## Demonstrating and Necessity (2004)

I

My title is meant to suggest a continuation of the sort of philosophical investigation into the nature of language and modality undertaken in Rudolf Carnap's Meaning and Necessity (University of Chicago, 1947, 1956) and Saul Kripke's Naming and Necessity (Harvard University Press, 1972, 1980). My topic belongs in a class with meaning and naming. It is demonstratives, i.e., expressions like 'that darn cat' or the pronoun 'he' used deictically (in contrast to its use either as a bound variable or as a "pronoun of laziness"). A few philosophers deserve particular credit for advancing our understanding of demonstratives and other indexical (i.e., context-dependent) words. Though Naming and Necessity is concerned with proper names, not demonstratives, it opened wide a window that had remained mostly shut in Meaning and Necessity but which, thanks largely to Kripke, shall forevermore remain unbarred. Understanding of demonstrative semantics grew by a quantum leap in David Kaplan's remarkable work, especially in his masterpiece 'Demonstratives' together with its companion 'Afterthoughts'. In contrast to the direct-reference propensities of these two contemporary figures, Gottlob Frege, with his uncompromisingly thoroughgoing intensionalism, shed important light on the workings of demonstratives in "Der Gedanke"—more specifically, in a few brief but insightful remarks from a single paragraph concerning tense and temporal indexicality.

Frege and Kaplan are especially concerned with Frege's Puzzle. As it applies to demonstratives, the Puzzle may be posed thus: How can 'This is that', if true, differ at all in content from an utterance of 'That is that' while pointing with two hands to the same thing? Kaplan lifts much of his theory of demonstratives from Frege's remarks, yet disagrees with Frege concerning the Puzzle's solution. This results in a fundamental tension in Kaplan's observations concerning demonstratives.

The present chapter was written to be delivered in part at the University of San Marino 2001 Conference on David Kaplan's Contribution to Philosophy. I am grateful to the discussants there, especially Kaplan, for their challenging comments (all of which I believe are answered here), and to the participants in my seminar at UCSB during Fall 2000 for their role as initial sounding board for most of the ideas presented here. I am also grateful to the referees for *The Philosophical Review*, to my audience at an American Philosophical Association, Pacific Division meeting (2002), and especially to my commentator, Ben Caplan, for their insightful reactions and comments.

<sup>1</sup> In J. Almog, J. Perry, and H. Wettstein, eds, *Themes from Kaplan* (Oxford University Press, 1989), pp. 481–614.

Kaplan distinguishes among three semantic values for a single expression: extension; content; and character. Extension is essentially Frege's notion of Bedeutung. The extension of a singular term is its designatum, i.e., the designated object for which the term stands; the extension of a sentence is either truth or falsity. Content corresponds closely to Frege's notion of Sinn or sense, and coincides with Russell's notion of what he called 'meaning'. It also corresponds to Strawson's notion of the statement made in using a sentence. The content of a declarative sentence is the proposition expressed, the content of a singular term is its contribution to the content of sentences in which it occurs. The content of an expression determines its extension with respect to discourse about various scenarios, and in particular, with respect to any possible "circumstance of evaluation", i.e., any possible world at a particular time. Indexicals reveal a need for a third layer of semantic value. An indexical sentence like 'I'm busy now' expresses different propositions on different uses. Some of these propositions may be true and others false. Likewise, when the sentence 'It is rainy today' is uttered one day and again the following day, the propositions asserted are different. Even if the extensions (in this case, the truth-values) happen to be the same, the propositions asserted still might have differed in truth-value—there are possible scenarios in which the same propositions determine different truth-values—and even a merely possible divergence in truth-value is sufficient to establish distinctness of the propositions expressed. Yet the sentence uttered is not ambiguous in regard to linguistic meaning; it is univocal. The meaning, which remains constant among different utterances, generates a distinct proposition for each distinct day on which the sentence is uttered, to wit, the proposition about that day to the effect that it is rainy. The character of an expression determines what content is expressed with respect to any particular context.<sup>2</sup>

A competent speaker need not know the extension of an expression (e.g., the truth-value of a sentence) in order to understand the expression properly. But neither must a competent speaker always know the content. The detective who stumbles upon an unsigned note containing the words 'The loot will be deposited in a Swiss account the

<sup>2</sup> Kaplan's three-tiered theory of character, content, and extension is inadequate. The eternal nature of contents—e.g., the fact that a given proposition is unwavering in its truth value—argues in favor of separating the possible world of a circumstance from the time, and drawing a fourway distinction among semantic values by inserting a semantic value—what I call the *content base*—between the levels of character and (proper) content. Content bases are proposition-like entities except for being non-eternal. Such things are sometimes called *states of affairs*. I call them *proposition matrices*. Kaplan's notion of character is replaced by a semantic value, which I call *program*, that assigns content bases to contexts:

Level 4: program

Level 3: content base with respect to c
Level 2: content with respect c and t
Bottom: extension with respect to c, t, and w

The content of 'I am hungry', when uttered by me at t, is the eternal proposition that I am hungry at t, whereas the content base is a proposition matrix—a recurring state of affairs that, although frequent, is not quite eternal. See my "Tense and Singular Propositions," in *Themes from Kaplan*, pp. 331–392. I will ignore the need for this significant modification of Kaplan's scheme in what follows when there is no danger of any resulting serious confusion of the relevant issues.

day after tomorrow' understands the sentence but cannot know which proposition it was used to express without knowing the extension of 'tomorrow'. What a competent speaker must know to understand the sentence (as opposed to understanding the speaker's speech act) is the character, and it is the character which is best identified with the *meaning*. An expression is *indexical* if its character determines different contents depending on the context.<sup>3</sup>

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Among indexicals, Kaplan distinguishes between demonstratives, which require an accompanying demonstration (e.g., a fingerpointing or hand gesture), and 'pure indexicals', which do not (like 'I' or 'tomorrow'). Moreover, according to Kaplan, demonstrations function rather like context-dependent definite descriptions: when performed ('mounted') in a particular context, a demonstration takes on a representational content that determines an object with respect to a possible circumstance. Which content is taken on depends on the context; which object is determined depends on the circumstance. Kaplan calls the demonstrated object the demonstratum of the demonstration (in the relevant circumstance), e.g., the person, place, or thing pointed to in an act of ostension.

Π

As mentioned, Frege made insightful observations concerning tense and indexicality. He wrote:

[in some cases] the mere wording, which can be made permanent by writing or the gramophone, does not suffice for the expression of the thought. . . . If a time indication is made in present tense, one must know when the sentence was uttered to grasp the thought correctly. Thus the time of utterance is part of the expression of the thought. If someone wants to say today what he expressed yesterday using the word 'today', he will replace this word with 'yesterday'. Although the thought is the same, the verbal expression must be different to compensate for the change of sense which would otherwise be brought about by the different time of utterance. The case is the same with words like 'here' and 'there'. In all such cases, the mere wording, as it can be written down, is not the complete expression of the thought; one further needs for its correct apprehension the knowledge of certain conditions accompanying the utterance, which are used as means of expressing the thought. Pointing the finger, gestures, and glances may belong here too. The same utterance containing the word 'I' will express different thoughts in the mouths of different people, of which some may be true and others false.<sup>5</sup>

Tyler Burge argues that this passage strongly supports an interpretation on which there is a very nearly explicit distinction in Frege's thought about language very much

<sup>3</sup> More accurately, an indexical determines different *content bases* depending on context. See the preceding note 2.

<sup>4</sup> In "Afterthoughts" Kaplan proposes replacing demonstrations with "directing intentions" (pp. 582–590 and *passim*). Though the distinction remains somewhat unclear, I believe that nothing said here is affected if the proposed replacement is made throughout.

<sup>5</sup> "Der Gedanke," Beiträge zur Philosophie des deutschen Idealismus (1918), translated by P. Geach and R. H. Stoothoff as "Thoughts," in Frege's Logical Investigations (New Haven: Yale University Press, 1977). An alternative translation of the quoted passage occurs there, at p. 10.

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like Kaplan's—not merely the celebrated dichotomy of sense and designatum, but a distinction among those two and, thirdly, conventional linguistic meaning.<sup>6</sup> Here again, the distinction among these three is said to be revealed by indexicals. Indexical words like 'yesterday', 'there', and the demonstratives express different senses with respect to different contexts of use. The linguistic meaning of an indexical remains constant among different uses, and determines what sense the expression takes on with respect to a possible use, whereas the sense determines what the expression designates. Since the sense shifts with context while the linguistic meaning remains the same, the sense is different from the meaning.

Burge's interpretation is evidently based on a misreading of the quoted passage. On the contrary, Frege explicitly denies that an indexical by itself expresses a sense that determines the relevantly designated object, let alone a different such sense in different contexts. Rather, it is supposed to be the indexical supplemented by the associated contextual element that expresses the relevant sense. In an utterance of a sentence involving an indexical, Frege observes, what expresses a proposition (a 'thought') is not the sentence itself—the 'mere wording' which might be written down or recorded onto an audiocassette—but the wording taken together with certain accompanying elements, like the time of utterance or an ostension, things that cannot be 'made permanent' by writing them down or by recording the spoken word. In such cases, the mere wording itself is, in an important sense, essentially incomplete. What expresses the proposition is neither the uttered words nor the conditions accompanying the utterance, but the words and the conditions working in tandem. Indeed, Frege says that the conditions form part of the expression of the proposition, as if what really plays the role of a sentence—what actually expresses the proposition—is a hybrid entity made up of syntactic material (words) together with such supplementary contextual material as a time of utterance or a gesture of the hand. According to Frege, the union of sentence and context accomplishes what neither can do without the other. Frege makes his position even clearer in "Logic in Mathematics" (1914):

I can use the words 'this man' to designate now this man, not that man. . . . The sentences of our everyday language leave a good deal to guesswork. It is the surrounding circumstances that enable us to make the right guess. The sentence I utter does not always contain everything that is necessary; a great deal has to be supplied by the context, by the gestures I make and the direction of my eyes. A concept-word combined with the demonstrative pronoun or definite article often has in this way the logical status of a proper name in that it serves to designate a single determinate object. But then it is not the concept-word alone, but the whole consisting of

<sup>&</sup>lt;sup>6</sup> Tyler Burge, "Sinning Against Frege," *The Philosophical Review*, 88, 3 (July 1979), at pp. 398–432. Burge argues that Frege's three-way distinction is partially non-semantic, because Frege's notion of *sense* is epistemic or cognitive rather than semantic. I am unpersuaded, partly for reasons to be set out shortly. Though Fregean propositions ("thoughts") are mentally apprehended objects of propositional attitude, Frege's notion of sense is no less semantic than Kaplan's notion of content or Alonzo Church's notion of sense. Indeed, the former is a good deal more semantic than, for example, Strawson's notion of the statement made in an utterance. (*Cf.* my "Two Conceptions of Semantics," in Z. Szabo, ed., forthcoming.) The Fregean sense of an expression is precisely what, on Frege's theory, the expression (as supplemented by various contextual elements) expresses and what, in turn, determines the same expression's *Bedeutung*. The last is a properly semantic notion if anything is.

the concept-word together with the demonstrative pronoun and accompanying circumstances which has to be understood as a proper name.  $^7$ 

Let us call these hybrid expressions-cum-contextual-elements supplemented expressions—e.g., supplemented words, supplemented sentences, etc. And let us call the expression that requires supplementation by a contextual element a mere expression (a mere word, etc.). Where there is no danger of confusion, we may call the latter entity simply an expression—although doing so evidently conflicts to some extent with the spirit of Frege's account, on which it is not the mere indexical sentence but the non-syntactically supplemented sentence that serves as "the expression" of a proposition. Let us call Frege's claim that it is not the mere words themselves, but the union of the mere indexical sentence with non-syntactic material, that expresses the proposition, the syntactic incompleteness thesis.

The syntactic incompleteness thesis precludes Burge's interpretation. If a mere indexical does not express a sense that determines the relevantly designated object, and instead only the supplemented indexical does, then neither does the mere indexical have a linguistic meaning that assigns it such senses with respect to contexts of use. It is very much in keeping with the spirit of Fregean semantic theory to ascribe linguistic meaning to supplemented expressions. But the same indexical differently supplemented yields different supplemented expressions, evidently with different linguistic meanings. The supplemented indexical 'tomorrow' today (the word supplemented by this very day), insofar as it functions as a meaningful expression itself, evidently means something very different from 'tomorrow' tomorrow. As 'tomorrow' is uttered on different days, and the sense that determines the designated day shifts, so the time that supplements the word also shifts, hence so does the supplemented word and its meaning. Conversely, the meaning of 'tomorrow' t is held fixed only by holding the supplementing time t fixed, hence also the sense that determines the designated day (the one after that of *t*). This blurs the line between the linguistic meaning and the sense of a supplemented expression, effectively eliminating any pressure to distinguish between them. If there remains any such distinction here, it threatens to be a distinction without a difference.

If the mere indexical or the mere present-tensed verb does not express a sense that determines the relevantly designated object, it does not follow that the mere expression does not express any sense at all. Does the mere indexical have a sense on Frege's view? If it does not, then its role is completely *syncategorematic*, i.e., it is then a contextually defined "incomplete symbol" having no content itself yet affecting the content of the larger expressions of which it is a part (the supplemented word and the supplement sentence in which it occurs)—like a right parenthesis or a crucially placed comma. But as a matter of general philosophical policy, Frege eschews syncategorematicity wherever it is not excessively implausible to do so. Instead Frege very likely viewed mere indexicals as designating *functions*—those "unsaturated" entities in Frege's ontology that stand in need of supplementation—while the

<sup>&</sup>lt;sup>7</sup> Frege's *Posthumous Writings*, H. Hermes, F. Kambartel, and F. Kaulbach, eds, P. Long and R. White, trans (University of Chicago Press, 1979), p. 213.

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supplementing contextual element, the time of utterance or a hand gesture, is regarded as a name of the argument to the designated function.8 A demonstration functions as a name of its demonstratum, whereas the time of an utterance might serve in the utterance as a name of itself. The mere word 'yesterday' could be taken to designate a function from a time t (which supplements the mere word, designating itself) to the day before that of t. Correspondingly, the word 'now' would designate the identity function restricted to times, just as a mere demonstrative like 'that' or 'he' would designate the identity function on demonstrata. Accordingly, the sense of the mere demonstrative would be the identity function on the senses of demonstrations.9 A mere demonstrative would thus express a sense (albeit not a concept, in Alonzo Church's sense, of the object designated by the supplemented demonstrative), and its sense would remain constant among various utterances, determining the designata for those utterances, precisely as the linguistic meaning intuitively does. This interpretation—which is both a plausible reading of the passage and true to the general spirit of a Fregean philosophy of semantics—does not merely fail to support Burge's attribution to Frege of a three-way distinction like Kaplan's. It strongly suggests that Frege rejected the postulation a level of semantic value distinct from sense which yields a sense for various contexts. In regarding the mere indexical as an expression for an identity function, and any contextual elements as separately designating parts of the completed expression, the need to postulate an additional semantic value beyond sense and designatum is eliminated. The task that Kaplan's character was designed to perform is held to be accomplished instead by the contextindependent sense of the mere indexical.10

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<sup>8</sup> I am indebted to observations made by Kripke, who suggested this interpretation and cited some of these points against Burge's reading of Frege in a seminar at Princeton around 1980.

<sup>9</sup> The time of utterance would have to present itself in a particular way in order to designate itself (perhaps as the current time, the time being, or the *specious present*, etc.), since on Fregean theory all designation is secured by means of a sense. Times of utterance, *qua* self-referential "expressions," would thus provide rare exceptions to the Fregean dictum: *There is no backward road from designatum to sense*.

A complication arises from Frege's explicit assertion that 'today' yesterday has the same sense as 'yesterday' today. The designated day is the same, but sameness of sense of the supplemented words would require that the sense of 'today' applied to yesterday should yield the very same value as the sense of 'yesterday' applied to today, i.e., 'today' (yesterday) = 'yesterday' (today) (where '\'' is a sense-quotation mark). It is difficult (at best) to reconcile this with Frege's tendency to treat the senses of compound expressions as (metaphorically) being *composed* of the senses of the component expressions. (How can the sense of 'yesterday' be a component of the proposition expressed by a sentence using the word 'today'?) On the other hand, as several commentators have noted (including Burge and Kaplan), Frege's assertion seems directly contrary to his original motivation for postulating sense as distinct from designatum. But see note 14 below.

<sup>10</sup> Burge says (p. 399n) that his interpretation of Frege as contrasting his notion of sense with the properly semantic notion of linguistic meaning is further supported by the following passage from Frege's "Logik" (probably 1897). But the passage supports, and even strongly suggests, the very different interpretation offered here:

Words like 'here' and 'now' achieve their full sense always only through the circumstances in which they are used. If someone says 'It is raining' the time and place of utterance have to be supplied. If a sentence of this kind is written down it often no longer has a complete sense because there is nothing to indicate who uttered it, and where and when ... the same sentence does not always express

## Ш

Although Kaplan's account of indexicals owes much to Frege, it differs from Frege's in important respects. First and foremost, the content of an indexical word is taken to be the designatum itself, rather than a concept of the designatum (in Church's sense). Furthermore, a mere indexical word like 'yesterday' is said by Kaplan to designate the relevant object—in this case, the day before that of the time of utterance—not a function from times to days. The word takes on, relative to a context of use, a content that determines the designated object with respect to the context. The time of the context serves to determine the content. Though Frege assigns a different designatum to the mere word, he also allows that the supplemented word designates the relevant day. One may wonder whether there is any non-arbitrary way to choose between saying with Frege that the word 'yesterday' supplemented by the time of utterance designates the day before that of the supplementing time, and saying instead with Kaplan that 'yesterday' designates with respect to a context the day before that of the context. Can it make any difference whether we say that a word plus a context designates a given object, or instead that the word designates the object "relative to" or "with respect to" the context?

From a purely formal perspective the different ways of speaking amount to the same thing. Either way we assert a ternary relation among a word, a context, and an object. But from a broader philosophical perspective, Kaplan's manner of speaking better captures the underlying facts. There are linguistic intuitions governing the situation, and on that basis it must be said that the word 'yesterday' (the *mere* word) designates a particular day—which day depending on the context of utterance—not a function from times to days. The intuition is unshaken even among sophisticates who, through proper training, have acquired the intuition that, for example, the

the same thought, because the words require supplementation to obtain the complete sense, and this supplementation can vary according to the circumstances. (Frege's *Nachgelassene Schriften*, H. Hermes, F. Kambartel, and F. Kaulbach, eds, Felix Meiner: Hamburg, 1969, at p. 146. An alternative English translation occurs in Frege's *Posthumous Writings*, p. 135.)

Burge also says (p. 400) that his interpretation is neutral concerning whether it is the indexical expression itself (e.g., the word 'that') or the accompanying circumstance (a demonstration) that actually expresses the sense that determines the relevant designatum. One way or the other, the sense associated with the indexical relative to the context varies with the context, whereas the meaning of the indexical itself remains constant among all its relevant uses. The reasoning is mistaken. There is more than one sense "associated" with the indexical relative to a context of use: there is the sense of the indexical itself, and there is that of the supplemented indexical. Insofar as it might be a third sense, there is also that of the contextual supplement—which, like the supplemented indexical, functions as a distinct expression from the mere indexical. It is irrelevant that different demonstrations will express different senses (as Frege undoubtedly held). Crucial to Burge's interpretation is the claim that the indexical itself ('that') does not, by Frege's lights, express a sense that remains unchanged with variations in context. But Frege is best seen as holding precisely that the mere indexical's sense remains unchanged despite changes in the accompanying contextual elements (and the senses thereby expressed).

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exponentiation in the numerical term '72' (and likewise the word 'squared' in 'seven squared') designates a particular mathematical function.<sup>11</sup>

It is preferable, both theoretically and conceptually, to see the ternary relation among word, context, and object as the relativization to context of the binary relation of designation between word and object, rather than as assigning a semantic value to a cross-bred mereological union of word and context. One unwelcome consequence of Frege's syntactic incompleteness thesis is the damage it inflicts on the syntax of an indexical language. The material that supplements the mere word to form the supplemented expression does not itself have a genuine syntax as such. It is not that such entities as times and gestures could not have their own syntax. In Über Sinn und Bedeutung Frege observes that "it is not forbidden to take any arbitrarily produced event or object as a sign for anything." A highly systematic mode of composition of such signs, and with it a generative grammar, could be cleverly devised, or might even evolve through usage. Although the expressions that make up a sign language, for example, cannot be "made permanent" by writing them down or by audio-recording, still sign language itself has its own definite syntax. But as a matter of sociological linguistics, such aids to communication as times of utterance and fingerpointings do not have an obvious and recognizable syntax. On Frege's account, a language with indexicals recruits elements from beyond conventional syntax in order to express propositions. What manages to express a proposition in such a language is not something that can be recorded by writing or the gramophone, at least not in its entirety. It is partly syntactic and partly contextual. Natural-language syntax becomes a fine theoretical mess.

In sharp contrast, one welcome consequence of relativizing the semantic relations of designation, and of expressing a content, to context is the recognition of a third kind of semantic value—Kaplan's character—which at least approximates the intuitive notion of *meaning*. Frege's account avoids the claim that utterances on different days of the word 'yesterday' are of a single univocal expression with different designata, but only at a serious cost: the cost of misinterpretation. Frege imputes univocality by interpreting the word in such a manner that it allegedly designates the same thing on each occasion of use—that designated thing being a function and not an "object," in Frege's sense. Though the word's meaning intuitively remains constant from one use to the next, that same word (not some *other* expression) also *does in fact* have different designata, and therefore also different contents, on different occasions of use.

There is a closely related reason why Kaplan contends that an indexical is monogamous in meaning while promiscuous in designation, a reason pertaining to Frege's Puzzle in connection with indexicals. Frege recognizes that 'Today is Smith's birthday', uttered one day, expresses the same proposition as 'Yesterday was Smith's

<sup>&</sup>lt;sup>11</sup> Frege maintained that it is not the exponent itself (and not the word 'squared') that designates the relevant function, but the incomplete expression '\_\_2' (likewise, '\_\_\_ squared'). On the interpretation suggested here, Frege saw the mere word 'yesterday' as also being incomplete, its argument place to be filled not with a syntactic entity but with the time of utterance (*qua* self-designating "expression").

birthday' uttered the next. Yet, as Kaplan notes, Frege apparently overlooks that the two sentences can differ in informativeness or "cognitive value" (*Erkenntniswerte*). Contrary to Frege's assertion, the information conveyed in an utterance at 11:59:59 pm of the former sentence is different from that conveyed in an utterance of the latter only seconds later. An auditor who does not keep a close eye on an accurate clock is apt to find the two assertions incompatible. But how can the two utterances differ in cognitive value when the very same proposition is asserted in each?

Kaplan's explanation proceeds in terms of the characters of the two sentences. There is an important yet generally overlooked aspect of character, one that I believe Kaplan invokes in his solution to Frege's Puzzle in connection with indexicals, even if only implicitly. (He does not articulate it in precisely the way I shall here.) It is that the character has a contextual perspective on content. More elaborately, the character specifies the content with respect to a given context of use in a particular manner, describing it in terms of its special relation to the context. To illustrate, the particular English sentence 'I had a fever yesterday' is governed by the following content rule:

(CR1) With respect to any context c the (English) content of 'I had a fever yesterday' is the proposition composed of the (English) contents of 'I', 'had a fever', and 'yesterday' with respect to c.

This rule fixes content for any context. Taking this together with such further English semantic facts as that the content of 'yesterday' with respect to a context is the day before that of the context, then "multiplying through," one derives a content rule of a rather special form, one that *fixes the character*:

(*CR2*) With respect to any context *c* the (English) content of 'I had a fever yesterday' is the singular proposition about the agent of *c*, and about the day before that of *c*, that the former had a fever on the latter.

I call this rule 'character-building'. Unlike the content rule (CR1), (CR2) specifies the content of the sentence with respect to any context as a particular appropriately non-linguistic function of the context, instead of merely fixing the content by reference to the semantics of component expressions. It thereby gives the character. Every utterance has a speaker and typically at least one auditor or reader, whom I shall call a 'speakee'. When a speaker utters 'I had a fever yesterday' in a context c, the speakee who understands the sentence (and thus knows its character-building content

12 Other specifications of the content, even as a function of context, do not fix the character. There is an exactly analogous distinction between a meta-linguistic bi-conditional in a theory or definition of truth, like 'Snow is white is true-in-English iff 'is white' applies in English to the English designatum of 'snow', and those special theorems called 'T'-sentences which appropriately fix the non-semantic truth conditions. Kaplan represents an expression's character in his formal apparatus by the function-in-extension from contexts to contents fixed by a content rule, but further remarks (e.g., *ibid.*, p. 505) suggest that the character is something more like the function-in-intension expressed by the character-building content rule. For present purposes an expression's character may be identified with the meta-proposition expressed by its character-building content rule, as distinguished from the other content rules. One who does not know this meta-proposition does not understand the expression. (*Cf.*, David Braun makes a similar observation, but a significantly different positive proposal, in "What is Character?" *Journal of Philosophical Logic*, 24 (1995), pp. 227–240.)

rule (CR2)) is thereby presented a particular proposition. The proposition in this case is singular, directly concerning a particular agent (the speaker) and a particular day (the preceding). But the sentence itself, via its character, presents the proposition to the speakee "by description" (in Russell's sense), in terms of its relation to the very context c—specifically (and roughly), as the singular proposition about the agent of this very context, and about the day before that of this very context, that helshe had a fever that day. The speakee who has been paying even minimal attention, by knowing which day and agent are in question, easily determines which singular proposition was expressed. The speakee therewith apprehends that proposition. The speakee is acquainted with the proposition, yet that acquaintance is obtained through identification of the objects given in a context-specific description. The meaning of the sentence describes a singular proposition in terms of the context, and two separate things occur as a result: the utterance issues in the speaker's assertion of that very proposition; and the attentive speakee thereby makes the acquaintance of the presented proposition.<sup>13</sup>

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Return now to the utterances of "Today is Smith's birthday' one day and 'Yesterday was Smith's birthday' the next. The same content is presented differently by the different characters. It is presented in the first context c as the singular proposition about the day of the time of this very context c that it is Smith's birthday, whereas it—the very same proposition—is presented in the second context c' as the singular proposition about the day before that of this very context c' that it is Smith's birthday. The two different descriptions of the same proposition in terms of its relations to two different contexts reflect the different characters' separate contextual perspectives. Kaplan proposes identifying the "cognitive value" ("Erkenntniswerte") of an expression with its

13 Cf. "Demonstratives," pp. 529–532, 597. Kaplan does not articulate the issues concerning knowledge by description and acquaintance as I have. He sees the matter in terms of a supplemented demonstrative's potential for having a different content while retaining its character, in that the same demonstration has different demonstrata in different contexts. I think of the matter instead in terms of the descriptive manner in which the character-building content rule presents the content as a function of context. The difference between the two perspectives is subtle but significant. (See also note 21 below.) To illustrate, Kaplan has introduced the name 'Newman-1' (not an indexical) for whoever will be the first child born in the 22nd century (in "Quantifying In," in D. Davidson and J. Hintikka, eds, Words and Objections: Essays on the Work of W. V. Quine (Dordrecht: D. Reidel, 1969), pp. 206–242, at 228–229). Kaplan agrees that 'Newman-1' has no semantic potential for having a different content (unlike the corresponding 'dthat'-term), since the content is the same no matter the context. Still, its character-building content rule presents that content in a special manner (albeit not as a non-constant function of context):

With respect to any context c the (English) content of 'Newman-1' is whoever will be the first child born in the 22nd century, if there will be a unique such person, and nothing otherwise.

The character's perspective on content underlies the phenomenon that has been called "the essential indexical" in explaining behavior by invoking indexical reports of certain beliefs or other attitudes (e.g., the belief that one's pants are on fire). Cf., John Perry, "The Problem of the Essential Indexical," Noûs, 13 (1979), pp. 3–21; reprinted in N. Salmon and S. Soames, eds., Propositions and Attitudes (Oxford University Press, 1988), pp. 83–101. If I am correct, however, a contextual perspective on content is quite inessential to what is semantically expressed by 'I do believe that my pants are on fire'.

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character—the way the content is presented as a function of context—rather than with the content.<sup>14</sup>

### IV

As mentioned, Kaplan's attention to Frege's Puzzle also motivates his distinction between demonstratives and the so-called pure indexicals. Since different syntactic occurrences of the same demonstrative can converge on the same designatum (hence the same content) yet differ in cognitive value, Kaplan reasons, the characters of those different occurrences must be different. But how can the characters differ when the two occurrences are of the very same univocal vocable?

Kaplan's solution: It is the same vocable, but different expressions. Kaplan's account of demonstratives, as contrasted with "pure" indexicals, can be summed up in a pair of succinct theses:

KT1: Although incorrect about pure indexicals, Frege's syntactic incompleteness thesis is correct with respect to demonstratives; but

KT2: As with all indexical words, the propositions expressed by sentences invoking supplemented demonstratives are singular rather than general.<sup>15</sup>

<sup>14</sup> The idea of accounting for cognitive value in terms of meaning rather than content (or the "statement" made) is found in P. F. Strawson, "On Referring," sec. V(*b*), where he says:

one becomes puzzled about what is being said in these sentences [sentences like 'Today is Smith's birthday' and 'Yesterday was Smith's birthday']. We seem ... to be referring to the same [thing] twice over and either saying nothing about [it] and thus making no statement, or identifying [it] with [itself] and thus producing a trivial identity.

The bogy of triviality can be dismissed. This only arises for those who think of the object referred to by the use of an expression as its meaning, and thus think of the subject and complement of these sentences as meaning the same because they could be used to refer to the same [thing].

Is Frege stymied here? Perhaps not. If the problem for him cited in note 9 above can be solved, he might accommodate the alleged difference in informativeness between 'Today is Smith's birthday' and 'Yesterday was Smith's birthday' through his doctrine of *indirect sense* (*ungerade Sinn*). In fact, Kaplan's identification of the cognitive value of a sentence with its character, *qua* a kind of description of the relevant proposition, is highly reminiscent of Frege's notion of indirect sense. *Cf.* my "A Problem in the Frege-Church Theory of Sense and Denotation," *Noûs*, 27, 2 (June 1993), pp. 158–166; and "The Very Possibility of Language: A Sermon on the Consequences of Missing Church," in C. A. Anderson and M. Zeleny, eds, *Essays in Memory of Alonzo Church* (Boston: D. Reidel, forthcoming).

<sup>15</sup> Kaplan sometimes use the term 'utterance' for the supplemented expression, reserving the term 'sentence' for the mere sentence. This terminological difference should not eclipse the fact that on Kaplan's view, as on Frege's, it is the supplemented sentence, not the mere sentence, that expresses a proposition when occurring in a context. (See note 24 below.)

Kaplan overstates KT2 by saying that "indexicals, pure and demonstrative alike, are directly referential" (*ibid.*, p. 492). This statement gives the misleading impression that the fact that indexical words are directly referential (in Russell's terminology, *logically proper names*; in Kripke's, Millian) obtains somehow in virtue of their context-sensitivity. Both the statement and the misleading suggestion are refuted by the context-dependence of such non-rigid phrases as 'his wife' and 'my hometown'. Also, indexical sentences typically express contingent truths and falsehoods ('He lives in Princeton, New Jersey'), hence do not rigidly designate their truth-value. By contrast, indexical words are directly referential not by virtue of their context-sensitivity, but presumably because their extensions are not secured through a semantic computation (as with definite descriptions and

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The attribution of KT1 is based on numerous passages in "Demonstratives" and in its forerunner, "Dthat." <sup>16</sup> In both of these works, sentences invoking demonstratives are uniformly given with a bracketed specification immediately following the demonstrative of a demonstration. The demonstration that completes the mere demonstrative is typically (not always) performed by the agent of the context, and this demonstration is supposed to serve as a component of the sentence that it accompanies. As Kaplan observes ("Demonstratives,", pp. 490-491), demonstratives are unlike other indexicals in this respect. A demonstration of oneself is completely superfluous in an utterance of 'I' or 'me', and a demonstration of anything else is completely infelicitous. By contrast, a typical demonstrative is essentially incomplete without an accompanying demonstration. Not vacuous; incomplete. A demonstrative *can* be used vacuously, by performing a demonstration with no unique demonstratum. What designates, or fails to designate, is not the demonstrative itself but a supplemented demonstrative, a demonstrative-cum-demonstration. An unsupplemented demonstrative—the mere word—is not even a candidate for designating. In effect, it is grammatically incomplete. As Kaplan puts it:

Demonstratives are incomplete expressions which must be completed by a demonstration (type). A complete sentence (type) will include an associated demonstration (type) for each of its demonstratives (*ibid.*, p. 527).

Kaplan tentatively accepts a 'Fregean theory of demonstrations', on which demonstrations have a character, and express an individual concept as content with respect to a context, and on which the demonstration's content determines a demonstratum with respect to a circumstance (i.e., with respect to a world at a time). Demonstrations are, in these respects, exactly like indexical definite descriptions. The demonstration fixes the designatum of the supplemented demonstrative, hence also its content. With this in mind, Kaplan proposes a sanitized demonstration-free model of how the natural-language demonstrative works: a mere indexical, 'dthat', which is supplemented not by a demonstration but by a singular term to form a complete singular term. Kaplan's 'dthat' is intended to represent our natural-language demonstrative 'that', except that it accepts accompanying supplemental specifications of anything whatsoever as demonstratum—even of something that cannot be strictly demonstrated (because, for example, it is nowhere to be found in the context)—as long as the supplemental specification is strictly verbalized:

*Dthat*[the suspicious-looking guy I saw yesterday wearing a brown hat] is a spy.

sentences) but given by a default semantic rule for all simple (e.g., single-word) singular terms, indexical or otherwise: the Russellian rule that *designatum* = *content*.

<sup>16</sup> In P. Cole, ed., *Syntax and Semantics 9: Pragmatics* (Academic Press, 1978), pp. 221–243; reprinted in P. French, T. Uehling, Jr., and H. Wettstein, eds, *Contemporary Perspectives in the Philosophy of Language* (Minneapolis: University of Minnesota Press, 1979), pp. 383–400.

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The content of this sentence is to be the singular proposition about the suspiciouslooking guy the agent saw the day before wearing the relevant brown hat—Bernard J. Ortcutt, to give him a name—that he is a spy. 17 Kaplan writes:

'Dthat' is simply the demonstrative 'that' with the following singular term functioning as its demonstration. (ibid., pp. 521-522)

I regard my 'dthat' operator as representing the general case of a demonstrative. . . . I regard the treatment of the 'dthat' operator in the formal logic . . . as accounting for the general case. (ibid., p. 527)

Though the content of the complete singular term is the designatum (Ortcutt himself), the actual meaning should be given by a character-building content rule. Kaplan suggests the needed content rule by saying that 'dthat' is "a special demonstrative which requires completion by a description and which is treated as a directly referential term whose referent is the denotation of the associated description" (ibid., p. 521). He then liberalizes by allowing the supplemental expression to be any singular term, definite description or otherwise. Earlier in "Dthat," he wrote: "I would like to count my *verbal* demonstration . . . as part of the sentence type" (p. 237). The content rule suggested by these remarks can be stated thus:

(D) With respect to any context c the content of the singular term  $\lceil dthat[\alpha] \rceil$  is the designatum with respect to c, if there is one, of the component operand singular term  $\alpha$  (i.e., the designatum, if any, of  $\alpha$  with respect to c and the particular circumstance  $c_W$ -at- $c_T$ of c). Otherwise  $\lceil dthat[\alpha] \rceil$  has no content.<sup>18</sup>

In effect, (D) constitutes a contextual definition of 'dthat'. Taking (D) together with such further semantic facts as that 'yesterday' designates the day before that of the context and "multiplying through," the character-building content rule for the particular term 'dthat [the suspicious-looking guy I saw yesterday wearing a brown hat]' is obtained:

(CR3) With respect to any context c the Kaplish content of 'dthat [the suspicious-looking guy I saw yesterday wearing a brown hat]' is, if anything, the suspicious-looking guy whom the agent of c saw in the possible world of c wearing a brown hat on the day before that of  $c.^{19}$ 

The semantic rule (D) also yields the following corollaries (Cf. "Demonstratives," pp. 520-522):

<sup>17</sup> A complex demonstrative like 'that man' may be seen as the combination of a mere demonstrative with a sortal term, standing in need of further supplementation by a demonstration which is facilitated by the sortal. Thus an utterance of 'He is a spy' is a natural-language analogue of: 'Dthat [the male x: x is suspicious-looking & x is wearing a brown hat] is a spy.'

18 Cf. the designation rule 11 of the inductive definition of extension ("truth and denotation")

in "Demonstratives," pp. 545-546.

<sup>19</sup> See note 12 above. The result of instantiating the meta-linguistic variable ' $\alpha$ ' in (D) to the quotation-name of 'the suspicious-looking guy I saw yesterday wearing a brown hat' is a content rule that fixes the function-in-extension from contexts to contents, but does not express the actual character. By contrast, the "multiplied through" character-building content rule displayed in the text fixes the intended function-in-intension, thereby expressing the relevant character.

- (D1) The singular term  $\lceil dthat[\alpha] \rceil$  is indexical—i.e., its content depends on and varies with the context.
- (D2) With respect to any context  $\lceil dthat[\alpha] \rceil$  is directly referential—i.e., its content with respect to a context, if any, is simply its designatum with respect to that context.
- (D3) With respect to any context  $\lceil dthat[\alpha] \rceil$  rigidly designates the designatum, if any, of  $\alpha$  with respect to that context, and is otherwise a rigid non-designator.

Corollary (D3) demonstrates that 'dthat' is, inter alia, an intensional operator. The content and designatum of [dthat[the  $\phi$ ]] with respect to a given context c and a given circumstance w-at-t is the designatum of [the  $\phi$ ] with respect to the circumstance of c, never mind the given circumstance w-at-t. The 'dthat'-operator is thus a rigidifier. With respect to any context, 'dthat [the suspicious-looking guy I saw yesterday wearing a brown hat]' rigidly designates whoever in that context is the suspicious-looking guy the agent saw wearing a brown hat on the day before that of the context. The operator is in this respect analogous to the modal operator 'actually': 'Actually, the suspicious-looking guy I saw yesterday wearing a brown hat is a spy' is true with respect to a context c and a possible world w if and only if the suspicious-looking guy that the agent of c saw wearing the relevant brown hat on the day before that of c is (at the time of c) a spy in the possible world of c, even if he is not a spy in w.

As mentioned, Kaplan intends his 'dthat'-operator as a kind of idealized, thoroughly syntactic model of natural-language demonstratives, which require supplementation by actual demonstrations rather than by singular terms. Kaplan sees in a single deictic utterance of 'that' a pair of component "expressions": the mere word and the supplemental demonstration. Although the demonstration has a content, that content forms no part of the content of the supplemented sentences in which it figures. The content rule governing supplemented demonstratives is modelled after (D):

( $T_K$ ) With respect to any context c the (English) content of the supplemented English demonstrative 'that'  $\delta$  (where  $\delta$  is a demonstration) is the demonstratum with respect to c, if there is one, of  $\delta$ , and nothing otherwise.<sup>21</sup>

Demonstratives on Kaplan's theory are thus content operators, in that the designation of a supplemented demonstrative with respect to a circumstance *w*-at-*t* depends not merely on the demonstratum of the supplementing demonstration with respect to

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<sup>&</sup>lt;sup>20</sup> But see note 24 below.

<sup>&</sup>lt;sup>21</sup> This rule is stated (slightly differently) in "Demonstratives," p. 527, where Kaplan says that it "gives the character" of a supplemented ("complete") demonstrative. The latter assertion contradicts my exposition, on which the instantiation of the variable ' $\delta$ ' in ( $T_K$ ) to a particular demonstration yields a content rule that is not character-building. (A character-building rule wold specify the content with respect to *c* as the such-and-such in *c*, where the demonstration's content is: the such-and-such. See notes 12 and 19 above.) As I see it, the rule ( $T_K$ ) itself is instead Kaplan's contextual definition of the mere word 'that'. Have I misinterpreted Kaplan? Or is his claim that ( $T_K$ ) gives the character of a supplemented demonstrative an oversimplification of his view? (It does fix the character, specifying the character by description.)

w-at-t but on the content. (It is the demonstratum determined by that content with respect to a different circumstance, viz., the circumstance  $c_W$ -at- $c_T$  of the context of utterance.) But demonstratives are counter-examples to a strong compositionality principle, on which the content of a compound expression is formed from the contents of the component expressions. This feature of Kaplan's account is brought into focus by (D). The content of 'dthat [the suspicious-looking guy I saw yester-day wearing a brown hat]' is not formed from the content of its component operand—contrary to what one might have expected on the basis of the general behavior of English compound expressions. The content is the guy himself.

V

By distinguishing supplemented demonstratives in virtue of their demonstrations, Kaplan provides a solution to Frege's Puzzle (as it applies to demonstratives) that builds on the idea that the cognitive value of an indexical is its character rather than its content. A supplemented demonstrative 'that' δ presents its content/designatum in a context c, roughly, as the such-and-such in this very context, where the content of the accompanying demonstration  $\delta$  is: the such-and-such. Supplemented demonstratives whose supplementary demonstrations differ in content differ themselves in character, in the way their content/designatum is presented as a function of context. The different completions of the sentence 'That is that', even though they share the same content, differ in informativeness because of a difference in meaning. The same proposition is presented two different ways, by means of different supplemented sentences with different characters: one time as the singular proposition about the suchand-such in this very context and about the so-and-so in this very context, that they are one and the very same; and a second time (pointing to the same object simultaneously with two hands) as the singular proposition about the such-and-such in this very context that it is itself. The same proposition is given by distinct descriptions of it in terms of different relations that it bears to the same context, descriptions invoking the contents of the distinct accompanying demonstrations.

Kaplan briefly considers an alternative account that does away with Frege's syntactic incompleteness thesis even for demonstratives, treating all indexical words on a par (pp. 528–529). Kaplan calls this alternative the Indexical theory of demonstratives. I shall call it the Bare Bones Theory. On this theory, a context of use is regarded as including alongside an agent (to provide content for 'I'), a time ('now'), a place ('here'), and any other such features, a demonstratum—or better yet, a sequence consisting of first demonstratum, second demonstratum, and so on, in case a single demonstrative is repeated in a single context with different designata, as in 'That<sub>1</sub> [pointing to a carton] is heavier than that<sub>2</sub> [a different carton]'. Demonstratives on the Bare Bones Theory function according to a very simple character-building content rule:

 $(T_n)$  With respect to any context c the content of the nth occurrence in a sentence of 'that' is the nth demonstratum (if any) of c.

This semantic rule imputes different characters to the demonstrative occurrences in 'That is that', since there are contexts in which the first demonstratum is one thing, the second demonstratum another. According to the Bare Bones Theory, the meaning (character) of a sentence like 'That is heavier than that' presents its content with respect to a context as the singular proposition about the first and second demonstrata, respectively, of this very context, that the former is heavier than the latter. This contrasts sharply with Kaplan's theory, on which the content is presented instead by means of the contents of the supplemental demonstration, as the singular proposition about the such-and-such in this context and about the so-and-so in this context, that the former is heavier than the latter. The Bare Bones Theory makes no place in semantics for the demonstration that accompanies the use of a demonstrative, and consequently misses the epistemologically significant content-demonstratum distinction. Kaplan favors this distinction as providing a more satisfying solution to Frege's Puzzle with regard to demonstratives, How can an utterance of 'That<sub>1</sub> is that<sub>2</sub>', if true, differ at all in content from an utterance of 'That<sub>1</sub> is that<sub>1</sub>'? He says:

The Fregean theory of demonstrations may be extravagant, but compared with its riches, [the Bare Bones Theory] is a mean thing . . . the Fregean idea that the very demonstration might have picked out a different demonstratum seems to me to capture more of the epistemological situation than the [Bare Bones] Indexicalist's idea that in some contexts the first and second demonstrata differ (*ibid.*, pp. 528–529).

VI

We looked at some grounds for favoring an account of indexicals on which contextual features are regarded as indices to which the semantic relations of designation and content are relativized over Frege's idea that such features instead form part of the expression. All of these grounds extend straightforwardly to demonstratives. There is first the damage inflicted upon English syntax. This is the main reason, or at least one very important reason, for the retreat from 'that' to 'dthat', with the resulting well-behaved syntax of a sort that we students of language have come to treasure. But foremost, there is this: linguistic intuition demands that a demonstrative has a single context-sensitive meaning which assigns different designata, and hence also different contents, on different occasions of use. On Kaplan's theory, in sharp contrast, each utterance of 'that' with a different designatum is an utterance of a different term with a different character or meaning. In fact, as with Frege, each utterance of 'that' accompanied by a different demonstration with a different content is an utterance of a different term with a different meaning—even if the demonstrata in that context are exactly the same. (The character is represented by the function that assigns to any context the demonstratum in that context of the particular accompanying demonstration; cf. (D) above.) One might say that the demonstrative 'that' is highly ambiguous on Kaplan's account, its precise meaning depending on the content of the accompanying demonstration. This is not merely somewhat counter-intuitive; it is obviously incorrect. As

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with all indexicals, the designatum of 'that', and therefore also the content, depends on the context, but the English meaning is the same on each occasion of use.<sup>22</sup>

It is not quite correct, however, to say that a demonstrative is ambiguous on Kaplan's account. More accurately, precisely the opposite is true: the mere demonstrative—the word itself—is utterly meaningless in isolation. One feature of Kaplan's operator 'dthat' that is easy to overlook but which makes it a highly implausible model for natural-language demonstratives like 'that' is that the former is, by stipulation, a syncategorematic 'incomplete symbol'. The content and designatum of the compound term  $dthat[\alpha]$  is a function of the content of its operand  $\alpha$  (viz., the designatum thereby determined), but the 'dthat'-operator itself has no character or content (no "meaning in isolation"). Natural-language demonstratives, in sharp contrast, have a meaning that remains fixed for each use and determines its content in that use.

This is one respect in which Kaplan's account is inferior to Frege's. As we have seen, Frege easily accommodates the fact that a demonstrative has a fixed yet context-sensitive meaning by taking the mere demonstrative to designate a function from features of context to appropriate designata. By contrast, semantically 'dthat' is not (as its syntax would have us expect) a functor. It might appear that Kaplan could improve his account significantly by following Frege's lead and taking 'dthat' to be a functor for the identity function, and by analogy, taking 'that' to designate the identity function on demonstrata. For numerous reasons such a modification is not open to Kaplan. One immediate problem—in fact, an immediate reductio of Frege's account—is that in the typical case a supplemented demonstrative is, according to that account, a non-rigid designator. Its designatum is simply the demonstratum of the supplementing demonstration, and thus varies from one possible world to the next. This conflicts with Kaplan's thesis KT2 and his semantic corollary (D3).

It might be thought that although Kaplan cannot follow Frege in taking a demonstrative to designate the identity function on demonstrata, this only goes to show that he must seek a different sort of function. As noted above, 'dthat' is, inter alia, an intensional operator. An appropriate designatum for 'dthat', therefore, cannot operate on the mere designatum of its operand. Analogously, an appropriate designatum for a natural-language demonstrative cannot be a function on the mere demonstratum of the supplementing demonstration. Instead, for any context c there is the aptly suited function  $@^i_c$  that assigns to any individual concept (any content suitable for either a definite description or a demonstration) the object determined by that concept in the particular circumstance  $c_W$ -at- $c_T$  of c (and to any non-concept itself). An account of 'dthat' as designating  $@^i_c$  with respect to c could be made to yield exactly the right intension (function from circumstances to designata) for

<sup>&</sup>lt;sup>22</sup> Other writers have made this observation about Kaplan's account—for example, Howard Wettstein, "Has Semantics Rested on a Mistake?" *Journal of Philosophy*, 83, 4 (April 1986), pp. 185–209, at 196*n*. David Braun presses a related point in "Demonstratives and Their Linguistic Meanings," *Noûs*, 30, 2 (June 1996), pp. 145–173, at 149–150. Braun assumes that Kaplan holds that a mere demonstrative is devoid of character while nevertheless having a univocal meaning, and objects that this is inconsistent with Kaplan's proposed identification of linguistic meaning with character. An alternative interpretation is provided in the next paragraph.

supplemented 'dthat'-terms. In fact, doing so would make 'dthat' an indexical modal functor exactly analogous to the sentential operator 'actually' (whose extension with respect to a context c is the function  $\mathcal{Q}^p_c$  that assigns to any proposition its truth-value in the particular possible world  $c_W$  of c). Kaplan's thesis KTI virtually cries out for  $\mathcal{Q}^i_c$  to serve as the mere demonstrative's designatum.<sup>23</sup>

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Yet Kaplan is barred from taking 'dthat' and natural-language demonstratives to be functors. The problem is that the propositions expressed by sentences invoking 'dthat' could not then be singular propositions—any more than the contents of sentences beginning with 'actually' are truthvalues rather than propositions (although again, this could be made to yield exactly the right intension). Instead of Ortcutt himself, the proposition expressed by 'Dthat [the suspicious-looking guy I saw yesterday wearing a brown hat] is a spy' would include among its constituents, if 'dthat' were semantically a functor, the content of the operand description 'the suspicious-looking guy I saw yesterday wearing a brown hat' as well as the content of the functor itself (perhaps something like the operation of assigning to any such individual concept the individual it determines in the particular circumstance  $c_W$ -at- $c_T$ ). This violates (D2) and would thus destroy KT2, and therewith tarnish the spirit of Kaplan's general account. The cost of mediation between KT1 and KT2 is not cheap: a demonstrative is regarded as a syncategorematic incomplete symbol, as mere punctuation.<sup>24</sup>

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<sup>23</sup> The character of a demonstrative might be represented on this proposal by the function that assigns to each context c the corresponding function  $@^i_c$ . Alternatively, the character might be identified with the appropriate function from singular-term characters to directly-referential-singular-term characters (e.g., from the character of 'the suspicious-looking guy I saw yesterday wearing a brown hat' to that of the corresponding 'dthat'-term).

David Braun in "Demonstratives and Their Linguistic Meanings" (see note 22 above) makes a proposal similar to the second identification of characters mentioned above. The similarity is superficial. Braun's specific proposal has at least two significant defects. First, Braun takes the arguments of the functions he identifies with the meanings of demonstratives to be demonstrations themselves rather than their characters. This would be analogous to taking the meaning of 'the mother of to be a function from its singular-term arguments (instead of their meanings) or the character of 'not' to be a function from sentences. This defect might be forgivable, if demonstrations are arguably part of a universal language (unlike singular terms). More important, Braun's central idea is to assign an additional kind of "meaning" to mere demonstratives: a fourth semantic value beyond character, content, and extension (of the supplemented demonstrative). By contrast, the proposal in the text (to be rejected presently) assigns a character, content, and extension to a mere demonstrative itself. The character of the mere demonstrative determines that of the supplemented demonstrative from that of a given supplemental demonstrative, whereas the content or extension of the mere demonstrative determines that of the supplemented demonstrative from the content (in both cases) of the demonstration.

<sup>24</sup> Kaplan explicitly acknowledges some of these points in "Afterthoughts," pp. 579–582. Discomfort over the cost of mediation seems to have prompted a disorderly retreat from KTI. Kaplan says that, precisely because the singular term is meant to be directly referential, he had intended the designating term to be simply the word 'dthat', rather than the compound expression  $[dthat[the\phi]]$ , and that the supplemental description [dthat] was to be merely a "whispered aside" which was "off the record" (p. 581; Kaplan adopted these latter phrases from suggestions by Kripke and me, respectively). Since the supplemental term is no part of the term 'dthat', he says, as originally intended 'dthat' is not a rigidifier of something else but a term unto itself. He writes:

The word 'dthat' was intended to be a surrogate for a true demonstrative, and the description which completes it was intended to be a surrogate for the completing demonstration. On this interpretation

Another problem with Frege's account, inherited by the envisaged account of demonstratives as designating  $@_c^i$ , is that the mere demonstrative is "context-sensitive"

'dthat' is a syntactically complete singular term that requires no syntactic completion by an operand. (A "pointing," being extra-linguistic, could hardly be a part of syntax.) The description completes the character of the associated occurrence of 'dthat', but makes no contribution to content. Like a whispered aside or a gesture, the description is thought of as off-the-record (i.e., off the content record). It determines and directs attention to what is being said, but the manner in which it does so is not strictly part of what is asserted. . . . 'Dthat' is no more an operator than is 'I' . . . The referent of 'dthat' is the individual described . . . It is directly referential.

Although Frege claimed that the context of use was part of "the means of expression" of a thought, he never, to my knowledge, attempted to incorporate "the pointing of fingers, hand movements, glances" into logical syntax. Can an expression such as the description in a 'dthat'-term appear in logical syntax but make no contribution to semantical form? It would be strange if it did. But there is, I suppose, no strict contradiction in such a language form. (pp. 581–582)

These remarks are at once curious and maddening. Kaplan's labeling the prospect of a noncompositional compound expression "strange" creates the misimpression that his account of designating demonstratives treats them otherwise. I shall make several points in response and clarification, though I suspect that a much expanded discussion is required. First, Kaplan introduced his expression 'dthat' in "Dthat" and again in "Demonstratives" explicitly stipulating that it requires completion by a supplemental term, typically a description. He also explicitly said that natural-language demonstratives analogously require completion, by a demonstration instead of a description. (See the quotes supporting the attribution of thesis KT1 and the content rules (D) and  $(T_K)$  above.) And indeed, it cannot be merely the expression 'dthat', but must be its union with a supplemental term—thus, a compound expression—that has a character of the appropriate sort. Contrary to Kaplan's remark, the supplemental description makes an essential contribution to content: It fixes the content. Without the supplemental term, 'dthat' is semantically impotent. (Ironically, Kaplan repeatedly acknowledges this point in "Demonstratives," both with regard to 'dthat'-terms and with regard to natural language, e.g., at pp. 490-491, and even in "Afterthoughts," e.g., at p. 588.) To see the point clearly, let the reader attempt to formulate an appropriate content rule like (D) above, except assigning content to the expression 'dthat' rather than to  $\lceil dthat[\alpha] \rceil$ , while treating the supplemental term  $\alpha$  as neither a component expression nor as a component of the context, but instead merely as a "whispered aside" (whatever that would be) that makes no contribution to content. Similarly for  $(T_K)$  and the supplemental demonstration. In whatever sense it is true, as Kaplan says above, that the supplemental term  $\alpha$  "completes" the character, it is equally true (if not even more so) that 'dthat' alone is incomplete without a supplemental term and that the complete term has the form  $\lceil dthat[\alpha] \rceil$ .

All of this is perfectly compatible with the further fact that the content of the supplemental term forms no part of the content of the completed term. Otherwise (D) itself should be formally inconsistent—as should be Kaplan's own informal formulation of this same content rule (p. 521). So too should be ( $T_K$ ), which Kaplan explicitly endorses (p. 527). In fact, Kaplan's acknowledgement above of the consistency of the envisioned prospect is tantamount to an acknowledgement that there is no valid argument from the non-compositionality of content of a complete 'dthat'-term to the supplemental term's not being an essential component expression. On the contrary, the envisioned consistent prospect is the very reality Kaplan has produced with his operator. There does seem to be a kind of inconsistency—not in the operator as stipulated, but between the very two paragraphs quoted above. In fact, the very notion of a demonstrative that is on the one hand non-compound and univocal, but on the other variable in character depending on the designata of "whispered asides," is straightforwardly inconsistent.

The remarks in "Afterthoughts," pp. 579–582, fail to provide a coherent interpretation of "Demonstratives." I conclude that Kaplan, on reflection, has misjudged his own original intent for 'dthat' above (and his own theory of demonstratives!) and that the theory is the one explicitly proffered in "Demonstratives" (at pp. 521–527 and passim): that the complete term is the supplemented term comprised by the union of the mere demonstrative with a supplemental demonstration.

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on Frege's account only in the sense that its sense and designatum are functions from contextually-variant elements. The central insight of Kaplan's account of indexicality is that indexicality is not a matter of expressing functions from contextually-variant elements, but a matter of taking on different contents altogether in different contexts. This observation goes significantly beyond Hans Kamp's original insight that indexicality requires double indexing of extension both to contexts and to circumstances which may vary independently of context. Not only does the extension, but also the content, of an indexical depend upon, and vary with, a context of use.<sup>25</sup> On Frege's account, the content of 'that' is the same in every context: the identity function on demonstration contents. Although "context-sensitive" in one obvious sense—the function in question is a function on a contextually-variant element—a mere demonstrative on Frege's account is not indexical in Kaplan's sense. Likewise, although on Frege's account a supplemented demonstrative, 'that'  $\delta$ , is "context-dependent" in one obvious sense—the argument to the function designated by 'that' is given by the demonstration  $\delta$ —it is not indexical in Kaplan's sense. It is crucial to Kaplan's account that the supplemented demonstrative be indexical. The content of 'that' $\delta$ in any context is the demonstratum of  $\delta$  in that context, and consequently varies with the context. For these various reasons (and more), Kaplan is barred from taking the mere demonstrative—the word itself—to have a meaning in isolation.

But the demonstrative 'that' is surely not meaningless in isolation. It has a definite meaning, one that remains unchanged from one utterance to the next, a meaning that is shared by demonstratives in other languages. And as with any indexical, the meaning of a demonstrative looks to the context to secure a content, and thence, a designatum. Far from being an "incomplete symbol", a demonstrative—the word itself—is a designating singular term if anything is. When Ralph points to Ortcutt and declares, "He is a spy!" the word 'he' surely designates Ortcutt. Furthermore, even if the pointing itself is regarded as somehow designating Ortcutt, intuitively it is the word 'he' rather than some hybrid consisting of the word and the pointing that semantically designates Ortcutt. Again, Kaplan's account of demonstratives as syncategorematic punctuation, rather than as fully designating singular terms, is not merely somewhat counter-intuitive. It is clearly incorrect.

Does Frege's Puzzle provide adequate grounds to segregate demonstratives from indexical words like 'I' and 'yesterday' in requiring Frege's syntactic incompleteness thesis? Kaplan's complaint concerning the alternative Bare Bones Theory has considerable force. The mere fact that separate occurrences of a demonstrative within a single context frequently differ in their demonstrata is not an adequate explanation of the apparent informativeness of 'That = that', any more than the apparent informativeness of 'Hesperus is Phosphorus' is adequately explained by noting that a single object typically has one name rather than two. Even sophisticated speakers aware of the co-designation of two occurrences of 'that' in a particular context deem it possible to believe that that 1 is the same as itself without believing that it is that 2 Frege's Puzzle is concerned with the contents of such sentences as 'Hesperus is Phosphorus' and 'This is that' and not merely with their syntax. The Puzzle is: How can

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the expressed propositions differ in the ways that they do from those expressed by 'Hesperus is Hesperus' and by an utterance of 'That = that' while pointing to the same object twice in the same way—as, perhaps, by pointing simultaneously with both hands?<sup>26</sup> Kaplan's explanation in the case of demonstratives is that the complete sentence is supplemented by distinct demonstrations with distinct contents, and though the two supplemented demonstratives have the same content in the relevant context, they differ in the manner in which they semantically present their common content as a function of context. The Bare Bones Theory also distinguishes the two occurrences of 'that' in regard to meaning, but that difference is described in terms of the different sequential order in which their demonstrations are performed, ignoring the epistemologically crucial contrast between the actual contents of those demonstrations. And, it should be added, the Bare Bones Theory cannot provide any explanation in terms of character or content of the uninformativeness of an utterance of 'That is that' while pointing with both hands, nor of the difference in informativeness between the two utterances of 'That is that', since the sentence is assigned the same character and the same content.

The Bare Bones Theory attempts to solve Frege's Puzzle by postulating distinct words with distinct meanings where there is only one word with one meaning. At bottom, this is the same general strategy employed in both Frege's and Kaplan's solutions. It is a strategy forced on anyone attempting to solve the Puzzle in terms of meaning. But it violates a linguistic variation on Occam's Razor: Thou shalt not multiply meanings beyond necessity. Worse, it flagrantly violates a further, particularly imposing variation of Occam's Razor: Thou shalt not multiply expressions beyond plausibility. Kaplan laments the fact that his preferred solution to the puzzle about 'That<sub>1</sub> = that<sub>2</sub>' does not extend to 'Hesperus is Phosphorus', since the two names, unlike the supplemented demonstratives, share the same character (ibid., pp. 562–563). Rather than contort our linguistic intuitions in order to accommodate an explanation which does not in any event work in the general case, it would be wiser to extract from the case of proper names an important lesson concerning Frege's Puzzle and devices of direct reference generally: The epistemologically significant ways in which the same proposition is different presented, or differently taken, are not always a matter of semantics (linguistic meaning).

The sins of the Bare Bones Theory are not limited to its violation of the linguistic variations on Occam's Razor. That theory ignores demonstrations altogether, and consequently ignores their properly semantic role in the proper use of a demonstrative. One potential problem with the Bare Bones Theory is that *a demonstration's demonstratum need not be active or even present in the context.* This point is illustrated by one of Kaplan's examples (used for a slightly different purpose). I may demonstrate Alonzo Church by pointing to a photograph while uttering 'He

<sup>&</sup>lt;sup>26</sup> Cf. my Frege's Puzzle (Atascadero, Ca.: Ridgeview, 1986, 199), especially pp. 57–60, 87–92. Performing the very same demonstration of the same object twice over in a single utterance of 'That is that' is in fact very difficult to accomplish. For convenience, I assume throughout that pointing simultaneously with both hands is a way of accomplishing this feat (though this assumption is strictly false).

was one of the greatest thinkers of the 20th century'. Regrettably, Church himself is not present or active in the context; only the photograph is. But the demonstratum is no mere photograph. It is the photograph's subject: Church himself. At most, Church is *present by proxy*, his photograph representing him not merely in the standard way that a picture represents but also standing in for him. The demonstratum of a particular demonstration may be neither present in the context nor an active participant, nor even present by proxy.<sup>27</sup> Consider the following discourse fragment:

(i) Do you recall the suspicious-looking guy we saw yesterday wearing a brown hat? (ii) Well, I think: he's a spy.

Although the 'he' in (ii) is anaphoric, it is not a variable bound by its grammatical antecedent in (i), but a syntactically free term designating Ortcutt. Of course, the pronoun 'he' does not designate Ortcutt no matter what the context. The anaphora here is of a peculiar variety. In effect, the 'he' in (ii) is a demonstrative and the definite description in (i) plays the role of accompanying demonstrative and the demonstratum is entirely absent from, and inactive in, the context; the demonstrative 'he' succeeds all the same. In general, the demonstratum of a particular demonstration need not be present by proxy nor connected to the context in any significant ("real") manner, e.g., causally. The demonstratum may be merely that which is demonstrated—witness Kaplan's 'dthat'-operator, which may be supplemented by material that designates an object from long, long ago and far, far away, merely "by description" (as in 'Consider whoever was the last child born in the nineteenth

<sup>27</sup> I am thinking here of a context as the setting or environment in which an utterance occurs, rather than as the proposition, or set of propositions, assumed by all conversational participants. The case of the answering machine demonstrates that a contextual parameter need not be at the location of the context at the time of the context, since the agent of the utterance of 'I am not here now' is typically asserting a truth. Though the agent of the context of such an utterance is, in some sense, absent from the context, he or she is nevertheless playing an active, or "real," role in the context—there is an assertion *in absentia* by the agent—and I conjecture that it is this fact that warrants including the absent agent as a contextual parameter. By contrast, the demonstratum of a particular demonstration may be entirely passive, utterly inert, a *mere* demonstratum. (Thanks to Ben Caplan for forcing me to be more explicit about this matter.)

The pronouns 'he', 'she', and 'that' may differ in this respect from the special demonstrative 'this', for which the designatum is arguably always present in the context of use (or present by proxy?). If something closely resembling the Bare Bones Theory is applicable to 'this', it is so because of some such special restriction governing its appropriateness. (In effect, the Bare Bones Theory may mistake 'that' for 'this'. Or is it the other way around?)

<sup>28</sup> Contrary to Kaplan's claim (echoing Peter Geach) that anaphoric pronouns may be seen invariably as bound variables (*ibid.*, p. 572). Perhaps the issue of whether the 'he' in (*ii*) is a bound variable is to some extent terminological. But the terminology of 'bound' and 'free' is not without constraints. If it is insisted that the 'he' is a bound variable, then what is the variable-binding operator that binds it to its grammatical antecedent? The 'his' in 'No author inscribed his book' is not a designating *occurrence*; it is genuinely a bound variable. By contrast, the 'he' in (*ii*) designates Ortcutt. Nor is the 'he' a "pronoun of laziness" or an abbreviation for the description in (*i*). The speaker's suspicion is not merely a *de dicto* thought to the effect that whoever is a uniquely suspicious-looking guy seen the day before wearing the relevant brown hat is a spy. It is *de re* concerning Ortcutt: that *he* is a spy. All indications are that the 'he' in (*ii*), although anaphoric, is syntactically free, with its grammatical antecedent functioning as a kind of verbalized demonstration.

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Century. It would have been possible that *he* or *she* be born instead in the twentieth Century').

As mentioned, Church's photograph may be employed as a stand in for Church himself. Another feature of the context which is no less relevant to understanding my use of 'he' is my demonstration of Church via the photograph. Frege and Kaplan put the demonstration directly into the expression to form a peculiar hybrid: 'he' pointing-at-the-photograph. But the demonstration does not belong in the expression. I say we take it back. My alternative proposal is that we put the demonstration exactly where it has belonged all along: in the context. Intuitively, the speaker's hand gestures, figerpointings, and glances of the eye are features of the context of use, every bit as much as the identity of the speaker and the time and place of the utterance. Consider again Frege's insightful observations: "Thus the time of utterance is part of the expression of the thought ... The case is the same with words like 'here' and 'there'. In all such cases, the mere wording, as it can be written down, is not the complete expression of the thought; one further needs for its correct apprehension the knowledge of certain conditions accompanying the utterance, which are used as means of expressing the thought. Pointing the finger, gestures, and glances may belong here too." I agree with Frege, as against Kaplan, that gestures and fingerpointings belong together with the time and place of an utterance; I disagree with Frege, and Kaplan, that they go into the expression uttered. Rather, they are equally features of the conditions of an utterance that fix the contents of uttered indexicals. My proposal is that a context of use be regarded as sometimes including a demonstration among its features, along with an agent, a time, a place, and a possible world. Not the bare demonstratum, but the demonstration with all its representational content.29

Better yet, since the same demonstrative may recur within a single sentence or stretch of discourse, each time accompanied by a different demonstration ('That one goes between that one and that one'), the context should include an *assignment* of a demonstration for each syntactic occurrence of a demonstrative in a sentence—the first occurrence, the second, and so on.<sup>30</sup> This fuller notion of a context provides a different explanation from that of Frege-Kaplan of the sense in which demonstratives without accompanying demonstrations are *incomplete*. The demonstrative itself is

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<sup>&</sup>lt;sup>29</sup> Kaplan objected (in San Marino) that the demonstration should not go into the context instead of the expression, for otherwise a possible context can include a demonstration completely different from the one performed by the context's agent in the context location at the context time in the context world. This prospect is avoided by restricting the admissible ("proper") contexts to those n-tuples  $< C_A, C_T, C_W, \ldots, C_D>$  such that the demonstration  $C_D$  is mounted at time  $C_T$  in possible world  $C_W$  (etc.). It is far from obvious, however, that such a restriction is desirable. Is the sentence 'That object (assuming it exists) is now being demonstrated', for example, to be regarded as true solely by the logic of 'to demonstrate'?

<sup>&</sup>lt;sup>30</sup> One might wish to let the context assign demonstrations to each demonstrative occurrence in an entire argument. The particular argument 'He is taller than him; hence, he is shorter than him' can be uttered with accompanying demonstrations that ensure the truth of the conclusion given the truth of the premise. ('He<sub>1</sub> is taller than him<sub>2</sub>; hence, he<sub>2</sub> is shorter than him<sub>1</sub>'.) Still, the form of words evidently yields an invalid argument. Compare: 'He is taller than him; hence, he is neither shorter than nor the same height as him'.

a complete expression, fully assembled and ready to go. Strictly speaking, it is the *context* that is incomplete. Or if you prefer, it is the *occurrence* of the demonstrative in the defective context that is incomplete, because of a contextual deficiency. It is like the use of 'now' in a timeless universe ("before" the Big Bang?), or the use of 'there' in Oakland, California—fully complete expressions occurring in defective contexts.<sup>31</sup>

The demonstration included in a context need not be an actual fingerpointing, or any action or event in the usual sense. The demonstration can be entirely verbalized—witness the discourse fragment displayed above. Kaplan should formalize this by putting the description from (*i*) directly into (*ii*) thus:

(ii') I think that *dthat* [the male x: x is a suspicious-looking guy & we saw x yesterday wearing a brown hat] is a spy.

If the description in (i) is replaced by 'the present Secretary of State', Kaplan would need to make a corresponding adjustment to (ii'). But there is no intuitive justification for this dramatic departure from surface syntax. The description in (i) does not occur in (ii), which is a complete sentence by itself. Instead, (i) is part of the context in which (ii) occurs ((i) is the *verbal* context for the occurrence of (ii)), and the description in (i) is associated with the 'he' in (ii), playing the role of accompanying demonstration. As already mentioned, the description in (i) is a verbalized demonstration. If the description is replaced by another, the context for (ii) is changed, and hence so too its content. But (ii) itself remains the same complete sentence with the same English meaning.<sup>32</sup>

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- <sup>31</sup> Gertrude Stein on seeing her childhood town after it had been torn down: "There is no *there* there." Braun objects to taking demonstrations as aspects of context on the question-begging grounds that doing so obliterates Kaplan's contrast between demonstratives and the so-called pure indexicals. On the contrary, this is precisely one important reason for putting demonstrations into the context, exactly where they belong. Braun also notes that, unlike other aspects of context (e.g., time and place), demonstrations are typically produced under the voluntary control of the agent and are not themselves the contents of the demonstratives they accompany. Here again, these are insufficient grounds to banish demonstrations from their proper place. Demonstrations have important features in common with such contextual aspects as time and place: they are all recognizable as features of the circumstances surrounding an utterance that fix the contents of uttered indexicals.
- 32 It is for similar reasons that substitution of 'Barbarelli' for 'Giorgione' fails in 'Giorgione was so-called because of his size'. Substitution alters the context for the demonstrative 'so'. The construction in the text raises particularly perplexing issues. Consider the following variant: '(i") Consider whoever is the shortest spy in the world; (ii'') he or she is certainly a communist.' It seems undeniable that the speaker has asserted of the shortest spy, de re, that he or she is a communist, since the semantic content of (ii") is precisely that very singular proposition. Kaplan concludes (contradicting his earlier arguments in "Quantifying In"—see note 13 above) that a mastery of the semantics of such directly designating devices as demonstratives enables speakers to form beliefs of singular propositions, and even to gain singular-propositional knowledge a priori (e.g., about the shortest spy that he or she is a spy, or about the first child to be born in the 22nd century that he or she will be born in the 22nd century), in the absence of any "real" connection to the object in question ('Dthat', p. 241; 'Demonstratives', p. 560n; 'Afterthoughts', p. 605). This conclusion leads almost directly to a form of the controversial thesis of latitudinarianism with regard to de re belief. But even if de re assertion (assertion of the singular proposition) is in fact accomplished through such means, it by no means follows that de re belief, let alone de re knowledge, follows suit. On the contrary, firm intuitions derived from ordinary language show otherwise. Cf. my 'The Good,

Importantly, the distinction between so-called pure indexicals and demonstratives is a matter of incompleteness not in the expressions, but in their contexts. Demonstratives and "pure" indexicals alike are full-fledged indexicals, complete expressions unto themselves. The demonstratives 'this' and 'that' are every bit as complete and purely indexical as 'you' and 'I', as pure as freshly fallen snow. The negative side effects of the syntactic incompleteness thesis are avoided. The strictures of the linguistic variations of Occam's Razor are respected. Forget the Bare Bones Theory. Here is an *Indexical Theory of Demonstratives* worthy of the epithet.

#### VII

As mentioned, this Indexical Theory conforms with the linguistic variations of Occam's Razor which Kaplan's theory flaunts.<sup>33</sup> But how does Frege's Puzzle with regard to demonstratives fare?

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The sentence 'That is that' has a single meaning. The sentence is univocal but indexical, expressing different identity propositions in different contexts—some necessarily true, others necessarily false. The invariant meaning presents the content expressed in a given context with its contextual perspective, (roughly) as the singular proposition about the demonstrata of the separate demonstrations assigned by this very context to the first and second syntactic occurrences of 'that', that they one and the very same. One might regard this as a lean and mean way of presenting content as compared with the riches of Kaplan's theory with its multiplicity of demonstration contents. But to see matters thus is to draw a hasty conclusion on the basis of a serious oversight concerning the communicative situation.

One may still appeal to the contents of accompanying demonstrations on the Indexical Theory in an account of *Erkenntniswerte*. The speakee understands the sentence merely by knowing the relevant character-building content rule. But in witnessing the utterance, the attentive speakee observes not only the sentence uttered but also the demonstrations that are assigned to distinct utterances of demonstratives. Indeed, the speakee must observe the demonstrations to grasp the speech act adequately, since knowing which proposition was asserted—knowing

the Bad, and the Ugly', in A. Bezuidenhout and M. Reimer, ed., Descriptions (Oxford University Press, forthcoming).

<sup>33</sup> Kaplan observes that there is "a kind of standard form for demonstrations" accompanying a typical utterance of a demonstrative: such demonstrations have a character like that of a definite description of the form: *the individual that has appearance A from here now*, where the mentioned appearance is "something like a picture with a little arrow pointing to the relevant subject" (pp. 525–526). This is plausible. However, by building excess material into the linguistic meaning of the demonstrative Kaplan inevitably misclassifies some utterances of synthetic sentences as being utterances of analytic sentences, e.g., 'He (if there is such a thing) has appearance *A* from here now'. Though this sentence is true, a full mastery of its meaning does not by itself give one the knowledge that it is inevitably true, as Kaplan's account implies. Its truth crucially depends on non-linguistic, empirical information: that the demonstrated male appears a particular way from the speaker's perspective at the time of the utterance. This information is supplied with the demonstration; it is built into the context of the utterance, not into the expression uttered. (*Cf.* note 31 above.)

what is said—requires knowing which object was demonstrated. Awareness of the context provides the speakee with a special handle on the demonstrations assigned to each utterance. This ancillary empirical knowledge about which demonstrations are performed in the particular context allows the speakee to make substitutions into the character-building content rule's mode of presentation of the content, plugging in particular demonstrations, with their particular contents, for the meta-level concept the demonstration assigned by this very context. Instead of taking the proposition in terms of its relation to the context, the speakee now takes the proposition in terms of its relation to the particular demonstrations observably included in the context. In effect, the speakee converts knowledge by description of the proposition in terms of the context into knowledge by description in terms of the demonstration, exchanging knowledge by context-specific description for knowledge by demonstration-specific description. The latter, in turn, provides acquaintance with the proposition itself. The epistemic situation is not unlike learning the color of Alonzo Church's hair by being told that Church's hair was the color of snow while simultaneously being shown what snow looks like.

When the speaker utters 'That is that' pointing to the same object with both hands simultaneously, the context assigns the very same demonstration to both syntactic occurrences of 'that'. In such contexts, the proposition expressed is taken by the attentive speakee as a trivial self-identity—in effect, as the singular proposition about the demonstratum of  $\delta$  that it is itself. This special way of taking the proposition is given not by the character itself, which presents the proposition in terms of its relation to the context, but by the character in tandem with the context which includes the observable demonstration  $\delta$ . There are other contexts that assign distinct demonstrations that happen to converge on the same demonstratum. In such contexts, the proposition is taken by the attentive speakee as an identification between objects differently demonstrated—as the singular proposition about both the demonstratum of  $\delta_1$  and the demonstratum of  $\delta_2$ , that they are one and the very same. Pairs of contexts, one of each sort, may yield exactly the same singular proposition—resulting in Frege's Puzzle. With regard to such context pairs, the uttered sentence 'That is that' not only expresses the same content but retains the same meaning. The relevant character-building content rule presents the proposition in terms of the same relations to the respective contexts—as a singular proposition about the demonstrata of whatever demonstrations are assigned to utterances of 'that' by the relevant context. In observing those demonstrations, the attentive speakee is enabled to take the proposition in the distinct contexts in terms of its relation to those very demonstrations. The different ways in which the same proposition is taken—what I have elsewhere called proposition guises<sup>34</sup>—are provided not by the character-building content rule itself, but in the contents of the demonstrations assigned by the particular context of use. In short, the difference lies not in the semantics but in the contexts, which assign distinct demonstrations to the syntactic occurrences of 'that' and thereby provide the attentive speakee with contrasting

perceptual perspectives on what is in fact the same proposition presented *via* the same meaning in the distinct contexts.

This contrasts with Kaplan's account, on which the same mere words are uttered, yet different sentences with different meanings (the different characters resulting from different demonstrations with different contents). While proposition guises can be a matter of linguistic meaning, they are not always so. Where demonstratives are used, they are a matter of ancillary knowledge, of non-linguistic perceptual perspective. The semantics of demonstratives on the proposed Indexical Theory makes essential reference to demonstrations, which are assigned to syntactic occurrences of demonstratives by the context. But that reference is exclusively by description. The semantics makes no essential reference to the *contents* of those demonstrations, even if they are crucial to the communicative and epistemic situation. The Indexical Theory provides no semantic distinction on which to hang the different ways in which the same proposition might be taken differently in different utterances of 'That is that'. The various proposition guises are not given in the semantics. They are given in the context—or more accurately, in the union of meaning and context.

In 'Afterthoughts', Kaplan says that he accepted the Fregean theory of demonstrations in 'Demonstratives' in part because 'the Fregean idea that that very demonstration might have picked out a different demonstratum, an idea that depended on the separability of a demonstration from a particular context, seemed to track very closely the cognitive uncertainties of 'that<sub>1</sub> is that<sub>2</sub>'. This cognitive value appears in character, and thus as an aspect of meaning' (p. 588). The Indexical Theory I propose demonstrates that the Fregean idea does not require the detachment of the demonstration from context. Nor must the relevant "cognitive uncertainties" be an aspect of meaning. Meaning has a role to play, and an important role it is. But the epistemologically crucial ways of taking things are given in the context rather than the character-building content rule. Direct-reference theorists who share my skepticism regarding Frege's Solution to Frege's Puzzle with regard to 'Hesperus' and 'Phosphorus'—including Kaplan (ibid., pp. 562-563, 598)—should not be troubled by this aspect of my proposed account. On the contrary, in respecting the strictures of the linguistic variations of Occam's Razor while locating the proposition guises provided through the use of demonstratives in non-semantic, contextual aspects of their use, the account points the way to a similarly non-semantic account of the cognitive role played by proper names, natural-kind terms, and other devices of direct reference.35

I have not argued that Kaplan's operator 'dthat' could not be added to a natural language like English, or even that it would be undesirable to do so. Quite the contrary, it has already proved itself a very useful addition to philosophical English. What I am asserting is that the operator provides an inaccurate and seriously misleading model of standard uses of the English demonstrative 'that'. Unlike 'dthat', which is syncategorematic, the English demonstrative 'that' is standardly used as a complete

<sup>&</sup>lt;sup>35</sup> See note 13 above. A name whose designation is fixed by description has a character of a rather special form. In the case of a typical name, the character-building content rule specifies the content for (every context) by name rather than by description.

singular term that semantically designates the relevant demonstratum with respect to a context. In other standard uses, the English word 'that' is not itself a singular term but part of a so-called complex demonstrative, 'that F', which is a complete, fully designating singular term. It might be better to view the bare demonstrative 'that' as a diminution or abbreviation of the demonstrative phrase 'that object' or 'that thing', making space for the complex phrase 'that F' as the underlying general case. There are other uses of phrases of the same surface form as complex demonstratives on which those phrases seem to be instead stylistically altered definite descriptions. ("David is still hoping to encounter that pupil who will surpass him.") There may also be uses of words like 'that' and 'she' on which they function nearly enough like 'dthat'—as perhaps, "A teacher gave Rudolf a low grade and David doubts whether she (the same teacher) graded fairly." Such uses deviate from the standard case.<sup>36</sup>

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<sup>36</sup> A frequently heard objection to the hypothesis that compound expressions of a given category (e.g., definite descriptions) are singular terms is that expressions of the given category can be coherently quantified into (i.e., they can contain a variable bound by an external quantifier) while genuine singular terms cannot. The objection evidently originated with Benson Mates, "Descriptions and Reference," Foundations of Language, 10, 3 (September 1973), pp. 409-418, at p. 415, but has been endorsed or echoed by others (e.g., Stephen Neale, Descriptions, Cambridge, Mass.: MIT Press, 1990, at p. 56n28). The objection typically relies on a  $\lambda$ -abstraction theorem, to the effect that any sentence  $\phi_{\beta}$  containing a genuine singular term  $\beta$  in extensional position, and which is the result of uniformly substituting  $\beta$  for the free occurrences of a variable  $\alpha$  in the open formula  $\phi_{\alpha}$ , is true only if the designatum of  $\beta$  satisfies  $\phi_{\alpha}$ . (The assumed abstraction theorem is not generally stated this precisely, if it is stated at all. Mates may rely on an alternative semantic principle: that any sentence  $\phi_{\beta}$  of a restricted class C, and containing a genuine singular term  $\beta$ in extensional position, is true only if  $\beta$  designates. The class C might exclude such problematic formulas as  $\lceil \beta \rceil$  does not exist].) The objection has been applied to complex demonstratives—for example, by Ernest Lepore and Kirk Ludwig in "The Semantics and Pragmatics of Complex Demonstratives," Mind, 109, 433 (April 2000), pp. 200-241, at pp. 205-206, 210-222, and passim (where something like the assumed abstraction theorem is explicitly applied): "It is difficult to see how to make sense of quantification into complex demonstratives on the assumption that they are referring terms. ... [The abstraction theorem] renders mysterious how the material in the nominal could interact semantically with the rest of the [quantified] sentence" (pp. 205–206). ... "Examples of apparently coherent quantification into the nominals of complex demonstratives supply some of the most important evidence for denying that they are referring terms" (p. 219). Cf. Jeffrey King, Complex Demonstratives (Cambridge, Mass.: MIT Press, forthcoming), at pp. 8-9, 20 - 22.

It should be noted in response that complex demonstratives seem especially immune to this objection, since quantification into them is, at best, odd. If the open phrase 'that man she sees at the podium' is used genuinely demonstratively in 'At least one woman here admires that man she sees at the podium' (not as a stylistically altered definite description), the sentence is indeed true if and only if the relevant demonstratum satisfies the matrix 'At least one woman here admires x', and the objection collapses. (The example is from Lepore and Ludwig.) Cf. Barry Taylor, "Truth-theory for Indexical Languages," in M. Platts, ed., Reference, Truth, and Reality (London: Routledge & Kegan Paul, 1980), pp. 182-198, at pp. 195-196; and Neale, "Term Limits," in J. Tomberlin, ed., Philosophical Perspectives, 7: Language and Logic (Atascadero, CA.: Ridgeview, 1993), pp. 89–123, at p. 107. More importantly, if it were sound, the assumed abstraction principle would establish more generally that the very notion of an open designator (a designating expression containing a free variable) is semantically incoherent. Despite the objection's popularity, ordinary mathematical notation is rife with counter-examples to the abstraction "theorem":  $(x + 3), (x^2),$  etc. The most glaring counter-example is the paradigm of an open designator: the individual variable. The objection is in fact based on an elementary confusion. Designation for an open term (whether compound or a variable) is relative to an assignment of values to its free variables. The variable

Following Kaplan's lead, I here introduce an artificial operator, 'zat'. Unlike its predecessor 'dthat', the 'zat'-operator does not have the logical form of a functor. But like 'dthat', neither is it a singular term. Like the logician's inverted iota, it is a variable-binding operator that forms singular terms from open formulas: '(zat x)(x is a man & x looks suspicious)'. It is not required, however, that the open-formula matrix, 'x is a man & x looks suspicious', be uniquely satisfied for the 'zat'-term to be a "proper" demonstrative, i.e., to designate. The meaning of a 'zat'-term is determined by the following replacement for (D) (as well as for  $(T_n)$ ):

(Z) With respect to any assignment of values to variables s and any context c, the content of an occurrence of the demonstrative term  $\lceil (zat\alpha)\phi_{\alpha} \rceil$  is the demonstratum of the demonstration assigned to that occurrence in c, provided there is such a demonstratum and it satisfies  $\phi_{\alpha}$  with respect to c (i.e., provided  $\phi_{\alpha}$  is true under the modified version of s that assigns the demonstratum to  $\alpha$  and is otherwise the same as s, with respect to both c and the particular circumstance  $c_W$ -at- $c_T$  of c). Otherwise  $\lceil (zat\alpha)\phi_{\alpha} \rceil$  has no content.

As with 'dthat', the 'zat' operator is a content operator, in that the designatum of  $\lceil (zat\alpha)\phi_{\alpha} \rceil$  with respect to a circumstance w-at-t must satisfy the matrix formula  $\phi_{\alpha}$  with respect to a different circumstance, viz., that of the context. Also like 'dthat'-terms, 'zat'-terms are not compositional with regard to content. Though  $\lceil (zat\alpha)\phi_{\alpha} \rceil$  is a compound term, the content of its matrix formula  $\phi_{\alpha}$  (under the assignment of values to its free variables) generally forms no part of the content of the 'zat'-term itself (under that same value assignment), which, provided it satisfies the operand, is simply the demonstratum assigned to the term by the context. The semantic rule (Z) yields the following corollaries, analogous to (D1)–(D3) above:

- (*Z1*) The complex demonstrative  $\lceil (zat\alpha)\phi_{\alpha} \rceil$  is indexical.
- (*Z2*) With respect to any context  $\lceil (zat\alpha)\phi_{\alpha} \rceil$  is directly referential.
- (*Z3*) With respect to any context an occurrence of  $\lceil (zat\alpha)\phi_{\alpha} \rceil$  rigidly designates the demonstratum of the demonstration assigned to it in that context, provided

'y' is a genuine singular term if anything is. Its designatum (under the assignment of, say, David Kaplan as value) may fail to satisfy the particular open formula ' $\sim$ (y)(y is a person  $\supset x$  is ingenious)' (let this be  $\phi_{\alpha}$ , with  $\alpha = 'x'$ ) even though the sentence that results by substituting 'y' for 'x' is true—precisely because the newly introduced occurrence of 'y' is captured by the quantifier, making its value irrelevant. The mistaken abstraction "theorem" can be corrected, and even generalized: An assignment f of values to variables satisfies a formula  $\phi_{\beta}$  [of the restricted class C] containing a free occurrence of a singular term  $\beta$  in extensional position, and which is the result of uniformly substituting free occurrences of  $\beta$  for the free occurrences of a variable  $\alpha$  in  $\phi_{\alpha}$ , if and only if the modified value-assignment  $\beta$ ' that assigns to  $\alpha$  the designatum of  $\beta$  under  $\beta$ , and is otherwise the same as  $\beta$ , satisfies  $\phi_{\alpha}$ . This corrected version effectively blocks the objection. (There is likewise a corrected, generalized version of Mates's apparent assumption: An assignment  $\beta$  of values to variables satisfies a formula  $\phi_{\beta}$  [of the restricted class C] containing a free occurrence of singular term  $\beta$  in extensional position only if  $\beta$  designates under  $\beta$ .) Cf. my 'Being of Two Minds: Belief with Doubt,' Noûs, 29, 1 (1995), pp. 1–20, at 18n26.

 $^{37}$  By stipulation, 'zat'-terms are genuine singular terms. Their stipulated content rule (Z) allows for the possibility of quantification in. (See the previous note.)

such a demonstratum satisfies  $\phi_{\alpha}$  with respect to c. Otherwise it is a rigid non-designator.

Accordingly, I propose that Kaplan's content rule  $(T_K)$  be replaced with the following as governing standard uses of demonstratives:

(T) With respect to any context c, the (English) content of an occurrence of the complex demonstrative 'that' NP is the demonstratum of the demonstration assigned to that occurrence in c, provided: (i) there is such a demonstratum; and (ii) NP applies to it with respect to c. Otherwise 'that' NP has no content. (NP may be deleted to form a bare demonstrative, in which case condition (ii) is regarded as vacuously fulfilled, or simply deleted.)

This rule yields the same corollaries for natural-language complex demonstratives: 'that' is a content operator; complex demonstratives are not compositional with regard to content; they are indexical, directly referential, rigid.<sup>38</sup> It is presumably Kaplan's intent that his alternative content rule  $(T_K)$  is to be extended to cover supplemented complex demonstratives, 'that' $NP \delta$ , by including (T)'s condition (ii).<sup>39</sup> This natural extension of  $(T_K)$  makes the mere (unsupplemented) complex

<sup>38</sup> Stefano Predelli, in 'Complex Demonstratives and Anaphora,' *Analysis*, 61, 1 (January 2001), pp. 53–59, challenges those who deny that complex demonstratives are compositional with regard to content to explain how the anaphoric pronoun 'her' in 'That man talking to Mary admires her' (uttered while pointing to one of several men talking to Mary) obtains its content. It is tempting to suppose that any anaphoric pronoun occurrence whose antecedent is a singular term simply inherits as its content the very content contributed by its antecedent to the content of the sentence in which the antecedent occurs. But according to (*T*), the antecedent term in this case contributes no component to the content of the complex demonstrative in which it occurs.

In response I note that the naive rule of content inheritance is falsified in cases in which the antecedent is a singular term that is not directly referential, as perhaps in 'The number of planets is such that, necessarily, it is odd' and 'Ralph believes of the man seen at the beach that he is a spy.' If the naive rule were correct (and if, contrary to Russell, the definite-description antecedents are singular terms), these sentences would be de dicto rather than de re. A more promising rule of anaphora — applicable even to anaphoric pronouns whose antecedents are singular terms that are not directly referential—is that a simple (non-reflexive) anaphoric pronoun occurrence whose antecedent is a singular term, if it is not itself a bound variable, typically takes as its content the object customarily designated by its antecedent. There is no requirement that the antecedent contribute its customary content to the content of the sentence in which the antecedent occurs. Although this rule is also subject to counter-examples, it is applicable to a significantly wider range of cases than the naive rule of content inheritance and it seems likely that some restricted variant is correct. Consider: "That man talking to the actress honored here tonight admires her". Although I hold the description 'the actress honored here tonight' does not contribute its customary content to that of the sentence in question, and instead merely contributes toward a restriction on admissible contents for the complex demonstrative, the description itself has a customary designatum (assuming it is a singular term), and it is that customary designatum, though she makes no appearance in the content of the demonstrative itself, that the anaphoric pronoun takes as its content.

<sup>39</sup> He says of  $(T_K)$  that "obvious adjustments are to be made to take into account any common noun phrase which accompanies or is built-in to the demonstrative" (*ibid.*, p. 527). Kaplan is interpreted as incorporating condition (*ii*) by Emma Borg, "Complex Demonstratives," *Philosophical Studies*, 97 (2000), pp. 229–249, at 242, where a designation rule entailed by my content rule (T) is defended at some length. A similar designation rule, though couched within the Bare Bones Theory, is proffered by David Braun, "Structured Characters and Complex Demonstratives," *Philosophical Studies*, 74 (1994), pp. 193–219, at p. 209.

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demonstrative 'that' NP syncategorematic, i.e., a contextually defined incomplete symbol. 40 Utterances of the same mere complex demonstrative accompanied by demonstrations of differing content are utterances of strictly different expressions with different meanings. On my alternative proposal, by contrast, a complex demonstrative is a complete singular term each use of which is an utterance of a single expression with a single meaning—though its content varies with context and its use is felicitous only in those contexts in which it is accompanied by a demonstration.

We have already seen numerous philosophically significant consequences of regarding natural-language complex demonstratives in accordance with (T), i.e., on the model of 'zat'-terms: Frege's syntactic incompleteness thesis is rejected; the purity of natural-language syntax is not threatened; complex demonstratives are not syncategorematic; they are both meaningful and univocal; they designate the right object, etc. A treatment of complex demonstratives on the model of 'zat'-terms yields further philosophically significant consequences. The semantic corollary (Z3) in particular imposes three conditions worthy of special note. Not surprisingly, complex demonstratives are rigid designators. <sup>41</sup> More interesting, a complex demonstrative

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- <sup>40</sup> Whereas the mere complex demonstrative 'that'  $^{^{\prime}}$  NP is devoid of character, content, and designatum, the content of the completed expression 'that'  $^{^{\prime}}$  NP  $^{^{\prime}}$   $\delta$  is defined to be the demonstratum of  $\delta$  (in the context), if there is a unique such demonstratum and NP applies to it (with respect to the context), and to be nothing otherwise.
- <sup>41</sup> In the sentence 'If there had been an atheist elected to the U.S. Senate, then that Senator's atheism would have been concealed during the political campaign' (on its most natural reading) the phrase 'that Senator' is evidently not correctly formalized using 'zat'. Yet it is a rigid designator. The sentence seems to have a form something like that of 'For every possible individual i, if i had been an atheist who was elected to the US Senate, then i's atheism would have concealed during the political campaign'. Though not a demonstrative phrase, the variable 'i' is a rigid designator of its value under any value-assignment. Simple individual variables are rigid designators par excellence. (By contrast, see note 28 above.)

The same remark applies to analogous bound-variable uses of pronouns ('..., then *he* would have concealed his atheism ...'; *cf.* note 38 above). Michael McKinsey, in "Mental Anaphora," *Synthese*, 66 (1986), pp. 159–175, uses an example like the following to argue that such pronouns are not rigid (p. 161): 'An atheist was once elected to the U.S. Senate, but his atheism had been concealed during the political campaign.'

According to McKinsey, the pronoun designates different possible individuals with respect to different possible worlds—to wit, whoever in that world is an atheist elected to the U.S. Senate. The argument is echoed by Scott Soames, in his review of Gareth Evans' Collected Papers, in Journal of Philosophy, 86, 3 (March 1989), pp. 141–156, at p. 145, and endorsed by Stephen Neale, in "Descriptive Pronouns and Donkey Anaphora," Journal of Philosophy, 87, 3 (March 1990), pp. 113-150, at p. 130, and again in *Descriptions*, at p. 186. It assumes, following Evans, that such pronoun occurrences (so-called "donkey" pronouns) are unbound singular terms or descriptions. Pace Evans, McKinsey, et. al., there is every indication that the pronoun here is (as Peter Geach maintains), or at least is naturally taken to be, a bound variable—like the last occurrence of 'i' in 'It was once the case that for some atheist i, i was elected to the U.S. Senate but i's atheism had been concealed during the political campaign'. (In this case the pronoun 'his' might be regarded as bound by the restricted quantifier 'an atheist'. But compare this with the plural pronoun in 'Few current atheists have been elected to the U.S. Senate, and their atheism was concealed during the political campaign'. Though also a bound variable, the 'their' is bound not by the restricted quantifier 'few current atheists' but, as it were, by a related unarticulated restricted universal quantifier. The sentence is true iff: (i) few individuals who satisfy the open sentence 'X are current atheists' also satisfy the open sentence 'X have been elected to the US Senate'; and (ii) those individuals that satisfy both 'X are current atheists' and 'X have been elected to the US Senate' also satisfy the

'that F' cannot literally (semantically) designate anything that is not an F. The phrase might be used by a speaker to designate something that is not an F, but this is a matter of "speaker reference" as opposed to "semantic reference." Such a "referential" use is, from the point of view of English semantics, a misuse. 42 More interesting yet, a complex demonstrative 'that F' may designate something with respect to a possible world w even though the designated object is not an F in w, as long as it is actually an F—for example, 'If we had not lowered admission standards, then that graduate student would not be in graduate school today'. 43 No component of the content of an atomic sentence of the form "That F is G" expresses about the demonstratum that it is F. Yet this is logically entailed. In fact, the sentence presupposes of the demonstratum that it is F, in that unless this is a fact the sentential subject is vacuous and the sentence is without truth value. 44

There is another noteworthy consequence. The following English sentence is *analytic*, in the sense that it is true by virtue of semantics alone:

S: That graduate student (if there is any such thing) is a graduate student. 45

The analyticity of *S* lies behind the logical validity of the argument, 'Every graduate student is full of angst; therefore that graduate student (assuming he/she exists) is full of angst'. <sup>46</sup> Although analytic, the content of *S* in any context is hardly a necessary truth. <sup>47</sup> Indeed, its contingency is a likely source of considerable anxiety for the demonstrated student. More surprisingly, *S*, although analytic, expresses an *a posteriori* truth. For consider a typical context in which the demonstratum is a particular graduate student, David. How does one come to know the following *de re* fact about

further open sentence 'Their atheism was concealed during the political campaign'.) For any simple pronoun occurrence, if it is a bound variable it is also an occurrence of a rigid designator. Consider: 'A girl sprang from the particular gametes s and e, and it is a necessary truth that whoever sprang from s and e did not spring instead from the entirely different particular gametes s and e'' vs. 'A girl sprang from the particular gametes s and e, and it is a necessary truth that she did not spring instead from s and e''. Consider also substituting 'that girl' for 'she'. (The foregoing remarks have benefitted from discussion with Alan Berger, who realized independently that McKinsey's argument is incorrect.)

- 42 Cf. "The Good, the Bad, and the Ugly."
- <sup>43</sup> Contrary to Lepore and Ludwig (pp. 222–226), this is not a matter of demonstrative phrases always, or typically, taking wide scope: 'Consider: *That graduate student* is not in graduate school today. The proposition is, of course, false. But its falsity is quite accidental. Indeed, it would have obtained if we had not lowered our admission standards'.
- 44 If the demonstratum is not F, the sentence "That F does not exist' is a true negative existential. Such things are rare. Cf. my "Nonexistence," *loc. cit.*
- <sup>45</sup> I assume here that the parenthetical antecedent is false if the demonstrative 'that graduate student' lacks a designatum.
- <sup>46</sup> Cf. Borg, op. cit., p. 239–241. Any theory that assigns logical attributes to propositions rather than to sentences or their meanings (such as is defended by Kripke) is unable to accommodate the validity of this inference, assuming (T), without S as an additional premise. Such theories miss the important distinctions illustrated by S.
- <sup>47</sup> Again, contrary to Lepore and Ludwig (*ibid.*, pp. 213, 222–226). In any context in which the demonstratum is a graduate student, the fact or state of affairs described by *S* could have been otherwise. (Philosophers indoctrinated in the Quinean tradition may have a tendency to misconstrue 'necessary' as a term for analyticity—a semantic notion—rather than for the peculiarly metaphysical notion of a fact or state of affairs that *could not have been otherwise*.)

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David: that he—that very individual (if he exists at all)—is in graduate school? In any number of ways. One might observe his lifestyle, follow him around the university, confiscate his computer disks, subpoena his transcripts, record his nocturnal mutterings. Not, however, by *a priori* reflection on the issue.<sup>48</sup>

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48 Kaplan mentions similarly analytic though typically contingent sentences of the form  $\lceil dthat[\alpha] = \alpha \rceil$ —he specifically mentions 'He is the male at whom I am now pointing' (see note 29 above)—claiming that all such sentences are a priori (ibid., pp. 518, 538-539). (Braun, pp. 211-212, 215-216, considers an example exactly like S, correctly deeming it logically valid. Braun does not discuss its epistemological status.) Kaplan offers as an explanation of the existence of such contingent yet (allegedly) a priori truths that alethic modal attributes (metaphysical necessity, possibility, contingency, etc.) are attributes of propositions whereas apriority and aposteriority are attributes of proposition-characters (i.e., of characters that, given a context of use, yield a proposition) or of sentences, not propositions. This confuses epistemological matters (apriority) with properly logico-semantic matters (analyticity), and thus misses one of the important philosophical lessons of demonstratives. Though the sentence 'Dthat [the only member of the UCSB Philosophy Department born in Los Angeles] is the only member of the UCSB Philosophy Department born in Los Angeles' is analytic-in-Kaplish—and hence, known to be true solely on the basis of pure Kaplish semantics—there is no learning the contingent fact described thereby (to wit, that I am the only UCSB philosopher born in Los Angeles) except through epistemic appeal to experience.

The same considerations apply against Kripke's contention in *Naming and Necessity* (pp. 54–56, 63) that 'The Standard Meter is exactly one meter long at  $t_0$ ' is contingent a priori. See notes 13 and 32 above. Such sentences should be deemed analytic even though the facts described are neither necessary nor (pace Kaplan and Kripke) a priori. Although the existence of analytic truths that are both contingent and a posteriori is a straightforward consequence of direct-reference theory—S is as good an example as any—the aforementioned confusion between epistemological and properly logico-semantic matters has obscured the fact. *Cf.* my "How to Measure the Standard Metre," *Proceedings of the Aristotelian Society*, 88 (1987/1988), pp. 193–217; and especially 'Analyticity and Apriority,' in J. Tomberlin, ed., *Philosophical Perspectives*, 7: Language and Logic (Atascadero, CA.: Ridgeview, 1993), pp. 125–133.