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A Problem For The Ideal Worlds Account of Desire*

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Abstract

The Ideal Worlds Account of Desire says that S wants p just in case all of S 's most highly preferred doxastic possibilities make p true. The account predicts that a desire report ‘ S wants p ’ should be true so long as there is *some* doxastic p -possibility that is most preferred (by S). But we present a novel argument showing that this prediction is incorrect. More positively, we take our examples to support alternative analyses of desire, and close by briefly considering what our cases suggest about the logic of desire.

1 Introduction

On the standard, Kratzerian analysis of modal expressions in natural language, modals operate as quantifiers over a restricted domain of possibilities. This domain is fixed by two parameters: (i) the *modal base*, which is the broad set of possibilities relevant for evaluating the modal, and (ii) the *ordering source*, which provides an ordering of the possibilities in the modal base.¹ Where M is a modal, and Q_M expresses its associated quantificational force, the rough idea is that ‘ $M\phi$ ’ is true just in case ϕ is true at

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¹The term “modal base” is often used ambiguously in the literature: sometimes it is used to mean the set of propositions that are intersected to determine the modal domain (or the function from worlds to such sets), while other times it is used to mean the modal domain itself. We use it in the second way here.

Q_M of the top-ranked worlds in the modal base. For instance, $\lceil \text{must } \phi \rceil$ is true just in case ϕ is true at *all* of the top-ranked worlds, $\lceil \text{may } \phi \rceil$ is true just in case ϕ is true at *some* of the top-ranked worlds, etc. On this view, different modal flavors (e.g. epistemic, deliberative, deontic, bouletic, etc.) correspond to different values of the two parameters (see Kratzer 1977, 1981, 1991, 2012).

This paper is about the application of the Kratzerian analysis to a particular type of modal construction, namely attitude verbs of desire, e.g. ‘want’, ‘hope’, ‘wish’, etc. More specifically, we raise a novel problem for this application of Kratzer’s ideas. On the Kratzerian account as applied to desideratives, the relevant modal base is taken to be the subject’s *belief set*, i.e. the set of worlds compatible with everything that the subject believes; and the relevant ordering is taken to be bouletic: the subject’s subjective preference ordering over possible worlds. Moreover, verbs such as ‘want’ are taken to express universal quantificational force. So, for instance, on this theory ‘Ann wants to win the race’ is true just in case all of Ann’s best belief worlds (as determined by her preferences) are worlds where she wins the race (von Stechow, 1999; Crnič, 2011). In short, all that’s relevant for determining whether a desire report is true are how things stand at the subject’s ideal belief worlds. For this reason, we will call this analysis the *Ideal Worlds Account of Desire* (IWA).

The problem we raise for the IWA involves the following prediction: the IWA predicts that a desire report $\lceil S \text{ wants } p \rceil$ should be true so long as there is *some* doxastic p -possibility that is most preferred (by S). After all, this desirable doxastic alternative will be top-ranked, and it will be a p -world. So, in this case all of the best worlds by S ’s lights will be p -worlds. But we argue that this is not sufficient for a desire report to be true. For

instance, consider the following case:

(Prisoner) Ann thinks that there is exactly one prisoner in the dock. She also thinks that this individual is either Bill or Carol, and that the prisoner might be hanged. Bill is Ann’s mortal enemy, so it would be best for Ann if Bill is the prisoner and is hanged. By contrast, Carol is Ann’s friend, so even if Carol is the prisoner, Ann would hate it if she was hanged.

(1) # Ann wants the prisoner in the dock to be hanged.

(1) is unacceptable in context (as indicated by the ‘#’ preceding the example). If someone were to utter (1), a natural response would be ‘No! Ann thinks the prisoner could be Carol, and Ann would be devastated if Carol was hanged’. But the IWA predicts that the report should be true: the best worlds in Ann’s belief set are ones where the prisoner is Bill and is hanged. Thus, the best worlds in Ann’s belief set are ones where the prisoner is hanged.

In what follows, we consider this problem for the IWA in more detail. We also discuss a response which appeals to a shift in the modal base, but we argue that it is ultimately unsuccessful.

2 The Ideal Worlds Account

As mentioned in §1, the IWA is an instance of Kratzer’s general approach to modals. This framework is set in a possible worlds approach to semantic content, where propositions are modeled as sets of possible worlds, namely the set of worlds where the propositions are true. In Kratzer’s system,

modals are evaluated relative to (i) a domain of worlds, or modal base, and (ii) an ordering over the worlds in the modal base. In applying this account to desire verbs, theorists have stipulated that the values of the modal base and ordering should be fixed as follows (von Fintel, 1999; Crnič, 2011). The modal base should be identified with the relevant subject S 's belief set at a world w , $\text{Dox}_{S,w}$; and the ordering should be identified with the subject's subjective preference ordering over possible worlds at w , $\succ_{S,w}$. $\succ_{S,w}$ is taken to be a strict partial order.

(Parameters for desire verbs)

(i) The modal base relevant for the evaluation of a desire report,

e.g. $\ulcorner S$ wants $p \urcorner$ at w is S 's belief set at w , $\text{Dox}_{S,w}$;

(ii) The ordering relevant for the evaluation of a desire report,

e.g. $\ulcorner S$ wants $p \urcorner$ at w is S 's subjective preference ordering over possible worlds at w , $\succ_{S,w}$

Kratzer's approach makes use of a function $\text{BEST}(\cdot, \cdot)$ that takes a modal base and an ordering and yields the set of top-ranked worlds as determined by the ordering. We can simplify by restricting our attention to scenarios where the modal base is finite. In this case, BEST can be spelled out as follows:

(Specification of top-ranked worlds)

For any modal base \mathcal{B} , and ordering $>$:

$$\text{BEST}(\mathcal{B}, >) = \{w' \in \mathcal{B} \mid \neg \exists w'' \in \mathcal{B} \text{ such that } w'' > w'\}$$

The IWA can then be expressed as follows:

(The Ideal Worlds Account)

$$\ulcorner S \text{ wants } p \urcorner \text{ is true in } w \text{ iff } \text{BEST}(\text{Dox}_{S,w}, \succ_{S,w}) \subseteq p$$

That is, $\lceil S \text{ wants } p \rceil$ is true just in case all of the subject's ideal belief worlds are p -worlds.

3 Doxastic possibility and desire

The IWA predicts that a desire report $\lceil S \text{ wants } p \rceil$ should be true so long as there is *some* doxastic p -possibility that is most preferred (by S). In particular, it predicts that (1) ('Ann wants the prisoner in the dock to be hanged') should be true in the *Prisoner* scenario. To see this, let us represent Ann's belief set through the following four worlds:²

w_{BH} : Bill is the murderer and hangs.

$w_{B\bar{H}}$: Bill is the murderer and does not hang.

w_{CH} : Carol is the murderer and hangs.

$w_{C\bar{H}}$: Carol is the murderer and does not hang.

Ann's preference ordering can be represented as follows:

$$w_{BH} \succ_{w_{\text{@}}, \text{Ann}} w_{B\bar{H}} \succ_{w_{\text{@}}, \text{Ann}} w_{C\bar{H}} \succ_{w_{\text{@}}, \text{Ann}} w_{CH}$$

Thus, $\text{BEST}(\text{DOX}_{\text{Ann}, w_{\text{@}}}, \succ_{\text{Ann}, w_{\text{@}}}) = \{w_{BH}\}$. The prisoner at w_{BH} , namely Bill, is hanged at w_{BH} . So, (1) should be true. But this is a bad prediction, since the report is unacceptable.³

²It is best to think of the descriptions w_{BH} , $w_{B\bar{H}}$, etc. as denoting equivalence classes of worlds, since they do not uniquely specify possible worlds. This toy model allows us to illustrate the central points in simple terms.

³Some might complain that we have overlooked an important distinction: all we've shown is that the IWA predicts that the de dicto reading of (1) is true, and we have ignored the de re reading of the report (Quine, 1956). However, we can stipulate that Ann is misinformed, and there are no prisoners in the dock. In this case, there can be no true de re reading of (1). Then (1) has no acceptable interpretation at all. But since the IWA predicts that (1) should be true on its de dicto reading, it predicts that the report should still have a good reading.

It is worth remarking on the scope of the challenge. The problem arises with a range of desire verbs, as well as a range of embedded clauses. For instance, the hope report (2a) is infelicitous in the *Prisoner* scenario. And the wish report (2b) is unacceptable in the amended context specified below. However, the IWA predicts that both reports should be true.⁴

- (2) a. # Ann hopes that the prisoner in the dock will be hanged.

[*Context*: As in the *Prisoner* scenario, but Ann comes to believe that nobody was hanged.]

- b. # Ann wishes that the prisoner in the dock had been hanged.

Moreover, the problem isn't tied to definite descriptions. For instance, consider (3):

- (3) # Ann wants a prisoner in the dock to be hanged.

(3) is just as unacceptable as (1) is. But the IWA also predicts that the report should be true.⁵

4 Shifting modal base?

We suspect that proponents of the IWA will try to respond by giving up the idea that the relevant modal base is necessarily tied to the subject's belief

⁴Note that on the IWA the modal base for 'wish' isn't the subject's beliefs, since wishing is a counterfactual attitude. Instead, it is taken to be a certain superset of the subject's beliefs (von Stechow, 1999). It can be checked that (2b) is still predicted to be true relative to this expanded set.

⁵(3) also shows that the problem doesn't have anything essential to do with presupposition, since indefinite descriptions are not standardly taken to trigger presuppositions (Heim & Kratzer, 1998).

set. For instance, in *Prisoner* the thought is that (1) is evaluated relative to the following set of worlds: $\{w_{B\bar{H}}, w_{CH}, w_{C\bar{H}}\}$. Since $w_{B\bar{H}}$ is the best world in this set by Ann’s lights, (1) is predicted to be false.

The idea that the modal base relevant for want reports isn’t always the subject’s belief set has some independent motivation. This stems from a general condition that is often imposed by proponents of the Kratzerian framework: a modal claim $\lceil M\phi \rceil$ is true with respect to a modal base \mathcal{B} only if \mathcal{B} contains both ϕ -worlds and $\neg\phi$ -worlds, i.e. ϕ is *diverse* with respect to \mathcal{B} (Condoravdi, 2002). Now, it has been recognized for some time (though it is often ignored) that subjects can want things that they are certain won’t obtain, as well as things that they are certain do obtain/will obtain:

- (4) a. I want this weekend to last forever (but of course I know it will be over in a few hours) (Heim, 1992, 199).
- b. Wu wants to be promoted (but believes he won’t be) [(Grano & Phillips-Brown, 2020) inspired by (Portner & Rubinstein, 2012)].
- (5) a. I live in Bolivia because I want to live in Bolivia (Iatridou, 2000).
- b. I want it to rain tomorrow (and I believe it will) [(Grano & Phillips-Brown, 2020) inspired by (Scheffler, 2008)].

These examples are perfectly felicitous, but given the diversity condition, they would be predicted to be bad if they were evaluated relative to a doxastic modal base. Consequently, some theorists have given up the doxastic modal base (Rubinstein, 2012; Grano & Phillips-Brown, 2020).

However, we don’t think that appealing to shifting modal bases provides a satisfying response to our challenge, for several reasons. First, those who maintain that the modal base for want reports isn’t always the subject’s

belief set still maintain that it very often is. For example, Grano & Phillips-Brown (2020) argue that $\lceil S \text{ wants } p \rceil$ is evaluated relative to the subject's belief set so long as p is diverse with respect to this set. But the proposition expressed by 'The prisoner in the dock is hanged' *is* diverse with respect to Ann's beliefs in *Prisoner*. So, if Grano & Phillips-Brown are correct, there should be no shift in the modal base when we evaluate (1).

Second, the considerations against identifying the modal base with the subject's belief set don't carry over to desire verbs such as 'hope'. Observe that hope analogues of (4) and (5) sound incoherent:

- (6) a. # I hope that this weekend lasts forever (but of course I know it will be over in a few hours).
- b. # Wu hopes to be promoted (but believes he won't be).

But as we have seen, hope reports raise just as much of a problem for the IWA as want reports do, e.g. (2a) ('Ann hopes that the prisoner in the dock will be hanged') is also unacceptable in the *Prisoner* scenario.⁶

Finally, note that a report such as (8) is easily heard as true in the *Prisoner* scenario:

- (8) Ann wants the prisoner to be Bill and for Bill to hang.

Thus, (8) must be evaluated relative to a modal base whose best worlds are ones where Bill is the prisoner and hangs. Assuming that modal bases are

⁶Also note that if the modal base relative to which hope reports are evaluated wasn't always the subject's belief set, then we'd expect examples such as (7) to be acceptable:

- (7) # I think Federer might win Wimbledon, and it would be best if that happened, but I don't hope that it does.

By contrast, it is very difficult to recover a coherent interpretation of this sentence.

kept fixed when we evaluate conjunctions, we would then expect (9) to be perfectly acceptable:

- (9) # Ann wants the prisoner to be Bill and for Bill to hang, so she wants the prisoner to be hanged.

But it isn't. In particular, the second conjunct still sounds bad.

In summary, we don't believe that appealing to non-doxastic modal bases provides the IWA with a compelling response to the problem we have raised. Since it is difficult for us to see what other responses there could be, we take our challenge to be robust.⁷

5 Conclusion

We'll close by drawing out two of the broader consequences of our discussion. First, it is worth emphasizing that other popular approaches to desire correctly predict that (1) should be false in context. For instance, on Heim's (1992) comparative desirability account, $\ulcorner S \text{ wants } p \urcorner$ is true just in case for each of S 's belief worlds w : S prefers the closest p -world to w , to the closest

⁷An anonymous reviewer wonders whether Phillips-Brown's (2018) version of IWA can handle the problem posed by examples such as (1). Phillips-Brown tweaks IWA by maintaining that want reports are evaluated relative to an additional, contextually determined parameter: a partition of logical space, which can informally be represented by a question denotation. His account is roughly the following: $\ulcorner S \text{ wants } p \urcorner$ is true relative to a partition Γ iff every top-ranked cell (given S 's preferences) in Γ entails p . We don't think that this entry helps with the problem we raise here, for at least two reasons. First, there are natural values of the partition parameter Γ on which (1) comes out true. For instance, Phillips-Brown's account predicts that (1) should be true in any context where the question $Q_1 = \textit{Who is the prisoner and will the prisoner be hanged?}$ is salient. For the top-ranked cell in this partition is one in which Bill is the prisoner and Bill hangs, which entails that the prisoner hangs. Second, the central motivation for Phillips-Brown's partition-sensitive semantics for 'want' doesn't carry over to hope reports (see Blumberg & Hawthorne forthcoming for a detailed discussion of the fine-grained differences between hoping and wanting). But as we've seen, examples such as (2a) ('Ann hopes that the prisoner in the dock will be hanged') pose just as much of a problem for the IWA as (1) does.

$\neg p$ -world to w .⁸ It is plausible that the closest world to w_{CH} where the murderer hangs is just w_{CH} itself; and that the closest world to w_{CH} where the murderer does not hang is $w_{C\bar{H}}$. In that case, since Ann prefers $w_{C\bar{H}}$ to w_{CH} , (1) is predicted to be false. And on Levinson’s (2003) decision-theoretic analysis, $\lceil S \text{ wants } p \rceil$ is true just in case the expected value of p , for S , outweighs the expected value of $\neg p$.⁹ Granted plausible assumptions, the expected value of the proposition expressed by ‘The prisoner is hanged’ has far lower expected value for Ann than the proposition expressed by ‘The prisoner is not hanged’ in *Prisoner*. So, (1) is also predicted to be false on Levinson’s account. Thus, examples such as (1) provide support for comparative desirability and decision-theoretic approaches over the IWA.¹⁰ Finally, consider the following detail in the logic of desire. The IWA makes desire closed under entailment. That is, it validates the following:¹¹

Closure If $p \models q$, then $S \text{ wants } p \models S \text{ wants } q$

Proponents of the IWA have argued that validating Closure is an important good-making feature of their analysis (see for example von Fintel 1999; Crnić 2011; Pasternak 2019). Its key explanatory benefit is that it explains why certain conjunctions of the form $\lceil S \text{ wants } p, \text{ but } S \text{ doesn't want } q \rceil$ are unacceptable, when p entails q :

- (10) a. # Ann wants to paint her house green, but she doesn’t want to
paint her house.

⁸Heim’s account was inspired by Stalnaker (1984). Also see Villalta 2008; Blumberg 2018 for variants of Heim’s semantics.

⁹Variants of Levinson’s analysis have also been endorsed by Lassiter (2011); Jerzak (2019); Phillips-Brown (Forthcoming).

¹⁰It is also easy to check that both Heim’s account and Levinson’s analysis predict that (8) (‘Ann wants the prisoner to be Bill and for Bill to hang’) should be true in the *Prisoner* scenario.

¹¹More correctly, if we suppose that the diversity condition is captured as a presupposition, the IWA makes Closure Strawson-valid (von Fintel, 1999).

- b. # Ann wants a ham sandwich, but she doesn't want a sandwich.
- c. # Ann wants to go on a free trip to Paris, but she doesn't want to go on a trip to Paris.

However, our discussion in §3 indicates that this argument is too quick. Observe that a conjunction such as (11) is perfectly acceptable in the context of *Prisoner*.¹²

- (11) Ann wants the prisoner to be Bill and for Bill to hang, but she doesn't want the prisoner to be hanged.

This suggests that Closure isn't valid after all. What remains to be explained is why the examples in (10) are unacceptable. We leave this as a topic for future inquiry.¹³

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¹²Indeed, Ann herself could perfectly well say ‘I want the prisoner to be Bill and for Bill to hang, but I don't want the prisoner to be hanged (since the prisoner could be Carol)’.

¹³One possible place to start is the theory of Ippolito (2020). She tries to provide a pragmatic account of a variety of abominable conjunctions. Although she does not explicitly apply her theory to attitude verbs, it is plausible that her proposal could help explain why examples such as (10) are infelicitous.

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