

What is a 'Logic of Sense'?:

Deleuze with Frege, Carnap, and Quine

The theory of sense and reference inaugurated by Gottlob Frege in his 1892 “Über Sinn und Bedeutung” originates much of the subsequent analytic tradition’s inquiry into the nature, structure, and basis of linguistic meaning, significance, and truth. Within the development of the tradition, one prominent strand has been the project of accounting for the truth-values of structured sentences of ordinary language in terms of the systematic contributions provided by the senses and the references of their individual concept and object-terms. Such terms are viewed as themselves already endowed with determinate senses, given implicitly or explicitly by the regular semantic structure of the language in question, and already thus structured so as to pick out determinate objects of reference or, if they fail of reference, to do so for structurally determined reasons.¹

Quite a different kind of question is posed, however, if, rather than just asking after the contribution of the senses of terms to the sense and truth-value of a sentence within the system of a language as already understood, one begins by asking *how* the senses of *both* terms and sentences are semantically and ontologically *constituted* in the context of a natural language as it is *actually* used and spoken. Such a language may be conceived as a system or structure of signs in regular use for such purposes (among others) as designation, description, expression, assertion, denial, reasoning, and contestation between agents or subjects on specific occasions of use. This preliminary definition points to the irreducible role of the actual employment of a language on particular occasions by individual speakers. It is also evident that these specific occasions are in some way governed by more underlying and general aspects of meaning or significance. These aspects must be available in advance of particular uses, and knowledge of them may be seen as constituting knowledge of the “meanings” of the language’s significant terms. If such aspects are located within the language itself as an inherent and presuppositional dimension of its functioning, the inquiry into this dimension takes the form of (what may be called) an investigation of the “being” of sense: an inquiry, that is, into its manner of existence or subsistence in relation to the systematic relations of the terms of such a language, as well as to its actual use in the individual and collective lives of its speakers. Plausibly, this theorization will, further, depend on developing an idea having ancient roots, but which also proves transformative at an early stage of the analytic tradition:

¹ This project of compositional semantics may be seen as beginning with Frege himself, as he pursues it, for instance, in *The Foundations of Arithmetic* (Frege (1884)) in the (limited) context of sentences expressing arithmetical and other numerical judgments; subsequently, it is continued in prominent analytic projects such as Tarski’s definition of the structure of a truth-predicate for a formal language and the model-theoretic approach to semantics it has been taken to imply, as well as the more contemporary project of “possible worlds” semantics.

that of the *sense* or *meaning* of a sentence or proposition, understood as “what is said” by means of it, and in virtue of which it is evaluable as true or false.²

In its initial formulation and many of its historically prominent projects, the analytic tradition has formulated the ambition of an analysis of the *logical structure of language* as a matter of the discovery of its overarching and structurally general rules of linguistic significance, meaning, or use.³ Here, the capacity of the terms of language to refer or denote is seen as an aspect of their functioning within a larger system of logical rules also governing the logical structure of sentential inference or deduction, and the force of logical principles is itself seen as consisting in the application of structurally general rules or norms of significant use. But the theory of propositional sense, as pursued within the tradition, has, as we shall see, recurrently existed in a somewhat ontologically uncertain relationship to the guiding idea of structural generality upon which these analytic projects depend. However, as I shall argue, a rigorous and critical theory of this relationship is at hand in the opening sections of Gilles Deleuze’s 1969 *The Logic of Sense*. For the theory designated by the title and given in the book, “logic” does not bear primarily the significance of a particular formal system or calculus (for instance that of Frege’s own quantificational logic). Rather, it is more closely akin to what Kant and Husserl termed a “transcendental” logic: a systematic accounting of the basis and structure of truth that addresses semantic, ontological, and metaphysical dimensions of description and explanation. “Sense” is also used here in a way that is broader than, although (as I shall argue) also strictly continuous with, Frege’s use of the term. In particular, whereas Frege’s usage comprehends both i) the capacity of individual terms to accomplish reference and ii) the contribution made by such a theory of reference to a systematic theory of the truth-conditions of sentences as these are inferentially and deductively interrelated within the structure of a language as a whole, Deleuze’s account extends the concept of sense to include also (in what is actually a usage more prominent in the phenomenological tradition) iii) the “intentional” sense of a linguistic expression or proposition *as* meant or intended by an agent or speaker. Bringing all three of these aspects of linguistic expression into view, Deleuze considers the status of a (stipulated) fourth level or stratum underlying the other three. He terms this fourth level “sense” and proceeds to develop its systematic structure by means of the presentation of a series of *paradoxes* which, as he says, form its theory.⁴

On this theory as Deleuze develops it, sense is characterized structurally and ontologically by several notable features, each motivated by the constitutive problems of giving a single underlying basis for the various phenomena of individual and collective reference and meaning. First, sense is *liminal*: situated “between” language and world, or between terms and what they denote, it has itself the “*aliquid*” status of a “third” term that cannot bear the significance of a sign or a thing but constitutes rather a

² This idea has ancient roots in Plato’s conception of the *logos* or sentence as the articulate structure of a saying *of* something *about* something (see, for instance, his inaugural development of this idea in the *Sophist*) but is first significantly developed in its own right the Stoic conception of the complete *lekton* or “sayable”. It is subsequently rediscovered, in a modern context, by Bolzano (in his 1837 *Theory of Science*) prior to Frege’s adoption of it.

³ For some discussion of the project and its history, see Livingston (2008), chapter 1.

⁴ Deleuze (1969) (henceforth: *LofS*), p. xiii.

mobile and dynamic line between the two. Second, sense is *differential* in that it presents the conditions of the constitution of stable conceptual or linguistic identities by producing a more basic operation of difference or differentiation, located neither simply in the domain of concepts nor that of objects, but which is ontologically *prior* to identity itself. Third, sense is *self-presuppositional* in that its effective functioning and structure depend on its “always already” having been established in advance as always structurally “there” prior to any founding gesture or instituting moment whereby it could have been put in place or effectively constituted by recourse to more primitive regularities or practices. Finally, for reasons involved in its bearing these features, sense is *ontologically paradoxical*. A “nonexisting entity,” sense both exists and does not. As such it may be treated as logically occupying the essentially contradictory space of the limit of what Heidegger termed ontic-ontological difference, whereby being is distinguished from all entities but sense, as the unitary condition for the intelligible significance of words and things, must paradoxically bear the attributes of both.⁵

I

We can begin to bring into view the irreducible status of sense in relation to sentences, entities, and the nature of language itself by rehearsing the motivations to which Frege appeals in introducing the distinction between sense and reference in his seminal 1892 article. Chief among these is a puzzle about the nature of *identity*, as exhibited in statements of identity such as “a=b” or “The Morning Star is [the same object as] the Evening Star.” As Frege notes, the truth-values of such statements are in general not known *a priori*; and they may indeed represent, once made and verified, a significant positive advance in knowledge.⁶ This shows that the judgment of identity is not *simply* equivalent to a judgment of the identity of a thing with itself, of the form “a is a”; for the latter judgment is, by contrast, *a priori* and trivial. On the other hand, such a judgment is not simply a judgment about *signs* or their usage. For this usage is arbitrary whereas the successful identity judgment expresses genuine knowledge, actually rooted in the thing(s) judged about.⁷ Moreover, as Frege points out, if “a” and “b” are treated simply as distinct *objects* rather than as signs considered with respect to their modes of signification then the cognitive significance of “a=b” is again just that of “a=a” and the possibly informative content of the judgment is again lost. Since the content of a statement of identity can thus be located neither in the properties of signs alone nor in the (trivial) self-identity of the designated object itself, it is therefore natural to:

...think of there being connected with a sign (name, combination of words, written mark), besides that which the sign designates, which may be called the *Bedeutung* [reference] of the sign, also what I should like to call the *sense* of the sign, wherein the mode of presentation [*Art des Gegebensein*] is contained.⁸

⁵ LofS, p. xiii.

⁶ Frege (1892), p. 151.

⁷ Frege (1892), pp. 151-52.

⁸ Frege (1892), p. 152.

Given this, the names or descriptions “Morning Star” and “Evening Star” will have the same referent but differ in sense, or in the way this (common) referent is presented or “given” through their use.

Sense is thereby introduced as a decisive third term, between signs and the things they are used to designate, but essentially inherent in this use as it underlies the possible significance of the judged identity of those things themselves. Furthermore, the informativeness of the judgment of identity is to be explained in terms of this difference: it is only insofar as the concrete use of “Morning Star” and “Evening Star” importantly differ in respect of the objective features of their way of presenting their objects that we can see the judgment of identity as itself objective and significant. In this respect, for Frege, the significantly judged or asserted self-identity of an object has a prior foundation in the *differential* relationships of senses; it is only insofar as the *sense* “morning star” differs from that of “evening star” in the mode of its presentation of the (selfsame) object that the significance of the judged or asserted identity is explained at all. If language is to be capable of formulating significant identity judgments at all, all judged or significantly asserted identities must be underlain by the differential being of the senses of nominal terms, or of the differentiations of the signs, not with respect to *what* they present, but with respect to *how* they present it. This differential being of linguistic presentation is, moreover, *objective*: Frege further argues that senses, if they are to underlie the possibility of informative identity judgments in the way described, must be sharply distinguished from any simply individual, subjective, or psychological representations or images. To begin with, if the judgment of identity is to be expressed and communicated in a public language, then the senses involved in it must be accessible in general to speakers. Frege writes: “[T]he sense of a proper name is grasped by everybody who is sufficiently familiar with the language or totality of designations to which it belongs...”⁹ While individuals will associate distinct and variable subjective ideas or representations with a nominal or designative term used in common, for statements involving such a term to be understood and assessed the sense must be the same.¹⁰

Additionally, it must be possible to consider not only the public and intersubjective senses of individual nominative or designative terms, but also that of the *sentences* which they, together with terms for concepts or predicates, compose. Frege accordingly introduces the term “thought” for the sense (as distinct from the reference) of a declarative proposition, and argues that thoughts must be objective and intersubjectively shared in the practice of a language, just as the senses of individual terms are. It is further reasonable, Frege argues, to consider the referent of a sentence as a whole to be determined whenever the referents of all of its individual terms are similarly determined. Such will be the case whenever, as Frege argues, each individual term has not only a sense but an (actually existing) object, and whenever this is the case, the sentence as a whole will have a determinate truth-value (either “true” or “false”).¹¹ This leads Frege to consider the *Bedeutung* (referent) of the sentence as a whole to

⁹ Frege (1892), p. 153.

¹⁰ Frege (1892), p. 154.

¹¹ In particular Frege is here impressed by the consideration that a sentence involving a name lacking a referent, e.g., “Pegasus is flying over the village”, while certainly bearing sense as a whole, will apparently lack a truth-value. (Frege (1892), pp. 157-58).

be its truth-value, while associating its sense with the quite different objective and non-linguistic but structured entity, the *thought* that it expresses. As Frege notes, it is possible and indeed customary in ordinary language not only to talk about the referents of signs, but also to talk about the words themselves, including their senses or the modes of presentation associated with them. For instance, if one wishes to discuss the meaning of another's words as uttered, one typically uses the device of (direct or indirect) quotation; similarly, in order to discuss the sense of an expression, "A", we may simply quote the expression, thereby referring to its sense. Here, "The sense of 'A'" is apparently itself a referring phrase, and thereby itself requires a distinction between sense and referent, distinct from that of the sense and reference of "A" itself. Observation of these facts leads Frege to distinguish what he terms the "ordinary" from the "indirect" or "oblique" reference of a word.¹² In indirect discourse, for instance in quotation, the quoted words do not have their ordinary reference, since one is not talking about the various objects ordinarily referred to by them. Rather, the ordinary or customary sense here becomes, on Frege's view, the "indirect" referent. It is in this way, for Frege, that the domain of senses becomes capable of being articulated and discussed, in general, on the level of the proper kind of being they enjoy.

To summarize: sense, as what is *expressed* in the sentence or proposition, has for Frege a variety of ontologically and metaphysically distinctive features relevant to its status with respect to a systematic theory of the expressive meaning of the sentences of a language as a whole. To begin with, it is neither simply an aspect of *signs* nor of the *objects* they stand for or refer to, but rather stands *between signs and objects* as the structural condition for the possibility of referential presentation which is the basis for any meaningful description, articulation, or communication about the things of the world. This modality of presentation is, as Frege argues, logically prior to any relationship or phenomenon of *representation*, either individual or general; and the central role of sense as mode of presentation in accounting for the possibility of identity already marks it as prior to any representational order founded simply upon the assumption of the substantial self-identity of the object, or the similarity of distinct objects falling under a self-identical concept. Thus, a second distinctive feature of sense, as it already figures centrally in Frege's argument, is its *priority with respect to the self-identity of things*. As is evident in the considerations which motivate Frege in introducing the concept of sense to begin with, its being cannot be founded simply on the assumption of a direct relationship of reference between an individual sign and an individual, self-identical object; rather, the self-identity of objects is to be explained in terms of the distinctness of senses, and here he makes irreducible use of the possibility of distinct modes of presentation of what is (in fact) one and the same thing. Third, however, Frege's appeal to the distinction and explanatory primacy of senses as modes of presentation over the identity of the presented does not, as we have seen, exclude treating them as nevertheless fully *objective*, in that they are ontologically quite independent of individual and psychological processes of imagination, representation, or thinking. As Frege argues, this objectivity is requisite if the structure of sense is to underlie the determinate truth-values of sentences and is thereby basically connected to the structure of truth as it figures in the structure and functioning of a natural language.

¹² Frege (1892), pp. 154-55.

It is with these distinctive features of sense in view that we can best understand Deleuze's own introduction of the notion of sense as a privileged and underlying explanatory dimension of the proposition, or of language as such, early in *The Logic of Sense*. Deleuze begins by distinguishing three familiar dimensions or "relations" of the functioning of a sentence or proposition, broadly recognizable from the perspective of "analytic" as well as "continental" theories. The first of these is the dimension at the center of Frege's own argument for the introduction of sense: this is the dimension of *reference* or *denotation*, whereby the terms and sentences of a language pick out, stand for, or indicate the objects and states of affairs of the world. As is the case also for Frege, denotation, in addition to the reference of proper and general nouns, includes the indicative or demonstrative functioning of "indexical" terms and pronouns: words such as "this", "that", "it", "here", "there," "now," etc.¹³ The second dimension is one that is not explicitly recognized by Frege, but is a central component of phenomenological conceptions of sense such as Husserl's. This is the dimension of "*manifestation*," which concerns in particular the relation of a proposition to its speaker or author.¹⁴ Here, the token sentence as uttered or inscribed is viewed as centrally involving the desire of the speaker to use it meaningfully, and often to express her own beliefs or attitudes. However, as Deleuze underscores, this primacy should not be understood as a matter of the prior constitution of a subject or agent of consciousness already equipped with the capacity for the arbitrary volitional production of meaning; rather, since any such constitution already involves the linguistic function of specific designators, primarily those of the "first person" such as "I", this constitution is very much dependent upon the order of reference or denotation itself.¹⁵

Finally, and more broadly, if in manifestation the structure of the proposition is thereby related closely to its actual use in the language by agents or speakers in the actual diachronic practice of what can be designated as "speech" (in opposition to "language"), this does not exclude that there is *also* a converse, and equally relevant, priority of language, understood as a synchronic and rational structure of the interrelationships of meaningful signs, over speech. Deleuze accordingly describes the dimension of propositional usage whereby propositions bear the *implicative* relationships of their concepts as that of "signification". Here, what is at issue in particular is the way in which the proposition may function within an argument, demonstration, or process of reasoning, as marked by its figuring as a premise or conclusion. By contrast with the relation of denotation or reference, signification is always an "indirect" process: that is, the signification of a proposition does not directly involve the relationship of its terms to their objects, but rather its systematic and regular relationships with other propositions in the language as a whole.¹⁶

Given these three dimensions or relations of the proposition, the question arises whether any of the three can be considered most basic or foundational for the other two. To begin with, it appears impossible simply to reduce denotation and signification to manifestation; such a reduction of the referential and generally inferential dimensions of meaning to first-personal intention, would, as

¹³ *LofS*, pp. 12-13.

¹⁴ *LofS*, pp. 13-14.

¹⁵ *LofS*, p. 14.

¹⁶ *LofS*, pp. 15-16.

Deleuze notes, amount to what may be called a “Humpty-Dumpty” view of meaning, on which the subjective or volitional desire to use a word in a particular way is wholly responsible for its referential or conceptual meaning: “When I use a word, it means just what I choose it to mean – neither more nor less...”¹⁷ On the other hand, it is equally impossible to reduce the dimensions of signification and manifestation to that of denotation or reference. Such a reduction could account for propositional meaning only insofar as, in advance, a referential correspondence between the words of a proposition and the individual objects to which it refers as well as a structural correspondence between the total proposition and the state of affairs it asserts could be presupposed. But this omits, as Deleuze notes, the evident possibilities of a name failing to have a referent and the equally evident possibility of a proposition asserting a falsehood.¹⁸ In either of these cases, the direct referential correspondence which would be the basis for all propositional meaning, on a view that reduces it to denotation, cannot be maintained; accordingly, it is evidently necessary to see the conceptual and significative dimension of language as presupposed by the possibility of reference, rather than the reverse.

Similarly, according to a view that reduces the first-personal dimension of manifestation to that of denotation, it will be impossible for an individual to use any term without succeeding in making reference to an actual object (as for instance when I use the apparently referential term “Pegasus”) or significantly to state a falsehood in the first person (for example, “I am in pain” when I am not). The suggestion of the possibility of such a reduction, which grounds first-person linguistic meaning in a privileged and presupposed domain of wholly “interior” reference or phenomena, might reasonably be thought to form the core of the idea of a “private” language grounded in the privileged availability of a special domain of “inner” experiences or phenomena. But for by-now familiar reasons, in the context of a broader consideration of the structure of the sense and structure of propositions as used in intersubjective discourse, such a view is not promising.

Since it thus appears impossible simply to reduce denotation to manifestation or, conversely, manifestation to denotation, this question quickly becomes that of the possible reduction of both manifestation and denotation to signification, or to the regular, general, and rule-governed relationship of signs in the practice of a language as a whole. As Deleuze suggests, the prospect of such a reduction directly raises a structurally decisive problem, one that is “at the heart of logic” itself.¹⁹ This is the problem of the basis of the meaning of individual signs and terms, as used on particular occasions, in what we may understand from the perspective of logical and conceptual generality as the being, and practice, of language itself: that is, the relationship of the force of “logical” norms and rules of reasoning to the practical instances of meaningful usage that they are said to govern and determine.

Within the analytic tradition since its inception, it has been typical to consider the logic of concepts as the articulation of such a *structural generality*. Here, an underlying basis for the conceptual distinctions and articulations of a language in use, up to individuating difference or distinction, are seen as grounded in the regular and systematic interrelationships of significant concepts, as exhibited in the rule-governed

¹⁷ LofS, p. 18.

¹⁸ LofS, p. 17.

¹⁹ LofS, p. 16.

functional relations of their signs. One prominent variety of this conception is evident in the program of *logical syntax* that Carnap drew from Wittgenstein's *Tractatus* and subsequently made the centerpiece of his conventionalist picture of linguistic institution in *The Logical Syntax of Language* and a series of related texts.²⁰ On Carnap's conception, any language (whether natural or artificial) is to be seen as specified by giving the formal rules governing the *formation* and *transformation* of its sequences of signs.²¹ A language is then understood as, in essence, a total calculus of conventionally instituted rules, and the phenomena of linguistic sense and reference are to be seen as instantiations in practice of the regular behavior of speakers in adherence to such rules. Here, then, the "logical" order of regular conceptual generality is seen as instituted or constituted essentially in advance of both the referential bearing of individual terms on their objects and the subjective intention of the use of terms on particular occasions. But this use is nevertheless seen as pre-determined in the regularity of the "in advance" pre-existence of a structural regularity of intersubjective practice capable of being summarized in a regular and general form.²²

As in Frege's conception, sense is here seen as both pre-existing and responsible for objective reference by formulating the structural condition of its possibility: sense or "intension" is thereby distinguished from extension as the generality of the regular conditions of determination associated with terms in a language is distinguished from what is determined by them. To enjoy this priority over reference, the order of conceptual generality need not, here, have the mysterious ontological status that Frege himself accords to what he sometimes calls a "third realm" of objective senses. It is sufficient that the conditions it places on reference be able to be formulated under the structurally general conditions that might reasonably be thought, on the conception, to characterize a language. It is this structure, in fact, that determines what is the significant behavior or practice of its speakers. Nor is it necessary that this order of conceptual generality be seen as conventionally instituted or stipulated, as it is in Carnap's conventionalist picture: all that is necessary is that it be understood as—at least—structurally implicit in the way linguistic terms do in fact determine their reference.

As we shall see, this conception cedes ultimately to a series of objections that formulate paradoxes which may be seen, indifferently, as fatal objections to the attempt to reduce sense to the structurally general order of signification, or as positive *indicia* of the actually paradoxical structure of its being as thus structured. From an ontological perspective, the arguments which lead to either conclusion are, similarly, in themselves indifferent with respect to the distinction between a conclusion of *eliminativism* with respect to sense—namely the conclusion that, since it must be thought as essentially paradoxical if it is thought at all, it cannot exist as a positive being—and that of the affirmation of its being, exactly as paradoxical. However, Deleuze's identification of the three propositional aspects of denotation,

²⁰ Carnap (1934); see also, e.g., Carnap (1950) and Carnap (1952).

²¹ Carnap (1934), p. 2.

²² Other examples of this kind of "structuralist" conception prominent in the analytic tradition might be thought to include Ryle's conception of the structure and basis of "grammatical" distinctions of categories, Sellars' project of "conceptual role" semantics, and Davidson's project of the formulation of "theories of meaning" for natural languages.

manifestation, and signification as functions of the proposition, and the trenchancy of the irreducibility of each to the others, already provides the rudiments of a positive argument for drawing the latter (rather than the former) kind of conclusion. Moreover, interpreting them this way allows us to see differently the battery of internal arguments within the analytic tradition that have appeared to require the elimination of the logic of structural generality: instead of having this conclusion, they can rather be seen, in general, as positive articulations of this logic's specific kind of being.

II

After distinguishing the three propositional dimensions of denotation, manifestation, and signification and arguing for their mutual irreducibility, Deleuze considers the consequences of introducing sense as a fourth dimension of the proposition, an underlying "ideational material" or "stratum" that assures a "real genesis" for the other aspects. Deleuze thus sees in Frege's original invocation of sense the strategic basis for the invocation of an ontologically peculiar dimension of language, irreducible to personal experience, the correspondence of words to objects, or conceptual structures or rules in general. If, indeed, sense is here seen as irreducible and as capable of underlying *all* three dimensions of denotation, manifestation, and signification, it will (as Deleuze argues) bear quite particular properties, ontologically distinguishing it from each of the three dimensions as their unitary underlying basis and paradoxical support. To begin with, and as was indeed already suggested by Frege's initial argument, sense will be ontologically *liminal* in that it is neither simply an attribute of words or things:

*Sense is both the expressible or the expressed of the proposition, and the attribute of the state of affairs. It turns one side toward things and one side toward propositions. But it does not merge with the proposition which expresses it any more than with the state of affairs or the quality which the proposition denotes. It is exactly the boundary between propositions and things. It is this *aliquid* at once extra-Being and inherence, that is, this minimum of being which befits inferences.²³*

As Deleuze notes, the question of whether to introduce sense at this point is a strategic one, not to be answered directly by any given empirical datum or conceptual proof. But *if* sense is thus introduced as the structural presupposition for the real arising of the three other functions of the proposition, it will necessarily be further irreducible along several dimensions of distinction, including those between the sign and its object, the representation and what is represented, the lived and the meant, and the general and the particular:

The question is as follows: is there something, *aliquid*, which merges neither with the proposition or with the terms of the proposition, nor with the object or the state of affairs which the proposition denotes, neither with the "lived," or representation or the mental activity of the person who expresses herself in the proposition, nor with concepts or even signified essences? If there is, sense, or that which is expressed by the proposition, would be irreducible to individual states of affairs, particular images, personal beliefs, and universal or general concepts

²³ LofS, p. 22.

... Better yet, perhaps sense would be “neutral,” altogether indifferent to both particular and general, singular and universal, personal and impersonal. It would be of an entirely different nature.²⁴

If, then, sense is introduced as a “fourth” stratum of language, unitarily responsible for the real arising of the other dimensions of manifestation, denotation, and signification, it will bear the significant ontological peculiarity of existing neither in things nor in the mind; it will not have the existence of “words, things, images, or ideas;” and it will not even be possible to appeal, in justifying its existence, to its usefulness, since it is, rather, “endowed with an inefficacious, impassive, and sterile splendor.”²⁵ Nowhere to be found among entities, it will, rather, be a “non-existent entity,” a paradoxical being that can be inferred only on the basis of the paradoxical relationships to which the more directly evident functions of the proposition already refer us.

Far from being an adventitious introduction of Deleuze’s own, this ontologically paradoxical status of sense is in fact already implicit in Frege’s inaugural conception, and significantly persists in subsequent analytic-philosophical discussions of it. In an exhaustive discussion in his 1947 *Meaning and Necessity*, Carnap considers the radical structural implications of the arising and treatment of what he calls the “antinomy of the name-relation” or the “antinomy of intension” in a variety of analytic discussions of meaning, including those of Frege, Russell, Church, and Quine.²⁶ At its core, the antinomy is just the by-now familiar feature of “oblique,” “intensional,” and modal linguistic contexts that, in those contexts, intersubstitution of co-referring or co-extensive terms will lead to the transformation of sentences into variants that are nonequivalent in truth-value. Thus, as Russell observed in “On Denoting,” George IV may be described as wondering whether Scott was the author of *Waverly*, without being rightly described as wondering whether Scott was Scott; one may believe that the morning star is rising, without thereby believing that the evening star is rising; or (to give a modal example) “Necessarily, 8 is 8”, the co-referring expression “the number of planets” cannot be substituted for the first occurrence of ‘8’ without destroying the truth of the claim. Thus, whenever the substitution of co-referring terms is allowed in general, it will be possible, as Carnap argues, to generate in these contexts contradictions in truth-value by means of what otherwise seem acceptable principles of reasoning. In this respect, the situation amounts, as Carnap argues, to a genuine antinomy of meaning, comparable (for example) to Russell’s paradox of the set of all sets that are not members of themselves.

At its root, the source of the antinomy evidently is the same as one of the features that leads Frege to posit sense at all, namely that in an “intensional” context such as “A knows that...” the substitution of co-referring terms does not generally preserve truth-value. More specifically and formally, as Carnap argues, antinomy will result whenever the following three principles are adopted as general principles of logical-semantic analysis:

Principle of Univocity: Every name or referring expression has exactly one referent.

²⁴ LofS, p. 19.

²⁵ LofS, p. 20.

²⁶ Carnap (1947), pp. 133-44.

Principle of Subject Matter: Any sentence speaks about the referents of the names (referring expressions) occurring in it.

Principle of Interchangeability: Co-referring names (i.e., terms that name the same entity) can be inter-substituted in any propositional context without altering the truth-value of the proposition.²⁷

In the specific context of Frege's conception in "On Sense and Reference," the tendency of the three principles to lead to antinomy may be addressed, as Carnap notes, by the distinction Frege draws between "ordinary" and "oblique" senses and referents.²⁸ In particular, the potential for contradiction in oblique contexts is here avoided by ascribing to expressions used in such contexts a non-ordinary referent, distinct from the ordinary one. In the case of propositions embedded in other propositions, the referent is here taken by Frege to be identical to the (ordinary) sense, or (in Frege's terminology) the thought that would be expressed by the proposition as ordinarily used. For example:

"Copernicus asserted that the orbits of the planets are circles."

The embedded sentence "the orbits of the planets are circles" does not have its usual referent – according to Frege, the truth-value False—but rather refers to the (false) proposition or thought that the planetary orbits are circles.²⁹ The device succeeds in avoiding the direct appearance of contradiction by effectively limiting the "Principle of Interchangeability" while the two other principles, those of Univocity and of Subject Matter, are maintained. While the entire proposition is still seen as characterizing (being about) the unitary object (here) referred to by "The orbits of the planets are circles" (namely its sense), intersubstitutivity is effectively restricted to ordinary contexts and disallowed in oblique ones, namely those in which sense is (in some way) at issue. Thus the direct antinomy produced by the general assumption of intersubstitutivity cannot arise, while the general reason for introducing senses to begin with—namely the possible informativeness of identity judgments—is meanwhile preserved on the level of the general semantic analysis.

However, as Carnap points out, Frege's suggestion here leads to further difficulties on the level of what are effectively the *ontological* implications of the picture of the relationship of sense and reference it envisions. One such consequence is that of an *infinite proliferation* of entities or referents.³⁰ Consider for

²⁷ These are simplified paraphrases of the principles as stated by Carnap (1947, p. 98).

²⁸ Carnap (1947), pp. 118-24.

²⁹ As Carnap notes, there are at least two reasons given by Frege for treating the reference of the embedded sentence in this way. The first is that the reference of the larger sentence to what Copernicus asserted is obviously not to a series of words, since Copernicus did not speak or understand English and so cannot be credited with a relationship to those words, but rather to the sense that they share with the synonymous Polish sentence. The second is that the reference of the embedded sentence cannot simply be to a truth-value—as it would be if used independently—since, if it were, the truth-value of the entire sentence would depend on the truth-value of the embedded one, which is evidently not the case (for instance, the entire sentence can be known and even affirmed without knowing the truth-value of the embedded one).

³⁰ Carnap (1947), pp. 129-30.

example an ordinary sentence, e.g., “Scott is a human,” or (in symbolic language), “Hs”. On Frege’s picture, this sentence has an ordinary referent, the truth-value ‘T’. If, however, it appears in an opaque context—as embedded in quotations marks, for instance, or as an attribution of belief—it instead refers to its (ordinary) sense, the propositional sense or thought *that Scott is a human*. As it is, here, an entity or referent, this propositional sense may itself have a name; at any rate, as Carnap notes, it must be considered to have one if we are to speak of it at all.³¹ But this new name will then itself have a sense, distinct from the initial one; and this further sense will itself be able to be named, and so forth. In this way, an infinite series of distinct names will necessarily be produced, correspondent to an infinite proliferation of distinct entities. Similarly but more broadly, in the ambit of Frege’s assumptions the possibility of discussing the sense of any referring expression will yield a similar proliferation as the original expression is embedded in multiple quotational or modal contexts.³² The proliferation is troubling, for Carnap, not simply on ontological grounds but also because it implies that the referent of the *original* expression is massively semantically ambiguous: indeed, on Frege’s principles, any referring expression turns out to have not one but infinitely many potential referents, depending on the context in which it is embedded. Moreover, the actual relationship, at each level, between the entity thus introduced and the expression that refers to it is itself by no means clear. There must be some such relationship in each case if we are allowed to discuss sense at all, but the actual relationship is not made clear or further explained.

This troubling proliferation of entities and the systematic and infinite semantic ambiguity it implies results directly from Frege’s invocation of senses as modes of presentation. As soon as it is possible to distinguish sense from reference, and to discuss sense in general, this discussion will itself produce the infinite series of referring expressions and, thereby, the infinite proliferation of entities associated with each one. Further, it is no response to this to hold that the problematic proliferation arises only on the assumption that senses are to be treated as “entities” or objects. As Carnap’s discussion makes clear, the proliferation of entities is already begun as soon as it is possible to *talk about* sense at all, as it must be if we are to discuss the sense of anyone’s words, thoughts, or beliefs. Here, because the possibility of such discussion of sense is already, plausibly, a structural feature of any natural language as such, the underlying structure of the problem is to be seen rather as present in the ordinary devices any such language maintains for quotation, modality, and the attribution and discussion of intentional states and attitudes.

As such it is, as Deleuze emphasizes, comprehensible as an original and structurally indicative paradox of sense that takes the form of an infinite regress of supposition if sense is seen as a reality at all.³³ Here, calling it “Frege’s paradox” and referring explicitly in a footnote to Carnap’s discussion in *Meaning and*

³¹ Carnap (1947), p. 130.

³² Carnap (1947), p. 131.

³³ It is also no response to this simply to deny that propositions are referring expressions at all. For then we will be left with i) the question of what is meant by saying that a proposition is “about” its several referential objects; and ii) a parallel problem, just as severe, with respect to the reference of whatever expressions *are* supposed to be referring ones.

Necessity, Deleuze emphasizes how the problem of the proliferation of entities is transformed into a constitutive paradox of infinite *regress* on the mere assumption of the existence of sense as a foundational stratum of linguistic being itself:

When I designate something, I always suppose that the sense is understood, that it is already there. As Bergson said, one does not proceed from sounds to images and from images to sense; rather, one is established “from the outset” within sense. Sense is like the sphere in which I am already established in order to enact possible denotations, and even to think their conditions. Sense is always presupposed as soon as I begin to speak; I would not be able to begin without this presupposition. In other words, I never state the sense of what I am saying. But on the other hand, I can always take the sense of what I say as the object of another proposition whose sense, in turn, I cannot state. I thus enter into the infinite regress of that which is presupposed. This regress testifies both to the great impotence of the speaker and to the highest power of language: my impotence to state the sense of what I say, to say at the same time something and its meaning; but also the infinite power of language to speak about words.³⁴

In this way, if sense is seen as a *general* feature of language and as the standing precondition for the possibility of denotation that is always already presupposed in any actual act of reference as its condition for possibility, the troubling potential for infinite ontological proliferation that is, as Carnap notes, inscribed in the very possibility of discussing sense at all, becomes an outright paradox of (vicious) infinite regress. If, as Deleuze suggests, sense is posited as the real presuppositional dimension of language by virtue of which denotation (or either of the other functions of the proposition) is possible, then this very assumption of its existence involves it in the structure of its bottomlessly regressive self-presupposition. As such, this bottomless self-presuppositional structure is structurally essential to it and is thus plausibly a central and defining aspect of its ontology and logic.

Further, to see how the paradoxical logic of self-presupposition is plausibly involved in *any* realist discussion of sense as the structural precondition for individual acts of propositional reference (and is not, in particular, an artifact of Frege’s own idiosyncratic assumptions), it is useful to consider the extended implications of Carnap’s own attempt in *Meaning and Necessity* to preserve the distinction between intension and extension on the level of the structural generality of a language.³⁵ On Carnap’s own “Method of Intension and Extension,” the distinction between intensional and extensional contexts is again drawn, and intersubstitution of co-referring terms is restricted in intensional contexts. However, rather than identifying the referent of a proposition or referring term appearing in an intensional context with a distinct object, the proposition or term is seen as retaining its ordinary referent, while the

³⁴ *LofS*, pp. 28-29.

³⁵ Further, there is good reason to see the underlying structure of regress as quite generally characteristic of any descriptive treatment of the presentational sense of intentionality, quite independently of the guiding assumptions of the analytic tradition’s attempt to characterize the broadly structural conditions for (specifically) *linguistic* sense. For a trenchant and convincing analysis of the parallel structure of infinite presupposition as it arises in the context of Husserl’s phenomenology, mentioning as well Carnap’s discussion of Frege in *Meaning and Necessity*, see Bell (1998), chapter 1 (especially pp. 39-41).

possibility of intersubstitutivity is nevertheless restricted in that, within intensional contexts, intersubstitutivity is allowed only of terms that are not merely co-referential but also “logically equivalent” or “L-equivalent.” L-equivalence is itself defined in terms of equivalence *according to* the semantic rules of the language system: that is, two expressions of the same language are L-equivalent if the assertion of their synonymy is “logically true” or “L-true”, and a sentence is L-true if its truth can be established on the basis of the semantical rules of the language system alone, without reference to any extra-linguistic facts.³⁶ This yields a distinction between intension and extension with the consequence, as Carnap notes, that it is possible to maintain of every referring expression that it has only one intension and only one extension, whatever the context in which it appears or is embedded. In this way, on a direct level, Carnap’s method avoids the troubling tendency to lead to an infinite proliferation of entities, and as a consequence avoids directly producing the systematic ambiguity of the referential meaning of propositions that problematizes Frege’s own picture of sense. This is because, on Carnap’s picture, sense is effectively structured in advance by the structure of the language and the co-intensionality (essentially, synonymy) relations it proposes. Thus (in Deleuze’s terminology), the being of the presuppositional stratum of sense is here referred to that of the language-system as a general set of rules governing synonymy or co-intensionality relationships, and thus constraining the identity conditions of sense by determining the permissible substitutivity relationships in intensional contexts.

In this way, Carnap’s own “method of intension and extension” operates as a solution to the antinomy of the name-relation, preventing it from arising, and similarly precludes the troubling infinite proliferation of entities that arises, on Frege’s picture, from the treatment of senses (in oblique contexts) as possible objects of reference. Since the equivalence of sense between two expressions is not understood here as the identity of a referent, but rather in terms of the relationship of L-equivalence established by the rules of the language system, it is not generally the case that each sense operates as a distinct object of reference, itself requiring a new sense, and so forth. On the other hand, there are at least three problems that remain that indicate how the attempt to situate sense in the structural generality of a language framework still gives it an uncertain ontological status, plausibly grounded in the uncertain status of the underlying stratum of sense itself.

To begin with, even given Carnap’s identification of synonymy relations with equivalences according to the rules of a language system, it remains possible for a speaker to be in doubt about these relations. This is the case, for instance, if Jones knows that Smith is an unmarried male, but does not know that Smith is a bachelor; here, even if the language framework establishes the relevant synonymy relation, there still remains a difference in what Frege would call “cognitive significance” [*Erkenntniswert*] for the individual speaker, and hence a difference in sense. It is thus possible for an instance of the antinomy that Carnap calls the antinomy of the name-relation to arise for an individual speaker, even given the total *corpus* of rules of the language-system. And further, if we wish to distinguish senses in a case like this, the distinction will again lead to the tendency for an infinite proliferation of entities. If we here again follow Deleuze in understanding sense not as structured primarily by the structural generality of a particular language system, but rather as a presuppositional dimension already invoked any time one

³⁶ Carnap (1947), pp. 10-11.

speaks, the standing possibility of such an individual difference in sense *regardless* of the specific form of the “language system” purportedly in use points to the necessary failure of any such system to capture the phenomenon of sense in its full generality.

Similarly, even on Carnap’s picture, it is evidently possible for some identifying judgments to be logically true in Carnap’s sense—and hence analytic in Carnap’s sense—while they are nevertheless cognitively substantive and informative. Thus, for example, given the semantic rules characteristic of the use of “triangle” for a given language system, it may be *logically* true (or “analytic,” in Carnap’s terms) that an equilateral triangle is equiangular; but this claim may nevertheless evidently be informative for a speaker and requires a non-trivial proof. This points to an evident difference in sense between “equilateral” and “equiangular,” regardless of the language system, and it seems clear that, given any specification of semantic rules for a language system, there will remain differences of this sort. Third, and perhaps most tellingly, Carnap’s criterion of synonymy, as specified relative to the semantic rules of a *particular* system, still gives no answer to the question of the basis of *cross-language* synonymies or translational equivalences, so that it would be possible to say (in English) of Copernicus that he asserted that the planetary orbits are circles. If, in particular, there is some basis for the translation relationship that is evidently invoked by this description, then its further specification will turn on the possibility of giving a criterion for sameness of sense across languages, rather than the one restricted to a particular language system.

In each of these cases, the evident and standing possibility of an identity, or distinction, of sense that remains undetermined even given the relevant language-system can be seen as pointing, on a more ontological level, to the necessary failure of the structural generality of any language system fully to capture the structure of distinctions of sense on which Frege’s original argument turns. Indeed, if we may draw a more general lesson, it appears plausible from these cases that, for *every* rule-governed stipulation of the basis of intensional distinctions, it is still at least possible for the stipulated distinctions to fail to grasp real distinctions actually evident in intersubjective use. If this is correct, then it is evidently the case that any attempt to capture the basis for sense in the structural generality of a language system composed by its semantic rules will itself depend upon the *prior* availability of the underlying and originary stratum of sense inherent in use, and will indeed earn the justification of its own rules only by explicit or implicit reference to it. Here, the dimension of sense will again operate, as Deleuze suggests, as a presuppositional stratum, leading to the problem of regress with respect to any attempt to fixate it in general or conceptual terms. Behind the particular structure of a stipulated language system, there will always already be more possible distinctions of sense evident in the ordinary linguistic behavior that authorizes it. These distinctions can again be codified, but the situation will then repeat itself. What will evidently remain incapable of total theorization by means of structural generality is the underlying structure of sense itself, as it is ordinarily available to us in everyday discourse.

However, what is involved in describing or theorizing the actual structure of sense as we may thus consider it to be “present” in individual or collective linguistic usage, even if it cannot apparently be captured in the structural generality of a rule-bound “language system”? Recognizing some of these difficulties, Carnap, in fact, grants that we need a further criterion of intensional structure beyond that

provided by the semantic rules of an individual language structure alone.³⁷ In particular, in response to the problem of the attribution of belief sentences in general, Carnap proposes to identify sub-propositional differences in intensional structure with differences in a speaker's dispositions to assert or deny specific sentences: thus it is intelligible to suppose of a speaker that she would agree, when prompted, to the statement "The number of inhabitants of Chicago is greater than 3 million" but not (since, as we may suppose, she is not capable of the requisite calculation) to "The number of inhabitants of Chicago is greater than $2^6 \times 3 \times 5^6$."³⁸ The two sentences will thus be, although L-equivalent in the language as a whole, different in sense for the speaker, and will hence require translation into another language by means of different sentences that capture this sub-sentential difference in intensional structure.³⁹ In this way, such distinctions of sense that are not sufficiently determined by the semantic rules specifying L-equivalences for terms of the system as a whole in terms of sentential relations of L-equivalence will depend on the behavioral dispositions of individual speakers to assent to, or deny, sentences within the language as a whole. Furthermore, Carnap suggests, the possibility of translation between different languages will be assured by identifying translational relations correlating terms of one language to another, rather than simply relations of logical equivalence of sentences.

In this way, in response to the evident problem discussed above, namely that distinctions in sense may remain even given the total specification of a language system, Carnap proposes ultimately to attribute them not to the generality of such a system but rather to *individual* differences in responses or dispositions to respond to sentences. With this, he essentially concedes the point that sense, as it is available to individual speakers, cannot be ultimately located within the structural generality of a "language system" at all. Therefore, given any such generality of rules or constitutive forms, it is evidently still intelligibly *possible* for distinctions of sense to arise on the level of individual behavior that are not captured by it. Just as significantly, however, Carnap effectively raises the question whether there is *any way completely* to capture theoretically the distinctions in sense that are evidently always available to speakers in the real practice of a language. In proposing the behaviorist criterion of sub-sentential intentional isomorphism, couched in terms of speakers' dispositions to respond affirmatively or negatively when prompted to particular statements, Carnap effectively imagines that there is, nevertheless, *some* level on which identities and differences of propositional and sub-sentential senses can effectively be fixed. In particular, if the infinite totality of these identities and differences admittedly cannot (in view of the difficulties above) be founded in the structural generality of a language system, Carnap nevertheless supposes that they must retain an objective foundation in the actual behavioral dispositions of speakers, as elicited in an (idealized) totality of promptings. If, however, these differences themselves can be seen as pointing, as Deleuze suggests, to the reality of an underlying level or stratum of sense that effectively precedes and underlies the authorization of *any such* reconstructive system of linguistic generality (whether formulated on the level of the "language system" or on that of individual behavioral dispositions), then the persistence of the possibility of distinctions of sense here points to an irreducibility founded in its structurally paradoxical character. In other words, if sense

³⁷ Carnap (1947), pp. 51-59.

³⁸ Carnap (1947), pp. 54-55; 59-63.

³⁹ Carnap (1947), pp. 62-64.

necessarily withdraws from any positive structural fixation of it in the way here indicated, an underlying *ontological* reason for this can be found in the paradoxicality of its being, whereby (as in the initial regressive paradox) any linguistic reference to this being invokes the possibility of another reference prior to it.

As we shall see, the issue bears a central significance for assessing the ontological implications of the radical and devastating critique of the determinacy of sense that was developed by Quine over a period of roughly twenty-five years, from his first critical reactions to the project of Carnap's *Logical Syntax of Language* (1933) to *Word and Object* (1960). If, in particular, Carnap's discussion in *Meaning and Necessity* effectively formulates a deeply seated ontological challenge to the assumption that sense can be fixed in such a way as to determine its conditions of identity and difference on the level of a total, theoretical description of language, he nevertheless continues, with the formulation of the behaviorist criterion of sub-sentential, intensional isomorphism to assume this fixity on the level of the totality of individual speech dispositions. To put things this way is, however, to suppose that both the sense of terms within a language and their translation to another language is objectively determined by the totality of these dispositions themselves. This is just the assumption that Quine would challenge in his increasingly radical critique of Carnap's assumptions about semantic determinacy, culminating in the thesis of the indeterminacy of radical translation, which Quine announces in 1960. As we shall see, the critique proceeds by means of challenging Carnap's specific conceptions of the determinacy of sense as grounded in structural generality. At the same time, it adduces criteria ultimately grounded in what is, for Quine, the sole possible objective basis of any positive conception of linguistic meaning: the evidentiary basis provided by the totality of "objective" speech dispositions as they can be recovered through radical translation. On the level of the ontology of sense, this supports, for Quine, an ultimately *eliminativist* conclusion: if there are no criteria to be found, even in the totality of objectively existing speech dispositions, for the identification and differentiation of senses, both the notion of sense and all actual intentional and intensional usage should be rejected. If, however, translational indeterminacy is seen as grounded more deeply in the kind of ontologically paradoxical, but nevertheless positive, structure of sense to which Deleuze's own development points, then there is reason to think that the failures of Carnap's projects of structural generalization as well as behavioral reconstruction itself have a unitary cause in the implications of this paradoxical structure itself. It would then be possible, without disputing the indeterminacy results, to situate them within a positive and objective (though paradoxical) logical and structural accounting for sense rather than (what is envisioned as) a total accounting for the objective world that demands its expulsion.

III

In Quine's historically decisive and multi-layered critique of Carnap's picture of language and meaning, both its characteristic conventionalism about the institution of the sense of linguistic expressions and, even more broadly, its deeper underlying assumptions about the effective structural foundations of meaning come into question on the basis of what may be seen as a deeper appeal to the actuality and lived reality of linguistic use. Even the question of the force and generality of *logical* laws and principles in governing a language is centrally at issue. In the 1936 article "Truth by Convention," Quine challenges the conventionalist doctrine of logical necessity, on which the necessity of logical truths and the logical

relationships of deduction and inference among sentences of a language are wholly determined by means of conventionally stipulated rules. In a decisive argument at the end of the article, Quine considers the problem that the application of a set of logical conventions to the sentences of a language must certainly have an infinite scope, since the number of sentences that can be constructed and seen as logically interrelated must itself be infinite.⁴⁰ But this infinite development must itself be determined by what must, on a conventionalist view (or indeed on *any* view that sees logical necessity as residing in the adoption of a finitely formulable set of rules), be understood as a *finitely specified* set of paradigms or rules. Here, however, as Quine argues, there lurks the decisive problem of a vicious infinite regress, such that the application in practice of any set of logical conventions appears itself to depend upon an antecedent use, and force, of the very same conventions.

As Quine acknowledges in a footnote, the underlying problem was first seen by Lewis Carroll in the 1895 dialogue “What the Tortoise Said to Achilles.”⁴¹ In the dialogue, Achilles enters into his notebook a familiar instance of deductive reasoning: the inference from

(A) Things that are equal to the same are equal to each other

And (B) The two sides of this triangle are equal to the same

To (C) The two sides of this triangle are equal to each other

Here, as the Tortoise points out, “logic” is itself seen as compelling the truth of (C), given the truth of (A) and (B). But what would one say to an interlocutor or objector who denies this, taking it to be possible to maintain the truth of (A) and (B) jointly *without* admitting to (C)? In response to such an interlocutor, it would apparently be necessary to introduce a further principle, to the effect that *if* (A) and (B) are true, then (C) *must* be true. But this further principle—call it (Z)—must then appear among the premises of the argument, which now must be seen as maintaining (in full) only that *if* (A), (B), *and* (Z) are true, then (C) *must* be true. But this might itself be objected to; and we would now have to introduce a further premise (and so on, *ad infinitum*). In effect, the new statement needed at each step amounts to a re-statement of the legitimacy of the application of the (so-called) “general rule” of deductive inference to the particular case of what we already have. This re-application, however, can only be licensed by a pre-existing understanding that the rule is indeed applicable to the (new) case at hand, and we cannot formulate this presupposition without circularity, since its formulation in each case presupposes itself.

In the context of the consideration of Carnap’s conventionalist structuralism about logic, the general consequence, according to Quine, is that:

...if logic is to proceed *mediately* from conventions, logic is needed for inferring logic from the conventions. Alternatively, the difficulty which appears thus as a self-presupposition of doctrine can be framed as turning upon a self-presupposition of primitives. It is supposed that the *if*-

⁴⁰ Quine (1936), pp. 270-73.

⁴¹ Quine (1936), p. 271; Carroll (1895).

idiom, the *not*-idiom, the *every*-idiom, and so on, mean nothing to us initially, and that we adopt the conventions . . . by way of circumscribing their meaning; and the difficulty is that communication of [these conventions] themselves depends upon free use of those very idioms which we are attempting to circumscribe, and can succeed only if we are already conversant with the idioms.⁴²

Quine sees the force of the problem specifically as rendering idle the prospect of a conventionalist account of the basis of the meaning of logical terms: if the adoption of logical conventions would indeed, as he argues, require a prior appeal to these conventions themselves, then it cannot be clear “wherein an adoption of the conventions, antecedently to their formulation” actually consists.⁴³ In this respect, any account of the force of the logical principles as resting in the (actual or idealized) adoption or institution of the conventions said to determine them will fail, since it will presuppose the prior availability of just these conventions themselves. It is thus not reasonable to hold that the generality of their use rests on such a prior adoption. Furthermore, the claim that they are conventionally adopted apparently adds little to “the bare statement that the truths of logic and mathematics are *a priori*, or to the still barer behavioristic statement that they are firmly accepted” in actual practice and use.⁴⁴

In this way, Quine effectively suggests, the regress pointed out by Carroll demonstrates the emptiness of what must appear as a fictional picture of the *origin* of the logical structure of a language, i.e., the picture invoked in Carnap’s own conception of logical syntax as the free provision of stipulative rules for the combination of signs. However, seen in the broader context of the question of the *being* of sense, the problem pointed out here has a broader implication: that of the impossibility of the reduction of sense to *any* kind of structural generality that can be adequately captured in finite terms at all. As we saw above, *if* sense is effectively presupposed as a unitary and originary *stratum* of linguistic functioning, responsible for the three propositional dimensions of denotation, manifestation, and signification and irreducible to any of them, it necessarily has the ontologically paradoxical status that is suggested by what Carnap treats as the antinomy of the name-relation itself: that of being able to be posited as an entity or a positive structural phenomenon only by reference to what then must be an additionally prior entity or of operating as a prior condition for linguistic meaning only by incessantly referring itself back to a still more basic stratum of conditioning. The paradoxical structure of regress here defines a paradoxical ontology of sense. Yet it can be asked also whether there is a paradox involved in the very proposal to submit the structure of sense to the generality of a logic: whether there is something paradoxical about the very project of submitting sense to a structurally defined logic at all. In Deleuze’s terms, this is effectively the question of the paradox involved in the attempt to reduce either (or both) of the propositional dimensions of denotation and manifestation to that of signification. If this attempt were successful, it would verify the possibility of the project that has implicitly or explicitly defined the ambitions of a wide variety of descriptive and critical projects within the analytic tradition, namely that of understanding both the constitution of sense and the generality of linguistic

⁴² Quine (1936), pp. 271-72.

⁴³ Quine (1936), p. 273.

⁴⁴ Quine (1936), p. 273.

usage as unitarily grounded in a pre-existing structure of logical or logical-syntactic rules. If, however, it cannot succeed, or at least cannot do so without also verifying an essential kind of structural paradox of force and application at the level of sense itself, this can be seen both as inherently complicating these projects and nevertheless providing the positive basis for a realism about it.

It is thus notable that, in considering and rejecting the possibility of reducing the other two propositional dimensions to that of the conceptual generality of signification, Deleuze refers explicitly and illustratively to Carroll's text, locating the paradox it formulates "at the heart of logic" and emphasizing its importance "for the entire theory of symbolic implication and signification."⁴⁵ Deleuze underscores how the regress of the paradox as developed by Achilles and the Tortoise amounts to a series of steps in which what previously operated only as premises, only conditionally asserted, nevertheless have to be detached from the general order of implication and must be asserted in their own right, in order to yield the conclusion desired; but this itself results in what can only be the *conditional* assertion of a new conclusion, and so forth. In this respect, the series of inscriptions that the Tortoise is forced to record in its attempt to ensure the generality of the force and bearing of logic has the form of the incessant repetition of the attempt to establish this generality in a single proposition that itself would be unconditional. But any such attempt, in turn, yields only the conditionality of a proposition that must itself then be grounded in a further one. At each step, when we consider a proposition to be positively concluded, this proposition must itself be considered to be affirmed for itself, and thereby related to a state of affairs taken as *actually existing* on the level of denotation, quite independently of the implicative relations that articulate the dimension of its signification. For this to be possible, however, two conditions must be fulfilled:

It is first necessary that the premises be posited as effectively true, which already forces us to depart from the pure order of implication in order to relate the premises to a denoted state of affairs which we presuppose. But then, even if we suppose that the premises A and B are true, we can only conclude from this the proposition in question (let us call it Z)—we can only detach it from its premises and affirm it for itself independently of the implication—by admitting that Z is, in turn, true if A and B are true. This amounts to a proposition, C, which remains within the order of implication and is unable to escape it, since it refers to a proposition, D, which states that "Z is true if A, B, and C are true ...," and so on to infinity.⁴⁶

In this way, each step amounts to separating out from the generality of signification a proposition that is fixed and affirmed as a denoted state of affairs, only to realize that this separation can be authorized only by means of the denotative truth of a further proposition, itself subject in its implications again to this general order. In this respect, at each step of the paradox:

...the conclusion can be detached from the premises, but only on the condition that one always adds other premises from which alone the conclusion is not detachable. This amounts to saying that signification is never homogenous; or that the two signs "implies" and "therefore" are

⁴⁵ LofS, p. 16.

⁴⁶ LofS, p. 16.

complete heterogeneous; or that implication never succeeds in grounding denotation except by giving itself a ready-made denotation, once in the premises and again in the conclusion.⁴⁷

In this way, what appears in the context of Quine's critique of Carnap's conventionalism as the always-presupposed necessity of logic in grounding the application of its own force is here seen as the necessary failure of logical inferences, as actually carried out on any specific occasion, to succeed in grounding themselves in a general order of logical-linguistic inference; or, seen another way, and as Deleuze suggests, as inscribing denotation and signification in a circle of mutual presupposition that can be broken only by the strategic presupposition of a level of paradoxical sense at the root of both.

If this suggestion is correct, then Quine's objection to Carnap's conventionalist picture of the institution of language in 1936 is just a specification of the more general paradoxical structure that results from any attempt to ground the application of logic on a particular occasion in its presumed inferential generality: the specification of any particular inferential relation establishes only the conditionality of a particular inference, conditional on the presumed and established force of another proposition which cannot itself be separated from inferential conditionality. The attempt to ground the force of logical rules, as applied to any particular instance of derivation and establishing the truth of its conclusion, itself always presupposes the denotation of a proposition that must thereby be separated from the logical order of signification, whose primacy it is supposed to establish itself. It follows not only that, as Quine suggests, the application of logical conventions cannot be grounded in these conventions themselves, but also that, as Deleuze suggests, any attempt to ground the logic of sense univocally in a general order of conceptual, inferential relations will, similarly, fail.

Developing the initial attack on Carnap's conventionalism in the mid-1930s, Quine's critique of the entire picture of necessity, logic, and truth that underlies it would, repeatedly, draw the moral of the irreducible appeal to *use* in the analysis and characterization of linguistic structure: the moral, that is, that there is nowhere to be found an adequate description and explication of "the" structure of a language as such. Instead of being located in an order of general rules or conceptual truths, distinctions of meaning—insofar as they exist in the "practice" of a language at all—are rather to be accorded to the actual behaviors of its speakers, as they are recoverable in an objective way from these behaviors themselves as observed from a neutral perspective. A further decisive moment of the development of this critique would come in 1950, with Quine's historically transformative rejection of the analytic/synthetic distinction in "Two Dogmas of Empiricism."⁴⁸ Quine's decisive argument against the reductive project of a logical analysis of language follows from what is seen to be the absence of any defensible and univocal criterion of synonymy for terms or sameness of meaning for sentences in the actual practice of the language, which the linguist is to reconstruct.

If, however, the objection that Quine already brings against Carnap's picture of language as structural generality in 1936 is seen as already *ontologically* decisive, we are in a position to see that it is not only the possibility of logical analysis, but more broadly the force of logic itself, that is here necessarily

⁴⁷ *LofS*, p. 16.

⁴⁸ Quine (1950).

referred back to a presuppositional dimension of paradoxical sense. From the perspective thereby gained, the real basis of Quine's appeal to the irreducibility of use, and hence to Carnap's structuralist picture of language, is thus to be seen as located in this dimension, inherent in the everyday life of linguistic usage but which necessarily and essentially eludes any systematic formulation of it. As we shall see, this offers the possibility of seeing Quine's most important results—including the decisive result of indeterminacy of radical translation that he formulates in *Word and Object* in 1960—as not simply negative and critical but as actually positively motivated by the reality of the very paradoxical structure of sense that Deleuze theorizes. It thereby makes possible, even in the face of the undisputed phenomenon of indeterminacy, an attitude of overall realism about sense, grounded in the features of its ontological structure thus demonstrated.

IV

In Chapter 2 of *Word and Object*, Quine specifies the project of radical translation as that faced by an interpreter constrained to develop a systematic translation of the utterances of a community of speakers of an otherwise unknown language, based entirely on the observable evidence of their dispositions to assent or decline to the translator's verbal prompting under situationally varying circumstances. Famously, Quine draws the conclusion of an essential and irremediable *indeterminacy* of the translation relations that can thereby be established, limiting oneself to what is grounded in the objectively evident facts themselves. As Quine puts the result:

...manuals for translating one language to another can be set up in divergent ways, all compatible with the totality of speech dispositions, yet incompatible with one another. In countless places they will diverge in giving, as their respective translations of a sentence of the one language, sentences of the other language which stand to each other in no plausible sort of equivalence however loose.⁴⁹

On this ground he proceeds, in Chapter 6, to the eliminative conclusion of a "Flight from Intension": in specifying an "austere" notational scheme suitable for "limning the true and ultimate structure of reality," all propositional and other intensional objects are to be eliminated.⁵⁰ This includes not only propositions as such, but also the (supposed) objects of verbs of intentionality, both those taking propositional and non-propositional complements (e.g., "wants" and "remembers" as well as "believes that" and "hopes that"), as well as the (purported) senses of individual referring terms. In the "austere" scheme, there is, further, no provision for indirect quotation; all quotation, except for direct, is to be eschewed.

Quine's argument for this conclusion has several strands but all of them turn on the indeterminacy of radical translation and what is, as Quine argues, the resultant absence of any objectively defensible

⁴⁹ Quine (1960), p. 27.

⁵⁰ Quine (1960), p. 221.

criteria for the synonymy of propositions. In particular, given the indeterminacy results, there are, in general, no sufficient criteria for the sameness or difference of propositional meanings across languages or even within a single language across agents or occasions of use or quotation. An approximation to sentence synonymy can be made by using a behavioristically defensible notion of “stimulus synonymy,” but this will be much broader and looser than what is envisioned by the apparent determinacy of meanings as they are referred to in ordinary intentional and quotational idioms. At any rate, once the translation of individual terms is undertaken, the aspects of indeterminacy that vitiate the determinacy of reference will ensure as well that there are no, even remotely, adequate criteria for synonymy, or the sameness of sense.⁵¹ More generally, given that, on Quine’s argument, translational relations between languages will always be affected by a large degree of indeterminacy with respect to the objectively attainable facts, there is little warrant in general for countenancing propositions or sentential meanings at all:

For, insofar as we take such a posit seriously, we thereby concede meaning, however inscrutable, to a synonymy relation that can be defined in general for eternal sentences of distinct languages as follows: sentences are synonymous that mean the same proposition. We would then have to suppose that among all the alternative systems of analytical hypotheses of translation . . . which are compatible with the totality of dispositions to verbal behavior on the part of speakers of two languages, some are “really” right and others wrong on behaviorally inscrutable grounds of propositional identity. Thus the conclusions reached in § 16 may of themselves be said implicitly to scout the whole notion of proposition, granted a generally scientific outlook . . . The very question of conditions for identity of propositions presents not so much an unsolved problem as a mistaken ideal.⁵²

In this way, Quine draws from the consideration of translational indeterminacy the conclusion of a far-ranging eliminativism about sense, as well as intentionality in general. As Quine notes, however, the analysis in terms of criteria for identity of propositional senses tends not only to produce, given his assumptions about objectivity, the eliminative conclusion, but also to demonstrate the *unity* and irreducibility of intentional idioms, propositional constructions, and indirect quotation with respect to the domain of phenomena they at least purport to express. Crediting Brentano with the modern re-discovery of intentionality as well as the suggestion of its holistic irreducibility to the non-intentional, Quine notes the significant possibility, consistent with all that he has said about translation and indeterminacy, of, in fact, *affirming* this irreducibility and, along with it, endorsing an “autonomous science of intention” rather than simply eliminating it from the scientific world:

The Scholastic word “intentional” was revived by Brentano in connection with the verbs of propositional attitude and related verbs of the sort studied in s. 32—‘hunt’, ‘want’, etc. The division between such idioms and the normally tractable ones is notable. We saw how it divides

⁵¹ Quine (1960), pp. 216-17.

⁵² Quine (1960), pp. 205-206. Section 16, titled “On Failure to Perceive the Indeterminacy,” considers and rejects (among others) the thought that translational determinacy can be assured even by consulting a bilingual speaker’s intuition about the correspondence of sentences in one language to sentences in the other.

referential from non-referential occurrences of terms. Moreover it is intimately related to the division between behaviourism and mentalism, between efficient cause and final cause, and between literal theory and dramatic portrayal. ...

The analysis in § 32 was such as to spare us any temptation to posit peculiar “intentional objects” of hunting, wanting, and the like. But there remains a thesis of Brentano’s, illuminatingly developed of late by Chisholm, that is directly relevant to our emerging doubts over the propositional attitudes and other intentional locutions. It is roughly that there is no breaking out of the intentional vocabulary by explaining its members in other terms. Our present reflections are favorable to this thesis.⁵³

Given the plausible irreducibility of the intentional to the non-intentional, it is plausible as well that descriptions of sense are similarly irreducible. In fact, as Quine notes, if (as has been argued) intentional notions generally share the significant indeterminacy that has been demonstrated in the case of propositional meanings, it is reasonable to take the indeterminacy results as establishing the irreducibility of intensional and intentional language quite generally:

Evidently, then, the relativity to non-unique systems of analytical hypotheses invests not only translational synonymy but intentional notions generally. Brentano’s thesis of the irreducibility of intentional idioms is of a piece with the thesis of indeterminacy of translation.

One may accept the Brentano thesis either as showing the indispensability of intentional idioms and the importance of an autonomous science of intention, or as showing the baselessness of intentional idioms and the emptiness of a science of intention.⁵⁴

In other words, in the wake of the indeterminacy results and the irreducibility of the intentional that they suggest, the options offered to the theorist are only two: either to adopt Brentano’s thesis and pursue an “autonomous” description of the structure of intentionality independent of the reductive project of a scientific ontology; or to adopt, within this ontology, the eliminative attitude that Quine himself favors:

My attitude, unlike Brentano’s, is the second. To accept intensional usage at face value is, we saw, to postulate translation relations as somehow objectively valid though indeterminate in principle relative to the totality of speech dispositions. Such postulation promises little gain in scientific insight if there is no better ground for it than that the supposed translation relations are presupposed by the vernacular of semantics and intention.⁵⁵

Here, in support of his own favored option of eliminativism, Quine adverts once again to the failure of the translational enterprise to find a behavioral basis, even given the totality of speech dispositions, for the identity or differentiation of propositional meanings or senses. From the perspective recommended by the results of the analysis of translation, the criteria of determinacy and identity that are apparently assumed by everyday intentional usage have not been found, and Quine accordingly concludes that

⁵³ Quine (1960), pp. 219-20.

⁵⁴ Quine (1960), p. 221. Section 32 investigates the phenomena of referential opacity (failure of intersubstitutivity) in various verbal contexts, including the ones Quine mentions here as well as “is looking for”; “is endeavoring that”; “was so-called”; etc.

⁵⁵ Quine (1960), p. 221.

unreflective adherence to the vague suggestion of this usage alone promises no real gain in scientific insight.

However, if we affirm the being of sense from a position motivated not only by the desire to vindicate everyday idiom but also by the kind of presuppositional and ontological reflection about the being of sense that forms the core of Deleuze's analysis, a more robust ground for a positive defense of the first option—that of affirming the “autonomy” and irreducibility of a theory of intention grounded in the logical theory of sense—once more comes into view. As we have seen above, Deleuze's strategic positing of the fourth propositional “dimension” of sense, when considered in its ontological implications, massively vindicates Brentano's and Chisholm's thesis of the irreducibility of the intentional: if sense cannot be reduced to denotation, manifestation, or (most decisively) the overarching structural generality of signification, it will also evidently resist any reduction to facts, structures, or realities describable without recourse to it. Beyond this, however, what arguably emerges from Deleuze's analysis are not only ontologically illuminating reformulations of familiar arguments for the irreducibility of the intentional but also principled grounds for describing and affirming a positive ontological structure of sense as thus irreducible. On this suggestion, there will indeed be no *consistent* reduction of propositional sense to the world of things, or to the realm of individual intention, or to the space of conceptual generality. The arguments that show the irreducibility of each of these domains to the other two also point, as we have seen, to the paradoxical ontology of sense itself, whereby it both is, and is not, an entity, and so cannot *consistently* figure in any reductive analysis seeking to identify its basis in the empirical facts of usage or the general structure of concepts. But if this paradoxical being is accepted, sense can nevertheless be affirmed, in a realist way, and the arguments that verify its irreducibility to the other dimensions of the proposition and, indeed, to any of the three orders of objects, concepts, or subjective intentions themselves will be seen instead as positive *indicia* of its underlying logical form.

What, then, of Quine's arguments, which draw the eliminative conclusion directly from the failure of factual evidence to vindicate criteria for the identity of sense? As we have seen above, the reasoning which verifies, on Deleuze's analysis, the paradoxical being of sense also give it the status, already at least implicit in Frege's original appeal, of a “differential” entity: one not constituted, in any of its individual instances, by any unity of essence or simple identity, but rather by the differential relationships that show up in the possibilities for significant differentiation of modes of presentation to which Frege points. To affirm sense in the light of them is, then, to theorize it not only as a paradoxical but also a differential entity: one for which positive conditions of identity are relatively secondary, and to be found, in general, only relative to specific and occasional differentiations that are essentially prior to them. Following the suggestion, then, we may certainly agree with Quine that *general* criteria for the identity of propositional senses are not to be found, and are certainly not to be vindicated on behavioral or any other factual grounds. However, the evident fact that for any *given* differentiation of sense it is possible to envision its own ontological condition in the paradoxical being of sense itself at least motivates the description of its structure, and the analysis has the result that this structure is intelligible – if paradoxical – even in abeyance of fixed or general criteria for the identity of its constituent entities.

If the ontological implications of Deleuze's analysis are thus affirmed, it would be necessary to dispute on its basis Quine's motto "no entity without identity," or at least to subject it to the implications of the existence of a "paradoxical entity" that, as underlying identity, is itself constituted by its difference from itself. What would be gained, on the other hand, would be a substantial positive account of the phenomenon of sense *as indeterminate* that nevertheless does not necessarily yield the eliminative conclusion of its nonexistence. As we have seen, what is suggested by the paradoxical logic and ontology of sense, following Deleuze's analysis, is not refutation of indeterminacy, but rather an independent positive demonstration of its actual ontological basis in the underlying paradoxical structure of sense itself. Here, the irreducible extensibility and diachrony of usage which is the index of the productivity of sense is seen as the real positive basis for what appears, within the reductive project of Quine's regimenting ontology, rather only negatively as the indeterminacy of translation relations with respect to the scientifically objective facts.

More specifically, as we have seen, the parallel arguments which suggest, for both Deleuze and Quine, the irreducibility of logically structured sense to any *corpus* of general rules governing inferential and deductive relations in a language as a whole, themselves already suggest that a sufficient basis for it is to be found only in the diachronic and intersubjective reality of actual linguistic use. If this suggestion is generalized and applied to the problem of the intelligibility of an initially unfamiliar language, its yield is just the constraint that Quine puts on the problem of the determination of sense in *Word and Object*: that of the radical interpretation of an initially unfamiliar language on the sole basis of the translator's observation of its speakers' linguistic behavior. Given this constraint, there is evidently no possibility of establishing determinate *general* criteria for the identity and difference of senses, either across languages or within one. But if, as Deleuze's analysis suggests, this impossibility is seen as rooted in the real and ontological irreducible stratum of sense itself, then we have good reason to see this result as a consequence of this reality rather than as motivating its denial. In particular, a translation manual, such as the radical translator is charged with producing, is itself essentially a structural generality in the relevant sense. If Deleuze's ontological consideration is credited, there is reason to think that no such generality can be seen as grounding sense sufficiently and in general; so it is, from this perspective, not to be seen as surprising that, as Quine shows, no single translation manual can succeed in uniquely fixing determinate translation relations either. Quine's conclusion that any such manual must be arrived at by means of the stipulation of a host of "analytical hypotheses" – themselves ungrounded in the objective facts – can, then, be viewed as just the reflection of the necessary insufficiency of any structural generality for determining distinctions of sense as such and in general.

If these suggestions are accepted, it will thus apparently be possible to affirm the reality of sense while nevertheless largely accepting Quine's indeterminacy arguments. Of course, the mode of acceptance will not then be that of its simple positing *within* the total realm of entities and objects whose properties and relations are characterized by means of Quine's "austere" scheme. Rather, it will be an essential aspect of sense positively to escape any such totality, or to offer terms for characterizes its structure overall to begin with. Incapable of appearing wholly *within* the world, but nevertheless pointing to the pervasive generation of its logical structure, sense will thus withdraw from any naturalist project committed to the cataloguing of its empirically individual phenomena or the elimination of all that is not

simply comprised of them. But the choice to affirm it will nevertheless be the condition for the possibility of a descriptive analysis which may be considered illuminating to the extent that we, as those who inhabit sense, find ourselves in constitutive relation to the specific reality it implies.

Works Cited

Bell, J. A. 1998. *The Problem of Difference: Phenomenology and Poststructuralism*. Toronto: University of Toronto Press.

Carnap, R. 1934. *The Logical Syntax of Language*. Trans. A Smeaton. London: Routledge and Kegan Paul, 1937.

Carnap, R. 1947. *Meaning and Necessity: A Study in Semantics and Modal Logic*. Enlarged Edition. Chicago: U. Of Chicago Press, 1956.

Carnap, R. 1950. "Empiricism, Semantics, and Ontology." *Revue Internationale de Philosophie*, 4 (1950), pp. 20-40.

Carnap, R. 1952. "Meaning Postulates." *Philosophical Studies*, 3 (1952), pp. 65-73.

Carroll, L. 1895. "What the Tortoise Said to Achilles." *Mind* 4:14, pp. 278-80.

Deleuze, G. 1969. *The Logic of Sense*. Transl. by Mark Lester with Charles Stivale. New York: Columbia U. Press, 1990.

Frege, G. 1884. *Foundations of Arithmetic*. Transl. by J.L. Austin. Oxford: Blackwell, 1997.

Frege, G. 1892. "On *Sinn* and *Bedeutung*." Transl. by Max Black. In M. Beaney, ed., *The Frege Reader* (Blackwell: 1997).

Livingston, P. M. 2008. *Philosophy and the Vision of Language*. New York: Routledge.

Quine, W. V. 1936. "Truth by Convention," in *Readings in Philosophical Analysis*, ed. by Herbert Feigl and Wilfrid Sellars. New York: Appleton-Century-Crofts, 1949.

Quine, W. V. 1950. "Two Dogmas of Empiricism." *Philosophical Review* 60 (1951), pp. 20-43.

Quine, W. V. 1960. *Word and Object*. Cambridge, MA: MIT Press.