Kaplan on Demonstratives

Demonstratives, Indexicals, Pure Indexicals

The best way to start is to get clear on Kaplan's terminology.

Indexicals

An indexical is a word whose "referent is dependent on the context of use … [whose] meaning provides a rule which determines the referent in terms of certain aspects of the context" (p. 490).

Examples (p. 489): *I, my, you, he, his, she, it, that, this, here, now, tomorrow, yesterday, actual, present*.

Demonstrations

A demonstration is "typically, though not invariably, a (visual) presentation of a local object discriminated by a pointing" (p. 490). Thus a demonstration is (or, at any rate, essentially involves) an **act** of a certain kind.

Demonstratives

A **demonstrative** is an indexical expression that requires an associated demonstration. It refers to the object that the demonstration demonstrates — the **demonstratum**, as Kaplan calls it.

The paradigm demonstrative is *that*.

Pure indexicals

An indexical for which "no associated demonstration is required" (p. 491).

Examples: *I, now, here, today, tomorrow, yesterday*.

Why no demonstration is required: "The **linguistic rules** which govern their use fully determine the referent for each context" (p. 491). Thus, when a speaker uses 'I' she refers to herself—she doesn't need to point (although she may, for emphasis). When a speaker uses 'today' he refers to the day on which his utterance-token is produced—no pointing is required.

Singular Propositions

Kaplan mentions them on pp. 483 and 494, but develops the idea in "Dthat," pp. 344-347. Kaplan (in the spirit of Frege) thinks of a proposition as a sequence of components. A brief look at "Dthat" for an account of singular propositions:

Kaplan and Frege agree about **general** propositions. For Frege, the sentence "Every spy is suspicious" expresses a thought that consists of the sense of the phrase "every spy" and the sense of the predicate "is suspicious". Likewise, for Kaplan the proposition that every spy is suspicious is a sequence (ordered pair) consisting of the *concept* denoted by "every spy" and the property of *being suspicious*.

But they disagree about **singular** propositions, such as ***the proposition that John is suspicious.***

Frege

The singular proposition consists of the **senses** of "John" and "is suspicious."

<The sense of 'John', the property of *being suspicious*>

Kaplan

As a direct reference theorist, Kaplan thinks that there is no such thing as *the sense of "John."* Rather, the proposition in question is the ordered pair consisting of the property of *being suspicious* and **John himself**. ("That's right, John himself, right there, trapped in a proposition," p. 344.):

<John, the property of *being suspicious*>

Now back to "Demonstratives."

Context
A context is a "possible occasion of use" (p. 494) of an expression. Each context has an *agent*, a *time*, and a *location*. The *agent* is the person who uses the expression (e.g., utters or writes the sentence); the *time* of a context is the time when the sentence is uttered or written; the *location* of a context is the place where the sentence is uttered or written. There will often be a *patient* (although Kaplan doesn't use that term)—the person to whom the sentence is addressed (the hearer, or the reader—the audience).

Content
The proposition *expressed* by an utterance.

Example: Bill says, on Monday, "I am hungry today." The agent is Bill, the time is Monday. Hillary says, on Tuesday, "You were hungry yesterday." The agent is Hillary, the hearer is Bill, the time is Tuesday. Different utterance and different context. But the two utterances express the same proposition:

<Bill, Monday, the property of *being hungry*>

That is, the two utterances have the same **content**.

Circumstances

Also called "circumstances of evaluation" or "counterfactual situations" (p. 494). These are what we take into account to evaluate the truth-value of the content. In other words, they are what Kripke calls *possible worlds*.

Example: Suppose I say "The President in 2010 will be a Republican." This sentence expresses a certain (non-singular!) proposition, namely:

<property of *being uniquely president*, 2010, property of *being a Republican*>

When we evaluate this proposition, we consider the (actual) circumstances—that in 2010 a Democrat (Obama), not a Republican, will be President. So, in the actual circumstances, the proposition is **false**.

But we can also evaluate that same proposition in different (counterfactual) circumstances—e.g., the circumstance that McCain had won the 2008 election. In that circumstance, the proposition (above) that was **actually** expressed by my **actual** utterance of that sentence would have been **true**. Same proposition expressed, but a different truth-value in different circumstances. Hence Obama is **not** a constituent in the proposition I express, even though Obama will be the president in 2010.

Directly referential

"I intend to use '*directly referential*' for an expression whose referent, once determined, is taken as fixed for all possible circumstances … an expression whose semantical *rules* provide *directly* that the referent in all possible circumstances is fixed to be the actual referent." (p. 493)

Direct Reference and Rigid Designation

We are now in a position to see what the definition of 'directly referential' amounts to.

Descriptions: In our example, the expression 'the President in 2010' is **not** directly referential. That is because its reference, in a given context, depends on more than just features of the context (or of its associated demonstrations) or its semantical rules. Its reference depends upon the circumstances. In the actual circumstances, it refers to Obama; in another possible circumstance, it refers to McCain.

Indexicals: Suppose, by contrast, that I point at Obama and say 'He is a Republican'. This sentence expresses a certain proposition. Let us now evaluate that proposition. In the actual circumstances, the proposition is false (for Obama is not a Republican). What about in the other circumstance considered above, in which McCain had won the 2008 election? The proposition is **still** false, for the proposition we are evaluating is the (singular) proposition *that Obama is a Republican*.

That is to say: the referent of 'he' in this example "once determined, is taken as fixed for all possible circumstances." 'He' refers to Obama, and the truth-value of the proposition expressed by our sentence is determined by the political affiliation of **Obama**.

We are now in a position to appreciate the "obviousness" of Kaplan's two principles (p. 492):

Two Principles:
1. The referent of a pure indexical depends on the context, and the referent of a demonstrative depends on the associated demonstration.

2. Indexicals, pure and demonstrative alike, are directly referential. (That is, the **content** an indexical yields is its **denotation**, not a sense or other conceptual component.)

Direct Reference vs. Rigid Designation
Our results so far make it appear that direct reference and rigid designation amount to the same thing. But Kaplan claims otherwise. Why?

It is widely (although not universally) accepted that **all directly referential terms are rigid designators**.

But everyone agrees that the converse is not true. That is, **not all rigid designators are directly referential**. Let us see why.

Consider Kaplan's mathematical example on p. 494, bottom. He gives a description that takes this form:

The n $[(p \wedge n^2 = 9) \vee (\neg p \wedge n+1 = 4)]$

This description picks out the same object—the number three—in all possible worlds, but it does not refer **directly** to the number three. Rather, the description's "descriptive meaning" becomes part of the propositional content of any proposition in which this description occurs. But this is **not** the case with a directly referential term: it is **only** the referent (and not the descriptive meaning) of a directly referential term that enters into the propositional content.

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The key difference is that in the case of a directly referential term, there are **semantical rules** that determine its referent in each context. These rules are part of the **way** in which a directly referential term secures its referent, and are part of the reason why it rigidly designates. The rules secure a referent **independent of the circumstance of evaluation**. But **other** rigid designators are not like this: if they achieve their rigid designation without benefit of a semantical rule, they are not directly referential.

Two Kinds of Meaning

Content

The content of a given utterance of a sentence is the **proposition** expressed. Bill's utterance, on Monday, of "I am hungry today" and Hillary's utterance on Tuesday of "Bill was hungry yesterday" have the **same content**.

<Bill, Monday, the property of *being hungry*>

Parts of sentences (names, predicates, indexicals, etc.) also have contents. The evaluation of the content of an expression in a given circumstance yields its extension in that circumstance (p. 501).

Hence, the evaluation of a proposition yields a truth-value; the evaluation of a singular term yields an object; the evaluation of an n-place predicate is a set of ordered n-tuples. In other words (pp. 502, 505):

A content is a function from circumstances of evaluation to an appropriate extension.

Character

The character of an expression is what "determines the content in varying contexts" (p. 505). Character is most prominent, of course, in the case of indexicals. (In fact, practically speaking, where there are no indexicals, character = content.)

Character vs. content

- It is the character of 'Bill' simply to refer to Bill, regardless of the context. (It is a function that yields Bill as its value for **every** context.)

- It is the character of 'I' to refer to the agent of the context. (It is a function that yields Bill as its value in contexts in which Bill is the **agent**.)

So Bill's use of 'I' and Hillary's use of 'Bill' have **different characters** but the **same content**. Kaplan represents character as a function, just as he did with content:

> **A character is a function from a context to a content**.

Now consider the entire utterances:

- On Monday, Bill says "I am hungry today."
- On Tuesday, Hillary says "Bill was hungry yesterday."

Both utterances have the **same content**, the proposition that Bill is hungry on Monday, <Bill, *H*, Monday>. But their characters are different.

- The character of Bill's utterance is that *the speaker is hungry on the day of utterance.* This is a function that takes us from a context with agent *a*, and time *t*, to the content that *a* is hungry at *t*, <*a*, *H*, *t*>. So, where *a* = Bill and *t* = Monday, the value of this function is the content: <Bill, *H*, Monday>.

- The character of Hillary's utterance is that *Bill was hungry on the day before the day of utterance.* This is a function that takes us from a context with time *t*, to the content that Bill was hungry on the day before *t*, <Bill, *H*, the day before *t*>. So, where *t* = Tuesday, the value of this function is the content: <Bill, *H*, Monday>.

Argument against Frege's theory of demonstratives

The argument against Frege depends on a careful distinction between **demonstrations** (acts of pointing) and **demonstratives** (expressions—typically 'this' or 'that'— essentially connected to an associated demonstration).

Frege's Theory of Demonstrations
A demonstration, like a description, has both a sense and a denotation.

Denotation

The denotation of a demonstration is the *demonstratum* — the object demonstrated.

Sense

The sense of a demonstration is the *manner of presentation*.

Two different demonstrations could have the same denotation but different senses. Imagine, Kaplan suggests, the case of the (very long and drawn out) assertion:

> That [pointing to Venus in the morning sky] is identical with
> that [pointing to Venus in the evening sky]

Call the first demonstration *Phos* and the second demonstration *Hes*. It is clear that *Phos* and *Hes* have the same denotation (demonstratum). But, Kaplan claims, they have different senses—different manners of presentation. (*Phos* takes place in the morning; *Hes* takes place in the evening.)

Frege's Theory of Demonstratives

The theory of demonstratives is just this: "an occurrence of a demonstrative expression functions rather like a place-holder for the associated demonstration" (p. 516).

But since demonstrations have senses, and demonstrative expressions are just stand-ins for demonstrations, it follows that **demonstratives themselves have senses**. And therefore, in accordance with Fregean theory, it is the **sense of a demonstrative that is a constituent in the proposition** expressed by the sentence containing the demonstrative.

It is on precisely this point that Kaplan will attack Frege's theory. For on Kaplan's view, the sense (insofar as there is a sense) of a demonstrative is restricted to its **character**, which will not differ from one demonstration to another. As for the **content** of a demonstrative, that is simply its **demonstratum**. This means that it is the **object demonstrated**, and not the sense, of a demonstrative that is a constituent in the proposition expressed. In this respect, demonstratives are like proper names.

The Counter-Example (pp. 512, 516)
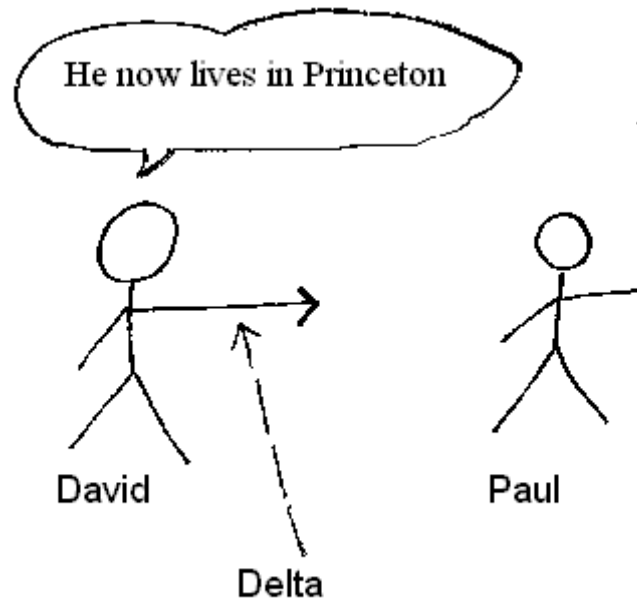
Paul now lives in Princeton; Charles now lives in Santa Monica. David points at Paul and says, "He now lives in Princeton."

Call the demonstration in question 'Delta' and the proposition expressed 'Pat'. Let the time of the context be t_0, and the demonstratum of Delta be Paul. Pat is true (for Paul, the demonstratum, lived in Princeton at t_0). Now consider two variations:

- **Easy case**: If Paul had moved to Santa Monica a week before t_0, Pat would have been false (for Paul would not have been living in Princeton at t_0).

- **Tricky case**: What if Paul and Charles had switched places, disguising themselves as one another? **Pat would still be true**. Why? Because David would have been pointing at Charles, and Pat is **not** the proposition that **would have** been expressed if David had been pointing at Charles.

The proposition that **would have** been expressed (if David had been pointing at Charles) is false—for Charles did not live in Princeton at t_0. But that is a different proposition, not Pat! On Kaplan's account, there are two propositions involved:

Pat = <Paul, t_0, *living in*, Princeton>

Mike = <Charles, t_0, *living in*, Princeton>

Now let us see how and why Frege's theory gives different results.

Kaplan claims (p. 516) that "according to the Fregean theory, the proposition I just expressed, Pat, would have been false under the counterfactual circumstances of the switch." But this is a very misleading way to put the point. For it is not Pat (as Kaplan construes it above) but a **different proposition**, the one that **Frege** thinks is expressed by David's utterance, that would be false. Let us see why.

On Frege's theory, it is the **sense** of a demonstration (rather than its demonstratum) that is a constituent in the proposition expressed. So it is **the sense of Delta** (rather than its denotation) that is a constituent of the proposition that Frege takes to be expressed by David's utterance.

So, for Frege, **the very same proposition** that actually was about Paul would have, in the counterfactual situation, been about Charles. That's because Frege's construal of the proposition expressed looks like this:

<*the unique male person being demonstrated*, t_0, *living in*, Princeton>

Roughly: on Frege's view, the proposition expressed would also be expressed by the sentence "The person I am now pointing at now lives in Princeton," where the description is construed *attributively*. So for Frege, there is just **one** proposition expressed in the two cases, and it is **not a singular proposition**. (That's why the same proposition can have a different truth-value in a different circumstance of evaluation, even though Paul's place of residence doesn't change.)

On Kaplan's theory, however, there are **two different propositions** (Pat and Mike) expressed by the actual and counterfactual uses of the sentence, and each of them is a **singular proposition**. Pat has Paul as a constituent; Mike has Charles. So when we consider whether Pat is true or false in this or that circumstance, we are considering a proposition that has Paul as a constituent. The location of Charles is irrelevant to assessing the truth-value of that proposition.

In effect, Kaplan's criticism is that Frege's theory of demonstratives confuses character with content.

The Meaning of indexicals

When it comes to **content**, the meaning of an indexical is just its reference (in a given context). The "meaning" of an indexical that goes beyond its reference has to do with its **character**, not its content.

E.g., it is the semantic function of 'I' to refer to the speaker of a context—that is its character. It refers to different people in different contexts, but has the **same character in every context**. (I.e., it means the same thing, no matter who uses it.)

But the semantical rule that gives the character of an indexical cannot be viewed as **synonymous** with it. That is, 'I' is not synonymous with 'the person who is speaking'. That is because 'I' is directly referential, but 'the person who is speaking' is not.

[Can you think of an example which shows this? I.e., a sentence in which the two terms are not interchangeable? Consider: "There is a possible circumstance in which I am not speaking." See p. 520.]

So Kaplan concludes that "in general, for indexicals, it is not possible to find synonyms" (p. 521).

Dthat

Kaplan introduces 'dthat' as an operator that can be used to convert a description (or any other singular term) into a directly referential one:

"'Dthat' is simply the demonstrative 'that' with the following singular term functioning as its demonstration" (p. 521-2). Where α is any singular term, 'dthat [α]' is a directly referential term whose referent is the denotation of α.

(If α is already directly referential, the 'dthat' operator has no effect.)

Armed with 'dthat', we can "come much closer to providing genuine synonyms" (p. 522):

'I' means the same as 'dthat [the person who utters this token]'.

Attaching 'dthat' to the description avoids the counter-example we just considered. For there **is** a possible circumstance in which dthat [the person who is speaking] is not speaking, even if there is no possible circumstance in which the person who is speaking is not speaking.

[Can we apply this move to descriptions associated with a **name**? E.g., could one similarly argue that 'dthat [the man called "Socrates"]' is synonymous with 'Socrates'? (This was, in effect, Searle's proposal in response to Kripke.) Kaplan doesn't say. But if we can, we have a possible reply to Kripke's rejection of Kneale's proposal. For the only objection he presented to Kneale was that 'the man called "Socrates"' is not a rigid designator. But 'dthat' turns it into a rigid designator.]

Content and Character as Objects of Thought

It is easy to confuse content and character. That's because in sentences that contain no indexicals, character and content coincide. For the character of an indexical-free sentence is a **constant** function that returns the same content in every context. (Roughly: it doesn't matter who utters such a sentence assertively—it always expresses the same proposition.)

But when indexicals are involved, the differences are substantial and obvious. Suppose I say that I am hungry and that **you say the same thing**. What do you say?

1. That **you** are hungry (e.g., you utter the sentence 'I am hungry, too')? Same character, but different content.

2. That **I** am hungry (e.g., you utter the sentence 'Yes, you *are* hungry')? Same content, but different character.

What holds for *saying* also holds for *believing*. **What** you believe has to do with the content; **how** you believe it has to do with the character. And **cognitive significance** is linked to character, not content. Hence, Kaplan's two principles:

- **Principle 1: Objects of thought (Thoughts) = Contents**
- **Principle 2: Cognitive Significance of a Thought = Character**

[In John Perry's terminology, the content is the *proposition believed*; the character is the *sentence accepted*.]

These two principles come into play when we consider the different roles of content and character in the explanation of behavior in terms of beliefs. Here examples by John Perry and by Kaplan do a brilliant job of bringing out the difference:

- **Perry's bear** (p. 532): You and I may believe different things, but believe them under the same character (e.g., 'A bear is about to attack me'), and so our behavior is the same—we both roll up in a ball and lie still. When we have beliefs with the same content (e.g., that a bear is about to attack **me**), we believe the same thing (same proposition), but we believe it under different characters, so we behave differently—I roll up in a ball, you run to get help.

- **Kaplan's pants** (p. 533): I see in a window the reflection of a man whose pants appear to be on fire. If I believe it under the character '**His** pants are on fire', I behave very differently than I would if I believe it (the same content!) under the character '**My** pants are on fire'.

It is thus not the **content** (the proposition believed), but the **character** (the way it is believed, as expressed by the **sentence** accepted), that is cognitively significant, and that is therefore crucial in explaining behavior.

Corollary 1

Even two persons in exactly the same cognitive state will **disagree** in their attitudes toward some object of thought (p. 531).

> Kaplan establishes this corollary with a Putnam-like argument. Castor and Pollux are twin brothers who are psychologically identical, and each sincerely asserts: "My brother is older than I am." Same psychological state, but they disagree about who is older.

> This is essentially the same as Putnam's point about me and my Twin Earth *Doppelgänger*—we are in the same psychological state (whose character is 'water is wet') but we believe different propositions. I believe that water (i.e., H_2O) is wet; he believes that what he calls 'water' (i.e., XYZ) is wet. This is *exactly* the result you would expect if 'water' is (as Putnam claims) indexical.

Corollary 2

Ignorance of the referent does not defeat the directly referential character of indexicals (p. 536).

> Consider Kaplan's example of the kidnapped heiress, locked in the trunk of a car. She does not know where she is or what time it is. She is, in this sense, "ignorant of the reference" of the indexicals 'here' and 'now' that she uses on this occasion. Yet, when she says 'It is quiet here now', she has succeeded in referring directly to the time and place of her utterance.

> On this basis Kaplan rejects what he calls *Direct Acquaintance Theories of direct reference*. Such theories (like Russell's) hold that one cannot refer directly to anything one is not Directly Acquainted with, in some favored sense.

> Against this, Kaplan stresses the **form of the reference** as against the **knowledge of the referent**. You refer directly to yourself by 'I' not because you are directly acquainted with yourself, but because it is the semantical function of 'I' to refer directly to the speaker of the context. (This is even more obvious with 'you'—it's directly referential, but there is less temptation to suppose Direct Acquaintance.)

Corollary 3

The bearers of **logical truth** and of **contingency** are different entities. **Characters** are logically true (produce a true content in every context). **Contents** (propositions) are contingent or necessary (p. 539).

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By 'logical truth' Kaplan has in mind a feature of a character (sentence) that can be known *a priori*. (He calls this kind of *a priority* 'logical truth' because such sentences are **true in virtue of the logic of indexicals**.)

Logical Truths that are not necessary

This explains why a logically true sentence can express a contingent proposition. (Recall 'I am here now', a truth of the logic of demonstratives that is not true in every possible world.)

In general, Kaplan says, where α is any singular term,

$$\alpha = \text{dthat } [\alpha]$$

is a **logical** truth, but not a **necessary** truth (provided that α is a nonrigid designator).

Necessary Truths that are not logically true

Similarly, a sentence that is not logically true may still express a necessarily true proposition. As we've already learned from Kripke (and Kaplan would agree), it is not a logical truth (knowable *a priori*) that Hesperus = Phosphorus, but it is still true that □(Hesperus = Phosphorus).

Kaplan generalizes with the following schema (p. 539):

$$\square(\text{dthat } [\alpha] = \text{dthat } [\beta])$$

may be true, although '(dthat $[\alpha]$ = dthat $[\beta]$)' is not a logical truth.

Example:

$$\square(\text{dthat [the morning star]} = \text{dthat [the evening star]})$$

is true, although '(dthat [the morning star] = dthat [the evening star])' is not a logical truth.

One might say:

$$\text{dthat [the morning star]} = \text{dthat [the evening star]}$$

is **metaphysically** necessary, but not **logically** necessary. (For it to be logically necessary, it would have to be possible to determine its truth from the **form** of reference alone. But its truth depends on **which** objects are getting referred to, not on **how** they are getting referred to.)

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