Metaphor

DHOEK@PRINCETON.EDU, WWW.DANIELHOEK.COM, 13 NOVEMBER 2019

> "Kant seems to think of concepts as defined by giving a simple list of characteristics in no special order; but of all the ways of forming concepts, that is one of the least fruitful. If we look through the definitions given in the course of this book, we shall scarcely find one that is of this description. The same is true of the really fruitful definitions in mathematics, such as that of the continuity if a function. What we find in these is not a simple list of characteristics; every element in the definition is intimately, I might almost say organically, connected with the others.
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> A geometrical illustration will make the distinction clear to intuition. If we represent the concepts (or their extensions) by figures or areas in the plane, then the concept defined by a simple list of characteristics corresponds to the area common to all the areas representing the defining characteristics; it is enclosed by segments of their boundary lines. With a definition like this, therefore, what we do — in terms of our illustration — is to use the lines already given in a new way for the purpose of demarcating an area (similarly if the characteristics are joined by "or"). Nothing essentially new, however, emerges in the process.
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> But the more fruitful type of definition is a matter of drawing boundary lines that were not previously given at all. What we shall be able to infer from it, cannot be inspected in advance; here, we are not simply taking out of the box again what we have just put into it."
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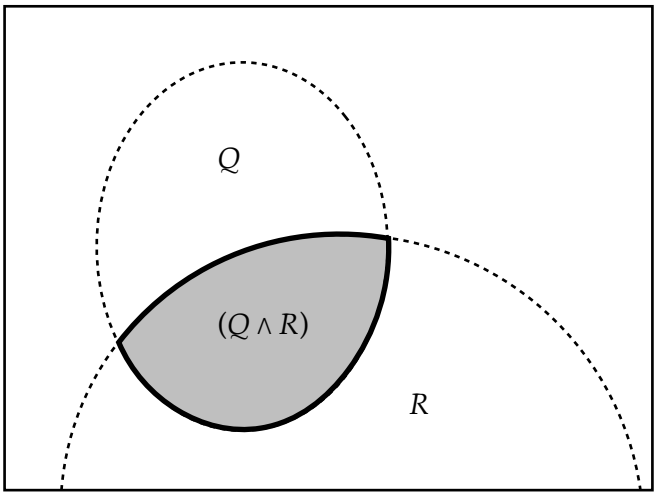
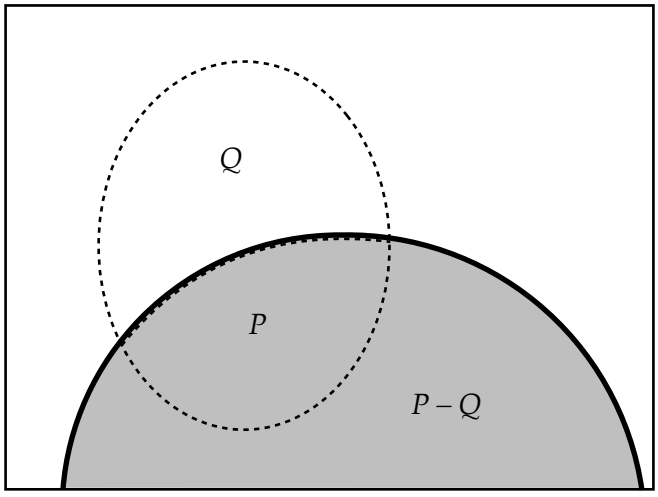
> — Frege, *Foundations of Arithmetic*, §88





Walton on Prop-Oriented Make-Believe

Make-Believe Games

In certain children's games, certain concrete objects and events (the *props*) represent elements of a make-believe world. (Sticks for horses or guns, hats for helmets or crowns, tree stumps for bears). In these cases, we can turn things around and use the make-believe to describe the props:

1) "Your horse is in the stable"
    - *Your tricycle is in the shed.*
2) "This bear is five times as big as the other ones."
    - *That stump is five times as big as the others*.

Walton calls this prop-oriented make-believe.

On Walton's analysis, a ***game of make-believe*** comes with certain ***props*** and a set of rules that associate different states of the props with different states of a certain fictional world. If the props are in a given state, then they ***make it fictional*** that the make-believe world is in the corresponding state. The claim *P* about the fiction, when used as prop-oriented make-believe, sends a message to the effect that the props in whatever state they need to be to make it fictional that *P* (according to the rules of the relevant game).

"Parafictional" Descriptions of Representations

3) "That is a man." (to describe a bathroom sign)
    - *That is a picture of a man*
4) "Anna was married when she met Vronsky."
    - *According to the novel Anna Karenina, Anna was married when she met Vronsky*

Walton points out that these cases are analogous. In a make-believe game, too, the props form an image of an alternative reality. Walton calls these metaphors *essential* because the intended content is still connected to the game (in a way that does not hold for (1-2) and (5-7).

Metaphors

5) "Crotone is in the arch of the Italian boot."
    - *Crotone is in thus-and-such area of Italy.*
6) "Napoleon is a passenger on the *Queen Mary*."
    - *There is a portrait of Napoleon aboard the Queen Mary.*
7) "Christopher Robin had spent the morning indoors going to Africa and back."
    - *Christopher Robin spent the morning sporadically reading his book about Africa.*

Conventionality in Metaphors

The rules of the game in question is often conventional.

- "If there is a convention to the effect that a ridge connecting two higher elevations makes it fictional that there is a *saddle*, we still have a metaphor."
- " 'high' and 'low' pitches, and 'rising' and 'falling' melodies, are grounded in similarities between pitch relations and spatial relations, although they may be not merely conventional but in some way natural. "

Is "Is" What You Think "Is" Is?

Walton observes that the metaphorical readings of identity claims are often asymmetric:

8) Life is Hell ≠ Hell is Life
9) Orson Welles is Hamlet ≠ Hamlet is Orson Welles

He takes the "is" in this cases to mean "represents" or "makes fictional": "A second tempting account of what it is to see one kind of thing in terms of another is that this is a matter of imagining things of the one kind to be of the other kind (I.A. Richards 1936). This is not my view. On my view it is a matter of taking things of one kind to prescribe imaginings about things of another kind, not (in general) imagining things of the first kind to be of the second."

Are All Metaphors Waltonian?

Initially, Walton only claims that the class of metaphors intersects with prop-oriented make-believe, and explicitly puts the taxonomy question to one side. But late in the paper, he returns to it, and attempts appropriate most cases of metaphor to his theory. Sure, textbook examples like "Juliet is the sun" fit uncomfortably, but perhaps that is due to the fact that it is unclear what game they elicit.

And in some cases, not only the props are of interest, but also the game of make-believe:

> "The point of the metaphors is not just to distinguish timper and tomper pitches and to identify timpish and tompish melodies; the make-believe looks forward to the content as well as back to the prop. The make-believe world in which ascendings and descendings occur is of interest in its own right. Although the metaphors are not essential to the prop oriented function their make-believe serves, they are important in pointing out and eliciting participation in the make-believe itself"

(Here "timper" and "tomper" are the artificial, non-metaphorical adjectives Walton introduces for high and low pitches, with "timpish" and "tompish" melodies being rising and falling ones.)

Conversational Exculpature: The Context-Dependent Strategy

To "exculpate" somebody is to free them from blame or to declare them innocent. Conversational exculpature is to be understood as the opposite of conversational implicature: forgiving a commitment instead of incurring an additional commitment. In exculpature, something is *subtracted* from the speaker's literal commitments rather than being added to it.

↑ *Girl with a Unicorn* by Raphael, Galleria Borghese

↓ X-Ray image of the painting (detail)

One common form of exculpature is *veracity* exculpature:

10) Sherlock Holmes lived on Baker Street

11) Macbeth saw a red dagger float in the air

12) Maddalena Strozzi was holding a baby unicorn

Of course Maddalena wasn't really holding a unicorn. But she may have been holding a less exotic animal: X-Rays revealed a small dog painted underneath.[1] The intended readings of these sentences are as follows:

13) According to the Holmes novels, Holmes lived on Baker Street.

14) According to Macbeth's vision, there was a red dagger floating in the air.

15) In the painting, Maddalena was holding a baby unicorn.

In the paper I propose we account for these readings as exculpatures:

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[1] The dog was a symbol of marital fidelity. Most likely the unicorn was painted over it because Maddalena's marriage was called off last-minute: unicorns are a symbol of virginal purity. The patron intended for us to forget about Maddalena's marriage, and to return Maddalena to innocence. That makes the history of this painting a nice metaphor for conversational exculpature.

(13) = (10) – *The Holmes novels are an accurate representation of Sherlock Holmes' life*

(14) = (11) – *Macbeth's vision was an accurate*

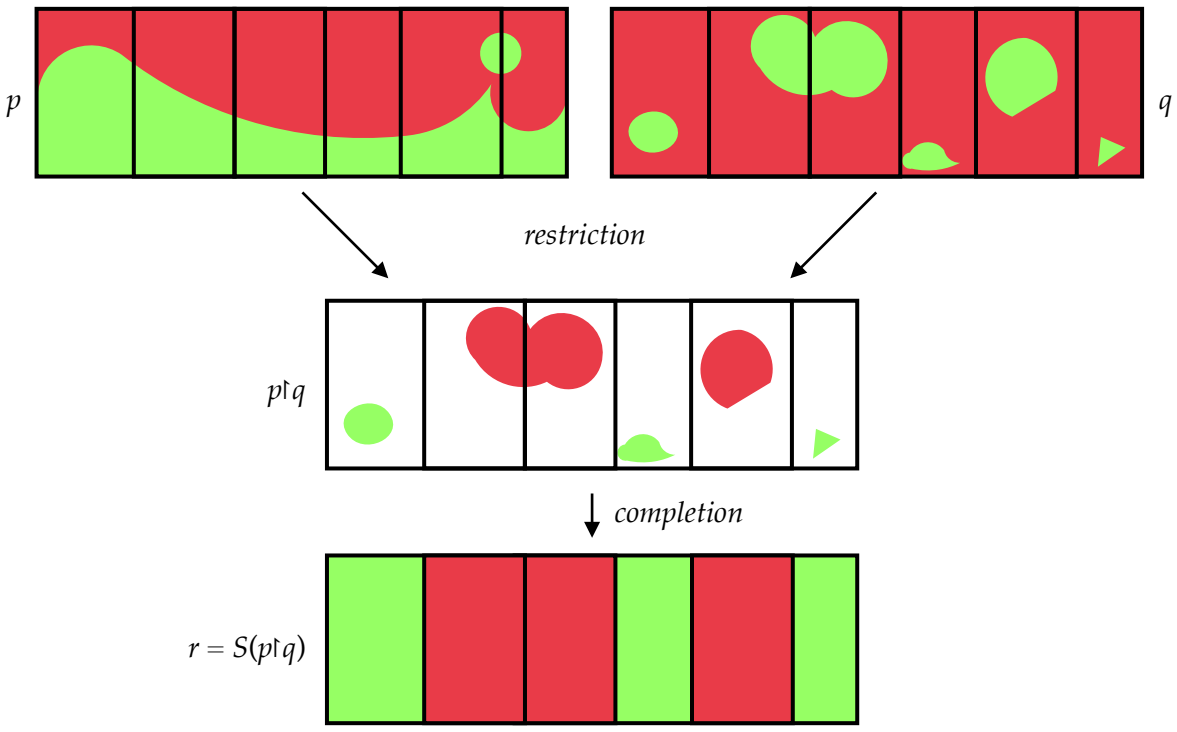
(15) = (12) – *The painting is an accurate depiction of Maddalena*

In each case, the speaker is talking *as if* the representation they are describing were accurate, describing the events in question in the indicative mood. But a charitable interlocutor will understand that the speaker is not serious about this, cancel that commitment, and be left with a message that is just about the content of the representation the speaker described, and not directly about the events depicted. This is exactly the speaker's intention.

In the theory, the way this works as follows. In addition to the proposition p the speaker literally expresses, there are two contextual ingredients: the subject matter S we are actually interested in (the target), and the contextual presupposition q to be subtracted (the point of departure). They jointly determine the unique remainder r in the way illustrated below, if these three conditions hold:

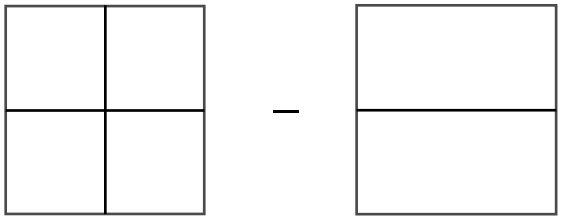
- *Aboutness*: r is about S.
- *Conditional Equivalence*: q and p entail r, and q and r entail p
- *Independence*: q has no bearing on S.

In case only the third condition fails, the remainder is still defined, and becomes the restriction of r to s, where s is the strongest proposition about S entailed by q.



Target-Dependence and the Hyperintensional Strategy

The analysis of exculpature shows how to get the remainder $R = P - Q$ once we have determined its subject matter. So if we find a way to determine the subject matter of R based on the subject matters of P and Q, we have a way to execute Last week we considered a natural proposal: the subject matter of $P - Q$ is a subject matter that satisfies the following two properties: (i) it's disjoint from the subject matter of Q and (ii) conjoined with Q's subject matter, it returns P's subject matter.



A B

But this approach does not give us a unique answer. For instance, there are two distinct partitions orthogonal to B which, conjoined with B, give back A. (Exercise: identify those partitions).

A concrete manifestation of the problem is the following case from my paper, which displays the dual dependence of the communicated content on the starting point and the target:

16) Amy travelled to Alexandria and back before Nut swallowed the sun.

As it stands, (16) will be uninterpretable to most readers, since it is unclear what story we're appealing to. Is Nut the personification of thunder, and did Amy get back before thunderclouds floated in? Or is Nut the goddess of harvest, and did she return before the wheat fields turned golden? Or is Nut the harbinger of the apocalypse and did Amy return before the end of the world? Or is Nut like Rahu in hinduism, who swallows the sun to cause a solar eclipse?

In fact, Nut is an Egyptian goddess, and the story is this:

17) Nut swallows the Sun God Ra at his death every night, causing the sun to set.

Now we know that (16) means *Amy travelled to Alexandria and back before sunset*. But which sunset is it? Sunset in Alexandria or sunset in Tripoli? On the account of exculpature I put forward, we can settle the matter using the subject matter of the conversation: this tells us what time zone we're interested in.

But it does not seem plausible that the subject matters of (16) or (17) can settle the matter: if (17) were true, the sun would set everywhere in the world at the same time. Thus it seems that, if we want to account for the message of a sentence like (16), the hyperintensional strategy on its own is doomed.

Subtraction According to Yablo

Yablovian Truthmaking

The Yablovian (reductive) truthmakers are "compact, nondisjunctive guarantors of truth." That is to say, the truthmakers of a proposition P are those sets of worlds that are (i) *natural* or non-disjunctive and (ii) *proportional* or minimal. Condition (i) rules out the proposition *goats eat cans or pigs can fly* as a truthmaker for "goats eat cans or pigs can fly". Condition (ii) rules out the proposition *goats eat cans and pigs can fly* as a truthmaker for "goats eat cans". In the context of propositional logic, truthmakers are characterised more precisely as *minimal models*: maximally partial assignments of truth values to the propositional constants that force P to be true. The falsemakers of P are the truthmakers of $\neg P$. For example, the truthmakers of $p \supset (p \wedge q)$ are $\neg p$ and q, but not pq. Its only falsemaker is $p\neg q$.

To a first approximation, we can formulate Yablo's initial proposal as follows. Identify a subspace $N \subseteq \mathcal{P}(\Omega)$ of the natural propositions in $\mathcal{P}(\Omega)$, where N is closed under negation and conjunction. Then say that the truthmakers of P are the weakest propositions in N that entail P, and its false-makers the weakest proposition in N incompatible with P. (See Yablo 2014, p. 62).

Note that Yablo's characterisation of truthmaking is *intensional*: it will assign P and P' the same truth- and false-makers whenever P and P' have the same truth-conditions. It is also *non-compositional* in that there is no obvious way to determine the truthmakers of (say) $P \vee Q$ from the truthmakers of P and the truthmakers of Q. In some cases, Yablo does want to make hyperintensional distinctions, although he is not sure "how to rationalise this". (Except perhaps this remark: "Where structure can be respected at no cost to minimality, that is surely the way to go." Yablo 2014, p. 63.)

Subtraction

Certain truth- and falsemakers of the material conditional $(Q \supset P)$ are special in that they are *targeted*. Being targeted is not an intrinsic property of truthmakers: as we will see, t is a targeted truthmaker for $(Q \supset P)$ only if it stands in the right sort of truth-making relation to P and Q. In Yablo's gloss: a truthmaker t is a targeted truthmaker for $(Q \supset P)$ if and only if (i) it is compatible with Q, and (ii) at those Q-worlds where t obtains, t is the reason that P obtains given Q.

The *truthmakers* of the remainder $P - Q$ are the targeted truthmakers of $(Q \supset P)$, and its false-makers are the targeted truthmakers of $(Q \supset \neg P)$. This recipe does *not* always yield a bivalent remainder: since $(Q \supset P)$ and $(Q \supset \neg P)$ are compatible, there could be worlds where $P - Q$ has both truth- and falsemakers. There could also be worlds at which $P - Q$ has neither. (In the book, Yablo adopts the convention that a proposition has a truth-value gap with respect to worlds where it has both a truth-

and a falsemaker.) This characterisation of remainder extends to cases where P does not entail Q as well. In those cases, $P - Q$ is intuitively supposed to capture the *interpolant* between Q and P.

Some examples:

- The mayor of London is a maniac – Jill is the mayor of London = Jill is a maniac
- Bizet is short – Bizet and Verdi are the same height = Verdi is short
- Tom is crimson – Tom is red = undefined outside of red-worlds, because there exist no targeted truthmakers for (*Tom is red* $\supset$ *Tom is crimson*) or (*Tom is red* $\supset$ *Tom is not crimson*) that are compatible with Tom's not being red.
- Wagner's music is not illegal – Music based on no ideas whatever is not illegal = Wagner's music was based on no ideas whatever.

Jaeger's Problem Again

Details aside, it is clear that Yablo's proposal as it stands cannot solve the inverse problem, although it may help with underdetermination. On the one hand, Yablo essentially relies on his reductive, "minimalist" approach to truthmaking in order to give $(Q \supset P)$ the truthmakers he wants it to have. On the other hand, this reductive approach seems to render the content of $P - Q$ a function of the truth-conditions of P and the truth-conditions of Q. As we saw in the first week of this class, that by itself gives rise to the inverse problem. Arguably, there is still form of the underdetermination problem too. The different readings of the "Nut" example (16/17) can be extracted given different choices of the initial algebra N of "natural" propositions. So, insofar as these various choices of N are all legitimate, we still have a kind of underdetermination.

(Definition of Directed Truthmakers)

The definition of a targeted truthmaker for $(Q \supset P)$ is complex and proceeds in stages:

- A truthmaker t' for $(Q \supset P)$ *uses more of* Q than a truthmaker t for $(Q \supset P)$ if and only if (i) there is a part Q' of Q such that Q' and t jointly entail P, but Q' and t' do not, and (ii) every part Q' of Q such that Q' and t' jointly entail P is such that Q' and t do too.
- A truthmaker t for $(Q \supset P)$ is *efficient* if there is a world $w \in t$ such that there is no other truthmaker t' for $(Q \supset P)$ with $w \in t'$ such that t' uses more of Q than t.

A targeted truthmaker for $(Q \supset P)$ is any efficient truthmaker that is compatible with Q.