Rescuing Resemblance: Responding to Common Objections to Resemblance-Based Theories of Reference

Joel Parthemore
PAICS Research Group
Department of Informatics
University of Sussex
Falmer, Brighton, UK

Abstract

I begin by considering what a resemblance-based theory of reference entails. One of the primary arguments against resemblance-based theories comes from Nelson Goodman, whose argument in essence is that resemblance is symmetrical while representation and reference are not. I argue that closer examination of both the concepts of resemblance and reference, in the light of a discussion of levels and meta-levels, significantly weakens this argument. By reconsidering our notion of reference, the apparent reflexivity of self-reference will also appear not to be a problem. Jesse Prinz, who endorses the main thrust of Goodman's argument, offers another means of rescuing resemblance by relieving resemblance of part of its intentional burden. This is useful as a theory of reference that relies entirely on visual resemblance remains problematic (not all concepts are visual), and one that generalizes the notion of resemblance risks over-generalization (everything ends up resembling everything). Both my own argument in support of resemblance-based theories and the one I interpret from Prinz then serve as a means of answering other familiar objections to resemblance-based theories.

1 Introduction

In discussing theories of concepts, a resemblance-based theory of reference says that the relationship between a concept and its referent is, partially or entirely, one of resemblance: not only must most concepts possess internal structure (allowing room for atomic concepts), but the structure of the concept must be to some degree isomorphic to the structure of the referent.

Concepts are often presented as being mental representations. At least to the layman, "representation" implies some, at least minimal, degree of resemblance: something is a good representation of an object to the extent that it bears some resemblance to the original. (This, often, is what anti-representationalists are reacting most strongly against. So for example it might be argued that Kevin O'Regan and Alva Nöe are not so much anti-representational as anti-resemblance.)

Resemblance-based theories, and the related imagist theories, have certain attractions. Many philosophers, not least of them Locke, have been interpreted as resorting to them. Jesse Prinz lists the attractions (he is discussing imagism, but the same attractions apply to resemblance-based theories): they provide a ready theory of concept acquisition from perceptual states; they seem to handle categorization well; they fit with at least some experimental psychology results; they tend to be parsimonious theories [6, pp. 26-28].

Although various contemporary theories of concepts including Prinz's own proxytype theory appear to require some room for resemblance, and resemblance is a truly difficult thing to avoid entirely (especially for the concept empiricists)[1], it is almost universally acknowledged to be problematic. As Prinz notes:

> ... Any two objects resemble each other in one way or another, but this does not mean that every object refers to everything else [6, p. 31].

[1] Indeed the only way to avoid resemblance entirely may be something like Jerry Fodor's informational atomism.

In particular, resemblance is symmetric (if one thing resembles another, then the second resembles the first) and reflexive (any thing, it is said, resembles itself maximally); reference is in most cases neither symmetric nor reflexive.

2 The Argument from Symmetry

Nearly everyone discussing this area seems to refer at some point back to Nelson Goodman and his book, **LANGUAGES OF ART**. From the opening onward, his position on resemblance-based theories is clear:

> The most naive view of representation might perhaps be put something like this: "A represents B if and only if A appreciably resembles B", or "A represents B to the extent that A resembles B". Vestiges of this view, with assorted refinements, persist in most writing on representation. Yet more error could hardly be compressed into so short a formula [4, p. 3].

Goodman continues:

> Again, 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 doesn't represent the painting [4, p. 4].

This "argument from symmetry", as I will refer to it, is one of the standard arguments against resemblance-based theories of reference: indeed, probably *the* most common. Goodman is talking about representation, but the argument applies equally well to reference, and that is how it is very often used.

There are two ways of responding to this: one is to consider what we actually mean by resemblance and whether the apparent symmetry of resemblance poses a fatal challenge to resemblance-based reference. The second is to remove part of the burden for reference from resemblance (what we might also call the intentional burden) and attribute it to some other mechanism, so that reference is partly based on resemblance and partly not. Though not an approach endorsed by Goodman (for reasons we will see), this is for example what I understand Prinz to do.

2.1 The Nature of Resemblance

What does Goodman mean by "as much like"? A lot turns on this phrase, and on the face of it, it seems unfortunately vague. He might be saying that A resembles B ***precisely*** as B resembles A. But how often, if ever, is that the case?

It does seem true that if one thing resembles another, then the second thing resembles the first. It is less obvious that if one thing resembles another that the second thing will resemble the first in *precisely the same manner*. This, I will argue, is what Goodman's argument needs in order to work, at least in order to be a fatal argument against resemblance-based theories of reference. If the nature of the resemblance in the one direction is any way different from the nature of the resemblance in the other, then there is no problem with reference attaching to resemblance.

How might we represent this symbolically? If we take $\otimes$ to be the property "resembles", then $(A \otimes B) \Rightarrow (B \otimes A)$: "'$A$ resembles B' implies 'B resembles A'". On the other hand, precise equivalence would look like this: $(A \otimes B) = (B \otimes A)$: "'$A$ resembles B' is equivalent to 'B resembles A'". If resemblance is *fully* symmetrical, than these two propositions will express the same content. That follows directly from the definition of symmetry. But I will argue that it is only rarely the case that A resembles B in the precise way that B resembles A, and that these cases do not, on their own, pose any problem for resemblance-based reference. Full symmetry may be an essential aspect of *resemblance simpliciter* for philosophers, but it is not how people normally think about resemblance.

Consider the Duke of Wellington and his portrait. Let us assume that the portrait is of sufficient quality and photographic style that to any viewer who knows the Duke, the portrait can only be taken as an image of the Duke; and the Duke can only be taken as the person in the portrait. But that is not to say that even on the most superficial of levels the Duke and his portrait are identical. Indeed in many ways, they have little in common. Consider:

> Contrast an image of a cat (such as a photograph) with a real cat. The real cat is a mammal, furry, alive, eighteen inches long (say), and composed of flesh and blood, while the image is not a mammal, not furry, not alive, five inches long (say), and composed of paper and Kodak chemicals [3, p. 74].

So there are certain things about the Duke that resemble the portrait, and there are certain things about the portrait that resemble the Duke. The resemblance is, as Goldberg and Pessin point out, superficial: only skin- (or canvas-) deep, and even then it might not do to look too closely, for skin and canvas are not such similar things. Indeed we might say that the relationship is not between the painting as a physical object and the Duke but between the *sense* of the painting – the meaning it's intended to convey – and the Duke; the canvas, as it were, is incidental, and the artist might have used some other medium to get the message across.

Still, there is a bi-directional one-to-one mapping between aspects of the Duke and aspects of the portrait. What is missing for full symmetry?

Let us, for sake of argument, translate "as much like" into "(as much) a likeness of". Ask people who know the Duke whether the portrait is a good likeness of the Duke, and you will surely get a "yes" or a "no" answer. Ask the same people whether the Duke is a good likeness of his portrait, and you will, I think, get some very puzzled expressions. (It would be interesting to test this experimentally.) The portrait may be a good likeness of the man, but the man is not a good, or a bad, likeness of the portrait: at least, we wouldn't normally say this. Neither would we say that someone is a good likeness of himself.

"Likeness", according to the dictionary, means "copy" or "portrait". That makes the portrait by truism a likeness of the Duke. But the Duke is not a portrait of his portrait.

Consider the word "copy". The portrait resembles the Duke by being, in certain aspects, a copy of the Duke, or a copy of certain aspects of the Duke. But the Duke is not a copy of his portrait, even though he does resemble it. What is going on here?

The portrait is an abstraction away from the "real" Duke, discarding most details and choosing to focus on a few external features. It contains no information, at least not explicitly, about his internal composition: either physically (his internal organs) or mentally (his thoughts or intentions). Even much or most information about his external appearance is discarded. No matter how photographic its quality, the portrait cannot give us even the same visual information as if we were in the presence of the Duke looking at him, for our eyes provide us depth perception that the portrait cannot. From the original to the copy, there is a substantive and qualitative loss of information. That relationship is clearly one-directional.

The Duke, on the other hand, resembles his portrait by virtue of being the embodiment of the image in the portrait. The "real" Duke fills in all the details that the portrait of necessity leaves out. Though there is resemblance in both directions, the resemblance in the one direction is subtly but importantly different from the resemblance in the other.

2.2 Levels and Meta-levels

Consider an example from geometry: a square and a cube. A square can be described as a two-dimensional abstraction away from a cube, which has three dimensions. All information about height and volume has been discarded. I can use a square as a portrait of a cube, as indeed a cube viewed from a certain angle will appear to be a simple square. But, even though a cube is composed of squares, a cube is not in any sense a portrait of a (single) square. If I held up a square drawn on a piece of paper

and said, "this is a cube", I think I would be universally understood. If I held up a cube and said, "this is a square", someone would surely correct me; or I would simply not be understood.

Physical dimensions can be viewed as merely a specific example of a more general principle about levels and meta-levels. By "level" we simply mean a certain perspective; another level is then either an abstraction away from that level or a level that *that* level is itself an abstraction away from. As one proceeds to meta-levels and meta-meta-levels, there is increasing abstraction: a quantitative and qualitative loss of data. In the other direction, there is increasing concreteness: quantitative and qualitative increase of data. The portrait is a portrait of the Duke by virtue of being a meta-level description of the Duke. If it were not a meta-level description of the Duke, it would not be a portrait of him.

To answer the argument from symmetry, the proponent of a resemblance-based theory of reference need only say that reference relies on the one kind of resemblance that goes from meta-level to (base) level, from abstract to concrete: "copy" (the portrait) to "original" (the Duke); and not on the resemblance that goes the other direction. The special case where resemblance *is* perfectly symmetrical (the resemblance of A to B is precisely the same as the resemblance of B to A) need not pose any problem.

Consider two identical twins. Say the twins are so close in appearance that their own parents cannot tell them apart. (Obviously on sufficiently close examination, differences between any two "identical" objects can always be found; there is no such thing as a perfect copy. My point is only that there exists a level of analysis at which the resemblance is precisely symmetrical.)

There is something immediately different here from the Duke and his portrait. Ask someone whether the one twin resembles the other, and you might get a response like, "well, yes; he doesn't *just resemble* his twin. So far as I can tell he's identical." Usually when we're talking about resemblance, we're referring to cases of similarity, not identity. One example of this is the "copying by abstraction" described above, where the copy is something less than the original. Another would be a statement like "my friend Gene resembles Robert De Niro". Note that I may well be less inclined to say that "Robert De Niro resembles my friend Gene", for the resemblance seems to work differently the other way around. Gene may be somehow a copy of Robert De Niro (when I look at Gene I think of Robert De Niro), but Robert De Niro need not be a copy *in the same way* of Gene (so that when I look at Robert De Niro I think of Gene).

But leaving those considerations aside and returning to our identical twins: the important consideration here for reference is that there is no level and meta-level. The one twin is not in a meta-level relationship to the other. In short, perfect resemblance is the wrong kind of resemblance for reference.

It is time to reconsider how we define reference. In linguistics, reference is the relationship between nouns or pronouns and the objects they name. Likewise we talk about reference as the relationship between concepts and the things they are about: in the case of physical objects, the objects they pick out in the "real" world; in the case of more abstract entities like "peace" or "justice", the shared ideas or values they pick out. In any case, I want to argue that reference always requires a relationship between meta-level (i.e., the word or the concept) and level (what the word or concept "picks out"). Reference requires these two logical levels of discussion, as between word and referent, concept and referent, mention and use, or meta-language and language: one level more abstract, the other more concrete; it is probably incoherent without them. Reference is a relationship from more abstract to more concrete. By this definition, reference cannot be symmetrical because meta-level and level will never be the same.

2.3 Reflexivity and Self-reference

Goodman writes:

> An object resembles itself to the maximum degree but rarely represents itself; resemblance, unlike representation, is reflexive [4, p. 4].

Again, we can read "reference" for "representation". My intuitions disagree here with Goodman: as I said before, resemblance is usually taken to refer to cases of similarity, not identity. It seems quite reasonable to say that "my friend Gene resembles Robert De Niro". It sounds odd to say that "my friend Gene resembles my friend Gene" unless I'm talking about two different people. So it's not immediately clear to me that resemblance is, in ordinary usage, reflexive, because it is not clear to me that "perfect resemblance" is, in fact, resemblance.

What of self-reference: does the definition I've just given for reference rule it out? I hope it will become clear that it doesn't. Rather, it attempts to clarify what we mean when we talk about self-reference. In many situations and especially when we are talking about self-reference, we conflate meta-level and level; but there is still a meta-level/level distinction to be made.

Self-reference is, of course, generally taken as another name for reflexivity. If $\otimes$ is the property "references", this suggests that A is self-referential if and only if $(A \otimes A)$. What I'm arguing is that there's something a bit misleading about self-reference, because the A on the left-hand side isn't the same thing as the A on the right-hand side; we're conflating two different things and calling them both A. This conflation is, to me, what self-reference is all about. Consider a couple of paradigmatic examples of self-reference. First a proposition:

This sentence has five words.

The proposition can be approached on several levels. First there is the sentence as a string of words (or letters, or symbols): its form. Then there is the sense of the sentence, which is its semantic content: what it's saying. We often treat these as being the same, but of course, they're not (this is, in effect, the use-mention fallacy). It's the *sense* of the sentence that refers back to the *form* of the sentence: this is how we get the self-reference. But the thing referring, the sense, is quite distinct from the thing being referenced: the form. We can think of the form of the sentence as one level, the sense of the sentence as meta-level. So reference once again is the a relation from meta-level to (base) level.

Next consider the painting ***The Betrayal of Images*** by Rene Magritte:

The painting can likewise be approached on several levels. There is the painting as a physical object (or a computer screen image, or a grid of pixels): it's form. Then there is the sense of the painting: the meaning it's conveying or intended to convey. The painting is self-referential because, unlike the case of the Duke's portrait, the sense of the painting refers not outward (to some other object, like the Duke) but back to the form of the painting. It tells us that the pipe is, despite appearances, not a pipe.

3 Prinz's Solution

Concept empiricists, committed to a perceptual basis for concept acquisition, have a natural inclination toward some form of resemblance theory. After all, one must somehow get from perception to conception.

Prinz notes that "Traditionally, concept empiricists have been imagists. They identify concepts with conscious picturelike entities that resemble their referents." [6, p. 139]. Although image-based theories of concepts are *not* equivalent to resemblance-based theories of concepts (a point which Prinz is at some pains to make), nonetheless imagists typically adopt resemblance-based theories of reference, and

theorists of resemblance-based concepts typically resort to images as the bearers of resemblance, so that image-based theories and resemblance-based theories are often treated together. To the extent that concept empiricists remain committed to some form of imagism and imagists remain committed to some form of resemblance-based reference, the concept empiricists will face whatever problems are inherent in resemblance.

Prinz is a concept empiricist. He cannot avail himself of the argument presented in the section above because, unlike me, he accepts Goodman's basic argument from symmetry. If I am correct that his proxytypes theory still relies on some form of resemblance between the proxytypes and their referents, then he must have another solution. I want to argue that Prinz is able to make use of resemblance by not having resemblance bear the full burden of reference. This is a solution I can make use of as well.

Prinz presents Goodman's argument that resemblance not only fails to provide a full account of intentionality[2], it is, in fact, necessarily irrelevant to it.[3] But he does not argue *for* it, either. This is because he is, if I am reading him correctly, committed to *some* intentional role for resemblance, even if he takes care not to make it too explicit or hang too much from it. [4]

3.1 Proxytypes as "Stand Ins"

I say this because his proxytypes are composed, in part, of prototypes and exemplars, whose internal features play an intentional role precisely *because* of their resemblance to the features of the prototypes' and exemplars' referents. His proxytypes successfully *stand in for* their referents in our mental simulations precisely because of their resemblance to their referents. Consider:

> If concepts are proxytypes, thinking is a simulation process.... Tokening a proxytype is generally tantamount to entering a perceptual state of the kind one would be in if one were to experience the thing it represents. One can simulate the manipulation of real objects by manipulating proxytypes of them in their absence. The term 'proxytype' conveys the idea that perceptually derived representations function as proxies in such simulations. They are like the scale models that stand in for objects during courtroom reenactments. They allow us to reexperience past events or anticipate future events [6, p. 150].

3.2 Informational Semantics Without Atomism

Furthermore, although Prinz is an informational semanticist and can use the informational semantics to bear part of the intentional burden[5], he is also avowedly not an atomist. [6, p. 164] For Fodor, informational semantics and atomism naturally go hand in hand; for Prinz, they necessarily come apart.

Having informational semantics bear part of the intentional burden is extremely handy. Informational semantics offers an elegant explanation of why concepts and referents go together that can, to a point at least, ignore the internal structure of both concepts and referents in favor of their reliable co-occurrence.

Prinz cannot have informational semantics bear all of the burden precisely because he is not an atomist: his proxytypes have internal structure, and the internal structure plays an intentional role that can only partly explained by being "reliable detectors". To the extent that the features of the proxytype *necessarily* resemble the features of the referent, resemblance is also playing a role.

[2] ... Which I will consider for this section to be synonymous with reference.

[3] "Once we have admitted the insufficiency of resemblance in explaining intentionality, Goodman then argues that resemblance plays no role at all. Assume that my mental image of a dog cannot represent a dog solely in virtue of resembling one. To explain its intentionality, we might supplement the resemblance story by saying that my dog image is a perceptual state that was initially caused by my seeing a dog. Once we have introduced this causal story, the fact that my dog image resembles a dog seems to do no explanatory work." [6, p. 31]

[4] It is worth noting that Prinz is committed to another form of resemblance that does not play any intentional role. That is the relationship between related proxytypes in one person's mind, as well as between a proxytype in one person's mind and the "same" proxytype in another person's mind. "If you and I agree about the most conspicuous walrus features, then we understand each other when we use the word 'walrus'," and we engage in similar walrus-directed behaviors. If the publicity desideratum is intended to explain such examples of coordination, a theory that predicts considerable conceptual similarity will suffice." [6, p. 158]

[5] "... Proxytype theory incorporates an informational theory of intentionality." [6, p. 156]

So on the one hand, my concept of RABBIT is a "correct" concept of RABBIT precisely because it reliably tracks rabbits. On the other, its ability to track rabbits follows directly from its constitutive structure. If my beliefs about rabbits, which partially constitute my concept of RABBIT, are sufficiently divergent from reality, then my concept of RABBIT will no longer reliably track rabbits, and the propositions I make about rabbits will in similar measure become suspect.

3.3 Towards a Solution

Prinz's answer begins with abandoning a certain naive form of imagism:

> To bring concept empiricism up to date, one must abandon the view that concepts are conscious pictures. Contemporary cognitive science helps in this endeavor by identifying a rich variety of highly structured, unconscious perceptual representations. ... I argue that such representations can be used to form concepts [6, p. 139].

Note that the representations are still perceptually based. Continuing on, Prinz appeals to a range of different types of representations, only some of which may involve resemblance-based intentionality:

> The representations postulated by contemporary accounts of perceptual processing are quite different from the ***simple images*** postulated by traditional empiricists.... First, by postulating multiple levels of processing and multiple cell types, current theories of perception arm the contemporary empiricist with a range of representations to work with. This marks a significant advance over classical empiricists, who typically envisioned only one kind of perceptual representation in each modality [6, p. 143, emphasis mine].

Prinz is talking there about perceptual representations as prior to proxytype formation, but the idea carries over:

> A proxytype can be a detailed multimodal representation, a single visual model, or even a mental representation of a word (e.g., an auditory image of the word "dog") [6, p. 149].

In sum: Prinz is a concept empiricist; concept empiricists are predisposed to favor explanations involving resemblance; having resemblance bear the full intentional burden is problematic, if not necessarily for the reasons Goodman gives in the argument from symmetry; Prinz's solution is to relieve resemblance of part of its intentional burden.

4 Other Objections to Resemblance

4.1 The Argument from Over-Generalization

This is the argument, alluded to in the introduction, that resemblance-based theories of reference over-generalize because resemblance itself over-generalizes: after all, it is said, everything resembles everything else, to some extent, but everything does not reference everything else. This argument is really just a variant on the argument from symmetry.

If the response I gave for the argument from symmetry works – that the general notion of resemblance masks a number of related but distinct notions of resemblance, and reference only attaches to one of them – then it should work for this argument as well. It's not clear that "everything resembles everything else" is saying anything meaningful; the phrase "to some extent" is telling, because in most cases the resemblance will be minimal. Consider, for example, a newborn baby and a set of egg beaters with a rotary handle. Most people would be inclined to say that the baby and the egg beaters don't resemble each other at all. We pick out two things as resembling each other precisely because we see a similarity that is *different* from the minimal way in which everything resembles everything.

4.2 The Argument from Under-Generalization

If resemblance might, on the face of it at least, seem to over-generalize, there is another sense it which it would seem not to generalize enough. Consider George Berkeley's discussion of triangles. At least if one's resemblance-based account is imagistic – that is, concepts are images – how does one explain one's

concept of a triangle except by virtue of images of specific triangles, which *must* be either scalene, or isosceles, or equilateral?

> The resemblance theory also suffers from more internal problems. For example, it struggles with our ability to think in an abstract or general way. How is it we can think thoughts like *Truth is a virtue* or *All triangles are trilateral*? How could a mental image resemble "truth" or "virtue"? And as Bishop Berkeley pointed out regarding triangles two centuries ago, any mental image you invoke would be of a particular triangle (right angled or not, isosceles or not, large or small, etc.); no particular image could resemble *all* triangles. But then, how can the resemblance theory explain our ability to think about *all* triangles? [3, p. 75]

Berekey's solution was to take specific images of triangles but ignore specific aspects of them in favor of the universal ones. [1, pp. 14-19] What Berkeley intended as a powerful argument in favor of imagism is often taken as one of the most powerful arguments *against* it, since most people would want to say that they possess a general concept of triangle that is *not* captured (as Berkeley would have it) by any set of of particular triangles.

Fodor raises a closely related concern to Goldberg and Pessin:

> Consider the thought that John is tall. Clearly the thought is true only of the state of affairs consisting of John's being tall. A theory of the semantic properties of a thought should therefore explain how this particular thought is related to this particular state of affairs. According to the resemblance theory, entertaining the thought involves having a mental image that shows John to be tall. To put it another way, the relation between the thought that John is tall and his being tall is like the relation between a tall man and his portrait. The difficulty with the resemblance theory is that any portrait showing John to be tall must also show him to be many other things: clothed or naked, lying, standing or sitting, having a head or not having one, and so on. A portrait of a tall man who is sitting down resembles a man's being seated as much as it resembles a man's being tall. On the resemblance theory, it is not clear what distinguishes thoughts about John's height from thoughts about his posture [2, p. 76].

Either it must be the case that all we have by way of concepts of John are a set of apparently unrelated mental portraits with no structure to hold them together, or (as Fodor suggests) we have a single portrait that has to do multiple duty: a portrait of John's being tall that also somehow implicitly shows him seated or lying down. The former seems unwieldy, the latter unworkable. What seems lacking is a general notion of John that abstracts away from all the specific images of him.

Taken another way, this is the familiar argument that images are inherently ambiguous: e.g., Wittgenstein's example of an image of a man climbing a hill that could also be an image of a man descending a hill. Indeed, this is how Goldberg and Pessin read Fodor.[6]

There are two obvious responses to what I'm calling the argument from under-generalization. The first is that this is only a problem for resemblance-based theories if resemblance bears all of the burden of reference. Prinz has already given us reason to consider why we might not want to do that. In particular, abstract concepts like "triangle" or "virtue", precisely because they are not inherently imagistic concepts, need not depend on resemblance at all for their reference.

On the other hand, one could argue that a resemblance-based theory need not limit itself to imagistic concepts: one could generalize the notion of resemblance and talk about isomorphic relations between parts of the abstract concept and parts of the abstract entity that it's referencing. This might seem to make things worse for resemblance-based theories by leaving an already under-constrained concept

[6] "Finally, as Fodor... points out, there's a real problem in explaining the propositional nature of our thinking.... Consider a thought like *Fred has short hair*. Any image of Fred will represent many of Fred's aspects besides his hair. It might show how tall he is or how heavy he is or what his eyebrows are like, whether he's sitting or standing, and so on. If to think about Fred is to invoke an image of Fred, as resemblance theorists claim, then what image could distinguish between the thoughts that Fred has short hair and that he is tall, heavy, and so on? Since, in a word, images are ambiguous while thinking in general is not, images seem ill-suited as a medium of thinking. The resemblance theorist, who relies on images, is in trouble." [3, p. 75]

of resemblance even less constrained, placing us back in the situation, perhaps, where everything really does resemble everything else.

Still, this needn't necessarily follow, providing our notion of resemblance (the kind I am suggesting attaches to reference) is sufficiently constrained to begin with and so long as like goes with like: just as a physical object resembles another physical object (and never an abstract entity), so an imagistic concept will resemble the physical object it references (and not some abstract entity). Likewise just as an abstract entity like liberty resembles another abstract entity like equality (and never a physical object), so an abstract concept will resemble the abstract entity it references (and not a physical object). At the least, it seems an avenue worth further exploration.

5 Conclusions

As much as I confess, like the concept empiricists, to favoring some form of resemblance-based intentionality, I have not attempted in this paper to give arguments in its favor so much as to show why familiar arguments against resemblance-based theories need not be fatal. In particular, I argue that Goodman's argument from symmetry is not all that it appears. The problem lies with our notions of resemblance and reference. I have argued that resemblance only appears to be symmetrical because the broader notion of resemblance masks related but distinct types of resemblance. By identifying these different kinds of resemblance, we are able to attach reference to the correct one, and the argument from symmetry loses much of its force. Just as, I argue, reference can be seen as always being a relationship across logical levels (from meta-level to [base] level), so, too, one type of resemblance can be seen as involving a similar relationship across logical levels.

Even if *resemblance simpliciter* is taken to be the symmetrical form of resemblance, the directional notion of resemblance I have identified qualifies as a suitable bearer of intentionality. If calling this directional entity resemblance confuses it with the broader notion of resemblance, then it warrants having a new name.

Even if the argument from symmetry does not block all use of resemblance-based intentionality, still there appear to be genuine problems with having resemblance bear the full intentional burden. Prinz's proxytypes theory offers another means of rescuing resemblance by relieving resemblance of part of that burden. It also provides an additional tool for answering some of the other objections to resemblance besides the argument from symmetry.

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