

Burge, Quine, and Initial One-word Sentences

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A thesis submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Philosophy.

Chapel Hill
2011

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ABSTRACT

Miroslav K. Lošonský: Burge, Quine, and Initial One-word Sentences
(Under the direction of Dorit Bar-On)

In Chapter 7 of Origins of Objectivity, Tyler Burge argues, contra Quine, that initial one-word sentences, if they have truth conditions, must have structure. In this paper, I argue that Burge's argument is unsuccessful. I proceed by first clarifying the sense in which Quine denies that initial one-word sentences are structured. I then argue that Burge's argument fails to establish that one-word sentences must be structured in a sense that is incompatible with the sense in which Quine denies that they are structured. I also offer and reject a charitable revision of Burge's argument.

ACKNOWLEDGMENTS

Thanks to my advisor, Dorit Bar-On, for her invaluable comments, guidance, and patience during the preparation of this thesis. I am also indebted to William Lycan and Dean Pettit for their helpful comments.

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§1 Introduction

In Chapter 7 of Origins of Objectivity, Tyler Burge argues, contra Quine, that initial one-word sentences, “insofar as they have truth conditions,...must have structure.”¹ In this paper, I argue that Burge’s argument is unsuccessful. My paper will be structured as follows. In section 1, I offer some brief background remarks on Quine and initial one-word sentences. In section 2, I provide an initial formalization of Burge’s argument as well as a few explanatory remarks. Section 3, which constitutes the bulk of this paper, contains my critique of Burge’s argument. I proceed by first clarifying the sense in which Quine denies that initial one-word sentences are structured. I then argue that Burge’s argument fails to establish that initial one-word sentences must be structured in a sense that is incompatible with the sense in which Quine denies that they are structured. I’ll conclude with a more general diagnosis of the problem with Burge’s argument.

Before turning to Quine and initial one-word sentences, I should say just a little bit about the broader context in which Burge’s argument occurs. Burge’s positive project in Origins of Objectivity is to offer an account of what he takes to be “the most elementary type of objective representation”, viz., perception.² Herein lies a detailed story regarding the constitutive conditions or, more colloquially, the nature of perception. Unfortunately, I cannot do justice to the details of this project here. More relevant to my discussion in this paper, however, is not Burge’s positive project but, rather, Burge’s negative project.

¹ Tyler Burge, *Origins of Objectivity* (Oxford: Oxford University Press, 2010), pg. 230.

² Burge, *Origins of Objectivity*, 25.

Burge's negative project involves, *inter alia*, a sustained critique of what he calls *compensatory individual representationalism* (or individual representationalism, for short). Burge summarizes individual representationalism as follows:

In barest summary, Individual Representationism is marked by a negative view and a positive view about objective representation of ordinary macrophysical entities. The negative view is that ostensibly ordinary perception and perceptual belief regarding such entities is in itself constitutively deficient. It needs further *representational* help to be what it is. The positive view is that the representational help must be the individual's capacity to represent some preconditions for the relevant representation. The individual must validate the objectivity by being the source of objectification through resources for further types of representation, which provide resources for explaining or making intelligible the individual's representation of physical reality.³

According to Burge, all varieties of individual representationalism are guilty, in one way or another, of hyper-intellectualizing objective representation; individual representationalists fail to recognize that "objective representation in perception is more basic than both representation of appearances and general representations of conditions on objective representation."⁴

Burge takes Quine to fall within this individual representationalist camp.⁵ (This is because Quine takes "ostensibly ordinary perception" to be deficient for objective representation. According to Quine, objective representation requires "further representational help" in the form of certain relatively sophisticated linguistic abilities.) Burge's argument for the structuredness of initial one-word sentences occurs in the middle

³ Burge, *Origins of Objectivity*, 20-21.

⁴ Burge, *Origins of Objectivity*, 22.

⁵ According to Burge, other notable members include Frege, Russell, Moore, Price, Ayer, Carnap, Sellars, Strawson, Evans, and Davidson.

of his lengthy critique of Quine's particular brand of individual representationalism.⁶ Luckily, the rest of Burge's critique of Quine needn't worry us here. (This is because the argument of Burge's with which I am concerned in this paper is more or less self contained.) So, without further ado, let's turn to Quine and initial one-word sentences.

§2 Quine & Initial One-word Sentences

Consider the first one-word utterances of a young child, e.g., 'Fido!', 'Ball!', 'Mama!', etc.⁷ According to Quine, these initial one-word utterances are *observation sentences*. Observation sentences are sentences that meet the following three conditions⁸: First, their truth-values must vary with the occasion of utterance. (To use Quine's terminology, observation sentences are *occasion sentences*—sentences that “command[s] assent or dissent...only variably from occasion to occasion.”⁹) Second, a subject's willingness to assent to or dissent from an observation sentence at time t must depend only on the subject's sensory stimulations at t (or “present impingements”¹⁰). So, for example, the sentence 'Ancient Egyptians worshiped Osiris' is *not* an observation sentence since a subject's willingness to assent to this sentence at time t depends on more than just her

⁶ Burge devotes over fifty pages to his critique of Quine. See Burge, *Origins of Objectivity*, Chapter 7.

⁷ These one-word utterances occur during what is commonly referred to in developmental psychology and linguistics as the *one-word stage*. The one-word stage, which begins shortly after the child's first year and lasts for approximately twelve months, is marked by the child's acquisition and use of individual lexical items, e.g., 'mommy,' 'apple,' 'car,' etc. For a detailed discussion of the various stages of language acquisition, see: David Ingram, *First Language Acquisition: Method, Description, and Explanation* (Cambridge, England: Cambridge University Press, 1989).

⁸ Throughout his career, Quine offered several different characterizations of observation sentences. The characterization I offer here is taken from Peter Hylton (2004). This is because Hylton's account of Quinean observation sentences elegantly captures the main thread running through all of Quine's sometimes nonequivalent characterizations of observation sentences. See: Peter Hylton, "Quine on Reference and Ontology," in *The Cambridge Companion to Quine*, ed. Roger F. Gibson (Cambridge, U.K.: Cambridge University Press, 2004).

⁹ Thus, stimulus analytic sentences—sentences that would be assented to on any occasion—do *not* count as observation sentences. See: W. V. O. Quine, *The Roots of Reference* (LaSalle, IL: Open Court, 1973), pg. 39.

¹⁰ Quine, *Roots of Reference*, 40.

sensory stimulations at *t*. A sentence such as ‘It is raining’ is, however, an observation sentence since, at least in most cases, a subject’s willingness to assent to this sentence at *t* depends only on her stimulations at *t*.¹¹ Third, the truth-value of an observation sentence on a given occasion must be “agreed to by just about any member of the speech community witnessing the occasion.”¹² In other words, an observation sentence must meet the requirement of intersubjectivity; “unlike the reporting of a feeling, the sentence must command the same verdict from all linguistically competent witnesses of the occasion”.¹³

Initial one-word sentences, then, are the one-word observation sentences uttered by children in the initial stages of word learning.¹⁴ (From here on I will often drop ‘initial’ from ‘initial one-word sentences’.) Now, since observation sentences are directly tied to sensory stimulations in the above sense, then mastery of an observation sentence does not depend on any prior linguistic abilities. Their mastery *only* requires associating the sentence with the appropriate sorts of sensory stimulations; observation sentences can be learned by “simple conditioning”.¹⁵ Quine thus takes observation sentences (in particular, one-word observation sentences) to be the “gateway” or “entering wedge” into language.¹⁶ As Quine is quick to point out, though, this is not to say that an observation sentence cannot be

¹¹ Quine points out that there is a sense in which a subject’s willingness to assent to an observation sentence depends on more than just her concurrent stimulations; “...it must be granted...that one’s readiness even to affirm or assent to an observation sentence...is dependent still on one’s earlier training, one’s rudimentary language learning.” However, Quine doesn’t think this presents much of a problem since “we know the social criterion that distinguishes [observation sentences and non-observation sentences].” Quine, *Roots of Reference*, 40.

¹² Quine *Roots of Reference*, 39

¹³ W.V.O. Quine, *Pursuit of Truth* (Cambridge, MA: Harvard University Press, 1990), pg. 3.

¹⁴ Quine thus takes the one-word utterances of children in the initial stages of word learning to be truth-evaluable sentences. Whether or not Quine is right about this is beyond the scope of this paper. My primary concern here is simply to reject Burge’s argument for the claim that Quine’s initial one-word sentences, if they have truth conditions, must be structured.

¹⁵ Quine, *Pursuit of Truth*, 5. Also, see: Quine, *Roots of Reference*, 42: “...[An] observation sentence is one that *can* be learned by direct conditioning.”

¹⁶ Quine *Roots of Reference*, 40

learned by other, more sophisticated, methods—methods that depend on prior linguistic capacities. For example, one could learn an observation sentence “by verbal explanation or by verbal context or by analogical construction from component words previously learned.”¹⁷ Quine’s point, however, is just that observation sentences *can* be learned in a much simpler manner, viz., by merely associating the sentence with the appropriate sorts of stimulations, and thus serve as an entering wedge into language.

Quine thus takes the child’s mastery of a one-word observation sentence, in the initial stages of word learning, to simply be a matter of the child’s associating the sentence with the appropriate sorts of stimulations. This is not to say that learning an initial one-word observation sentence is entirely trivial; it still requires some capacities. *Inter alia*, the child must have the capacity to learn the distinctive traits “shared by the episodes appropriate to that observation sentence”.¹⁸ For example, in order for a child to master the one-word sentence ‘Red!’, the child must learn the patches of color that are appropriate to ‘Red!’. More generally, the child must learn that the one-word sentence ‘Red!’ is associated with visual, as opposed to tactile, stimulations.

According to Quine, an important consequence of the fact that *initial* one-word sentences are mastered by merely associating the sentence with the appropriate sorts of stimulations is that *initial* one-word sentences do not refer to particulars, substances, etc. That is, since mastery of an initial one-word observation sentence is merely a matter of associating that sentence with the appropriate sorts of stimulations, then the child should not be understood as engaging in objective reference. For example, the child’s utterance of ‘Apple!’ in the initial stages of word learning should not be understood as referring to *an*

¹⁷ Quine, *Roots of Reference*, 42

¹⁸ Quine, *Roots of Reference*, 43

apple. Rather, the child's initial one-word sentences should all be understood as "whole linguistic responses to sensory stimulation".¹⁹ As Quine puts it,

...It is not for the child to say in the first case "Hello! Mama again," in the second case "Hello! Another red thing," and in the third case "Hello! More water." They are all on a par: Hello! More mama, more red, more water. Even this last formula, which treats all three terms on the model of our provincial adult bulk term 'water', is imperfect; for it *unwarrantedly imputes an objectification of matter*, even if only as stuff and not as bits.²⁰ [my emphasis]

Since *initial* one-word sentences are merely conditioned responses to stimulation, they should not be understood as making genuine reference to particulars, substances, etc. It is not until later, once the child has acquired an additional linguistic apparatus, that it becomes appropriate to understand the child as engaging in objective reference. Until then, "there is no call to read into [initial one-word sentences]...any reference to objects."²¹

So what, then, does it take for the child's use of, say, the term 'apple' to be appropriately understood as referring to a physical particular? According to Quine, in order to understand the child as engaging in objective reference, and not merely responding to sensory stimulations, the child must be capable of individuation or, as Quine sometimes puts it, divided reference. The child must know what counts as one apple and what counts as another apple—the child must know what it takes for something to count as *an* apple. For Quine, this requires "a linguistic apparatus of plurals, identity, negation, pronouns, and quantifiers...".²² Until the child has acquired this linguistic apparatus, it is gratuitous to construe her initial one-word sentence 'Apple!' as the sentence 'There's an apple'. Again, in

¹⁹ Burge, *Origins of Objectivity*, 216

²⁰ W.V.O Quine, "Speaking of Objects," in *Quintessence* (Cambridge: HUP, 2004), pg. 95.

²¹ W.V.O Quine, "Things and Their Place in Theories" in *Quintessence* (Cambridge: HUP, 2004), pg. 230.

²² Burge *Origins of Objectivity*, 236.

the initial stages of word learning, the child's one-word sentences should be understood as merely pre-individuative, whole linguistic responses to stimulation.

According to Burge, Quine takes initial one-word sentences to be “unstructured”.²³ Since clarifying what Burge must mean by this will play a central role in my critique, I won't go into much detail here. For now, we can understand the claim that Quine takes initial one-word sentences to be unstructured as the claim that Quine takes initial one-word sentences to be merely “whole linguistic responses to stimulation” in the above sense.²⁴

§3 Burge's Argument

Burge argues, contra Quine, that initial one-word sentences, insofar as they have truth conditions, *must* have structure. Exactly what Burge means by ‘structure’ is somewhat unclear. However, since Burge is directing his argument at Quine, then the sort of structure that Burge argues one-word sentences must have (if they have truth conditions) must be incompatible with the sense in which Quine denies that one-word sentences are structured. I'll leave it at this for now; any further difficulties regarding Burge's use of the term ‘structure’ will be dealt with in my critique of Burge's argument.

Here is a reconstruction of Burge's argument:²⁵

- (1) One-word sentences have truth conditions.
- (2) The truth conditions of a sentence constitute an aspect of its meaning.
- (3) The truth conditions of an occasion sentence (and thus a one-word sentence) depend on:
 - a. Particular elements
 - b. Repeatable patterns

So,

²³ Burge, *Origins of Objectivity*, 215, 230.

²⁴ Burge *Origins of Objectivity*, 216.

²⁵ This argument can be found in Burge, *Origins of Objectivity* 230-231.

(4) The truth conditions (and thus an aspect of the meaning) of initial one-word sentences must mark:

- a. Particular elements
- b. Repeatable patterns

(5) Elements 4(a) and 4(b) are structural.

So,

(6) Initial one-word sentences must have structure in an aspect of their meaning.

So,

(7) Initial one-word sentences have structure.

Since Quine agrees that initial one-word sentences have truth conditions, then, insofar as this argument is concerned, premise (1) is uncontroversial.²⁶ (According to Quine, an utterance of a one-word sentence is true just in case it is uttered under the appropriate stimulations and false just in case it is uttered under inappropriate stimulations. A stimulation *S* is appropriate to a one-word sentence *O* just in case almost any member of the speech community would assent to *O* under *S*.)

According to (2), the truth conditions of a sentence (observational or not) are a part of the semantic content or meaning of that sentence. So, for example, the conditions under which the sentence ‘Snow is white’ is true constitutes an aspect of the meaning or semantic content of the sentence ‘Snow is white’. (Although this premise is not entirely uncontroversial, my critique of Burge’s argument will not rest on a rejection of this premise.

²⁶ Quine explicitly claims that one-word sentences have truth values; e.g., in Roots of Reference he writes, “a sentence is observational insofar as its *truth value*, on any occasion, would be agreed to by just about any member of the speech community witnessing the occasion.” [my emphasis] (Quine, *Roots of Reference*, 39). In Pursuit of Truth, Quine claims that observation sentences “are *occasion* sentences: true on some occasions, false on others” (Quine, *Pursuit of Truth*, 3). Since one-word sentences have truth-values, they must have truth conditions.

It should be noted, though, that Burge presents this premise as if it were entirely uncontroversial, which it is not.²⁷⁾

The third premise is somewhat less straightforward than the previous two. I'll start with (3b), the claim that the truth conditions of a sentence depend on repeatable patterns. Recall that, according to Quine, a one-word observation sentence O is true under some stimulation S just in case S is appropriate to O. A stimulation S is appropriate to O just in case almost any member of the speech community would assent to O under S. More generally, the truth conditions of a one-word sentence depend on the counterfactual assent/dissent of members of a speech community under various stimulation types or patterns. It follows that the truth conditions of an initial one-word sentence depend on patterns or types that can "be repeated in a context different from the one in which [they occur]..."²⁸ (Unless noted otherwise, I will use the terms 'type', 'repeatable pattern', and 'pattern' interchangeably.)

In addition to repeatable patterns, Burge claims that the truth conditions of a one-word sentence also depend on particular elements (this is (3a)). Exactly what Burge has in mind here is somewhat unclear. He shifts between the claim that the truth conditions of one-word sentences depend on *particular* contexts (or occasions) and the claim that the truth conditions of one-word sentences depend on particular elements in a context.²⁹ The sense

²⁷ I have in mind here arguments to the effect that the meaning or semantic content of a sentence underdetermines its truth conditions. See: Paul Pietrowski, "The Character of Natural Language Semantics," in *Epistemology of Language*, ed. Alex Barber (Oxford: Oxford University Press, 2003); Anne Bezuidenhout, "Truth-Conditional Pragmatics," *Nous* 36, no. S16 (2002); Robyn Carston and George Powell, "Relevance Theory--New Directions and Developments," in *The Oxford Handbook of Philosophy of Language*, ed. Ernest Lepore and Barry C. Smith (Oxford: Clarendon Press, 2006); John Perry, "Indexicals, Contexts, and Unarticulated Constituents," *Proceedings of the 1995 CSLI-Armsterdam Logic, Language and Computation Conference*, 1998.

²⁸ Burge, *Origins of Objectivity*, 230.

²⁹ Burge initially claims that the truth conditions of initial one-word sentences "depend on...particular elements in contexts." A couple of paragraphs later, he claims that the particular element could be "a particular context or some particular element in a context." See Burge, *Origins of Objectivity*, 230.

in which the truth conditions depend on *particular contexts* is fairly clear; they depend on particular contexts in the sense that the truth-value of a one-word sentence can only be assigned relative to a particular context or occasion of utterance. (Recall that one-word sentences are occasion sentences.) The sense in which the truth conditions of a one-word sentence depend on particular elements in a context, however, is not quite as obvious. There are at least two ways we might understand this claim. First, we might take this as the claim that an one-word sentence can only be true (at a given time) if the appropriate repeatable pattern is instantiated by a particular element in a context. Alternatively, we might take this as the claim that the repeatable patterns on which the truth conditions of a one-word sentence depend must themselves be arrangements of particular elements. I'll return to this issue in my critique. For now, I'll understand 'particular' as referring to either particular contexts or particular elements in a context.

(4) is supposed to follow from (1)-(3); since truth conditions depend on both particular elements and repeatable patterns, then the particular elements and repeatable patterns must be "marked" by (or "represented in"³⁰) the truth conditions of a one-word sentence. That is, the truth conditions of a one-word sentence *O* must mark or represent the patterns appropriate to *O*— $P_1 \dots P_n$ —as well as "a particular context or some particular element in a context."³¹ So, for example, the truth conditions of the one-word sentence 'Apple!' must look something like:

(TA) An utterance of 'Apple!' is true iff particular *e* instantiates pattern $P_1 \vee P_2 \vee \dots \vee P_n$.

³⁰ Burge, *Origins of Objectivity*, 231.

³¹ Burge, *Origins of Objectivity*, 230.

(Burge notes that the actual particular element marked by ‘*e*’ is most likely context dependent; “[the] particularistic factor could be entirely implicit and dependent on context for its activation.”³² I take it that ‘*e*’ functions something like an indexical.) Since the truth conditions of a one-word sentence must mark both repeatable patterns and a particular [premise (4)], and since the truth conditions of a sentence constitute an aspect of its meaning [premise (2)], then an aspect of the meaning of a one-word sentence must mark both repeatable patterns and a particular.

Premise (5) is the claim that these two elements—particulars and repeatable patterns—both of which are an aspect of the meaning of a one-word sentences, are “structural”³³. This is because “their effects on truth conditions differ. A stimulation pattern can remain the same as the context of stimulation varies.”³⁴ I take it that Burge’s thought here is that if at least two elements make independent contributions to the truth-conditional content of a sentence *O*, then these elements, taken together, are structural.

(6) ties this all together; “since the interplay between these factors [the particular element and the repeatable pattern] must be represented in the truth conditions of Quine’s initial one-word sentences, and since the truth conditions are an aspect of their meaning, one-word sentences must have structure in an aspect of their meaning.”³⁵ Burge concludes that Quine’s initial one-word sentences, insofar as they have truth conditions, must have structure.

This is all by way of explanation. None of this is to say that Burge’s argument is any good. Nevertheless, the above remarks should suffice to provide at least a general sense of

³² Burge, *Origins of Objectivity*, 231.

³³ *Ibid.*

³⁴ *Ibid.*

³⁵ *Ibid.*

Burge's line of attack. Roughly, Burge's strategy is to argue that the truth conditions of a one-word sentence must be structured in the sense that they depend on two distinct elements: a particular and a general repeatable pattern. And since the truth conditions of sentence constitutes an aspect of its meaning, then an aspect of the meaning of one-word sentences must have structure.

§4 Critique: Part I

As I've already mentioned, exactly what Burge means by 'structure' is not entirely clear. At the very least, though, we know that Burge's argument, since it is directed at Quine, must show that initial one-word sentences are structured *in a sense that is incompatible with the sense in which Quine denies that they are structured*. Thus, it is important that we get clear on the sense in which Quine denies that one-word sentences are structured.

As we have seen, Quine thinks that C³⁶ can master initial one-word sentences by merely associating the sentence with the appropriate patterns of stimulation. (This requires learning what Quine calls a sentence's *similarity basis*—"the distinctive trait shared by episodes appropriate to that observation sentence; the shared trait in which their perceptual similarity consists".³⁷) Thus, according to Quine, C can master a one-word sentence without in any way representing, discerning, or referring to particulars—i.e., C can master a one-word sentence without in any way including particulars in her take on the world. According to Quine, as far as mastery is concerned, it is enough for C to merely associate the one-word sentence with the appropriate patterns of stimulation. And since Quine takes the only relevant datum in the initial stages of word learning to be C's mastery, he concludes that it is gratuitous to construe the initial one-word sentence 'Apple!' as the structured sentence

³⁶ I'll use 'C' to refer to any developmentally average child in the one-word stage.

³⁷ Quine, *Roots of Reference*, 43

‘That’s an apple!’ or ‘There’s an apple!’; *initial* one-word sentences should be understood as merely whole linguistic responses to stimulation patterns.

Now, if Burge’s argument is to engage the sense in which Quine denies that one-word sentences are structured, then Burge’s use of the expression ‘one-word sentences are unstructured’ needs to be treated as a placeholder for Quine’s position. And it should be clear by now that the relevant position of Quine’s concerns the sort of representational capacities that mastery of a one-word sentence requires. More specifically, the relevant position of Quine’s is that, in the initial stages of word learning, C can and does master one-word sentences without representing, discerning, tracking, or referring to particulars.³⁸ So if Burge is trying to argue that one-word sentences *must* be structured if they have truth conditions (which he is), and if Burge is directing his argument at Quine (which he is), then Burge needs to argue that mastery of the truth conditions of a one-word sentence requires a capacity to represent particulars (and repeatable patterns).

The problem, however, is that Burge’s argument, even if it is sound, does *not* establish that one-word sentences must be structured in this sense. Burge’s argument, even if it is sound, does not establish that mastery of the truth conditions of a one-word sentence depends on the capacity to represent particulars. To illustrate, consider C’s initial one-word sentence, ‘Apple!’. If Burge’s argument is sound, then it establishes that ‘Apple!’ must be structured in the following sense: the truth conditions, and thus an aspect of the meaning of ‘Apple!’, must mark both a particular element and a repeatable pattern. But notice that even if one-word sentences must be structured in this sense—i.e., even if the truth conditions of ‘Apple!’ must mark a particular and a repeatable pattern—this is not yet incompatible with the claim that C can master ‘Apple!’ by merely associating ‘Apple!’ with the appropriate

³⁸ Throughout this paper, I will often just use ‘representing’ for the sake of brevity.

patterns *without* representing particulars in any capacity. The fact that the truth conditions of an initial one-word sentence O exhibit a certain degree of structure doesn't entail that C cannot master O by merely associating O with the appropriate patterns of stimulation and *not* representing particulars. So even if Burge is right that the truth conditions of a one-word sentence depend on and must mark both a particular element and repeatable patterns, it doesn't follow that C cannot master a one-word sentences by *merely* associating the sentence with the appropriate repeatable patterns.

The problem with Burge's argument, then, is that it simply misses its target. Even if it is sound, Burge's argument only shows that one-word sentences must have truth conditional structure. But this is not the sense in which Quine is denying that one-word sentences are structured. The relevant position of Quine's is just that C can master a one-word sentence without representing particulars in any capacity; i.e., that C can master a one-word sentence without including particulars in her take on the world. So even if Burge's argument is sound, it looks as though it simply misses its intended target.

In the explanatory remarks following his argument, Burge writes the following:

The fundamental objection to Quine's view...is that...the use of the [one-word] sentences depends on applications of perceptual capacities [that] involve both a capacity to single out particulars...and a capacity to group those particulars under general types....³⁹

In this passage, Burge is claiming that his fundamental objection to Quine is that the use (or mastery) of one-word sentences depends on certain structured representational capacities. More specifically, Burge is claiming that the mastery of one-word sentences requires a

³⁹ Burge, *Origins of Objectivity*, 231-232.

perceptual capacity to single out particulars and group particulars under general types.⁴⁰ Now, at least at first glance, it might seem a bit odd that Burge claims that this is his “fundamental objection”. After all, not once during the course of his actual argument does Burge say anything about the mastery of one-word sentences depending on structured perceptual capacities. However, given the problem I have just pointed out, that Burge makes this his fundamental objection shouldn’t come as much of a surprise. This is because if Burge’s argument (despite appearances to the contrary) is supposed to establish that the mastery of initial one-word sentences depends on an ability to represent particulars and repeatable patterns in perception, then Burge’s argument would, at the very least, not miss its target. This is because the claim that the mastery of a one-word sentence depends on structured perceptual capacities (or, more generally, structured representational capacities) is incompatible with Quine’s position, according to which mastery does not depend on any such capacity.

The important question, then, is not whether the truth conditions of initial one-word sentences depend on particulars and repeatable patterns but, rather, whether mastery of the truth conditions of initial one-word sentences requires a capacity to represent particulars and repeatable patterns (in perception).⁴¹

⁴⁰ I take Burge to be claiming that his fundamental objection to Quine is that the mastery of initial one-word sentences depend on structured perceptual capacities in the sense that one can only master the truth conditions of initial one-word sentences if perception is *structured* in the relevant sense. One could, however, interpret this passage somewhat differently. One might take Burge to simply be claiming that one-word sentences depend on perceptual capacities that are, as a matter of fact, structured. This, however, cannot be the point Burge is trying to make in the argument I am discussing here. The argument that Burge presents on pp. 230 is supposed to proceed from premises that even Quine would have to accept. Thus, Burge’s argument cannot simply assume that perception is structured in the relevant sense.

⁴¹ I put ‘in perception’ in parentheses because, strictly speaking, Burge only needs to establish the more general claim that mastery of the truth conditions requires structured representational capacities. For Burge, though, the relevant representational capacities are perceptual. Throughout the rest of this paper, I will mainly attack the general claim that mastery depends on structured representational capacities. Any arguments I offer against this more specific claim, however, should apply to the more general claim as well.

§5 Structure

Since it might not be entirely clear how this is related to the claim that initial one-word sentences are themselves structured (which is purportedly what is at stake), I'll spend this next section explaining the notion of sentential structure that Burge's argument is attempting to establish. I'll then explain how this is related to the seemingly distinct issue raised by Burge's "fundamental objection", viz., whether or not mastery of the truth conditions of initial one-word sentences requires a structured perceptual capacity to represent particulars and repeatable patterns.

The best way to understand what Burge is trying to establish with his argument is that one-word sentences must be structured is that one-word sentences, despite their lack of surface structure, nevertheless have some sort of hidden or unarticulated structure. I take it, then, that the relevant notion of structure is what is often referred to as *logical form* or *logical structure*.⁴²

Now, as Jason Stanley points out in his article "Context and Logical Form"⁴³, there are at least two prevalent uses of the expression 'logical form'. According to the traditional use, which Stanley calls the *revisionary conception of logical form*, logical form is a regimentation of defective natural language. Appeals to logical form on this revisionary conception, "are appeals to a kind of linguistic representation which is intended to *replace* natural language for the purposes of scientific or mathematical investigation [my emphasis]".⁴⁴ This conception

⁴² I will use 'logical form' and 'logical structure' interchangeably.

⁴³ Jason Stanley, "Context and Logical Form," *Linguistics and Philosophy* 23, no. 4.

⁴⁴ Stanley, "Context and Logical Form", 391.

of logical form is thus normative in the sense that talk about logical form is talk about “how we *should* regiment our verbal behaviour for purposes of scientific inquiry [my emphasis]”.⁴⁵

It should be clear that the revisionary conception of logical form cannot be what Burge has in mind; Burge’s position regarding initial one-word sentences is obviously not normative or evaluative in this sense. Rather, Burge is arguing that initial one-word sentences must, *as a matter of fact*, have structure. (He is clearly not arguing for the claim that children, in the initial stages of word learning, ought to regiment their verbal behaviour in order to rid it of certain defects.)

What Burge must have in mind, then, is something like what Stanley calls the *descriptive conception of logical form*.⁴⁶ According to the descriptive conception of logical form, the logical form of a sentence corresponds to the *actual* structure of that sentence; “talk of logical form in this sense involves attributing hidden complexity to sentences of natural language...”. This conception of logical form is thus descriptive (not normative); the logical form of a sentence is its *actual*, though sometimes hidden, structure.

Here is an intuitive (though not entirely uncontroversial⁴⁷) example of hidden logical structure. Consider the sentence:⁴⁸

- (i) It is raining

Clearly, (i) is true iff it is raining at some particular location at some particular time.

However, there is no element or constituent in the surface structure of (i) that corresponds

⁴⁵ Paul Pietrowski, "Logical Form and LF," in *The Oxford Handbook of the Philosophy of Language*, ed. Ernest LePore and Barry C. Smith (Oxford: Clarendon Press, 2006), pg. 830.

⁴⁶ Stanley, "Context and Logical Form", 392.

⁴⁷ These examples are intuitive enough, however, to serve my purpose here, which is simply to illustrate the notion of logical form.

⁴⁸ This example is taken from Carston and Powell, "Relevance Theory: New Directions and Developments," 348.

to a location or time. One way to account for this is to posit hidden indexical elements in the logical form of (i) that correspond to (or mark) a time and a location:⁴⁹

(i*) It is raining (*t*), (*l*)

(‘*t*’ and ‘*l*’ are the hidden time and location variables, respectively.) Exactly how the value of these variables are determined needn’t worry us here (although they are plausibly determined by the context). The important point is just that on this understanding of (i), these variables are a part of the logical form or structure of (i).

To bring this somewhat closer to home, consider the following dialogue⁵⁰:

John: “Who bought the bottle?”

Sarah: “Bill”

Now clearly Sarah’s response to John’s question has no surface structure. That is, there are no structural elements in the expression ‘Bill’. On at least one understanding of Sarah’s response, however, Sarah’s utterance, though it lacks surface structure, does have an implicit or hidden logical structure. For example, Stanley claims that the logical form of Sarah’s utterance “actually contained the words ‘bought the bottle’, only covertly.”⁵¹ According to Stanley, although Sarah’s response to John had no surface structure, Sarah’s response actually contained the hidden subject-predicate structure, “Bill/bought the bottle”.

These examples should give some substance to the relevant notion of sentential structure. Roughly, Burge’s thought is that although initial one-word sentences lack surface structure, they must nevertheless have some sort of hidden logical structure. So, for example, the one-word sentence ‘Apple!’, though it has no surface structure, must

⁴⁹ This is not the only way to account for this datum. See Carston and Powel, "Relevance Theory: New Directions and Developments," 349.

⁵⁰ This is from Stanley, “Context and Logical Form,” 402-403.

⁵¹ Stanley, “Context and Logical Form,” 403.

nevertheless have a structured logical form in the sense that its logical form must mark both a particular element, *e*, as well as a repeatable pattern (or patterns).

We can understand Burge's strategy for arguing for this claim is by comparing it to the strategy employed in the first example for appealing to hidden constituents in the sentence 'it is raining'. The strategy there was to first show that the truth conditions of the sentence 'it is raining' depend on both a location and a time and then infer from this that there must be elements in the logical form of 'it is raining' that correspond to a location and a time. Similarly, Burge's strategy is to first show that the truth conditions of a one-word sentence depend on both a repeatable pattern and a particular element, and then infer from this that one-word sentences must have a structured logical form that marks both particulars and repeatable patterns.

Now, if Burge is arguing that one-word sentences must have a hidden logical structure in this sense, then why am I claiming that the central issue is whether or not mastery of the truth conditions of a one-word sentence requires or depends on a capacity to represent particulars and repeatable patterns in perception? Why isn't it enough for Burge to simply show that the logical form of a one-word sentence must contain an element that marks a particular and an element that marks repeatable patterns, regardless of whether or not C has the capacity to represent particulars and repeatable patterns?

The reason is that, if Burge's argument is intended as an argument against Quine (which it is), then Burge's argument needs to show that initial one-word sentences must be structured in the sense that Quine is denying that they are structured. And, again, the relevant position of Quine's is just that, in the initial stages of word learning, C can and does master a one-word sentence by merely associating that sentence with the appropriate stimulation patterns and not representing particulars in any capacity. Thus, Burge's claim

that one-word sentences must have a hidden logical structure is only incompatible with Quine's position to the extent that this logical structure is imputed to one-word sentences in virtue of the representational capacities required for their mastery. So, although whether or not one-word sentences have logical structure might very well be relevant, this is not really the essential issue. What really matters, insofar as Quine's position is concerned, is whether or not mastery of the truth conditions of a one-word sentence requires the capacity to represent both particulars and repeatable patterns.

§6 Critique: Part II

Here, then, is a charitably revised version of Burge's argument (the revisions are in italics)⁵²:

- (1) One-word sentences have truth conditions.
- (2) The truth conditions of a sentence constitute an aspect of its meaning.
- (3) The truth conditions of an occasion sentence (and thus a one-word sentence) depend on:
 - a. Particular elements
 - b. Repeatable patterns

So,

(4') *Mastery of the truth conditions (and thus an aspect of the meaning of an initial one-word sentence) requires the capacity to represent⁵³:*

a'. particular elements

b'. repeatable patterns

- (5) Elements 4(a)' and 4(b)' are structural.

So,

(6) Initial one-word sentences must have structure in an aspect of their meaning.

So,

⁵² I call this a 'charitable revision' for two reasons. First, it accommodates Burge's aforementioned "fundamental objection". Second, this version of Burge's argument does not run the risk of missing its target; if this argument is sound, then Quine's position regarding the unstructuredness of initial one-word sentences must be false.

⁵³ As I noted before, I'm using 'represent' in a fairly broad sense so as to include tracking, discerning, singling out, etc.

(7) Initial one-word sentences have (*a hidden, logical*) structure.

The crucial step, as far as Quine's position is concerned, is the move from (3') to (4') (more specifically, the move from (3a) to (4a')). This is because if Burge can show that the truth conditions of a one-word sentence depend on particulars in a sense from which it follows that the mastery of the truth conditions of a one-word sentence requires representing particulars, then the sense in which Quine denies that one-word sentences must be structured is false. (This is because Quine denies that mastery requires a capacity to represent particulars.) If, on the other hand, the truth conditions of a one-word sentence do not depend on particulars in a sense from which it follows that the mastery of a one-word sentence requires a capacity to represent particulars, then Quine's position is left unaffected by this argument. In the next few pages, I will argue that there is no sense in which the truth conditions of a one word sentence depend on particulars from which it follows that mastery of the truth conditions requires an ability to represent particulars.

Before discussing the move from (3a) to (4a'), though, let's first consider the move from (3b)—the claim that the truth conditions of a one-word sentence depend on repeatable patterns—to (4b')—the claim that mastery of the truth conditions requires the capacity to track repeatable patterns.⁵⁴ As it turns out, this move is actually quite plausible; i.e., it is plausible that the truth conditions of an initial one-word sentence depend on repeatable patterns in such a way that the mastery of a one-word sentence requires a capacity to track repeatable patterns. This should be fairly obvious. Since a one-word sentence is true just in case it is uttered under the appropriate patterns, then surely the mastery of a one-word sentence requires, at the very least, an ability to track the patterns that are appropriate to a

⁵⁴ See footnote 53

one-word sentence.⁵⁵ (If this weren't the case, then mastery would be quite miraculous.) Thus, it's overwhelmingly plausible that the truth conditions of initial one word sentences depend on repeatable patterns in such a way that their mastery requires a capacity to track repeatable patterns. So there is no problem with the move from (3b) to (4b')—i.e., the move from the claim that the truth conditions of a one-word sentence depend on repeatable patterns to the claim that mastery of a one-word sentence requires the ability to represent or track repeatable patterns. (Furthermore, it seems reasonable to claim, as Burge does, that these patterns must be patterns in perception, broadly construed.⁵⁶)

The problem, however, is not the move from (3b) to (4b') but, rather, the move from (3a) to (4a'). (This shouldn't come as a surprise. The important question is not whether mastery of the truth conditions of a one-word sentence requires the capacity to track repeatable patterns but, rather, whether such mastery requires the capacity to represent particulars.) The question, then, is whether the truth conditions of a one-word sentence depend on particulars in such a way that their mastery requires a capacity to represent particular elements. (It is important to note that this question does not concern whether or not children, or adults for that matter, have the capacity to represent particulars. Rather, the question is whether or not mere mastery of a one-word sentence requires or depends on such a capacity.)

Now, as I pointed out in the explanatory remarks following my initial formalization of Burge's argument, there are at least three ways in which the truth conditions of a one-word sentence might be said to depend on particulars. First, and perhaps most obviously,

⁵⁵ This is not to say that such tracking must occur at the level of the individual; such tracking could occur subindividually.

⁵⁶ I say "broadly construed" because I don't want to invoke Burge's particular account of perception according to which perception involves the capacity to single out particulars and group them under general types.

the truth conditions of a one-word sentence could be said to depend on particulars in the sense that the truth-value of a one-word sentence can only be determined relative to a *particular* context or occasion. Now, it is clear that the truth conditions of a one-word sentence depend on particulars in this sense. However, this sort of dependence of the truth conditions of a one-word sentence on particulars doesn't license the move from (3a) to (4a'). This is because even if the truth conditions of a one-word sentence depend on particular contexts or occasions in this sense, C could still master a one-word sentence by merely associating the one-word sentence with the appropriate stimulation patterns. A capacity to associate a one-word sentence with the appropriate patterns of stimulation doesn't require a capacity to represent the particular contexts or occasions in which these stimulations occur.

Perhaps, however, Burge has something else in mind. Perhaps the thought is not just that the truth conditions of a one-word sentence depend on particular contexts or occasions in the above sense but, rather that the truth conditions of a one-word sentence depend on a particular element in the context of utterance instantiating the repeatable patterns or types. That is, perhaps the thought is that the patterns or types on which the truth conditions depend must be instantiated by a particular element in the context of utterance.

The problem here is that, regardless of whether or not this is in fact the case, it doesn't follow that the mastery of a one-word sentence requires a capacity to represent or single-out particular elements. That is, even if it is true that patterns (or types) must be instantiated by a particular element in a context, it doesn't follow from this that mastery of the truth conditions of a one-word sentence requires a capacity to attribute repeatable patterns (or types) to a particular element in a context. Regardless of whether or not C has a capacity to predicate patterns of particular elements in this sense, such a capacity needn't be

invoked in order to explain C's mastery of a one-word sentence. C's ability to track the patterns appropriate to a one-word sentence does all the explanatory work. There is no need to posit, in addition to this capacity, a capacity to take these repeatable patterns or types as attributes of a particular element. Quine makes a similar point in "Things and their Place in Theories"⁵⁷:

As long as the word 'milk' can be accounted for simply as an occasion sentence on a par with 'It's raining,' surely nothing is added by saying that it is a name of something... Similarly for 'sugar,' 'water,' 'wood.' Similarly even for 'Fido' and 'Mama.' We would be idly declaring there to be designata of the words, counterparts, shadows, one a piece: danglers, serving only as honorary designata of expression whose use as occasion sentences would continue as before.

Quine's point here is more or less the same. Insofar as mastery of initial one-word sentences is concerned, claiming that they designate particular objects is explanatorily idle. Insofar as mastery is concerned, C's ability to track the patterns appropriate to a one-word sentence does all the necessary explanatory work.

There is one last sense in which the truth conditions of a one-word sentence might be said to depend on particulars. As we have seen, the truth conditions of a one-word sentence depend on repeatable patterns. Patterns, however, seem to conceptually presuppose particular elements, viz., the things that are arranged in a pattern.⁵⁸ It thus seems that the truth conditions of a one-word sentence depend on particular elements in the sense that the patterns on which the truth conditions of a one-word sentence depend must themselves be arrangements of particular elements. And since mastery of a one-word sentence requires distinguishing appropriate from inappropriate patterns, then it might seem that mastery of a one-word sentence requires the ability to discern a pattern's particular elements.

⁵⁷ W.V.O Quine, "Things and Their Place in Theories," pg. 231.

⁵⁸ I am indebted to William Lycan for pointing this out to me.

There are two ways one could respond to this. The first way would be to simply drop talk of patterns altogether and talk about types instead. Since the notion of a type doesn't seem to presuppose particular elements in the sense that patterns do, and since Quine could just as well explain mastery in terms of associating one-word sentences with the appropriate stimulation types, then we might be able to simply avoid this sort of dependence between truth conditions and particulars from the get-go.

Substituting talk of patterns for talk of types is, however, unnecessary. This because even if it is true that patterns conceptually presuppose particular elements, it doesn't follow that the ability to track a pattern requires the ability to represent, discern, track, or single-out the particular elements that make up a pattern. To illustrate, consider a high resolution digital image composed of thousands of small red and black pixels. Provided that the pixels are arranged in a suitably systematic way (suppose that all of the red pixels are on one half of the image and all of the black pixels are on the other half), then one could obviously track this image and distinguish it from other digital images. And clearly one could do this even if one did not have the ability to discern or represent the particular pixels from which the digital image is composed.

One might respond to this by granting that although tracking this digital image doesn't require discerning the image's particular pixels, it nevertheless requires an the ability to represent or discern particular elements at some level of resolution or another. (So, for example, perhaps tracking this digital image requires an ability to represent the red half and black half of the image as particular elements.) Now, although this might plausibly be how we in fact track such images, the ability to track such an image certainly doesn't require discerning particular elements in this way. This becomes clearer in examples where the issue of resolution doesn't arise, such as tracking chords played on a piano. Consider, for

example, the chords F-sharp 7 and B-flat minor. It seems clear that one can track these chords and distinguish them from one another regardless of whether or not one has the ability to track, represent or discern the notes from which these chords are composed. A person with a relatively untrained ear could distinguish between F-sharp 7 and B-flat minor even if she were unable to discern the particular notes that make up these chords.⁵⁹ More generally, the ability to track a pattern or recognize instances of the same pattern can be construed as something like a gestalt phenomenon. Patterns can be tracked all at once, as it were.

Since it is at least possible that one can track patterns without discerning the particular elements that make up a pattern, then there is no need to think that C's ability to track the repeatable patterns appropriate to a one-word sentence depends on C's ability represent, discern, track, or single-out the particular elements that such patterns presuppose. Thus, even if the patterns on which the truth conditions of a one-word sentence depend presuppose particular elements, it doesn't follow that mastery of a one-word sentence requires the capacity to represent particular elements.

So, to recap: there are at least three ways in which Burge might claim that the truth conditions of a one-word sentence to depend on particulars. First, he could take the truth conditions of a one-word sentence to depend on particular contexts or occasions. Second, he could take the truth conditions of a one-word sentence to depend on a particular element in a context instantiating a repeatable pattern or type. Third, he could take the truth conditions of a one-word sentence to depend on the particular elements that compose and individuate patterns.

⁵⁹ The chord F-sharp 7 is composed of the notes F#, A#, C#, and E. The chord B-flat minor is composed of the notes A#, C#, and F.

As I have hopefully shown, none of these can do the work that Burge needs them to do; i.e., neither of these three kinds of dependence of truth conditions on particular elements requires a capacity to represent particulars in order to explain their (i.e., the truth conditions') mastery. Even if the truth conditions of a one-word sentence depend on particulars in all three of these senses, one could still master a one-word sentence by merely associating the sentence with the appropriate patterns (or types) and not representing particulars in any capacity.

Provided that these exhaust the ways in which the truth conditions of a one-word sentence depend on particular elements, then there is no good reason to accept (4a')—the claim that mastery of the truth conditions of a one-word sentence depends on the capacity to represent particular elements. Even if the truth conditions of a one word sentence depend on particulars, mastery of a one-word sentence doesn't require an ability to represent these particulars. Thus, even our charitably reconstructed version of Burge's argument fails and Quine's position regarding the structuredness of one-word sentences is left unscathed.

§7 Conclusion

Quine is guilty of many things. Most obviously, and as Burge is eager to point out, Quine is guilty of taking C's verbal behaviour as the only relevant evidence for the structuredness of C's one-word sentences. This is surely false; i.e., surely there are other sources of relevant evidence. However, Quine does get at least one thing right; Quine is right in taking the structuredness of C's initial one-word sentences to be an empirical matter—something that ultimately depends on empirical evidence. Burge's argument against Quine gets this wrong.⁶⁰ Burge fails to recognize that the structuredness of a one-word sentence is not something that follows from the mere fact that C's initial one-word sentences

⁶⁰ More specifically, Burge's argument against Quine on pp. 230-231 of Origins of Objectivity.

have truth conditions, at least not in the sense that Quine denies that one-word sentences are structured.

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