# Two Notions of Resemblance and the Semantics of 'What it's Like'

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According to the resemblance account of 'what it's like' and similar constructions, a sentence such as 'there is something it's like to have a toothache' means 'there is something having a toothache resembles'. This account has proved controversial in the literature; some writers endorse it, many reject it. We show that this conflict is illusory. Drawing on the semantics of intensional transitive verbs, we show that there are two versions of the resemblance account, depending on whether 'resembles' is construed notionally or relationally. While well-known criticisms of the resemblance account undermine its relational version, they do not touch its notional version. On the contrary, the notional version is equivalent to various accounts usually interpreted as rivals to resemblance. We end by noting that this resolution of the controversy (a) explains why 'like', which is a comparative, appears in a construction that concerns the properties of events, and (b) removes any pressure to suppose that 'like' is ambiguous between a comparative and a non-comparative sense.

## 1. Introduction

Sentences that contain the phrase 'what it's like', and variants on that phrase, are ubiquitous in philosophy of mind and consciousness studies. But what do they mean exactly?

According to the resemblance or comparative account, 'like' in 'what it's like' means 'resembles' or 'similar to'. So, if we take 'there is something it is like to have a toothache' as our exemplar, the resemblance account entails that:

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- (1) 'There is something it is like to have a toothache' is true in a context c if and only if there is something having a toothache resembles in c.

This account is natural and straightforward; 'like' does mean 'resembles', at least it often does (see D'Arcy [2017]). So it is not surprising to find the resemblance account endorsed in the literature—a recent example being Gaskin [2017]. But many writers on the subject, including Nagel in the paper that is the main source of this literature, reject it as implausible [see Nagel, 1974, fn. 6]; for them, 'like' in 'what it's like' sentences does not mean 'resembles'.<sup>1</sup>

We will argue that this dispute over the resemblance account is illusory; it neglects the fact that there are two different versions of the resemblance view. The word 'resembles' is an intensional transitive verb, which means it is semantically similar to verbs such as 'hunts', 'seeks', 'wants' and so on. Such verbs induce two readings—the notional and relational readings, as they are usually called—of sentences in which they occur. In turn, this yields two versions of the resemblance account. The relational version is indeed implausible, just as Nagel and others maintain, but the notional version is not. Indeed, far from being implausible, the notional version comes in forms that are equivalent to the accounts endorsed by critics of the resemblance view. The moral of the story is that in reality there is no opposition between the resemblance account and these rivals: critics of the resemblance account are right about the relational version, proponents are right about the notional version.

## 2. Two Versions of the Resemblance Account

Let us start by providing further detail about the idea that 'resembles' is an intensional transitive verb and so gives rise to two versions of the resemblance account. Consider (2):

(2) Alice resembles a member of the intervarsity basketball team.

On its relational reading, if (2) is true, there must be—i.e. there must exist—a particular member of the intervarsity basketball team such that Alice resembles that person. On the notional reading, by contrast, this need not be the case; Alice

<sup>&</sup>lt;sup>1</sup>See also Lewis [1988], Hellie [2004], Stoljar [2016], among many others.

may resemble a member of the intervarsity basketball team even though no such member exists—imagine all members accidentally vaporized by the Space Force, for example. Likewise, Alice may resemble a member of the team, even though there is no particular member she resembles.

The same thing is true when we adopt, as in (3), explicitly quantificational versions of such sentences.

## (3) Alice resembles something.2

On its relational reading, if (3) is true, there must exist a particular thing such that Alice resembles that thing. On its notional reading, however, this need not be the case; Alice may resemble something even if she is the only existing thing in the universe.

If resemblance works this way in general, it works this way in the resemblance account. The relational version, as we will call it, entails that:

'There is something it is like to have a toothache' is true in a context c if and only if there exists, in c, an x such that having a toothache resembles x.

The notional version, by contrast, entails that:

(5) 'There is something it is like to have a toothache' is true in a context c if and only if having a toothache resembles something in c.

The difference is that the relational version, but not the notional version, has our sentence requiring for its truth some distinct thing—that is, some thing distinct from having a toothache—that then bears the relation of resemblance to having a toothache. The right-hand side of (4) contains an ordinary existential quantifier, while the right-hand side of (5) contains a quantifier that replaces a noun phrase that may be interpreted non-specifically. The quantifier in (5) is the quantifier at issue in the inference from 'Alice resembles a member of the basketball team—but no particular one' to 'Alice resembles something'.

But what is the correct analysis of the notional reading of 'resembles', and

<sup>&</sup>lt;sup>2</sup>Occurrences of 'something' in intensional positions are what Friederike Moltmann [1997, 2003, 2008] calls *special quantifiers*, which differ from ordinary objectual quantifiers in that they do not replace expressions whose function is to refer—they are 'non-nominal quantifiers'.

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the non-specific noun-phrases that accompany it? The most well-known semantics for 'resembles' has been developed by Zimmermann [1993]. On a view of this sort, the notional reading of 'John resembles a pig,' for example, has the following analysis:

(6) 'John resembles a pig' is true in a context c if and only if John has, in c, some property or properties characteristic of pigs.<sup>3</sup>

Adapting this to our examples, (2) is true on the notional reading just in case Alice has some property or properties characteristic of members of the basketball team, while (3) is true just in case she has some property or properties characteristic of something—anything at all.

Likewise, applying this analysis to the notional resemblance account, given in (5), yields:

(7) 'There is something it is like to have a toothache' is true in a context c if and only if having a toothache has, in c, some property or properties characteristic of something.

Thus, as the name suggests, the relational resemblance account involves an event bearing a relation of resemblance to some other thing. By contrast, the notional version does not involve a relation at all, but rather involves that event having certain contextually relevant properties.

# 3. The Case Against Resemblance

Given that there are two versions of the resemblance account, we now face two questions. First, when Nagel and others reject the resemblance account, which

On analyses of this sort, John can resemble a pig even if there are no pigs; all that is required is that he has certain properties. Meier then goes on to develop this analysis to accommodate the fact that 'resembles' is not only an intensional transitive verb, but also a multidimensional comparative. On her view, 'resembles' is a *multidimensional intensional comparative*.

 $<sup>^{3}</sup>$ Here we paraphrase Zimmermann slightly, for readability. His analysis is presented formally by Meier [2009] as follows: 'John resembles a pig' is true iff there is a possibly complex property  $P^{*}$  such that

 $<sup>1.</sup>P^*(John)$ , and

<sup>2.</sup> For all y, if y is a prototypical representative of pigs, then P \* (y).

version are they rejecting? Second, even if they are right to reject one version, do their objections threaten the other version as well?

The relational/notional distinction has never been explicitly drawn in the literature on these issues, so answers to these questions are to some extent speculative. Nevertheless, it is most plausible, when examining existing criticisms of the resemblance account, to make the following trio of points: (a) these criticisms focus exclusively on the relational version; (b) they are prima facie plausible against that version; and yet (c) they are implausible against the notional version.

Let's illustrate this by looking at two well-known discussions of the resemblance view, one by David Lewis, the other by Benj Hellie. Lewis writes:

A literalist might see the phrase 'know what it's like' and take that to mean 'know what it resembles'. Then he might ask 'what's so hard about that? Why can't you just be told which experiences resemble one another?' ... This misses the point. Pace the literalist, 'know what it's like' does not mean 'know what it resembles'. Lewis [1988, pp. 78-80]

Versions of (a)-(c) clearly apply here. Concerning (a), Lewis talks of experiences resembling one another, which strongly indicates that he takes resemblance to be a relation either between particular entities or types of entities. After all, a sentence such as 'the marbles resemble each other' is most naturally read as being true if and only if there are some marbles which stand in various relations of resemblance to each other.

Concerning (b), Lewis's argument against the resemblance view starts from the premise that it is possible for one to know everything that a thing resembles without knowing what it's like: "I don't know any better what it's like to taste Vegemite when I'm told that it tastes like Marmite, because I don't know what Marmite tastes like either" [Lewis, 1988, p. 80]. But, the argument continues, if 'knowing what it's like' just meant 'knowing what it resembles', this situation would be impossible. Hence the resemblance view is false.

If we understand Lewis's premise as a claim about what relations of resemblance a thing stands in, his reasoning has prima facie force. Admittedly, it may be questioned; Marmite is only one thing that Vegemite resembles, not every-

thing. But Lewis presumably thinks that what holds in the case where Vegemite resembles Marmite likewise holds no matter what relations of resemblance Vegemite stands in. Insofar as this generalization is legitimate, his argument against the relational resemblance view is successful.

Concerning (c), while Lewis's reasoning may have force against the relational resemblance view, it has none against the notional resemblance view. On the notional reading, resemblance is not a relation, but instead may involve properties of any type, relational or otherwise. Hence Lewis's premise, understood in that way, is equivalent to the claim that it is possible to know absolutely every property a thing has without knowing what it is like. But that is clearly mistaken. Thus, the notional resemblance view is untouched by the argument.

Turning now to Hellie, he writes:

[W]hen one asks 'what is San Francisco like?' it is appropriate to respond with a string of predicates, such as 'dense, hilly, and expensive'. The comparative question would be more appropriately answered with a string of NPs (Noun Phrases), such as 'uranium, Ithaca, and cuts from the tenderloin'. In certain contexts, this might be an apt answer, but in most, it would be bizarre. [Hellie, 2004, pp. 339-340]

Once again, versions of (a)-(c) apply. Concerning (a), that Hellie is interested in the relational resemblance view is shown by the fact he considers 'Ithaca' an answer to the comparative question. 'Ithaca' denotes a specific, existing, particular, and when such an expression occurs in the complement of 'is like'—as in 'San Francisco is like Ithaca'—'like' can only have its relational resemblance reading.

Concerning (b), Hellie's argument is a good one against the relational version. When we ask 'what is X like?' we are often asking for a response given with various predicates; as he points out, the question 'what is it like?' is nearly synonymous with the question 'how is it?', and the latter can be aptly answered by specifying the properties that an object has. But responses to this question that make use of referring expressions, such as 'Ithaca', and so force the relational reading, seem bizarre.

Finally, concerning (c), Hellie's objections put no pressure at all on the notional resemblance account; on the contrary, they seem to count in its favor. On

that account, 'what is X like?' asks for some of X's contextually relevant properties, and such properties are specified with predicates, just as Hellie points out.

Our suggestion that the arguments of Lewis and Hellie are subject to an analysis of this form may be strengthened by noting that parallel remarks apply in the case of many discussions of resemblance in philosophy, quite apart from 'what it's like.' To take just one example, consider Goodman's classic argument against resemblance analyses of representation. Goodman argues that resemblance has the wrong logical features to serve as an analysis of representation:

unlike representation, resemblance is symmetric: B is as much like A as A is like B, but while a painting may represent the Duke of Wellington, the Duke does not represent the painting. [Goodman, 1976, p. 6]

Goodman's suggestion is surely correct when considered as a point about relational resemblance: relational resemblance is symmetrical, while representation is not. But when considered as a point about notional resemblance, it is unconvincing. In the notional sense, resemblance is not a relation at all, so it is clearly not a symmetrical relation.

# 4. The Resemblance Account and the Property Account

We have argued that there are two versions of the resemblance account, and that the case against that account works only against its relational version. At this point, one may wonder how the notional resemblance account compares to various competitors that have been proposed in the literature.

Many writers who reject the resemblance account favor what has come to be called 'the property account', which entails that:

(8)'There is something it is like to have a toothache' is true in a context c if and only if there is, in c, some property F such that having a toothache has F.

It is easy to show, however, that this view is equivalent to the notional resemblance account. We saw above that on a Zimmerman-style analysis of 'resembles', the notional resemblance account comes out as (7): 'there is something it is like to have a toothache' is true in a context c if and only if having a toothache has in that context some property or properties characteristic of something. But the right-hand side of (7) entails the right-hand side of (8): if you have in a context a property F that is characteristic of something, you have in that context a property F. Conversely the right-hand side of (8) entails the right-hand side of (7): if you have in a context a property F, then you have in that context a property characteristic of something (for example things that are F). Thus, the right hand side of (8) is equivalent to the right hand side of (7); more generally, the property

If the notional resemblance account and the property account are equivalent, there is no need to choose between them. If you say 'I reject the resemblance account but support the property account', what you say is plausible only if what you have in mind is the relational version of the resemblance account. But if what you have in mind is the notional version, you contradict yourself.

## 5. The Resemblance Account and the Affective Account

account and the notional resemblance account are equivalent.

The property account is equivalent to the notional resemblance account, but it does not follow that either view is correct as it stands. On the contrary, the recent literature on these issues has brought to light at least two features of 'what it's like' and its variants that are hard for the property view (and so the notional resemblance view) to explain.

First, 'what it's like' sentences have a distinctive pattern of usage in which (a) they are characteristically used to report experiences and yet (b) they also permit non-experiential uses, as when we ask 'What will it be like for the UK to leave the EU?' (see Snowdon [2010]). Some views of 'what it is like' have a good account of feature (a) but no account of feature (b). Others, such as the property view, have a good account of (b) but have difficulty explaining (a).<sup>4</sup>

Second, the property view neglects the fact that 'what it's like' sentences, at least as they occur in philosophy of mind and consciousness studies, have an extra structural feature. For we may ask not only what it is like for Bill to go bungee jumping, but also what it is like for Mary for Bill to go bungee jumping,

<sup>&</sup>lt;sup>4</sup>For discussion of this point, see Stoljar [2016].

or, as we may put it to avoid a confusing repetition, what it is like to Mary for Bill to go bungee jumping. (Suppose that Mary gets anxious whenever Bill goes bungee jumping.) In such cases we have two subjects not one: Bill is the subject of the infinitival clause 'to go bungee jumping'—he is the agent of the event of bungee jumping. Mary, on the other hand, is the subject of the finite clause 'what it is like for Bill to go bungee jumping'—she is the experiencer (as we might put it, following the usage of such linguists as Gisborne [2010]) of the event of Bill's going bungee jumping.

The affective account, recently suggested by Stoljar [2016], is designed to accommodate both features. On this view, to revert to our original example, 'there is something it is like to have a toothache' has as its logical form the following: 'there is something it is like to x for y to have a toothache'. The view then entails:

(9) 'There is something it is like to x for y to have a toothache' is true in a context c if and only if there is, in c, some way W such that y's having a toothache affects x in way W.

This account separates in principle the agent of the event of having a toothache and the experiencer of that event—the agent affected by the having of the toothache. Hence it accommodates the second of the two features just noted. Further, since the affecting relation at issue here is something that is characteristically experiential but not necessarily so, it explains the first feature.

The affective account does not deny that sentences containing 'what it's like' concern properties. Both the property view and the affective account agree that 'there is something is like to have a toothache' is true in a context only if having a toothache has a property in that context. But the affective account goes further in requiring that the property in question be of specific sort, namely, the property of affecting a subject in a contextually relevant way. Hence we may say that the affective account is equivalent to a restricted version of the property account, a version in which the properties in question are required to be of a certain sort.

What is the relation between the affective account and the resemblance account? If, as we saw above, the notional resemblance account is equivalent to the property account, and if, as we have just seen, the affective account is equivalent to a restricted version of the property account, it follows that the affective account is in turn equivalent to a restricted version of the notional resemblance

account.

To illustrate this, notice that typically things resemble not as such but in various respects. John may resemble a pig, for example, in respect of how he eats but not how he looks. If so, on a Zimmermann-style analysis, John has properties that are characteristic, not of pigs in general, but of pigs in respect of how they eat. Likewise, when we ask, 'What is it like to Mary for Bill to go bungee jumping?' we are not simply asking, 'What does Bill's going bungee jumping resemble?' We are rather asking, 'What does Bill's going bungee jumping resemble in respect of how it affects Mary?'

These observations permit us to formulate a restricted version of the notional account that is equivalent to the affective account formulated in (9) above. This is as follows:

(10) 'There is something it is like to x for y to have a toothache' is true in a context c if and only if, in c, y's having a toothache resembles something in respect of how it affects x.

To see that these are equivalent, recall that, on the Zimmermann-style analysis, an event resembles something in respect of how it affects x just in case it has properties that are characteristic of something that affects x. If so, the right-hand side of (9) entails the right-hand side of (10): if in a context there is some way that having a toothache affects someone, then in that context having a toothache has the properties characteristic of something that affects someone. Conversely, the right-hand side of (10) entails the right-hand side of (9): if in a context having a toothache has the properties characteristic of something that affects someone, then in that context there is some way that having a toothache affects someone.

We saw before that the property view is equivalent to the notional resemblance view; what we have now seen is that the affective view is in turn equivalent to a restricted version of the notional resemblance view (mutatis mutandis, a restricted version of the property view). If you say 'I reject the resemblance account but support the affective account', what you say is plausible only if what you have in mind is the relational resemblance account. But if what you have in mind is the notional resemblance account, you contradict yourself, at any rate if it is restricted in the way suggested.

## 6. Conclusion

Our proposal has been that 'resembles' is an intensional transitive verb and hence that there are two versions of the resemblance account of 'what it is like'. The relational version of the account is implausible, but the notional version is not; indeed it has a version that is equivalent to the property account, and a more restricted version that is equivalent to the affective account.

What consequences may be drawn from our discussion? The main consequence is that it is a mistake to assume, as is often done in the literature, that the resemblance account stands in opposition to these alternatives. In reality there is no conflict at all. But there are two further related consequences that are worth pointing out. The first concerns an apparently puzzling feature of questions of the form 'what is it like?', namely, that 'like' here seems to be a resemblance or comparative notion, and yet the question seems equivalent to 'how is it?', which, as Hellie emphasized, asks about something's properties. Once we recognize that there is a notional reading of 'resembles', this puzzle dissolves. The notional reading of 'what is it like?' can ask about a resemblance by asking for a property.

The second consequence concerns a response to the fact that 'like' has these two uses, namely, that 'like' is ambiguous between a comparative and a non-comparative sense. Our discussion suggests there is no need to posit such an ambiguity. It is common in the literature on the semantics of intensional transitive verbs to treat the distinction between the relational and notional readings as a distinction in scope.<sup>5</sup> If this approach is correct, the relational and notional versions of the resemblance account will likewise employ two different scopal readings of the same construction. In that case, 'what it's like' will be no more ambiguous than 'what Mary seeks.'

<sup>&</sup>lt;sup>5</sup>The traditional statement of this view comes from Montague [1974], who derived the relational reading of sentences involving ITVs using a special rule of quantifying in, together with a type-shift. Montague's view has been widely, although not universally, adopted. Proponents of similar analyses include Quine [1956], Zimmermann [1993, 2006], and Richard [2000], among many others. Fodor [1970] criticises scopal analyses of the different readings of attitude verbs on the grounds that scope cannot generate all of the available readings. But even those who do not think that the notional/relational distinction is a scopal one accept that the distinction does not arise from a lexical ambiguity in the verb—verbs such as 'seek', 'need', and 'owe' are not lexically ambiguous. Our point in the text is that the same is true for 'resemble'.

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