Brandom 1979). In this way, a performance is to a practice as a token is to a type. Group-relative and relatively holistic ensembles of practices were what the Boasians meant when they spoke of 'patterns of culture' (cf. Benedict 1959 [1934]; Sapir 1985 [1927]). And they were quick to point out that norms were not only requisite and habitual, but also tacit — and hence difficult to articulate. Indeed, norms exhibit what Heidegger would call *facticity*, a notion which turns as much on Boasian cultural relativism as on Durkheimian social facts: while norms could be otherwise (there, then, or among them), they must be this way (here, now, and among us). In these ways, human beings are to norms as fish are to water.

Norms need to be contrasted with rules, conventions, regularities, laws, and traditions (cf. Bourdieu 1977 [1972]; Brandom 1994; Kripke 1982; Lewis 1969; Wittgenstein 1953, *inter alia*). Haugeland succinctly summarizing a century's worth of theorizing, notes that *rules* are typically understood as requiring two things: 'the rule to be followed must be explicitly formulated in some code or language; and the rule follower must read the formulated rule and do what it says to do *because* that's what it says' (Haugeland 1998: 149). Rules, then, are like recipes; following a rule is like following a recipe; and to have and follow rules requires a linguistic ability.[23]

Following Lewis (1969), Haugeland defines a *convention* as 'an "as-if" agreement, in which the parties have settled on a certain arranged behavior pattern, for mutual benefit. The origins of these conventional arrangements are not addressed by the account; but their persistence is explained by showing how, for each individual, it is *rational* to go along with whatever arrangements are already in place' (Haugeland 1998:

150). Conventions, then, are like miniature social contracts, and while their origins are hazy, their perdurance can be explained by self-interest (in the context of mutual-benefit) and rationality more generally. If rules require language in the stereotypic sense, conventions require rationality in the stereotypic sense.

A *regularity* is merely a pattern of behavior that 'shows up' in a laboratory specimen, say, but does not 'lead or guide the behavior [of the specimen] in any way' (Haugeland 1998: 150). And when some specimen deviates from a regularity, it is in no way 'wrong,' rather 'the regularity is defective, or else it is only statistical and has exceptions' (Haugeland 1998: 150). Almost any entity can exhibit a regularity; no particular capacity is required other than the exhibition of a statistically significant behavior. In section 15, two kinds of regularities will be discussed: conditional regularities (of the stimulus-response variety) and natural regularities (of the cause-effect variety).

*Laws*, loosely speaking, are conventions and/or rules that are promulgated and enforced by a political entity — say, following Weber (1978 [1956]: 54), an organization with a monopoly on the legitimate use of force within a given territory.

Finally, a *tradition* (or *custom*) might be thought of as a set of practices particular to some group that is recognized by that group (or by someone studying that group) as particular and/or essential to that group's identity (in the weak sense of this word — say, self-sameness across historical time) whether it actually is or not, and with no specification as to whether it is beneficial or harmful to that group, and/or rational or irrational by some standard. Traditions, insofar as they are often noticed and essentialized practices, are often the site of cultural revitalization or extirpation.[24] As is well-known, traditions are usually 'invented' if not 'spurious'; and, as cannot be stressed enough, whether invented or not, they are often 'moving' or 'affective' (cf. Hobsbawm 1983; Sapir 1985 [1924]; Weber 1978 [1956]).

It should be emphasized that norms, rules, conventions, regularities, laws, and traditions can be interrelated in pernicious and often confusing ways.[25] Any one of these might lead to or from the others: for example, a regularity could become a tradition, a rule could give way to a norm, a norm could lead to a convention, and so on. Certain behaviors might be simultaneously subject to one or more of these explanations: for example, the norms of speaking might be subject to the rules of a schoolmarm and/or the laws of a nation. Local explanations might phrase traditions or norms in terms of rules or conventions or regularities (and vice-versa): for example, we might justify a norm by explaining it in terms of a convention. Finally, any norm, rule, regularity, convention, law, or tradition

is subject to *naturalization* — understood as natural (and hence timeless and universal) rather than normative (and hence historical and cultural). In any case, these terms should be used as ideal types. Suffice it to say, not only are there complex relations among these different factors in historical time, but there are complex relations among them in ontogenetic and phylogenetic time. Finally, it should be emphasized that rules (language), conventions (rationality), traditions (history), and laws (politics), and the capacity to have them, presuppose a normative ability.

To return to the question with which this section began, rather than say symbols are grounded in convention, it should be said that symbols are grounded in norms. More important, however, than the argument that symbols are grounded in norms, is the argument that *norms are thirds*. To see this, note the following. First, norms may be specified in terms of a relation between a type of circumstance and a type of behavior. Thus, norms can be described as 'if in circumstance X (e.g., entering a church, eating soup, using a fork), one is committed or entitled to do Y (e.g., take off your hat, not slurp the soup, hold it by the long, skinny end).' Norms, then, are as enabling (entitlement or permission) and they are constraining (commitment or obligation).[26] Second, any type of circumstance can itself count as a type of behavior; and any type of behavior can itself count as a type of circumstance. That is, the behavior of one norm can be the circumstance of another norm; and the circumstance of one norm can be the behavior of another norm. Hence, norms flow to and from other norms. They chain, embed, and net — thereby reliquescing into each other and deliquescing out of each other.[27] And third, a type of circumstance is just a sign type (or legisign) and a type of behavior is just an interpretant type (as a legisign that is the proper significate effect of another sign). Hence, an object type is just a complex set of commitments and entitlements that link a sign and an interpretant (or a circumstance and a behavior) — as evinced in the sanctioning practices of a community, and as embodied in the dispositions of its members. One reason norms are not usually understood as thirds, needless to say, is that objects are usually understood as 'objects' — whereas the object of a norm, as a bundle of commitments and entitlements, is truly an abstract and social entity.

Any circumstance or behavior which is implicated in a large number of norms or practices may be called a *sort*.[28] Another way to say this is that a sort is a sign type (or object type or interpretant type) that is implicated in many different thirds. Group-relative thirds such as affordances and instruments, actions and roles, intentional statuses and speech acts are thus sorts, or legi-thirds, in this sense. That they are implicated in a large number of norms (or thirds) gives them a kind of stability and/or

institutional objectivity — which is another meaning of *facticity*. For example, Berger and Luckmann call an analogous, but much more circumscribed process, 'typification' (Berger and Luckmann 1967: 72).[29] And they argue that *institutionalization* 'occurs whenever there is a reciprocal typification of habitualized actions by types of actors' (Berger and Luckmann 1967: 54). Using this idea, they eloquently characterize an individual's phenomenological experience of an institution:

An institutional world, then, is experienced as an objective reality. It has a history that antedates the individual's birth and is not accessible to his biographical recollection. It was there before he was born, and it will be there after his death. This history itself, as the tradition of the existing institutions, has the character of objectivity. The individual's biography is apprehended as an episode located within the objective history of the society. The institutions, as historical and objective facticities, confront the individual as undeniable facts. (Berger and Luckmann 1967: 60)

## 11. Code

Traditionally understood, a *code* is that which must be more or less shared between two or more individuals for there to be communication between or among them. With this explanatory goal in mind, codes are understood as sets of pairings between sign types and object types.[30] Or, more elaborately defined, a code is understood as a set of thirds (and hence signs, objects, and interpretants) that two or more people share in common (more or less), and by means of which they can (and perhaps do) communicate. Another approach to describing a code (or, rather, to describe what the notion of a code is trying to explain) is to describe the conditions of appropriateness and effectiveness for any sign or set of signs (and hence any interpretant or set of interpretants): what must be the case for a sign to be used appropriately; and what comes to be the case when it is used effectively. In this sense, a code is really just some portion of the ensemble of norms in which humans are implicated, typically focused on because stereotypic in some sense — say, linguistic, symbolic, addressed, and so forth.

While the first sense of code tends to push analysis towards a rule-based, deductive, semantic, symbolic, sign-object, type-to-token, constative, synchronic, representationalist, and competence/langue idiom; the second sense of code tends to push analysis towards a norm-based, inductive (and abductive), pragmatic, indexical, sign-interpretant, token-to-type, performative, diachronic, inferential, and performance/parole

idiom. To some degree, this entire essay stands as a description of the second kind of analytic approach, showing how it subsumes the first kind.[31]

Jakobson (1990b) famously defined metalanguage as messages about codes (M/C) — or (linguistic) signs whose (propositional) objects are pairings between signs and objects. And he offered the example of 'flicks means movies.' This should be maximally generalized from the meta-linguistic to the *metasemiotic*. In particular, assume the message (or sign) doesn't have to be in the same code as the code it stands for (thus, 'translation' as an inter-language phenomenon is as metasemiotic as 'glossing' as an intra-language phenomenon). Next, messages can be any kind of sign, not just signs with propositional content (thus, adjusting one's daughter's hand as she learns to tie her shoes is as metasemiotic as explaining to her what the word 'bachelor' means). And finally, take codes in the sense of appropriateness and effectiveness of thirds in context rather than pairings of signs and objects.

In such an extreme case, all signs are meta-signs (which is another way to say that all interpretants and objects are signs). For this reason, in the case of human-being, there is no reason to posit a metasemiotic order above and beyond the semiotic order: when correctly conceptualized and defined, the latter presupposes the former. One is always already reflexive (qua self-interpreting) even if one is only occasionally and derivatively reflective (qua self-conscious). Indeed, much of semiosis and linguistic research has been hampered rather than hastened by theorizing second-order processes after or on top of first-order processes — rather than as part-and-parcel. And this bias is rooted in its focus on sign-object relations rather than sign-object-interpretant relations between relations. Distinguishing between first-order and second-order sign systems only makes sense when one cuts out a particular swatch of practices as more important than some other swatch. Indeed, if *culture* is that group-relative ensemble of thirds turning on commonality, contrast, and consciousness (see section 13), culture is always already meta-culture.[32]

## 12.   Contact

Malinowski famously spoke of *phatic communion* as 'a type of speech in which ties of union are created by a mere exchange of words' (Malinkowski 1936: 315). And Jakobson, following Malinowski, considered one of the key factors of any speech event to be the *contact*, which he characterized as 'a physical channel and psychological connection between the addresser and the addressee, enabling both of them to enter and stay in

communication' (Jakobsen 1990b: 73). Building on this definition, he characterized the phatic function as an orientation to either the channel or the connection.[33]

*Physically*, a channel is the medium in which, or by which, signs move between signers and interpreters. It consists of a path, between a source and a destination, along which signs (or sensory information from them) can travel (across space and/or in time).[34] While this is often imagined as two tin cans connected by a string, with a signer and interpreter on each end, it is best understood by reference to more complicated examples — such as internets, radio transmissions, and gossip circles (cf. Spitulnik 2001 [1996]; Warner 2002). In any case, one must distinguish between the materiality of the sign, and the materiality of the medium by which the sign travels: sometimes they are the same (as in verbal utterances); sometimes they are different (I attach a note to an arrow and shoot it against your door). These are often conflated in the term 'channel' because they are identical in the case of verbal utterances.

*Psychologically*, a connection may be thought of as whether someone on either end of a physical channel is actually sending or receiving messages, and/or preparing to send or expecting to receive messages. In this regard, one can speak of the degree of *hermeneutic openness*: are the signers and interpreters sapient, sentient, or responsive; are they expecting or preparing messages that are informative, relevant, and/or (de)codable; is some phenomenon being treated as worthy of signification or interpretation. In this context, one can speak of *semiotic compensation*: the degree to which one is willing to treat some entity as a sign (with some degree of information, relevance, and interpretability) and thereby expend effort on its interpretation — be it not only utterances and actions, but the meaning of a Kafka text, the groan of a branch, the babbling of a baby, the muttering of a drunk, or the slip of one's tongue. Psychoanalysis, for example, may be understood as an attempt to institutionalize one particular form of semiotic compensation. *Strain*, as will be discussed in section 15, arises when we find either too much or too little meaning in the phenomena around us (e.g., treating causes as norms or norms as causes). It may also be understood as the (unintended) effects of semiotic overcompensation or undercompensation.

## 13. Semiotic community

Bloomfield famously defined a *speech community* as 'a group of people who use the same system of speech signals' (1984 [1933]: 29) and, alternately but not equivalently, 'a group of people who interact by means of

speech' (1984 [1933]: 42). And Gumperz defined it with a little more detail as 'any human aggregate characterized by regular and frequent interaction by means of a shared body of verbal signs and set off from similar aggregates by significant differences in language usage' (Gumperz 2001 [1968]: 43).

A *semiotic community* can be defined in relation to a speech community. First, a sign-community may involve any kind of signs, not just linguistic signs. Second, rather than phrase it in terms of 'signals' or 'signs,' stress that what is shared is thirds — and hence, signs, objects, and interpretants. Third, rather than phrase it in terms of a shared code, phrase it as shared norms of appropriateness in context and effectiveness on context (with shared codes, like 'English,' being the precipitate of these norms). Fourth, note that there are three different kinds of *being-in-common*: 1) thirds can be held in common (and hence a group can be *in itself* ); 2) thirds can be held in common, and in contrast to another group that holds thirds in common (and hence a group can be *in itself* and *beside another*); and 3) thirds can be held in common, in contrast to another group that holds thirds in common, and with a reflexive sense of this contrastive commonality (and hence a group can be *in itself*, *beside another*, and *for itself* ). See Table 1, column 7. Needless to say, this is a perfect starting point to ground a theory of culture and identity.

Thus, there is a substantive, contrastive, and reflexive sense of sign-community. Bloomfield picked up the first sense, and Gumperz picked up the second sense. Indeed, *pace* Bloomfield and Gumperz, it is tempting to reserve the term 'community' for the last kind of grouping. In this regard, the thirds that are held in common may be referred to as a *semiotic commons*. Indeed, in the spirit of Hardin (1968), some might be inclined to lament 'the tragedy of the semiotic commons' in many different senses: we don't know what anyone means anymore (or we know all too well); we've already interpreted everything there is to express (or nothing worth interpreting is ever expressed); and so forth.

## 14.   Function

The term *function* is definitionally overloaded, bearing the brunt of many distinct and often contradictory meanings, so it is worthwhile distinguishing between a number of different uses. First, there is function in the mathematical sense. For example, we say $f(x) = x^2 + 3$. This mathematical usage, when phrased as one 'dependent' variable varying as a function of one 'independent' variable, is often used in a non-mathematical and folk-scientific way in various cases of reductionism: say, cultural practice

A is a function of biological propensity B, or cultural value A is a function of psychological need B, and so forth.

Second, as predominantly used in this essay, a function is the object of those thirds called 'instruments' (e.g., a hammer or a sofa), whose signs are artificed entities, and whose key interpretants are actions that wield these entities. In this usage, functions contrast with purchase, purposes, statuses, and values — as the respective objects of those thirds called affordances, actions, roles, and identities.

Third, this use of function may be generalized to mean any object of a sign. In this usage, iconicity (or motivation more generally as will be seen in section 15), is about form following function, or the grounds of thirds being iconic-indexical and/or determining.[35]

Fourth, moving to language proper, there is Bloomfield's definition of function: 'The positions in which a form [e.g. some linguistic unit, such as a word] can appear are its *functions* or, collectively, its *function*. All the forms which can fill a given position thereby constitute a *form-class*' (1984 [1933]: 185). He offered the following example: 'all the English words and phrases which can fill the actor position in the actor-action construction, constitute a great form-class, and we call them nominative expressions [or noun phrases]' (Bloomfield 1984 [1933]: 185). In short, for Bloomfield, the function of any word (or linguistic sign type more generally), is the grammatical patterns in which it is implicated — what some linguistics now call its 'distribution.' For example, mass nouns (e.g., *mud*) have a different function from count nouns (e.g., *rock*) as evinced by the fact they cannot be pluralized or take an indefinite article in contrast to count nouns (e.g., *a mud* or *muds* versus *a rock* or *rocks*). As may be seen from the mass/count noun example, the Bloomfieldian function of a sign is related to the object of the sign more generally. That is, grammatical patterns are usually a function of the meaning of the forms that are implicated in those patterns (cf. Whorf 1956 [1937]). Silverstein (1999) has noted that most formal paradigms in linguistics (e.g., Saussure, Bloomfield, and Chomsky) are actually form-functional: the function of any form is its relation to the other forms within a whole (and where the 'whole' is confined to language structure or *langue* per se).

Fifth, sometimes function is taken to mean illocutionary force and contrasted with content in the sense of propositional content. In this usage, form is the morphosyntactic and/or phonological structure of an utterance, content is the proposition it expresses, and function is its illocutionary force — say, declarative, optative, interrogative, or imperative. Slightly widened (to take into account non-propositional linguistic signs), this use of function corresponds to 'the work we do with language' or how some utterance can be used as an instrument to purposely affect context.

In this usage, it is widened from illocutionary force to include any speech act more generally. Malinowski most famously championed this usage. For example, in theorizing *phatic communication*, he was interested in showing the ways language was 'not as an instrument of reflection but as a mode of action' (Malinkowski 1936: 315).

Sixth, Jakobson's use of function was in part related to these 'goal-directed' aspects of verbal behavior, but generalized away from purposeful manipulation per se, to a 'set' (*Einstellung*) or 'orientation' towards any one of the six "constitutive factors in any speech event" (Jakobson 1990a: 72). For example, an orientation towards the speaker determined the emotive or expressive function (as evinced in various formal properties of an utterance (say, first person and optative); an orientation towards the referent determined the referential function (say, third person and declarative); and an orientation towards the addressee determined the conative function (say, second person and imperative); or an orientation towards the code determined the metalinguistic function; an orientation towards the contact determined the phatic function; and an orientation towards the message (or sign) determined the poetic function. This is essentially Malinowski's sense of function added to Bühler's (1982 [1934]) account of the three key factors of a speech event (speaker, referent, addressee), and generalized to include three more factors (contact, code, and message).[36]

Seventh, Silverstein in an influential article (1987, and see 1999) has contrasted the Bloomfieldian sense of function and the Jakobson-cum-Malinowski sense of function, with what he calls the 'contextualization-functions' of language (Silverstein 1999: 78): utterances index context both by being appropriate in it and effective on it.[37] This sense of function, which champions the basic insights of Austin's notion of performativity while theorizing them in terms of Peirce's ideas of indexicality, will be taken up in sections 20–21.

Eighth, there is the sense of function as a verb: an instrument is functioning (one can do with it what it was designed to do); or an instrument is malfunctioning (one cannot do with it what it was designed to do).

And finally, Aristotle's four causes might be loosely understood as four kinds functions. Thus, in his famous discussion of four causes (2001: 240–241; and see Heidegger 1993 [1954]), Aristotle takes up the content, form, artificer, and purpose of any object or activity. For example, a bowl has four causes: the clay from which it is made (e.g., that out of which the bowl is made, or its substance); the shape that the clay has been formed into (e.g., the form the clay has taken, or the essence of the bowl); the person who shapes the clay into a bowl (e.g., the source or change which causes the bowl to be); and the purpose for which the bowl was made

(e.g., that for the sake of which a bowl was made). These are sometimes referred to as the material cause, formal cause, efficient cause, and final cause.

## 15.   Motivation: Social constructions and natural kinds

*Functionalism* might be understood as any mode of investigation that focuses on function (in any one of the senses of the last section) when studying form. In this regard, the term *motivation* might be used to refer to principled relations between form and function — or relations that seem 'motivated' relative to some principle. Loosely speaking, then, functionalism is the study of motivated meaning.

For the purposes of this essay, there are three types of relations that can be motivated: sign-object relations, concept-category relations, and sign-interpretant relations. In particular, sign-object relations are the classic locus for motivation — especially in the sense of 'iconicity.' Concept-category relations are really relations between object types and sets of object tokens (where the sign that stands for the object is a word) — hence, this distinction is only useful for the case of inferentially-articulated signs. And sign-interpretant relations relate to sign-object relations (given the definition of objects as the conditional relatum of interpretants); in addition, they push analysis towards an analysis of norms (as pairings of circumstances and behaviors). In short, while these three types of relations are interrelated (as different ways of examining a third more generally), it is useful to separate them for analytic purposes. They will be referred to as semiotic motivation, conceptual motivation, and normative motivation, respectively.

In this schema, one might inquire into the motivation for a particular sign (concept, or norm); one might inquire into the motivation for a set of signs (concepts, or norms); and one might inquire into the motivation for the capacity for semiosis (or conceptualization, or normativity). And even more abstractly, such inquiries could even be asked on different timescales: ontogenetic origins (or from the standpoint of an individual); historical origins (or from the standpoint of a culture); and phylogenetic origins (or from the standpoint of a species). In short, questions regarding motivation may (minimally) be posed in 27 different ways (or $3 \times 3 \times 3$): third, concept, norm; element, system, capacity; ontogeny, history, phylogeny. For example, taking one term from each of these sets, one might inquire into the history of a system of concepts, or the ontogeny of a particular third, or the phylogeny of the capacity for normativity. Rather than be exhaustive, this section will only treat a select set of relations.

Regarding *semiotic motivation*, the following distinctions are important. First, one may ask whether the ground of any third is iconic and/ or indexical versus symbolic. That is, one may ask whether the sign and object share a quality in common, and/or have a relation of contiguity, versus merely stand in an 'arbitrary' relation to one another. And second, one may ask whether the object of any third is dynamic or immediate. In the first case, the object determines the sign, therefore bringing it into being. In the second case, the object is represented by the sign, therefore being brought into being by it. (As mentioned, indexicality usually correlates with determination, and symbolism usually correlates with representation.) To the degree that the ground of a third is iconic-indexical (versus symbolic) and determining (versus representing), one can say that a third is motivated.[38]

More specifically, functionalism in linguistics is an attempt to explain linguistic form by reference to 'language-external' factors or 'language-internal' factors (cf. Friedrich 1979; Saussure 1983 [1916]: 69, 76, *passim*; Van Valin and LaPolla 1997).[39] In particular, internal motivation usually refers to whether some sign-object relation is motivated by other sign-object relations within a semiotic system (and in regard to any 'level' within the system: phonology, morphology, syntax, discourse, etc.); whereas external motivation usually refers to whether a sign is motivated by some object outside of a semiotic system — usually understood as some natural process (what kinds of things exist in the world: e.g., taxonomic categories), some social process (what kinds of ends does communication serve: e.g., speech acts and politeness), or some cognitive process (what kinds of structures exist in the brain: e.g., limits on attention or memory).[40] In contrast to Saussurian doctrines regarding the arbitrariness of the sign, linguistic functionalism tends to regard all thirds as internally or externally motivated to some degree.

Regarding *conceptual motivation*, the key question is whether (for signs with propositional content) a category drives a concept or a concept drives a category. In this regard, Griffiths (1997: 143–149) has articulated several different kinds of social constructions. *Trivial social constructions* are those in which a concept is dependent on a social institution for its existence. This is called trivial insofar as concepts only exist by way of sign systems, in particular language, which require social institutions. Thus, to say a concept is a social construction is vacuous. *Non-trivial social constructions*, in contrast, are those in which a category is dependent on a concept for its existence (where the concept is, again trivially, dependent on a social institution for its existence). *Overt* forms of non-trivial social constructions are those in which this category dependency could be pointed out to members of the social institution without disrupting

the construction process per se. And *covert* forms of non-trivial social constructions are those in which this category dependency could *not* be pointed out to members of the social institution without disrupting the construction process per se. Thus, electrons are not social constructions in any sense of the term (as a category they seem to exist irrespective of any group's conceptual elaboration of them — as per the discussion of natural kinds in section 6). Senators are an overt social construction. And multiple personality disorder is most likely a covert social construction (cf. Hacking 1995).[41]

While an extremely useful set of distinctions to keep in mind (and far more nuanced than most accounts of social construction), this is too simple a typology on several accounts. First, processes of social construction are phrased in terms of a relatively abstract two-term relation (concept and category), rather than in terms of a relatively concrete process involving the interplay of words used in contextually appropriate and effective utterances, and standing for particular referents, in relation to the concepts and categories both guiding and precipitating out of these utterances (cf. Sahlins 1981; Silverstein 1995 [1976]). And second, as part of this process, and as per Putnam's four-dimensional vector, the grammatical patterns in which a word is implicated, and the inferential patterns in which a concept is implicated, play a large role in conceptual structure. In this way, several important pieces of the social construction process relate both to claims of the kind Sapir and Whorf are famous for having introduced (see Lucy 1992), and to functional linguistics more generally. Loosely speaking, word-concept relations (and word-word/concept-concept interrelations) are as important as concept-category relations.

Regarding *normative motivation*, recall that the circumstance-behavior pairings, most characteristic of norms, were rephrased as sign-interpretant pairings in section 10. Abstracted slightly, norms might be understood as the pairing between a sign event and an interpretant event. In this regard, it is useful to distinguish normative pairings of events from natural regularities in the tradition of Newton and Hume, and in the stereotypic sense of cause-effect pairings. In particular, cause-effect pairings are usually understood to have the following properties: 1) the two events are relatively instantaneous in time and relatively immediate in space; 2) all cause events are sensual tokens of a common type, and all effect events are sensual tokens of a common type; 3) and the pairing between cause and effect is phrased in terms of necessity and possibility (irrespective of the authority of any community). In contrast, sign and interpretant events can be relatively distant in time and space; the sign (and interpretant) events need not be sensual tokens of a common type; and they are phrased in terms of commitment and entitlement (thereby being both

subject to the authority of a community, and enabling as much as constraining).

Because of the great differences between these two types of event pairings (normative pairings and cause-effect pairings), it is worthwhile distinguishing between the normative order and the causal order (or 'cultural norms' and 'natural causes'). In this regard, there are certain cases in which one may speak of the causal order regimenting the normative order: when natural causes play a role in sanctioning cultural norms. For example, one uses a hammer to pound in a nail not only because hammers are normatively appropriate and effective ways to pound in a nail (as sanctioned by the practices of one's father or foreman when, say, one attempts to use a saucepan to pound in a nail), but also because hammers are feasible and efficacious ways to pound in a nail (as sanctioned by the properties of steel and wood, force dynamics, and so forth). To the degree to which a cultural norm is regimented by a natural cause, one can say that the practice, or norm, is motivated.[42]

In short, using a notion of motivation grounded in semiotic mediation, three distinctions have been introduced: the discussion of thirds introduced a distinction between (determining) iconic-indices and (representing) symbols; the discussion of concepts introduced a distinction between social constructions and natural kinds; and the discussion of norms introduced a distinction between cultural norms and natural causes. Additionally, in the last two cases, it was shown how social constructions could be motivated to the degree they turned on natural kinds; and cultural norms could be motivated to the degree they turned on natural causes. In his discussion of norms, Brandom has made the claim that: 'The criterial classification of things into objective and social is itself a social, rather than objective or ontological, categorization of things according to whether we treat them as subject to the authority of a community or not' (Brandom 1979: 190).[43] To phrase this in the terms used here, thereby both generalizing its relevance and specifying its mechanism: the distinction between iconic-indices and symbols is itself symbolic; the distinction between social constructions and natural kinds is itself socially constructed; and the distinction between cultural norms and natural causes is itself culturally normative. Such a claim is worth considering for all of the binary domains scholars have been handed: illness and disease, mind and brain, place and space, persons and homo sapiens, emotion and affect, gender and sex, and so on.[44]

Does grounding the distinction between natural causes and cultural norms in cultural norms undercut the realism espoused in section 6? Perhaps in response to such a concern Brandom has also introduced the compelling idea of *strain* to characterize what happens when we attempt

to treat the objective as the social, or the social as the objective (where, the social, remember, is that which is subject to the authority of some community). Phrased in the idiom introduced here, strain can arise when indices are treated as symbols (or vice versa), when natural kinds are treated as social constructions (or vice versa), and when natural causes are treated as cultural norms (or vice versa). For example, strain may arise when one attempts to treat the wind's shaking of a branch as an addressed sign (say, by attempting to hermeneutically translate it); just as strain may arise when one attempts to treat conversation as stimulus-response patterning (say, by trying to causally explain it). A community can, needless to say, get away with either kind of treatment without undue strain — perhaps just not in the context of other communities that make the divisions in other ways, and perhaps not in that temporal and (perhaps) imaginary limit that scientific practices embrace all phenomena and all societies embrace scientific practitioners. In any case, another sense of *fetish* — and one that only make sense in the context of an entrenched realism — is that which minimizes the appearance of strain while maximizing the treatment of social constructions as natural kinds.

## 16.   Semiotic framing

*Semiotic framing* turns on the 'orientation' of the interpreter relative to the sign being interpreted. It should be contrasted with the question of correctness of interpretation (whether a sign corresponds with its object: say, *that's a dog* versus *that's a cat*). It should be contrasted with the question of the code of interpretation (whether a sign-object correspondence is rendered in one code or another: say, *that's a cat* versus *eso es un gato*). And it should be contrasted with the question of semantic construal, or conceptualizing the same situation in multiple ways: say, *that's a cat* versus *that's an animal*, or *that's a cat* versus *that's not a dog* (cf. Langacker 1987; Talmy 2000b). In short, the question is not whether a portrait correctly portrays a person; nor whether we paint, draw, or sculpt the portrait; nor the style or degree of detail with which the person is portrayed; but where one is positioned *semiotically speaking* relative to the person when one portrays her. In particular, different semiotic frames turn on whether the component of a third is understood as: 1) sign, object, or interpretant; 2) dynamic object or immediate object; 3) composed of smaller thirds or composing larger thirds; and 4) sign event or embodied sign. In a more intuitive idiom, different semiotic frames turn on whether the semiotician is focused on: the past or future of a third; the actor or

observer's relation to a third; a proximate or distal view of a third; and the public or private nature of a third.[45] In this way, different semiotic frames are perfectly compatible with each other and intelligible with respect to one another. Thus, there is no privileged semiotic frame — they relate to each other as different faces of a Necker Cube.

First, most entities and events can be framed as signs, objects, or interpretants. This is just the point made in section 2 that any component of a third (sign, object, or interpretant) is simultaneously and/or sequentially a component of other thirds. For example, the very same utterance may be understood as a sign that stands for something (e.g., an assertion that describes a state of affairs: 'the hammer is heavy'); it may be understood as an interpretant of another sign (e.g., an answer to a question: 'why do you keep bending nails'); and it may be understood as an object that another sign may stand for (e.g., as the object of a swatch of reported speech: 'he said 'the hammer is heavy''). Similarly, an instrument may be understood as an object other signs stand for (e.g., the object of the word 'hammer'); it may be understood as a sign which stands for a function (e.g., the artificed entity itself which has a function as interpreted by a use); and it may be understood as the interpretant of a sign (e.g., as the interpretant of an action whose purpose is realized in it: a hammer is the interpretant of the action of making a hammer). Importantly, this kind of framing can be given a temporal interpretation — to see an entity (such as a hammer) as a sign is to foreground its protentive nature: asking what interpretants it will give rise to. Conversely, to see an entity as an interpretant is to foreground its retentive nature: asking what signs gave rise to it. Thus an important sub-case of this framing, is whether we focus on the history or the future of any entity — what signs gave rise to it as an interpretant; or what interpretants it will give rise to as a sign.

Second, most entities or events, when understood as objects (rather than signs or interpretants), may be semiotically framed as dynamic or immediate objects. For example, whereas we might see some controlled behavior and infer its purpose (as the immediate object of the action), we might also know someone's purpose and understand their action as determined by it (as its dynamic object). This framing in terms of dynamic or immediate object may in part be interpreted as having an observer-centered or actor-centered point of view. That is, relative to the observer, the purpose is the immediate object of the action (they only learn about the purpose through the action); and relative to the actor, the purpose is the dynamic object (it determines or causes their action). This framing, at least in the case of actions, may also be interpreted as corresponding to actor- or observer-centered frames. If in protention a sign gives rise to interpretant and in retention an interpretant was caused

by a sign, in determination an object causes a sign and in representation a sign causes an object.

Third, most sign-object-interpretant relations may be semiotically framed as consisting of smaller sets of sign-object-interpretant relations or embedded in larger sets of sign-object-interpretant relations. Or, perhaps more intuitively phrased, between the circumstance and behavior paired in any norm may be nested any number of other normative pairings; and any circumstance-behavior pairing may be nested in any number of other norms. In this way, just as one may characterize a landscape with different degrees of visual detail (e.g., each leaf on a tree versus each tree in a forest), one may characterize meaningful behavior with different degrees of semiotic detail (e.g., each word in an utterance versus each utterance in a conversation). This form of semiotic framing, then, may be likened to how 'near' or 'far' an analyst positions herself relative to a semiotic event.

Finally, one may add a form of semiotic framing that focuses on sign events versus on embodied signs. Previewing an idea that will not be fully explained until sections 18 and 19, rather than understanding semiosis in terms of sign events (such as speech acts) that presuppose certain context (as their 'roots') and create certain contexts (as their 'fruits'), focus instead on embodied signs (such as social and intentional statuses) that presuppose certain sign events (as their 'roots') and create certain sign events (as their 'fruits'). Insofar as sign events are just public behaviors, those who focus on 'performance' may like the former approach; and insofar as intentional states are just embodied signs, those who focus on 'psychology' may like the latter approach. In short, this form of semiotic framing turns on the relative weighting of speech acts versus intentional statuses, and hence of putatively 'public' and 'private' modes of semiosis.

## 17.   Embodiment

Before claiming that some process involves embodiment, it is worthwhile getting clear on two questions: what 'the body' is; and what it means for that body to 'embody.' Regarding the first question, several different senses of the word *body* should be mentioned. There is the *biological body*: everything within and including the skin (or outermost membrane) of some animal or organism, at some level of description: say, flesh and bones; or veins, skin, muscles, nerves, and skeleton; or heart, kidney, liver, spleen and brain; or arms, legs, fingers, and toes; and so forth. There is the *culturally explicit body*: which parts of the body (in the above sense, or perhaps more liberally) are lexicalized in a language and/or topicalized by a community. More generally, there is the *culturally salient*

*body*: which parts of the body (in any of the above senses) are implicated as means or ends in the linguistic and cultural practices of a community (however tacitly or explicitly). And there is the *medical body*: how the body and its parts, in their biological or cultural senses, are implicated in local empirical observations (qua 'perceptions'), theoretical representations (qua 'beliefs'), and practical interventions (qua 'intentions'). Notice that there is no necessary isomorphism between the biological body, the culturally explicit body, the culturally salient body, and the medical body. Needless to say, the medical body tends to be the biological body (when the body is a modern, western, human body). And the culturally explicit body tends to be some subset of the culturally salient body (for whatever sign community is at issue).

Continuing this line of inquiry, but opening up into western philosophy more generally, in an Aristotelian tradition there is the *zoe*, or bare life as instantiated in the biological body (and shared by all living things), and in contrast to *bios*, or the good life as instantiated in a body politic (and characteristic only of human beings). In a Cartesian tradition, there is *res extensa*, or that which takes up volume in space, and in contrast to *res cogitans*, or that which involves representations. Sometimes this last pairing is used to ground a body-mind distinction: the parts of an individual best characterized by *res extensa* and *res cogitans*, respectively. And sometimes it is used to ground an object-subject distinction: the parts of the world best characterized as *res extensa* and *res cogitans*, respectively (indeed, it is as if the mind-body divide is a personification of the subject-object divide; or, conversely, it is as if the subject-object divide is just an ontologization of the mind-body divide). And in a Kantian tradition, one might introduce the *pure body*, as that part of the world subject to causes (and amenable to 'pure reason'), and to be contrasted with the *practical body*, or that part of the world subject to norms (and amenable to 'practical reason').

And then there are any number of ontological distinctions grounded in this last set of dichotomies: cognition versus affect, male versus female, mind versus brain, gender versus sex, culture versus nature, human languages versus animal sounds, value versus pleasure/pain, symbol versus index, polis versus household, hegemony versus violence, consent versus coercion, production versus reproduction, action versus labor (see Arendt), superego versus id, cooked versus raw, public versus private, signifier versus signified, articulation versus experience, and so on (perhaps indefinitely). And just as with the distinction between social kinds and natural constructions (or cultural norms and natural causes), most of these distinctions between two kinds are themselves the product of processes particular to one of the kinds. Thus, a culture-nature distinction is

the result of a cultural process; a human-animal distinction is the result of a human process; a public-private distinction is the result of a public process; a polis-household distinction is the result of a political process; and so on. In any case, before one even attempts to assert some process involves embodiment, one needs to theorize what a body is, and what the stakes and assumption are underlying the theory that presents that body as *the* body.

With these caveats in mind, the second question may be called into question: what does it mean for a body to embody, and/or for a process to be embodied. First, assuming for the moment that the 'body' — its nature, extent, and parts — is established (say, we decide to focus on the culturally salient body or perhaps *zoe*), one may examine thirds whose components are implicated in the body. This is just the way the body is taken up in meaning, or made meaningful. For example, the object component of a third might be some feature of the body, where the sign that stands for it is relative symbolic (words like *arm* and *liver*), indexical (symptoms like a fever), or iconic (drawings of the dissected body in a medical textbook). Or the sign component of a third might be some feature of the body, such as sign-language or gesture, facial expressions or directions of gaze, controlled behavior that stands for a purpose, symptom themselves (from the standpoint of the sign, rather than the object), or even verbal signs so far as the vocal organs are responsible for their acoustic qualities. Finally, as will be the main focus in what follows, the interpretant component of a third might be some feature of a body: a change in bodily state (affective interpretant), a purposeful or non-purposeful behavior (energetic interpretant), or a habit or disposition to signify and interpret (ultimate (representational) interpretants).[46]

Second, much less literally, assuming the 'mind' — its nature, extent, and parts — is established, one may examine how attention to thirds, or semiosis more generally, pushes attention towards the 'body' and away from the 'mind.' Needless to say, mind, just like body, has been taken to be so many things that shifting attention from one to the other can be taken in many different ways. For example, one might shift focus from symbols to icons and indices, and from representation to determination. One might shift focus from arbitrary relations to motivated relations. One might shift focus from rules (conventions, etc.) to norms. More generally, one might shift focus from conscious processes to unconscious processes; from concepts to categories; from explicitness to implicitness; from thirds controlled, composed, and committed to thirds uncontrolled, uncomposed, and uncommitted to. One might shift focus from relative abstract objects (like purchases, functions, purposes, statuses, and values) to the relatively concrete signs and interpretants that stand in for them (such

as affordances, instruments, actions, roles, and identities).[47] One might move from constituents of the 'representational whole' (perceptions, beliefs, intentions, plans, wishes, memories), to constituents of the 'residential whole' (affordances, instruments, actions, roles, and identities), and hence from representations of the world to residence in the world. And, finally, one might move from speech acts and mental states to normative shifts in commitment and entitlement space. In short, rather than shift attention from the mind to the body, the interesting move is to examine the *enthirdment* of body and mind, and the semiotic and social processes that tend to divide and dualize them.[48]

## 18.  Embodied interpretants: Affective, energetic, representational, and ultimate

As defined in section 7, interpretants are the proper significate effects of signs: they are that component of a third which relates to an object in a way that corresponds with the way a sign relates to the object, and because of the way the sign relates to the object. While Peirce characterized several basic kinds of interpretants, he did not treat them in detail (cf. 1955: 276–284). In this section, his brief comments are fleshed out into a complete theory.

The *affective interpretant* is just the feeling produced by a sign, perhaps no more than 'the feeling of recognition' (Peirce 1955: 277).[49] As will be used in this essay, affective interpretants have three key characteristics. First, an affective interpretant is a change in one's bodily state. For example, an affective interpretant can range from an increase in metabolism to a blush, from a feeling of pain to a feeling of being off balance, from sweating to an erection. Second, this change in bodily state is itself a sign that is potentially perceptible to the body's owner, or others who can perceive the owner's body. For example, they may be perceptible through internal or external channels (e.g., one can see one's blush in a mirror, as can others, or feel heat in one's neck and face). Indeed, an affective interpretant may even be perceived through scientific apparatus — specialized instruments that extend the human sensorium (e.g., EEGs, MRIs, and so forth).[50] And finally, as signs, these interpretants may lead to subsequent, and perhaps more developed, interpretants. For example, these subsequent interpretants may include actions (pulling one's hand from a flame that is causing pain), exclamations ('ouch'), assertions ('that hurts'), or thoughts (say, never to sit on a hot radiator again).

As seen by these examples, affective interpretants seem to involve no physical effort: a person doesn't cause them to happen; they happen to a

person. That is, they seem to causally originate in an organ or appendage rather than in an individual, so that they might best be characterized as *bodily* processes rather than *behavioral* ones. Indeed, if they involve any effort at all, it is merely to resist them — which is already an interpretation of them. More carefully phrased, and going back to the definition of a signer offered in section 8, one has minimal control over the expression of the sign, minimal composition of the sign-object relation, and minimal commitment to the interpretant of this relation. Of course, there are techniques of the body that allow for greater degrees of control, composition, and commitment of such affective interpretants (cf. Mauss 1973). For example, one may learn to will an erection as well as hold back a tear. However, when subject to such techniques, affective interpretants shade into energetic interpretants. Indeed, in the other direction, affective interpretants (in relation to the signs that give rise to them) may shade into stimulus-response or cause-effect pairs, rather than circumstance-behavior norms. For example, sweating is probably on the border between an affective interpretant and a physical response. In this way, the boundary between affective interpretants and responses (or effects) more generally is like the boundary between cultural norms and natural causes discussed in section 15: it may be drawn in different places, subject to more or less strain.

The *energetic interpretant* involves physical or mental effort, such as a reflex action or an association (Peirce 1955: 277).[51] While these require effort, and involve individual causality, they do not necessarily involve purpose, intention, or planning (in any sense of these words). For example, flinching at the sound of a gun is an energetic interpretant; as is craning one's neck to see what made a sound; as is saluting a superior when she walks by; as is wielding an instrument (say, pounding in a nail with a hammer); as is heeding an affordance (say, tiptoeing on a creaky floor); as is screaming in pain (as an energetic interpretant of a sign that is an affective interpretant). While a person causes these to happen (in contrast to affective interpretants), the person is not necessarily responsible for their happening insofar as they do not necessarily turn on purpose or intention (though, the allocation of responsibility as a function of features such as causality and intentionality is a culture-specific practice, as discussed in section 8).

In this way, energetic interpretants seem to be behavioral rather than bodily processes.[52] Compared to affective interpretants, energetic interpretants involve a relative degree of control, composition, and commitment. And, in parallel with affective interpretants, there are techniques of the body that can reduce one's degree of control, composition, and commitment (for example, intoxication or dissociation). Hence, just as affective interpretants can be 'raised' into energetic interpretants; energetic

interpretants can be 'lowered' into affective interpretants. Indeed, there are reflex actions (like the Morrow Reflex in infants), which are on the border between a cause-effect or stimulus-response pair and an energetic interpretant (and again, there are culture-specific notions of what counts as energetic versus affective interpretants in the first place, in addition to what counts as an interpretant versus a 'response' or 'effect').

The *representational interpretant* involves a sign with propositional content, such as an assertion (or speech act more generally), or a 'thought' (or intentional state more generally).[53] Representational interpretants are just signs with propositional content understood within a particular semiotic frame: their key criterion, then, is that their objects are inferentially articulated (as propositions or concepts). As intimated in section 16, one of the crucial properties of such representational interpretants is that they can confer propositional content on the semiotic objects of the non-propositional signs they represent or refer to. For example, the concept underlying the word 'hammer' can confer propositional content on the function of the instrument called 'hammers'; and the concept of the word 'father' can confer propositional content on the status of those individuals called 'fathers.' See Table 1, column 8.

Calling a representational interpretant an 'interpretant' rather than a 'sign' is not a trivial point; rather, it is one of the most pervasive examples of semiotic framing. In particular, it shows that the states of affairs that are represented with assertions may also be understood as signs that are interpreted by assertions. Similarly, it shows that the referents referred to with words may also be understood as signs that are interpreted by words. For example, describing the event of someone's hand going up as 'she raised her hand' is a representational interpretant of the action itself (as a third whose sign is a controlled behavior and whose object is a purpose). Indeed, anytime one provides a representation of a state of affairs as a description of it (e.g., 'the suitcase is in the hallway' or 'Jack and Jill went up the hill to fetch a pail of water'), one is providing an interpretant of the state of affairs as a sign. In particular, one is providing an interpretant of what kind of instrument that is (a suitcase; not a box nor a chair), and what kind of action was undertaken (the purpose was to fetch water; not come tumbling down nor neck in the woods on top of the hill unseen). In short, referring to some artificial entity as a 'box,' or some individual as a 'policeman,' or some controlled behavior as 'hitting,' provides an interpretant of the function of that instrument, or the status of that person, or the purpose of that action. The reason these are usually called signs and not interpretants is that affordances, instruments, actions, roles, and identities are not usually treated as signs to be interpreted (but rather as 'objects' to be signified).

Immediately following his discussion of representational interpretants, Peirce defined *ultimate representational interpretants* as, in some sense, a representational interpretant, plus all the propositions that may be inferred from it, when all of these propositions are embodied in a change of habit, as evinced in behavior that conforms to this propositional content. In particular, he says that 'the only mental effect that can be so produced and that is not a sign but is of a general application is a *habit-change*; meaning ... a modification of a person's tendencies toward action' (Peirce 1955: 277). For Peirce, a belief is the quintessential ultimate representational interpretant: in being committed to a proposition (i.e., 'holding a belief'), one is also committed to any propositions that may be inferred from it; and one's commitment to this inferentially articulated set of propositions is evinced in one's behavior: what one is likely or unlikely to do or say insofar as it confirms or contradicts these propositional contents.[54]

Notice that these ultimate representational interpretants are not signs in themselves: they are 'a modification of ... tendencies toward action' (insofar as they dispose one toward certain actions), but they are not the actions per se. Thus, in contrast to affective, energetic, and representational interpretants, which are simultaneously signs, ultimate representational interpretants are not signs (in the stereotypic sense of a *sensible* entity that stands for something else). In particular, one doesn't perceive a habit-change per se; one perceives utterances and actions that index it. These utterances and actions are therefore signs, to be sure, but primarily signs of other objects (in particular, the states of affairs that they represent or the purposes that determine them), and only secondarily of — or one degree of indexical remove from — the representational interpretant.

Peirce thought that these ultimate representational interpretants may arise in a number of different ways. For example, they might result from a prior experience (say, surprise or fear due to an unexpected event leads to a new belief, and thus new patterns of conduct: future avoidance of the frightening place and all places like it). They might arise from some previous exertion of the will (say, one learns that it is bad to drink on weekdays, one resolves never to drink again except on weekends, and one's bar-visiting behavior follows suit). And they might arise from both unexpected events and previous exertions (say, after the shock of waking up with a hangover on a Tuesday morning, one resolves to stop drinking on weeknights, and one's bar-visiting behavior follows suit).

To conclude this section, it should be stressed that in any interpretation of a sign all of these kinds of interpretants can be combined. Indeed, for the same reason that symbols presuppose indices which presuppose icons (see section 5), representational interpretants presuppose energetic

interpretants, which presuppose affective interpretants. For example, upon hearing a gunshot, one may be suffused with adrenaline (affective interpretant); one might make a frightened facial expression (relatively non-purposeful energetic interpretant); one may run over to look what happened (relatively purposeful energetic interpretant); one might say 'that scared the hell out of me' (representational interpretant); one may never go into that part of the woods again (ultimate interpretant); and one might forever believe that the woods are filled with dangerous men (ultimate representational interpretant). In sum, many interpretants are not 'mental signs,' or even subsequent utterances (such as answers to questions), but various modes of embodied comportment: feelings, (re)actions, assertions, and habits. And all of these interpretants are themselves just signs (or dispositions to signify) that themselves can be interpreted by others — indeed, they are often bundled together as evidence for a single ascription: 'Jake must be terrified of the woods.' This typology therefore provides a simple metalanguage for describing the layering of interpretants implicated in any 'emotion.'

## 19.    Social and intentional statuses

Peirce's notion of the ultimate representational interpretant (URI) is so important for what follows that it should be discussed at length (and modified quite a lot). In particular, an ultimate representational interpretant may be usefully related to Linton's notion of *status*, which was defined as a 'collection of rights and duties' contingent upon occupying a certain position in society (Linton 1936: 188). For example, owing to one's position within an institution such as a family, business, or team (say, being a mother, a CEO, or a wide receiver), one has certain rights and duties which are typically defined relative to the statuses of other individuals within that institution (say, those who are sons, secretaries, or quarterbacks), and to the functioning of that institution (say, the *raison d'etre* of a family, corporation, or football team).[55]

To use Linton's definition of status in conjunction with Peirce's definition of ultimate representational interpretants, a few modifications are in order. First, rather than phrase statuses in terms of rights and duties (as grounded in rules or conventions), they should be phrased in terms of commitments and entitlements (as grounded in norms). Second, while Linton does not specify the content of his rights and duties, the contents of commitments and entitlements may be phrased in terms of modes of signifying and interpreting. That is, one may be committed or entitled to expressing certain signs to be interpreted or interpreting certain signs

expressed. This provides a much wider definition of what one may be committed or entitled to — going beyond Peirce's grounding of habits in actions to include any kind of sign or interpretive event more generally. And finally, keeping in mind that Linton was trying to describe social statuses (e.g., being a mother), whereas Peirce was trying to describe what may be called 'intentional statuses' (e.g., believing it will rain or wanting an ice cream), a distinction should be made between *ultimate interpretants* (which consist of a 'collection' of commitments and entitlements not otherwise specified) and *ultimate representational interpretants* (which consist of an inferentially articulated set of commitments and entitlements).[56] Putting all these ideas together, an ultimate representational interpretant is *an inferentially articulated set of normative commitments and entitlements to signify and interpret in particular ways*. And an ultimate interpretant is just *a set (not otherwise specified) of normative commitments and entitlements to signify and interpret in particular ways*.

Defined in this way, the distinction between ultimate interpretants (UIs) and ultimate representational interpretants (URIs) seems to map onto a distinction between two kinds of statuses: social statuses in the stereotypic sense (e.g., being a mother, being a doctor, being a person, being a speaker) and mental states in the stereotypic sense (e.g., believing that it will rain, hoping that it will not snow, etc.). At first glance, it seems like this distinction is valid. For example, many lay-theories and disciplinary boundaries correlate with these categories. Thus, anthropologists are understood as studying social statuses while psychologists study intentional statuses. Social statuses seem to be one-place predicates whereas intentional statuses seem to be two-place predicates. Thus, for social statuses, only the content need be specified (e.g., being a *mother* versus being a *father*); whereas for intentional statuses, both the 'psychological mode' (e.g., *belief* versus *desire*) and the 'propositional content' (*that dogs are dangerous* versus *to eat ice-cream*) need to be specified. And finally, as mentioned, intentional statuses seem to represent states of affairs, and hence be inferentially articulated; whereas social statuses do not require a notion of representation, and hence there is no dependence on inferential articulation. Thus, *being a secretary* need have no propositional content; whereas *believing it will rain* has propositional content almost by definition.

However, such a dichotomy does not really hold up: many social statuses are inferentially articulated (usually by having propositional content conferred upon them by representational interpretants of them: words like 'mother' and 'doctor'); and many intentional statuses may have minimal propositional content and even be one-place predicates (for example, being depressed or being anxious); and finally, social and intentional statuses are not beholden to any particular 'psychological' or

'anthropological' principles, merely semiotic ones (which crosscut such disciplinary boundaries in the first place).[57] In short, it is probably the case that any social or intentional status involves both ultimate interpretants and ultimate representational interpretants.

Social and intentional statuses, whether understood as ultimate interpretants or ultimate representational interpretants, are relatively meaningless unless simultaneously theorized with respect to *roles*. For Linton, a role is performed by an individual 'when he puts the rights and duties which constitute the status into effect' (Linton 1936: 188). Phrased in the idiom just introduced, a role is any one of the sign-events (modes of signifying and interpreting, or giving off signs for others to interpret and interpreting signs that others have given off) that one is committed or entitled to, as stipulated by one's status. In short, a role is *any mode of signifying or interpreting that is an enactment of one's status*. A role, then, is usually the best evidence of one's status: if one sees some particular mode of signification or interpretation that others engage in, one may infer their status, and thereby be able to predict other modes of signification and interpretation that they will be likely to engage in. In short, *roles are to statuses as signs are to objects*.[58]

Given that any sign or interpretant that one gives (off) may be used by others to infer one's status, there is much ambiguity: many different roles can indicate the same status; and the same role can indicate many different statuses. Hence, the idea of an *emblematic role* needs to be introduced: a role which is minimally ambiguous (so that it stands for only one status), and maximally public (so that we each know that we all know the status in question). Another crosscutting definition of an emblematic role frames it in terms of modality: a role that one may (only) do if one is of that status, and a role that one must (always) do if one is of that status. For example, wearing a uniform is an emblematic role in both senses: not only is it minimally ambiguous and maximally visible; but it may only be worn by members of a certain status, and it must be worn by all members of that status. Other examples of emblematic roles include flags, hats, badges, insignia, and so forth. Finally, if one relaxes the criteria in the second definition, then quasi-emblematic roles may include any physical characteristics stereotypically used to identity people: skin color or hair quality (racial status), relative stature or facial features (ethnic status), body shape or voice-pitch (gender status), and so forth.

Linton understood status and role as two sides of a coin. While true insofar as one cannot understand one without reference to the other, this is false insofar as it projects their relationship into a two-dimensional space. As the terms will be used here, a status is an object; a role is a sign that stands for, and/or gives evidence of, a status; and an *attitude* is

an interpretant of a role-status relationship.[59] One might rather say that roles, statuses, and attitudes are *three components of the same third*.

Just as statuses are no more mysterious than any other object, attitudes are no more mysterious than any other interpretant. Hence attitudes may be affective interpretants (blushing when you learn your date used to be a porn star), energetic interpretants (reaching for you pistol when you learn your date is a bounty hunter), or representational interpretants (saying 'you can't be serious' when your date makes his or her intentions known). In particular, attitudes may themselves be ultimate representational inter- pretants, and hence statuses. That is, my status might be regimented by others' attitudes towards my status, which are themselves just statuses.

In this way, the attitudes of others towards our statuses are evinced in their modes of interacting with us: they expect certain modes of significa- tion and interpretation from us (as a function of what they take our sta- tuses to be); and they sanction certain modes of signification and interpre- tation from us (as a function of these expectations). Thus, we perceive others' attitudes towards our status in their modes of interacting with us (just as we perceive others' statuses by their patterns of behavior). In this way, if one wants to know where statuses reside, or where ultimate (rep- resentational) interpretants are embodied and embedded, the answer is as follows: in the sanctioning practices of a sign-community, as embodied in the dispositions of its members, and as regimented by reciprocal attitudes towards each others' statuses (as evinced in each other's roles). If you think this is circular, you're right; if you think circularity is bad or some- how avoidable, you're wrong. Indeed, if there is any sense to the slogan 'meaning is public,' this is it.

Just as one can commit to others' interpretants of one's signs (see sec- tion 8), one can commit to others' attitudes towards one's roles: that is, one can anticipate what attitude the interpreter will adopt, where this an- ticipation is evinced in being surprised by, and/or disposed to sanction, non-anticipated attitudes.[60] In a Meadian or Vygotskian idiom, one can 'internalize' another's attitude (towards one's status). And, in cases of self-reflexive semiosis, where this other is oneself, one can self-sanction one's own behavior as conforming or not with one's status. This is, of course, a crucial aspect of selfhood. For the moment, it should be noted that it is both a relatively human-specific and a relatively sign-specific ca- pability.[61] In particular, it seems that only humans, and only humans at a particular age, can commit to others' attitudes (that is, affect certain roles such that others will take them to have certain statuses as evinced in these others' attitudes); and this commitment is differentially possible as a func- tion of what kind of role, and hence sign, is being committed to (for ex- ample, relatively symbolic thirds are easier to commit to than relatively

indexical thirds, and emblematic roles are relatively easy to commit to almost by definition). Indeed, this relative ability to commit to others' attitudes may lead to three sorts of discrepancies: cases where the attitudes of others take us to have statuses our own attitudes don't; cases where our own attitudes take us to have statuses the attitudes of others don't; and cases where neither our own attitudes, nor the attitudes of others, take us to have statuses we seem to have (insofar as our behavior evinces it as a regularity, though perhaps not a norm). Some senses of the term *unconscious* turn on exactly these kinds of discrepancies.

Insofar as statuses, roles, and attitudes are best understood as particular kinds of objects, signs, and interpretants (respectively), they are subject to *semiotic framing* like any other third. Thus, in its least-marked sense, a status is an object, as stood for by a role, and as interpreted by an attitude. However, as initially defined, a status is an ultimate (representational) interpretant — and hence an interpretant (rather than an object). And finally, one can understand a status as a sign that a role is an interpretant of (in the dramaturgical sense). For example, we might understand Hamlet's utterances and actions, as put forth in Shakespeare's play, as a status (to be sure, a relative 'scripted' status — and hence grounded in something like rules or conventions rather than norms), and then we might understand, say, Laurence Olivier's performance of Hamlet, as an 'interpretation' of this status (somewhat confusingly, in pre-theoretical terms, this is usually called 'interpreting a role' — but a role, in this case the actual performance, is really an interpretation of a status, in this case the actual script). While most of our statuses are not scripted, some are first learned and followed as scripts, and only later embodied as norms; and some are first learned and followed as norms, and only later regulated (rules) or even legislated (laws) as scripts. In any case, this shows that even with relatively scripted statuses, there is still much individual leeway for interpretation. This is therefore another way in which norms delimit rather limit behavior, and hence enable comportment as much as constrain it.

Each individual has many statuses, and each of these statuses is regimented via the attitudes of different sets of others (cf. Linton 1936; Mead 1934). Usually, these sets are institution-specific (indeed, this is one of the key criteria of any institution). For example, as a mother, my status is regimented by the attitudes of my children, my husband, the babysitter, several close friends, my own parents, and so forth. As a bank teller, my status is regimented by the attitudes of my boss, my coworkers, my customers, and so forth. As a shortstop, my status is regimented by the attitudes of the pitcher, the basemen, the fielders, the batter, the fans, and so forth. As someone committed to the claim that you had ice cream for

dessert last night, my status is regimented by your attitude (insofar as you just informed me of this), and perhaps the attitudes of any other participants in the speech event, and so forth. And, within each of these institutions, my attitudes regiment the statuses of my children and husband, my boss and customers, my basemen and batters, the participants in our speech event. In short, for each of our statuses, there is usually a set of others whose attitudes regiment it, and whose statuses our attitudes help regiment.

In cases where one has committed to the regimenting attitudes of sets of others towards one's status (within some institution), the sets of committed to (or 'internalized') attitudes may be called a *generalized other*, loosely following Mead's famous definition (1936: 154). Indeed, we can say that a status is that to which all attitudes conditionally relate. Most of us have an infinity of generalized others, some being wide enough to encompass all of humanity (say, our status as a person — at least we hope so), some being so narrow as to encompass only our lovers (say, as holding a certain awkward desire that we have shyly informed them of ). And sometimes we have statuses, as regimented by the attitudes of others, that we have not internalized. These form part of what may be called our unconscious self. These questions — of different kinds of multiply overlapping generalized others, and of conscious and unconscious selves (via committed to and uncommitted to, or internalized and uninternalized attitudes) — are crucial for understanding agency and selfhood.

Finally, another way to characterize all these ultimate (representational) interpretants is as *embodied signs*. As will be seen in section 20, ultimate (representational) interpretants, and statuses more generally, have the basic structure of thirds: they have roots leading to them (insofar as they are the proper significate effects, or interpretants, of other signs); and they have fruits following from them (insofar as they give rise to modes of signifying and interpreting, or roles, that may be interpreted by others' attitudes). The key caveat is that the third itself (i.e., the status or ultimate (representational) interpretant) is non-sensible or 'invisible': one knows it only by its roots and fruits, the sign and interpretant events that lead to it and follow from it. For example, any number of sign events may lead to the belief that it will rain tomorrow (you hear it on TV, your farmer friend tells you, the sky has a certain color, you hear the croaking of the toads, etc.), and any number of sign events may follow from the belief it will rain tomorrow (you shut the windows, you tell your friends, you buy an umbrella, you take in the wash, etc.). Thus, intentional statuses are inferentially and indexically articulated: they may logically lead to and follow from other intentional statuses; and they may causally lead to and follow from states of affairs. In this way, so called

'mental states' may be understood as complex kinds of embodied signs that humans are singularly adept at tracking. And so called 'theory of mind' is really just a particular mode of the 'interpretation of signs.'

## 20.   Performativity revisited from the standpoint of embodied interpretants

In his influential monograph *How to Do Things with Words*, Austin theorized about those utterances which do not merely describe events in the world (stereotypic signs), but actually perform actions on the world. He calls such utterances 'performatives' and, while noting that the most stereotypic performatives are utterances such as 'I name this ship the *Queen Elizabeth*' or 'I bet you sixpence it will rain tomorrow,' the thrust of his argument was to show that all utterances are performative to some degree. The key passage, which lays out 'some at least of the things which are necessary for the smooth or "happy" functioning of a performative,' is as follows:

(A.1)   There must exist an accepted conventional procedure having a certain conventional effect, that procedure to include the uttering of certain words by certain persons in certain circumstances, and further

(A.2)   the particular persons and circumstance in a given case must be appropriate for the invocation of the particular procedure invoked.

(B.1)   The procedure must be executed by all participants both correctly and

(B.2)   completely.

(Γ.1)   Where, as often, the procedure is designed for use by persons having certain thoughts or feelings, or for the inauguration of certain consequential conduct on the part of the participants, then a person participating in and so invoking the procedure must in fact have those thoughts or feelings, and the participants must intend so to conduct themselves, and further

(Γ.2)   must actually so conduct themselves subsequently (Austin 2003 [1955]: 14).

Building on the foregoing analysis, with its emphasis on non-stereotypic signs and embodied interpretants, Austin's account may be synthesized and generalized as follows. For an utterance, or any sign event in general, to be 'happy,' it must be appropriate in context and effective on context. To be *appropriate in context*, two basic requirements

must be met. One, there must be some norm (or set of norms) that relates a type of prior context to a type of sign to a type of subsequent context. The prior and subsequent context may include the types of social and intentional statuses of the speaker and other participants (including non-present and non-human participants),[62] the type of place and time, and the types of actions that are done along with the action of expressing the sign (including the action of expressing other signs). And two, the actual prior context must be a token of its type, and the actual sign must be a token of its type. Finally, to be *effective on context* the subsequent context must be a token of its type.[63]

Indeed, strictly speaking, there are actually two linked norms (or sets of norms): one that relates a type of prior context to a type of expressed sign (e.g., in this context one is entitled or committed to this sign); and another that relates the type of expressed sign to a type of subsequent context (e.g., in the context of this sign one has these commitments and entitlements). In the idiom of section 10, there is a relation between two pairings of circumstances and behaviors, where the behavior of the first pair (the sign event) is the circumstance of the second pair. In short, being appropriate in context is adhering (in some sign event) to the commitments and entitlements to signify and interpret that were already created (by previous sign events); and being effective on context is creating (by some sign event) commitments and entitlements to signify and interpret that will be adhered to (in subsequent sign events).

As may be seen by this synthesis, several changes have been made to Austin's account of performatives. First, Austin focuses on 'conventions' (without distinguishing them from regularities, rules, norms, traditions, and so on). In contrast, it will be assumed that performatives are primarily grounded in norms (of course, norms can be elaborated into rules, conventions, or traditions; and hence many speech acts are conventions in the strict sense). In short, the first change is to move from 'conventional procedures' to normative practices. Second, Austin focuses on verbal utterances — in particular, signs with propositional content and illocutionary force (e.g., 'shut the door' or 'sixpence it won't rain'). Indeed, his real focus is on 'explicit performatives,' or verbal utterances whose illocutionary force has propositional content (e.g., '*I order* you to shut the door' or '*I bet* you sixpence that it won't rain'). In contrast, it will be assumed that *any* sign event, involving *any* type of sign, may be understood in terms of being appropriate in context and effective on context. Thus, wielding an instrument is a sign event; as is undertaking an action; as is performing a role; as is frowning; as is blushing; as is exclaiming 'ouch'; as is saying 'um'; as is tiptoeing across a creaky floor; and so on. And third, Austin focuses on 'certain persons' and 'certain thoughts or

feelings' without specifying what exactly these are. In contrast, these will be understood as social and intentional statuses, as defined in the last section: (inferentially articulated) sets of normative commitments and entitlements to signify and interpret in particular ways.

In short, certain sign events are only appropriate insofar as participants *currently hold* certain social and intentional statuses (or in which a space of commitments and entitlements is already in place), and are only effective insofar as participants *subsequently hold* certain social and intentional statuses (or by which a change in the space of commitments and entitlements takes place; where, again, this includes non-present and non-human participants, insofar as their statuses are subsequently regimented by the attitudes of those present and human participants, and where these statuses reside in participants' attitudes). Indeed, these conditions of appropriateness and effectiveness constitute the 'meaning' or 'significance' of any sign event (cf. Brandom 1994).[64] Thus, just as we comport within a space of commitments and entitlements, our comportment changes the space of commitments and entitlements. Much of the *Sturm und Drang* of semiosis, then, is just shifts in commitment and entitlement space — in particular, shifts in those particularly salient swatches of commitment and entitlement space that are called social and intentional statuses.[65]

As argued in section 19, statuses only reside in the attitudes of others. Thus, whether a sign event is appropriate or effective in context is really a function of participant's prior and subsequent attitudes towards each others' (and their own) statuses. This means that 'context' in the last instance resides in interpretants — in particular, embodied interpretants: affective, energetic, and (ultimate) representational.

This point is worth elaborating. Usually context is taken to be things (events, people, actions, instruments, etc.) in contiguity with some verbal sign of interest — and hence context is taken to be an 'object' that a sign indexes. However, as seen here, context really resides in attitudes; and what is typically taken to be 'context' (i.e., 'objects' in their most 'objective' sense) is really just that to which all attitudes conditionally relate (i.e., objects in their semiotic sense). For example, while we usually speak of some verbal sign as indexing the gender of a speaker (as an object), we really mean that some verbal sign is an interpretant of the gender of a speaker (as a sign — in particular, a role expressing a status). This is another way of pointing out that sign-interpretant relations are much more important than sign-object relations. And this means that context can only be 'seen' in participants' dispositions to sanction each others' (and their own) modes of signifying and interpreting insofar as they take each other (and themselves) to have particular statuses, and/or take signs to have certain interpretants (and/or objects). (And this should make intuitive

sense: the point of signs is to change attitudes towards statuses (as objects), not to change 'objects' per se.)[66]

In short, whenever we say that some sign indexes some object in the context of the sign-event, this is just short-hand; rather, signs index attitudes towards the statuses of participants in the sign-event, and the objects (or statuses themselves) are just projections from these attitudes. This means that the sign-context distinction is untenable: context is itself just attitudes already in place, or coming to be in place, regarding the statuses of participants; and attitudes are just ultimate (representational) interpretants, which are just signs. That is, what counts as the sign event versus the context is an arbitrary distinction insofar as much of context is just other sign events in contiguity with the sign event at issue. What we can say instead is that certain signs are of focal interest to the analyst (or to the actors) and certain signs are of background interest to the analyst (or to the actors). Thus, while such a distinction is easy to introduce when the analyst (or actor) is interested in linguistic signs (all other signs being relegated to 'context'), when studying signs that are usually understood to be 'context' (affordances, instruments, actions, roles, and identities), it becomes much more difficult to make such a distinction. Hence, one cannot admit of a sign-context distinction without severe qualification.

Finally, one can invert the entire picture just given by shifting to another *semiotic frame*. That is, rather than focusing on sign events, with the presupposed contexts leading to them as roots and the created contexts following from them as fruits, the 'inverse' frame should be entertained: embodied signs may be thought of as following from prior sign events and leading to subsequent sign events. That is to say, one can do the exact same kinds of analysis either by focusing on (public) sign events which presuppose and create embodied signs, or by focusing on embodied signs which presuppose and create (public) sign events. Those who focus on the 'psychological' may like the former approach (insofar as intentional states are just embodied signs); and those who focus on the 'performative' may like the latter approach (insofar as sign events are just public performances). In any case, as discussed in section 16, the two frames are equivalent; no different that the famous rabbit-duck inversion, or the Necker Cube figure-ground inversion. In short, the semiotic stance includes the intentional stance as just a different but equivalent semiotic frame.

## 21.   Indexical presupposition and creation revisited

Michael Silverstein has introduced two important distinctions that relate to the foregoing analysis: 1) a distinction between presupposing

and creating indices; and 2) a distinction between referential and non-referential indices.[67] A *creative* index is one 'which can be said not so much to change the context, as to make explicit and overt the parameters of structure of the ongoing event' (Silverstein 1995 [1976]: 205). In contrast, a *presupposing* index is one whose object is uninterpretable 'without the knowledge of some aspect of the situation' (Silverstein 1995 [1976]: 204).[68] In this sense, presupposition and creation are the semiotic analog of Austin's appropriateness and effectiveness. Thus, presupposing means only appropriate in context of symmetric attitudes already in place; and creating means only effective on context if symmetric attitudes come into place. *Referential indices* are just indexical signs that have propositional content — or, as phrased here, either represent a state of affairs or refer to a referent. And *non-referential indices* are just indexical signs that do not have propositional content. In this sense, referential indices are signs which are maximally explicit in regard to their objects — and thus most likely to lead to a symmetric attitude.

These two distinctions crosscut each other, such that any linguistic sign belongs — *relatively speaking* — to one of four types: 1) creative referential indices (e.g., second-person pronouns such as *tu* and *usted*, or *focus* constructions more generally; 2) presupposing referential indices (e.g., tense and locative deictics such as *here* and *there*, or *topic* constructions more generally); 3) creative non-referential indices (e.g., modes of prosody indicating deference); and 4) presupposing non-referential indices (e.g., dialects indicating region or registers indicating occupation). With this typology, then, Silverstein simultaneously critiqued anthropology (with its focus on symbols rather than indices, and with its elision of linguistic phenomena altogether) and linguistics and philosophy (with their elision of the social and non-referential functions of language).

While the foregoing has emphasized Silverstein's relation to Austin (i.e., presuppoisateness/creation maps onto appropriateness/effectiveness and referential/non-referential maps onto explicit/implicit), prior to both Silverstein and Austin is George Herbert Mead. In particular, Mead (1934) made a distinction between the Me versus the I on the one hand, and symbols versus gestures on the one hand. As already discussed, the symbol/gesture distinction is really a distinction between thirds whose interpretants one can or cannot commit to (and hence is a question of relative degrees of self-reflexivity and/or explicitness). And, for Mead, 'The "I" is the response of the organism to the attitudes of the others; the "me" is the organized set of attitudes of others which one himself assumes' (Mead 1934: 175). Or, in the idiom introduced above — a semiotic and temporal reading of Linton, Mead, and Austin — the Me is the self as appropriating, having taking into account others' attitudes towards

its social and intentional statuses; and the I is the self as effecting, enacting social and intentional roles that change others' attitudes.[69]

With this genealogy in mind, several slight additions and modifications may be made to Silverstein's typology. First, rather than speak of referential and non-referential indices, the emphasis will be on signs with propositional content and signs without propositional content, and hence signs whose objects are inferentially articulated and signs whose objects are not[70] (all representational interpretants are referential indices). Second, in keeping with the general arguments of this essay, and the foregoing points of this section, the emphasis is not on statuses (or objects more generally), but on attitudes (or interpretants more generally). Third, in keeping with the foregoing points of the last two sections, 'context' resides in attitudes towards participants' statuses (including non-present and non-human participants). Thus, the contextual 'features' that Silverstein discusses should be understood as projections from the attitudes of participants. The key question, as to creative versus presupposing indices, respectively, is whether participants' interpretations of any sign lead to new (symmetric) attitudes (towards each others' and their own statuses), or merely confirm old (symmetric) attitudes (towards each others' and their own statuses). Fourth, this is generalized from linguistic signs to all signs — including those that typically fall under the heading of 'context' in its traditional sense: affordances, instruments, actions, roles, and identities. And fifth, with these points in mind, creation and presupposition actually consist of several different dimensions — logical, epistemic, contextual, and causal — which have been bundled together as one dimension in these definitions.

In particular, logical presupposition and creation (or rather 'entailment') is just the canonical definition of these terms: a sign with propositional content $p$ *logically presupposes* an interpretant with propositional content $q$ if $p$ implies $q$ and $-p$ implies $q$; and a sign with propositional content $p$ *logically entails* (or creates) an interpretant with propositional content $q$ if $p$ implies $q$.[71] Epistemic presupposition and creation is that part of Silverstein's definition that turns on making some parameter 'overt and explicit': a sign *epistemically presupposes* an attitude if there are other signs (in the immediate, prior, or general context) that lead to that attitude; and a sign *epistemically creates* an attitudes if it is the only sign (in the immediate, prior, or general context) that leads to that attitude. Interpretive presupposition and creation is that part of Silverstein's definition that turns on whether or not a sign is 'uninterpretable' without some addition contextual factor: a sign *interpretively presupposes* an attitude if it requires access to some sign (in the immediate, prior, or general context) to be interpreted; and a sign *interpretively creates* (or just doesn't

presuppose) an attitude if it does not require access to some sign (in the immediate, prior, or general context) to be interpreted. And finally, causal presupposition and creation turns on the direction of causality between a sign and an object (or rather interpretant): a sign *causally presupposes* when the object brought the sign (or rather interpretant) into being; and a sign *casually creates* when the sign (or rather interpretant) brought the object into being. Notice that in Silverstein's original definitions, presupposing indices are mainly defined via the interpretive dimension. And creative indices are mainly defined via the epistemic dimension (though there is a bit of the causal dimension). As phrased here however, presupposition and creation are polar oppositions in a relational space of (at least) four dimensions.

## 22.  Conclusion: Natural language is ergon not organ

Usually when people refer to *natural language*, or to 'Language' (spelled with a capital 'L' and spoken with a large dose of admiration), they are referring to what languages like English, Japanese, ASL, and Nahuatl have in common, and they are implicitly contrasting such languages with artificial language (like programming codes: C++, Fortran, Assembly), non-human languages (animal signal systems), and non-fully fledged human languages (secret codes, pigeons, traffic signals, etc.). Typically, some feature, or cluster of features, is used to explain what is particular to natural languages, sometimes referred to as 'design features' (cf. Hockett 1958; Lyons 1977). For example, there is *generativity* (or productivity): the ability to make an infinite number of sentences with a finite number of elements (say, just words and rules), insofar as parts of wholes are able to be wholes with parts. There is *communication* (or prevarication): signs may be addressed, and indeed covertly addressed and hence dissembled with. There is *displacement*: the fact that object events (as the states of affairs of utterances) can be separated in space (here/there), time (now/then), person (I/you), and mode (is/might) from sign events. There is *symbolism*: the ability to have arbitrary relations between signs and objects (say, grounded in norms, rules, or conventions). There is *perspectivalism* (or construal): the fact that the various constructions of language allow one to describe the same event from various different points of view, or with differential attention to its various aspects (cf. Langacker 1987; Talmy 2000b). There is *metaphor*: the fact that a set of signs used for characterizing some relatively concrete domain of experience (say, movement or heat) can be used to describe some relatively abstract domain of experience (say, life or anger) (cf. Lakoff and Johnson 2003

[1980]). There is *logical form* (or rationality): the ability for propositions (the legi-object of assertions) to stand as the premises and conclusions of inferences, and/or logical ability per se (induction, deduction, and so forth). There is *referentiality* (or propositionality or representationality or semanticity): the fact that sentences have propositional content, such that either (1) they can be understood as describing objects and events in the world (in true or false terms) or (2) their meaning can be inferentially articulated in terms of other propositions. There is *metalanguage*: the fact that natural languages can turn back on themselves, and thereby take themselves as an object of representation. There is *poetic indeterminacy* (or expressivity): the fact that one can use all of language's properties for aesthetic and indefinitely creative ends (cf. Friedrich 1986). There is *representational indeterminacy*: the fact that language allows for an infinite number of new contents for beliefs, intentions, feelings, and values and, indeed, new modes of believing, feeling, and acting (cf. Brandom 1979; Hacking 2002). And finally there is *performativity*: words may be used to perform actions on the world, not just describe events in the world (cf. Austin 2003 [1955]).[72]

All of these features of natural language relate to various paradigms in linguistics, and many of them have been taken — at one point or another, and in some paradigm or another — as either essential to natural language (meaning that if it was taken away natural language would cease to be what it is), or foundational to natural language (meaning that many of the other properties turn on it). And insofar as language is the mark of *logos* or *bios*, any one of them has been understood as emblematic of human being.

Against these tendencies, one might side with Lorenz, who criticized various attempts to define *life* insofar as they took 'such complex phenomena, whose peculiarity resides in the confluence and interaction of a multitude of constitutive individual processes and [tried] to define them on the basis of just one of them' (Lorenz 1996 [1944/1948]: 83, italics removed from original). Phrased another way, isolating one of these features out for exemplarity and explanation often leads one to view natural language as *organ* (or 'faculty') whereas seeing all of these features together in interaction leads one to view natural language as *ergon* (or 'facility').

**Notes**

\*     This essay is dedicated to Michael Silverstein.
1.     Notice that his notion of correspondence has nothing to do with 'truth as correspondence' in the standard epistemological sense (in which a true assertion is said to 'correspond' with a state of affairs).

2. In particular, if the interpretant is itself a sign, then its object is the relation between the first sign and its object. For example, the boy's desire for his mother is simultaneously a sign of his mother and, as an interpretant, a sign of his father's relation to his mother.

3. Savan (1976, cited in Colapietro 1989: 16) defines an object as that to which all interpretants collaterally relate. While this phrasing is nice, it begs the economic interpretation. One might say, rather, that collateral relationality is a species of conditional relationality when the thirds at issue are commodities (see section 2 of this essay), whose objects (value) turn on commensurable quantities of a single quality.

4. Polysemy is simply the case of signs whose interpretants have more than one locus of conditional relationality, or more than one conditional relatum.

5. More carefully phrased, objects may be further distinguished into quali-objects (what a sign could stand for), sin-objects (what a sign token stands for on a particular occasion of use), and legi-objects (what a sign type stands for in general, or across all uses). Note that this is not a forced distinction if one remembers that, as per semiotic framing, most objects of signs are themselves signs with objects. Also, just as there are replicas and singularities with sign tokens, there are replicas and singularities with object tokens. Notice, then, that just as legi-signs embody the sound-system of speakers (what qualities they intersubjectively take to stand for objects), the legi-objects of any language project the ontology of the speakers (what qualities they intersubjectively take to be stood for by signs). Such an ontology does not just include birds and bees, electrons and suits, but also functions and purposes, statuses and values. Finally, it should be noted that Saussure's signifier and signified are, in a semiotic framework, really legi-signs and legi-objects, respectively (for lexical signs, in particular).

6. In particular, propositions may be best understood as the contents of assertions, questions, commands, and wishes when shorn of their illocutionary force (whether declarative, interrogative, imperative, or optative). Terminologically, a sentence is said to express a proposition; while an utterance (a sentence uttered in some context) is said to represent a state of affairs.

7. Various traditions refer to these ideas using different terms (sense and referent, intension and extension, and so forth). For the purposes of this essay, all that matters is consistency of usage.

8. For more on inferential articulation, see Brandom (1994), Lyons (1977), and McCawley (1993). It should be noted that there are a few radical individuals who think that concepts do not turn on inferential articulation (see Fodor 1998).

9. Peirce's notions of firstness, secondness, and thirdness are notoriously difficult to define. The best way to get a feel for them is to exhibit various ways they can be expressed. For example, in relation to the sign-object relation, an icon is to firstness as an index is to secondness as a symbol is to thirdness. In relation to the sign-component of a third, a quali-sign is to firstness as a sin-sign is to secondness as a legi-sign is to thirdness. In relation to Kant's categories of modality, possibility is to firstness as actuality is to secondness as necessity is to thirdness. In relations to Hegel's phenomenology, sense is to firstness as force is to secondness as understanding is to thirdness. And so on. See Table 1.

10. In Parmentier's wonderfully perspicacious example (1994), falling grass is index of wind, and also an icon: it is an index insofar as it directs the interpreter's attention to something (the wind); and it is an icon insofar as it conveys information about that something (the wind's direction). In addition, every symbol must embody an index and an icon, the former to indicate the object, and the latter to express information about that object. Silverstein (1995 [1976]) offers a slightly different, but compatible interpretation: every sign token is an icon of a sign type (hence, every sign trivially

embodies an iconic mode); and every symbol token is an index of a symbol type (because its use in context depends upon the existence of a shared code).

11. As Colapietro writes, 'the object of semiosis is, thus, both immanent and transcendent: Insofar as it is an immanent goal, it is to be identified with the immediate object; whereas insofar as it is a transcendent "being," with the power and/or force (*CP* 5.520) of constraining the sign in some way, it is to be identified with the dynamic object' (Colapietro 1989: 15). He argues that semiosis involves both teleology and fallibility: 'The fact that all signs have immediate objects and, thus, immanent objectives makes semiosis a teleological process: Each sign projects for itself a telos.... The fact that all signs have dynamic objects and, hence, external constraints makes semiosis a fallible process: Any sign is open to the possibility of missing its mark' (Colapietro 1989: 15).

12. And this is why the notion of 'ground' is slightly complicated.

13. It should be said that the term concept has a relatively narrow use in this essay. Strictly speaking, one should distinguish between lexical concepts (the object types of 'words,' or open class phenomena, as it has been used so far) and grammatical concepts (the object types of grammatical categories and complexes, or closed class phenomena). See Talmy for the most sustained theorization of grammatical concepts — or what he calls 'closed-class semantics' (Talmy 2000a: 22).

14. It has been argued that basic level terms: 'maximize the number of attributes shared by members of the category; and ... minimize the number of attributes shared with members of other categories' (Taylor 1995: 51; and see Rosch 1975).

15. For example, in deciding whether some animal is a bird, is it more important to take into account the fact that birds fly, have feathers, or lay eggs? Or in deciding that something is an axe, is it more important to take into account the material from which it is made, its shape, or the types of actions that are usually done when wielding it?

16. As Peirce says, 'That which any true proposition asserts is real, in the sense of being as it is regardless of what you or I may think about it' (Peirce 1955: 265). Bacon called the real 'the true prints and signatures made upon creation' (Bacon 2000 [1620]: 37).

17. There is a leakage between compose and commit because there is a leakage between object and interpretant — the former defined as that to which all the latter conditionally relate.

18. These distinctions are not the same as, and should not be confused with, those distinction put forth by Varro (e.g., actor, poet, supporter) or Goffman (e.g., animator, author, principal). For a discussion of the interrelation see Kockelman (2004).

19. See Brandom (1994) for the distinction between sapience, sentience, and responsiveness.

20. Thus, it is not a question of whether the signer, were she in the interpreter's shoes, would interpret her sign the way the interpreter does; it is a question of whether she takes the interpreter to interpret it a particular way (as seen by her subsequent sanctions of the interpreter's behavior as a function of whether he did or did not take it as she expected).

21. There are other reasons scholars neglect interpretant events. For example, if interpretants are thought to be mental entities, then they don't seem to have event-like characteristics. Or, insofar as every interpretant is a sign, an interpretant event is another sign event (though not another speech event). Or, because the signs of verbal communication are relatively non-persistent, the interpretive event has to be nearly simultaneous with the sign event. And finally, Jakobson was never fully over Saussurian structuralism when he took up Peirce: while he introduced shifters (thereby taking into account indices), he maintained the focus on sign-object relations.

22. Imitation should be contrasted with mimicking insofar as to imitate requires copying both the form and function of another's behavior (both what others do and why they do it; both the controlled behavior and its purpose; both a sign and its object); mimicking, in contrast, only requires copying the form of another's behavior. There is good evidence that only human-primates can imitate, and only starting around nine months of age (cf. Tomasello 1999). In any case, Brandom and Haugeland do not differentiate between these ideas.

23. Famously, as per Wittgenstein, rule-following presupposes norm-abiding; but not vice versa.

24. As Brandom sees it, 'The practices which make up a tradition share a common ancestry' (Brandon 1979: 195, footnote). Notice, however, he is using tradition how it should be used (a set of practices that have a history in common, and have been 'passed down' across generations), not how it is actually used (so far as shared history is usually imagined).

25. In cases where a pattern of behavior might be explained by, say, reference to norms or rules, the trick for distinguishing among them is focusing on why the pattern exists, rather than by focusing on the characteristics of the pattern per se.

26. This sense of commitment, which will always be paired with entitlement, is just the deontic sense of necessity (and possibility) — to wit: obligation (and permission). It should be contrasted with commitment as defined in section 7 (as in commitment to an interpretant), which will always be paired with control and composition.

27. Note that an interpretant of a sign is the best judgment of whether that sign was a good interpretant of the sign it was an interpretant of. That is, the judgment as to whether a behavior counts as a performance of a practice rests in another practice (cf. Brandom 1979: 188).

28. Haugeland (1998: 152) has an analogous idea, which he refers to as a role. It is not just a legi-sign, because many different thirds have it as a component — thus it is also a legi-object and legi-interpretant. And, usually, there is some sign with propositional content — typically a word — that stands for it as a referent. In this way, sorts are not just legi-thirds, but lexi-thirds with lexemes that refer to them.

29. Circumscribed, because they phrase them as a pairing of an actor and an action, rather than as a pairing of circumstances and behaviors, or signs and interpretants. If Berger and Luckman's understanding of types is too circumscribed, Haugeland's understanding of roles is too wide.

30. Indeed, one stereotype of codes, in the pairing sense, is that they are isomorphic (there is one object for every sign, and one sign for every object).

31. There are a few other senses of code which should be discussed. There are codes in the espionage sense — designed to disable communication as much as enable it. Both aspects of codes (enabling and disabling communication) are crucial to both groups of people — spies and speakers. There are codes of law: rule-based, and politically-regimented standards of behavior. There are codes of honor: rule-based, standards of behavior that turn on statuses and values. And so on. Codification, then, is just when a code becomes explicitly articulated, rule-based, and (sociopolitically) defended. One can spend some time discussing how codes are stabilized, or differentiated, across individuals, over space and in time. There are various forms of regimentation: metalinguistic (dictionaries and grammars), poetic (parallelism), discursive (pair-part structures), and so on. There are also genres of metalinguistic regimentation: complicated words defined in terms of simple words; expertise regarding definitions and the social division of linguistic or semiotic knowledge; of ostension and exemplary semiotic objects, of large-scale circularities, of attempts to find universal codes, and so on.

32. Finally, one might also mention metacodes: relatively marked codes that are invoked to understand some sign in the context of that sign's being uninterpretable relative to (normal or unmarked) codes. Goffman famously introduced the 'key' as 'the set of conventions [or rather norms] by which a given activity, one already meaningful in terms of some primary framework, is transformed into something patterned on this activity but seen by the participants to be something quite else' (Goffman 1986 [1974]: 43). Keys then are kinds of metacodes that tell you that what looks like a message in one code should really be interpreted relative to another code (or another part of the same code). Again, this distinction only works when some particular set of thirds is separated from thirds per se. Rather, one finds a norm that would turn a behavior into a performance (or a token of an interpretable practice).

33. Jakobson suggested that the phatic function was 'the first verbal function acquired by infants; they are prone to communicate before being able to send or receive informative communication' (Jakobsen 1990a: 75). And autism as it was originally described was understood as 'a deficit in affective contact,' where contact is a kind of emotional channel — kids not tuning in to their parents (Kanner 1943).

34. One key limit case of a channel is when the signer and interpreter are identical, such that there is near instantaneous transfer (in time), near immediate transfer (in space).

35. The functionality of a social fact (like language) is different from the functionality of a tool in that language is an emergent tool; no one person built it; whereas we feel that tools had an intentional designer. Nonetheless, we can speak about their 'function' in this sense. Indeed, most instruments have no nameable artificer for most users. Language is just the extreme case.

36. Sometimes Jakobson's sense of function is used to mean something akin to an interpretant.

37. In particular, Silverstein notes that, 'The role of "function" of languages in social life is all based on the fact that linguistic — and dependent cultural — texts project (index) the metaphorically "surrounding" contexts in which they by degrees "appropriately" occur, as well as project (index) the contexts that, by their occurrence, they have "effectively" brought into being' (Silverstein 1999: 78).

38. And it is probably worth considering thirds whose components are natural features — existing without the purposeful intervention of humans — and thirds whose components are artificed entities — existing by way of the purposeful intervention of humans. The reasons for separating out such dimensions is the pervasive tendency to conflate them. For example, when a scholar such as Grice asserts that 'every artificial or non-iconic system is founded upon an antecedent natural iconic system' (Grice 1989: 358), he makes it seem that naturalness and iconicity are the same thing.

39. Classic examples are Greenberg on topics such as number, gender, kinship, and deixis (see the essays in 1990); Berlin and Kay on color (1969), Bull on tense-aspect (1960), Jakobson and Halle on phonology (1956), and Silverstein on case (1976, 1993). And see Haiman (1985), Talmy (2000b), and Van Valin and LaPolla (1997) for more recent work, as well as the collected essays in Tomasello (1998 and 2003).

40. Also, keep distinct the notion of originary motivation (in regards to how some form-functional relation originated historically) and the notion of interpretive motivation (in regards to how some form-functional relation is interpreted in real-time). For example, while the term 'bark' (used to refer to the sound dogs make) may have originated in some iconic, or onomatopoeic connection, no speakers actually use this knowledge to infer or decode its meaning — though they often use it to gloss its meaning.

41. Hacking (1995, 2002) has done much to show that many concepts exist not because of epistemic dynamics (say, their inferential utility in scientific theories), but in non-

epistemic (or 'deontic') dynamics (say, their political utility in social relations). And he has introduced the notion of dynamic nominalism to show ways in which the mechanism underlying causal homeostasis (or projectability per se) is the existence of the concept.

42. Brandom notes that, for Kant, being free consists in being constrained by norms rather than by causes; and, for Hegel, being free consists in the self-expression made possible by the (evolving) norms of one's community (Brandom 1979: 187). And he is interested in keeping with Kant and Hegel's sense of freedom being grounded in norms. To do this, he makes much of the fact that language in generative — producing an infinite number of utterances with a finite number of rules. Thus, he defines freedom (in the Kantian sense) as 'the capacity to produce an indefinite number of novel appropriate performances in accord with a set of social practices one has mastered' (Brandom 1979: 194). And he refers to the self-cultivation of the individual (in the Hegelian sense of freedom):

> consist in the exercise and expansion of expressive freedom [a la just mentioned] by subjecting oneself to the novel discipline of a set of social practices one could not previously engage in, in order to acquire the capacity to perform in novel ways, express beliefs, desires, and intentions one could not previously have, whether in arts or sports. The cultivation of the community consists in the development of new sets of social practices, at once the result of individual self-cultivation … and the condition for it. It is in this sense that we speak of the "culture" of a group as the set of social practices they engage in. (Brandom 1979: 195)

This is well put. However, as will be seen in section 22, this is only one piece of the generative capacity made possible by thirdness, and not the most important one.

43. These distinctions bear a family resemblance to Heidegger's distinction between 'categories' and 'existentials' (1996 [1953]: 49–55; and see Dreyfus 1991: 40–45).

44. Indeed, with regard to gender and sex, one sees that Butler (1993) made a similar point, but much later than Brandom, with much less generality (across domains) and with much less specificity (in terms of mechanism) than offered in this section.

45. As will be seen, in any particular instance, many of these kinds of semiotic framings may be operative at once; they are for analytic purposes only. Lastly, no explanation is being offered for why one frame is invoked versus another at any point in social life.

46. Needless to say, because of semiotic framing each of these points about interpretants is true of signs and objects, each of these points about objects is true of signs and interpretants, and each of these points about signs is true of objects and interpretants.

47. There is the material body: the bearer of meaning (or vehicle or phenomena) as contrasted with the meaning born (or value or neumena). Marx, for example, spoke of use-values and individuals as 'bearers' (Traeger) of economic values and social relations, respectively. As will be seen, this is the most common use of the term 'embodiment': signs embody meaning or value insofar as they stand for them as their objects.

48. As Colapietro points out,

> The body itself is, in its own way, a medium. In 'Some Consequences,' Peirce claims that 'the organism is only an instrument of thought' (*CP* 5.315). But since thought is essentially a process of semiosis, the kind of instrument that the organism provides is that of a medium. The person is not 'shut up in a box of flesh and blood' (*CP* 7.591). The body is not principally something in which the self is located; rather it is the most immediate medium though which the self expresses. Precisely because it is the most immediate medium that the human subject uses,

the use of all other media are mediated by this medium: For the human subject, semiotic consciousness is incarnate consciousness. (Colapietro 1989: 39)

49. Peirce's called these 'emotional interpretants' (Peirce 1955: 77). They might be understood as interpretants qua firstness: quality, possibility, sense, iconicity, feeling. The name has been changed so that they are not confused with 'emotions' (in some putative psychological sense).

50. Of course, if non-perceptible to others and the owner (before the introduction of such technology), the communicative importance of such affective interpretants are minimal (though their causal importance may be major). Nevertheless, once in place feedback may allow them to take on a communicative function.

51. An energetic interpretant might be understood as the interpretant qua secondness: contrast, actuality, force, indexicality, action. Notice that such a reliance on effort in Peirce's definition can be usefully related to James's understanding of effort: 'That we have a feeling of effort [while acting] there can be no doubt . . . . The difference between a simply passive sensation [read 'affective interpretant'], and one in which the elements of volition and attention are found [read 'energetic interpretant'], has also been recorded by popular speech in the difference between such verbs as to see and to look; to hear and to listen; to smell and to scent; to feel and to touch' (James 1920: 151–152, quoted in Dreyfus 1991: 56).

52. Of course, they usually involve bodily processes. Indeed, as may be seen from these examples, just as all indices involve icons, all energetic interpretants involve affective interpretants.

53. It might be understood as the interpretant qua thirdness: mediation, necessity, understanding, symbolism, thought. Peirce called these 'logical interpretants' (1955: 277). The name has been changed to be consistent with other theoretical terms, but the underlying idea is the same. In keeping with this usage, the term ultimate representational interpretant will be used to refer to what he called 'ultimate logical interpretants' (Peirce 1955: 277).

54. Peirce thought that the ultimate representational interpretant of most propositions pertaining to experimental phenomena was the habit change that these engendered in the people who knew them. That is, beliefs — expressible via assertions — have habits as interpretants. This is the semiotic account of Bain's maxim: a belief is that upon which one is prepared to act. In this sense, with ultimate logical interpretants, Peirce is at his most pragmatic. It also underscores his somewhat gnomic assertion that 'the logical interpretant should in all cases be a conditional future' (Peirce 1955: 281).

55. Thus, be sure to separate Linton's sense of status from the pretheoretical sense of status — a la relative prestige, and as used in expressions like 'status symbols.'

56. That is, commitments and entitlements do not relate to each other simply as an unorganized aggregate; they are inferentially articulated relative to each other by virtue of the propositional content of the signs and interpretants they involve.

57. Indeed, notice how the so-called 'privateness of mental states' is no more (or less) mysterious, and no more (or less) correct, than the privateness of social statuses.

58. This comes with the caveat that a role, as a mode of signifying and interpreting, is usually a sign of some other object.

59. See Mead (1934: 8–13, passim) for a related, but not identical, usage. Also, be sure not to confuse this theoretical use of attitude with the everyday sense of attitude — say, 'the president's attitude towards the death penalty.'

60. This is in addition to being able to control the expression of a role (as a sign), or compose a role-status relations (as a sign-object relation).

61. Relatively, because dogs seem to have an unusual ability to engage in gaze-following, and most primates seem to be able to track certain social statuses (and, more generally, because the data is still out regarding these questions).

62. These commitment and entitlements, presupposed and created, can be specified relative to any of the participants of the sign event (and even non-present participants, if only because not yet sapient — say, a child being baptized: one whose status can be regimented by others' attitudes, but who cannot yet regiment others' statuses with its own attitudes).

63. Also, Austin's notions of 'correctly' and 'completely' are not explicit in this synthesis of Austin insofar as they are implicitly stipulated by token-type relations: the type is a specification of what is correct and complete; and to be a token of a type is to be correct and complete.

64. Thus, to further specify the significance of a sign event one specifies what it presupposes regarding each participant's commitments and entitlements to signify and interpret and what it creates regarding each participant's commitments and entitlement to signify and interpret. What these actually are, as a function of what kinds of signs are being expressed, is an ethnographic and linguistic question.

65. In this way, social and intentional statuses are just particularly salient swatches of commitment and entitlement space — so salient as to have been lexicalized in words like 'mother' and 'banker,' 'believe X,' and 'desire Y.'

66. Many of the most important features of any sign event turn on the relative symmetry of participants' attitudes towards each others' (and their own) statuses. In particular, participants in any sign event will be said to have symmetric attitudes (toward some status) insofar as they intersubjectively share attitudes toward that status (where the status in question can belong to anyone of the participants, or a non-participant). That is, each participant assumes all participants assume the same attitude towards some status. For example, we each assume we all assume that you are a defrocked priest, or that it is winter, or that an animal with those features is called a 'rat' in English. Asymmetric attitudes (toward some status) arise when we each assume we both assume different attitudes towards that status. For example, we each assume we both assume that only you know the time, or that only I know what my grandmother's name is. And ametric attitudes (toward some status) arise when we have no common assumption about the symmetry or asymmetry of our attitudes toward some status. That is, differences or similarities in attitudes toward some status are not yet calibrated, or known, or even relevant to us.

    For other uses of symmetric and asymmetric frames, see Brown and Gillman (1972 [1960]; Friedrich (1966); and Hanks (1990: 143–150); and for similar ideas, see Schutz (1967) on 'the reciprocity of perspectives.' For the relation between such frames and information status, in terms of pragmatic presupposition and assertion, see Lambrecht (1994). As used here, symmetric, asymmetric, and ametric attitudes generalize these ideas for all thirds, not just third with propositional contents and referential functions.

    Symmetric attitudes typically arise in one of three ways. There is shared access to signs in the immediate context: by your uniform we each assume we both assume you're a mechanic; or by its natural features we each assume we both assume it's a rock. There is shared access to signs in prior contexts: by my comment a moment ago regarding my health we each assume we both assume I have a cold; or by a shared experience we each assume we both assume there was a car crash. And there is shared access to signs in general context: by having grown up in the same area we each assume we both assume that there's a cave to the west of us; or we each assume we both

assume that the natural feature in front of us is called a 'tree.' Generally speaking, immediate context is grounded in intersubjective perceived experience; prior context is grounded in intersubjective remembered experience; and general context is grounded in intersubjective cultural experience.

Analogously, asymmetric attitudes typically arise when we each assume we both assume only one of us had access to some sign in the immediate context (we both know my back was turned when you saw it, or I was asleep when it happened), in the prior context (we both know I missed class that day, or had my Walkman on), or in the cultural context (we both know I just moved here from Bulgaria, or you just converted to my religion). Notice, then, that asymmetric attitudes require the assumption of lack of common assumption because of differential access to some sign. Notice that the more we know about a person, and the more we know that person knows about us, the more metric our attitudes become — such that we learn what we both know and what only one of us knows. Thus, 'getting to know someone,' is as much about creating symmetric attitudes as asymmetric attitudes. And notice that power relations often lead to asymmetric attitudes: you and your parents both know only they know what you were like as an infant.

The canonical example of a process involving the real-time formation of symmetric attitudes is topic-focus constructions in everyday discourse (cf. Lambrecht 1994; Van Valin and LaPolla 1997). For example, in the assertion 'he took me to the movies,' he (the topic, or 'old information') is only appropriate insofar as there exists a symmetric attitude (regarding the identity of the referent); and took me to the movies (the focus, or 'new information') is only effective insofar as there comes to exist a symmetric attitude (regarding the kind of action undertaken by the referent). Importantly, notice that the presupposed symmetric attitude (toward the identity of the topic) is usually the result of a prior sign-event in which it was a created symmetric attitude (e.g., an utterance like 'I met this guy' or 'my brother Dave is a nice guy'). And notice that the created symmetric attitude may be used in a subsequent sign event as a presupposed symmetric attitude (e.g., an utterance like 'what movie did you see' or 'was it fun'). In this way, just as what is now presupposed was once created, what is now created goes on to be presupposed.

In sum, the appropriateness and effectiveness of any sign event turns on the relatively symmetric and asymmetric attitudes of participants presupposed and created by the sign event, where such environments may have arisen in immediate, prior or general contexts. Note, then, that much of the 'theory of mind' literature is just the observation that humans track intentional statuses — with the fact that we also track social statuses, and the fact that both these kinds of tracking are just semiotic processes, elided in deference to putative 'mind reading' capacities.

67. By 'indices' he means thirds whose ground is primarily indexical, and thus signs that stand for their object by a relation of contiguity. And, in general, his focus is on linguistic signs.

68. Silverstein clarifies this distinction in a subsequent text, in which he says that 'relative presupposition is a relationship whereby a specific effective instance of a pragmatic signal [e.g., an index] is linked to and requires, for its effect, some independently verifiable contextual factor or factors [e.g., other indices]' (Silverstein 2003 [1981]: 387). In contrast, the 'relative creativity of a particular pragmatic signal, at the opposite pole of this continuum, essentially brings some contextual factor into existence, serving as the unique signal thereof' (Silverstein 2003 [1981]: 387).

69. There are thus two key dimensions, then: an implicit-implicit dimension; and an assimilation-accommodation dimension. The implicit-explicit pattern shows up in a

number of distinctions, made famous by many different theorists: norm versus rule (Wittgenstein, inter alia), gesture versus symbol (Mead), showing versus saying (Wittgenstein), implicit versus explicit (Austin), non-referential versus referential (Silverstein), non-proposition versus propositional (as used here), practice versus discourse (Bourdieu), comportment versus consciousness (Heidegger), residence versus representation (as used here), and so on, and so forth. In all of these cases, the second term is the more marked term — unable to be explicated without reference to the first term: e.g. rules are grounded in norms; symbols are grounded in gestures; discourse is grounded in practice; and so forth. The assimilation-accommodation pattern shows up in a number of guises, again made famous by many different theorists: retention and protention (Husserl), forgiving and promising (Arendt), past and future (Augustine), Me and I (Mead), sensing and moving (Aristotle), being thrown and projected, or affectedness and understanding (Heidegger), appropriateness and effectiveness (Austin), presupposition and creation (Silverstein), and so on and so forth.

70. This is done to avoid the various ambiguities of the word 'reference' and/or 'referential'. For example, there is the referential function of Jakobson in contrast to the non-referential functions (phatic, poetic, conative, etc.). There is reference (*Bedeutung*) in Frege, corresponding to the truth-value of an assertion or the 'referent' of a referring expression (usually a proper noun, such as 'The Evening Star'), and in contrast to sense (*Sinn*). And there is the general sense of reference versus predication: for example, in the utterance 'the boy is ill,' the boy refers to some identifiable individual, and is ill predicates a quality of him. All three of these meanings are of course related insofar as they involve signs with propositional content (or conceptual structure), and hence which are inferentially articulated, which is the key criterion.

71. Silverstein's notions of creativity and presupposition join together various notions that Austin treated in more conventional logical terms. In particular, Austin used several terms, derived from logic, to characterize these: presupposed, implied, entailed (2003 [1955]: 39–52). If, for example, a performative is felicitous (appropriate and effective), then the statement A.1 and A.2 must be true: 'presupposition'. If it is felicitous then statements Γ.1 must be true: implication. If felicitous, then Γ.2 must be true (that I am obliged to do something): entailment. Silverstein has judiciously assimilated these all to notions of presupposition and entailment.

72. Most of these properties have several important features: something finite allows for something infinite; something fixed allows for something emergent; something normative allows for something transformative of norms; something grounded in causes gives rise to norms that allow for practices which transcend causes.

# References

Aristotle (2001). Physics. In *The Basic Works of Aristotle*, Richard McKeon (ed.), 218–397. New York: The Modern Library.

Austin, J. L. (2003 [1955]). *How to Do Things with Words*, 2nd ed. Cambridge: Harvard University Press.

Bacon, Francis (2000 [1620]). *The New Organon*, Lisa Jardine and Michael Silverthorne (eds.). Cambridge: Cambridge University Press.

Benedict, Ruth (1959 [1934]). *Patterns of Culture*. Cambridge: Riverside Press.

Berger, Peter L. and Luckmann, Thomas (1967). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Anchor Books.

Berlin, Brent and Kay, Paul (1969). *Basic Color Terms: Their Universality and Evolution*. Berkeley/Los Angeles: University of California Press.

Bloomfield, Leonard (1984 [1933]). *Language*. Chicago: University of Chicago Press.

Bourdieu, Pierre (1977 [1972]). *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.

Boyd, Richard (1991). Realism, anti-foundationalism, and the enthusiasm for natural kinds. *Philosophical Studies* 61, 127–148.

Brandom, Robert (1979). Freedom and constraint by norms. *American Philosophical Quarterly* 16 (3), 187–196.

—(1994). *Making it Explicit: Reasoning, Representing, and Discursive Commitment*. Cambridge: Harvard University Press.

Brown, R. and Gilman, A. (1972 [1960]). The pronouns of power and solidarity. In *Language and Social Context*, P. P. Giglioli (ed.), 252–282. New York: Penguin.

Bühler, K. (1982 [1934]). *Sprachtheorie: die Darstellungsfunktion der Sprache*. Stuttgart: Gustav Fisher Verlag.

Bull, William E. (1960). *Time, Tense, and the Verb: A Study in Theoretical and Applied Linguistics, With Particular Attention to Spanish* (= University of California Publications in Linguistics 19). Berkeley/Los Angeles: University of California Press.

Butler, Judith (1993). *Bodies that Matter: On the Discursive Limits of Sex*. New York: Routledge.

Colapietro, Vincent M. (1989). *Peirce's Approach to the Self: A Semiotic Perspective on Human Subjectivity*. Albany: State University of New York Press.

Dreyfus, Hubert L. (1991). *Being-in-the-World: A Commentary on Heidegger's Being and Time, Division 1*. Cambridge: MIT Press.

Dummett, Michael (1981 [1973]). *Frege: Philosophy of Language*, 2nd ed. Harvard: Harvard University Press.

Fodor, Jerry A. (1998). *Concepts: Where Cognitive Science Went Wrong*. Oxford: Oxford University Press.

Frege, Gottlob (1980 [1884]). *The Foundations of Arithmetic*, 2nd ed. Evanston: Northwestern University Press.

Friedrich, Paul (1966). Structural implications of Russian pronominal usage. In *Sociolinguistics*, W. Bright (ed.), 214–259. The Hague: Mouton.

—(1979). The symbol and its relatively non-arbitrariness. In *Language, Context, and the Imagination: Essays by Paul Friedrich*, Anwar S. Dill (ed.), 1–61. Stanford: Stanford University Press.

—(1986). *The Language Parallax*. Austin: University of Texas Press.

Gibson, James J. (1986 [1979]). *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin.

Goffman, Erving (1959). *The Presentation of Self in Everyday Life*. New York: Anchor Books, Doubleday.

—(1981 [1979]). Footing. In *Forms of Talk*, 124–159. Philadelphia: University of Pennsylvania Press.

—(1986 [1974]). *Frame Analysis: An Essay on the Organization of Experience*. Boston: Northeastern University Press.

Greenberg, Joseph H. (1990). *On Language: Selected Writings of Joseph H. Greenberg*, Keith Denning and Suzanne Kemmer (eds.). Stanford: Stanford University Press.

Grice, Paul (1989). Retrospective epilogue. In *Studies in the Ways of Words*, 339–385. Cambridge: Harvard University Press.

Griffiths, Paul E. (1997). *What Emotions Really Are*. Chicago: University of Chicago Press.

Gumperz, John (2001 [1968]). The speech community. In *Linguistic Anthropology: A Reader*, Alessandro Duranti (ed.), 43–52. Malden, MA: Blackwell.

Hacking, Ian (1995). An indeterminancy in the past. In *Rewriting the Soul: Multiple Personality and the Sciences of Memory*, 234–257. Princeton: Princeton University Press.

—(2002). Making up people. In *Historical Ontology*, 99–114. Cambridge: Harvard University Press.

Haiman, John (1985). *Iconicity in Syntax*. Amsterdam/Philadelphia: John Benjamins.

Hanks, William F. (1990). *Referential Practice*. Chicago: University of Chicago Press.

Hardin, Garrett (1968). The tragedy of the commons. *Science* 162, 1243–1248.

Haugeland, John (1998). The intentionality all-stars. In *Having Thought: Essays in the Metaphysics of Mind*, 127–170. Cambridge: Harvard University Press.

Heidegger, Martin (1996 [1953]). *Being and Time*, Joan Stambaugh (trans.). Albany: State University of New York Press.

—(1993 [1954]). The question concerning technology. In *Basic Writings*, David Farrell Krell (ed.), 307–342. San Francisco: Harper.

Hobsbawm, Eric (1983). Introduction: The invention of tradition. In *The Invention of Tradition*, Eric Hobsbawm and Terrence Ranger (eds.), 1–14. Cambridge: Cambridge University Press.

Hockett, C. F. (1958). *A Course in Modern Linguistics*. New York: Macmillan.

Jakobson, Roman (1990a). The speech event and the functions of language. In *On Language*, L. R. Waugh and M. Monville-Burston (eds.), 69–79. Cambridge: Harvard University Press.

—(1990b). Shifters and verbal categories. In *On Language*, L. R. Waugh and M. Monville-Burston (eds.), 386–392. Cambridge: Harvard University Press.

Jakobson, Roman and Halle, Morris (1956). *Fundamentals of Language* (= Janua Linguarum, Series Minor, 1). The Hague: Morton.

James, William (1920). The feeling of effort. In *Collected Essays and Reviews*. New York: Longmans, Green, and Company.

Kanner, Leo (1943). Autistic disturbances of affective contact. *The Nervous Child* 2, 217–250.

Keil, Frank C. (1989). *Concepts, Kinds and Cognitive Development*. Cambridge: MIT Press.

Kitcher, P. (1993). *The Advancement of Science*. Oxford: Oxford University Press.

Kockelman, Paul (2004). Stance and subjectivity. *Journal of Linguistic Anthropology* 14 (2).

Kripke, Saul (1980). *Naming and Necessity*. Cambridge: Harvard University Press.

—(1982). *Wittgenstein on Rules and Private Language*. Cambridge: Harvard University Press.

Lakoff, George (1987). *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press.

Lakoff, George and Johnson, Mark (2003 [1980]). *Metaphors We Live By*, 2nd ed. Chicago: University of Chicago Press.

Lambrecht, Knud (1994). *Information Structure and Sentence Form*. Cambridge: Cambridge University Press.

Langacker, R. W. (1987). *Foundations of Cognitive Grammar*, vol. 1. Stanford: Stanford University Press.

Levinson, Stephen C. (1983). *Pragmatics*. Cambridge: University of Cambridge Press.

Lewis, David K. (1969). *Convention: A Philosophical Study*. Cambridge, MA: Harvard University Press.

Linton, Ralph (1936). *The Study of Man*. New York: Appleton, Century, and Crofts.

Lorenz, Konrad (1997 [1944/1948]). *The Natural Science of the Human Species: An Introduction to Comparative Behavioral Research*, Agnes von Cranach (ed.), Robert D. Martin (trans.). Cambridge: MIT Press.

Lucy, John A. (1992). *Grammatical Categories and Cognition*. Cambridge: Cambridge University Press.

Lyons, John (1977). *Semantics*, vol. 1. Cambridge: Cambridge University Press.

Malinowski, Bronisław (1936). The problem of meaning in primitive languages. In *The Meaning of Meaning*, C. K. Ogden and A. I. Richards (eds.), 296–336. New York: Harcourt, Brace.

Mauss, Marcel (1973). Techniques of the body. *Economy and Society* 2 (1), 70–88.

McCawley, James D. (1993). *Everything That Linguists Have Always Wanted to Know about Language (But Were Ashamed to Ask)*, 2nd ed. Chicago: University of Chicago Press.

Mead, George Herbert (1934). *Mind, Self, and Society from the Standpoint of a Social Behavioralist*, Charles S. Morris (ed.). Chicago: University of Chicago Press.

Moore, C. and Dunham, P. (eds.) (1995). *Joint Attention: Its Origins and Role in Development*. Hillsdale, NJ: Erlbaum.

Parmentier, Richard J. (1994). Peirce divested for nonintimates. In *Signs in Society: Studies in Semiotic Anthropology*, 3–22. Bloomington: Indiana University Press.

Peirce, Charles S. (1955). *Philosophical Writings of Peirce*, Justus Buchler (ed.). New York: Dover Publications.

Peirce, Charles S. (1931–1966). *The Collected Papers of Charles S. Peirce*, 8 vols., C. Hartshorne, P. Weiss, and A. W. Burks (eds.). Cambridge: Harvard University Press. [Reference to Peirce's papers will be designated *CP* followed by volume and paragraph number.]

Putnam, Hilary (1975). The meaning of 'meaning.' In *Philosophical Papers: Mind, Language and Reality*, vol. 2, 215–271. Cambridge: Cambridge University Press.

Quine, W. V. (1969). Ontological relativity and natural kinds. In *Ontological Relativity and Other Essays*, 26–68, 114–138. New York: Columbia University Press.

Rosch, Elinor (1975). Cognitive representations of semantic categories. *Journal of Experimental Psychology: General* 104, 192–233.

Sahlins, Marshall (1981). *Historical Metaphors and Mythical Realities*. Ann Arbor: University of Michigan Press.

Sapir, Edward (1985 [1924]). Culture, genuine and spurious. In *Selected Writings in Language, Culture, and Personality*, David G. Mandelbaum (ed.), 308–331. Berkeley: University of California Press.

—(1985 [1927]). The unconscious patterning of behavior in society. In *Selected Writings in Language, Culture, and Personality*, David G. Mandelbaum (ed.), 544–559. Berkeley: University of California Press.

Saussure, Ferdinand de (1983 [1916]). *Course in General Linguistics*. La Salle, IL: Open Court Press.

Savan, David (1976). *An Introduction to C. S. Peirce's Semiotics*, part I. Toronto: Toronto Semiotics Circle.

Schutz, Alfred (1967). *The Phenomenology of the Social World*. Evanston: Northwestern University Press.

Sellars, Wilfrid (1997 [1956]). *Empiricism and the Philosophy of Mind*. Cambridge: Harvard University Press.

Silverstein, Michael (1976). Hierarchy of features and ergativity. In *Grammatical Categories in Australian Languages*, R. M. W. Dixon (ed.), 112–171. Canberra: Australian Institute of Aboriginal Studies.

—(1987). The three faces of 'function': Preliminaries to a psychology of language. In *Social and Functional Approaches to Language and Thought*, 17–38. New York: Academic Press.

—(1993). Of nominatives and datives: Universal grammar from the bottom up. In *Advances in Role and Reference Grammar*, Robert D. Van Valin (ed.), 465–498. Amsterdam/Philadelphia: John Benjamins.

—(1995 [1976]). Shifters, linguistic categories, and cultural description. In *Language, Culture, and Society: A Book of Readings*, Ben G. Blount (ed.), 187–221. Prospect Heights, IL: Waveland Press.

—(1999). Function. *Journal of Linguistic Anthropology* 9 (1–2), 76–77.

—(2003 [1981]). The limits of awareness. In *Linguistic Anthropology: A Reader*, Alessandro Duranti (ed.), 382–401. Malden, MA: Blackwell.

Spitulnik, Debra (2001 [1996]). The social circulation of discourse. In *Linguistic Anthropology: A Reader*, Alessandro Duranti (ed.), 95–118. Malden, MA: Blackwell.

Talmy, Leonard (2000a). The relation of grammar to cognition. In *Towards a Cognitive Semantics: Volume I: Concept Structuring Systems*, 21–96. Cambridge: MIT Press.

—(2000b). The windowing of attention in language. In *Towards a Cognitive Semantics: Volume I: Concept Structuring Systems*, 257–310. Cambridge: MIT Press.

Taylor, John R. (1995). *Linguistic Categorization: Prototypes in Linguistic Theory*, 2nd ed. Oxford: Clarendon Press.

Tomasello, Michael (ed.) (1998). *The New Psychology of Language: Cognitive and Functional Approaches to Language*, vol. 1. Mahway, NJ: Lawrence Erlbaum.

—(1999). *The Cultural Origins of Human Cognition*. Cambridge: Harvard University Press.

—(ed.) (2003). *The New Psychology of Language: Cognitive and Functional Approaches to Language*, vol. 2. Mahway, NJ: Lawrence Erlbaum.

Tomasello, Michael and Call, Josep (1997). *Primate Cognition*. New York: Oxford University Press.

Van Valin Jr., Robert D. and LaPolla, Randy J. (1997). *Syntax: Structure, Meaning, and Function*. Cambridge: Cambridge University Press.

Warner, Michael (2002). Publics and counterpublics. In *Publics and Counterpublics*, 65–124. New York: Zone Books.

Weber, Max (1978 [1956]). *Economy and Society*, vol. 1, Guenther Roth and Claus Wittich (eds). Berkeley: University of California Press.

Whorf, Benjamin (1956 [1937]). Grammatical categories. In *Language, Thought and Reality*, John B. Carroll (ed.), 87–101. Cambridge: MIT Press.

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