The Meaning of 'Look'

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Abstract

I develop a compositional semantics for a class of sentences that I call *VA sentences* – sentences whose main verb is 'look' and that we use to describe how things visually appear (such as 'The table looks red', 'John looks as if he is tired', and 'The top line looks longer than the bottom line'). In Chapter 1, I explain my motivation for developing such a semantics, and outline the general approach that I take – the so-called *neo-Davidsonian* approach. In Chapter 2, I argue against the view commonly held by philosophers of perception that we use 'look' in VA sentences with more than one meaning, and I adopt the working hypothesis that we use it with just a single meaning. In Chapter 3, I propose that by 'look' in VA sentences we (unambiguously) mean a kind of event, and that we use VA sentences to talk about events of this kind – *looking* events. I propose that we (optionally) use the subject of 'look' to specify a *stimulus* of the looking events about which we are talking, by referring to or quantifying over objects, that we (obligatorily) use the complement of 'look' to specify a *way* of these events (where a way is a property of the event), by referring to or quantifying over ways of looking, and that we (optionally) use modifiers of the form 'to S' to specify an *experiencer* of these events, by referring to or quantifying over subjects. Thus, by 'Patch looks that way to John' we mean that there is a looking event whose stimulus is Patch, whose way is that way, and whose experiencer is John. In Chapter 4, I argue that in the 'XP looks Adj' construction (where Adj is an adjective) we use Adj to definitely describe a way of looking, and propose that by Adj we mean [the w: things look w if f], where f is the property that we mean by Adj in 'XP is Adj'. In Chapter 5, I explain that 'things look w if f' is to be understood generically, as meaning that events in which f things look some way are events in which they look w. In Chapter 6, I argue that we often use Adj to mean a more specific quantifier as well, such as [the w: things that are people look w if f], and explain how this can account for various intuitions about our use of 'XP looks Adj'. In Chapter 7, I consider our use of modifiers of the form 'to S'. I argue that VA sentences that contain these modifiers are structurally ambiguous, and use this to account for three intuitions that might otherwise be a problem for the account of 'XP looks Adj' being developed. Finally, in Chapter 8, I consider all of the remaining constructions exhibited by VA sentences, and in each case propose how it is that we use the complement of 'look' to refer to or quantify over ways of looking (as I proposed in Chapter 3 that we do).

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1 The Project

My aim in this thesis is to clarify what we mean by a certain class of sentences – sentences whose main verb is 'look', and that we use to describe how things visually appear. I shall call them *visual appearance sentences*, or *VA sentences* for short. The following is a fairly representative sample:

(1) a. Patch looks that way.[1]
      b. He looks the way Mary looks.
      c. John looks American.
      d. Someone looks a character.
      e. Those women look in love.[2]
      f. John looks like a duck.
      g. John's mum looks how she always looks.
      h. The top line looks longer than the bottom line.
      i. They look to be tired.
      j. It looks as if these tomatoes are ripe.
      k. There looks to be a unicorn approaching.

There are also sentences whose main verb is 'look' but that we do not use to describe how things visually appear:

(2) a. John looked out the window.
      b. She looked after my pot plants.
      c. The boss is looking to hire someone.

Because we do not use these sentences to describe how things visually appear they are not VA sentences, as I am characterising them, and I am not interested in this thesis in clarifying what we mean by them (although I think that would also be an interesting project). I mention them just to set them aside.

I will assume for simplicity that it is the same word 'look' that we use in all VA sentences. My interest is in what we mean by VA sentences, and in particular what we mean by their main verb (or verbs) 'look'. I am not interested in the number of verbs 'look' that we use in these sentences to mean what we do.

Since we understand each other when we use VA sentences, there is a sense in which we already know what we mean by them. So why am I bothering to clarify? Because there is an important sense in which we do not know what we mean by them. There is reason to think that what we mean by a complex expression is determined *compositionally* – that is, what we mean by the expression is a function of what we mean by its immediate constituents and the manner in which they are syntactically combined. What we mean by 'John looks American', for example, is a function of what we mean by 'John', what we mean by 'looks American', and the manner in which they are syntactically combined to form the sentence 'John looks American'; what we mean by 'looks American', in turn, is a function of what we mean by 'looks', what we mean by 'American', and the manner in which they are syntactically

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[1] I shall often use 'Patch' as a proper name for a colour patch.
[2] The acceptability of sentences such as (1d) and (1e) varies from community to community – to speakers in Australia they are perfectly acceptable, but to many speakers in the U.S. they are not. I would be happy to omit them from this list.

combined to form the verb phrase 'looks American'. It turns out to be very difficult to explain exactly how the meanings of 'John looks American' and 'looks American' are determined compositionally. In fact, it turns out to be difficult even to explain what it is that we mean by the word 'look' – as I shall argue in Chapter 2, there have been many false claims about this in the perception literature over the last one hundred years. So there is at least one important sense in which we do not know what we mean by VA sentences – we have no theory of how their meanings are determined compositionally. When I say that my project is to clarify what we mean by VA sentences, I mean that my project is to develop such a theory – to develop a compositional semantics for VA sentences, or, as I shall call it, a *semantic theory* of VA sentences.

1.1 Motivation

Apart from its intrinsic interest, there is at least one good reason for developing a semantic theory of VA sentences: by developing such a theory we can better understand the phenomena that we use VA sentences to talk about. In particular, we can better understand the phenomenon of visual appearance.

What I am claiming is that by doing semantics we can get metaphysical results. This might seem like a bold if not misguided claim, but I think it is neither. The reason why we can do it is that semantic theories have metaphysical consequences. Suppose that we are trying to work out what it is for it to be the case that p, where we express p using a sentence S. Suppose that S contains a constituent expression e. Suppose that we have a semantic theory of S, according to which we use e in S to mean a certain particular, a. Then it is a consequence of this theory that what it is for it to be the case that p has something to do with a. Suppose that S contains another constituent expression e', and that according to our semantic theory we use e' in S to mean a certain relation, R. Then it is a consequence of this theory that what it is for it to be the case that p has something to do with the relation R. Finally, suppose that according to our semantic theory we use e as a semantic argument of e' – that is, we use e to specify one of the relata in the relation that we mean by e'. Then it is a consequence of this theory that what it is for it to be the case that p has something to do with a standing in the relation R. Here we have three metaphysical consequences of our semantic theory of S.

Admittedly, these metaphysical consequences are limited – they tell us that what it is for it to be the case that p has something to do with a, R, and a's standing in R, but they tell us very little, if anything, about the natures of a and R themselves. Perhaps the metaphysical consequences of our semantic theories are bound to be limited in this kind of way. But that does not mean they are bound to be uninteresting or unhelpful. On the contrary, the metaphysical consequences of the semantic theory of VA sentences that I shall develop in this thesis turn out to be interesting and helpful, enough so to adjudicate between competing answers to certain questions in the philosophy of perception. That seems to me to be pretty interesting and helpful.

One might accept that semantic theories have metaphysical consequences, but reject the idea that doing semantics can help with doing metaphysics – what happens in practice is that metaphysicians independently develop their theories, which semanticists must then respect when they develop theirs. It might be relatively easy to develop a semantic theory whose consequences are in accord with a single metaphysical theory. But semantic theories typically have consequences for not just a single metaphysical theory of a single phenomenon, but for a variety of metaphysical theories of a variety of phenomena. Why is that? Because the sentences that we use to talk about one phenomenon typically have constituents that we use with the very same meaning in sentences that we use to talk about other phenomena. There is evidence, for example, that what we mean by 'red' in 'The table looks red to John' is the very same thing that we mean by 'red' in 'The table is red'. So any claim about what we mean by 'red' in the former case has consequences not only for what it is for the table to look red to

John, but also for what it is for the table to be red. This makes it much harder than one might think to get our semantic theories to be consistent with our metaphysical theories. Sometimes when there is a clash, the best thing to do is not to adjust our semantic theories, but to adjust our metaphysical theories. This is how by doing semantics we can get metaphysical results.

For any given phenomenon there are at least two things that we would like: a metaphysical theory of the phenomenon, and a semantic theory of the sentences that we use to talk about the phenomenon. The way to get these theories is not to first develop one, and then use that to constrain the development of the other. The way to make progress is to develop them in tandem, checking each against the consequences it has for the other, making appropriate adjustments to one or the other (or both) when those consequences are problematic. I think that to date too little attention has been paid to the semantic constraints that are placed upon our metaphysical theorizing about certain aspects of perception. In this thesis I make a start towards rectifying that.

There are two issues in the philosophy of perception that the results of this thesis have an immediate bearing upon.

The first issue, a relatively minor one, is the question of whether or not the relation expressed by 'looks the same as' is transitive.[3] It is thought by many philosophers of perception that it is not. Indeed, there seems to be good reason to think so: it seems possible for there to be a series of colour patches p_1, …, p_n such that p_1 looks the same as p_2 (in respect of colour), p_2 looks the same as p_3, p_3 looks the same as p_4, and so on, but p_1 does not look the same as p_n. If such a series is possible, as it seems to be, then the relation expressed by 'looks the same as' is not transitive. I believe, contrary to this, that such a series is not possible. It is a consequence of the account that I shall develop in this thesis that what we mean by 'p_k looks the same as p_{k+1}' is true iff one entity, the way p_k looks, is (numerically) identical to another entity, the way p_{k+1} looks, and since identity is a transitive relation, so is the relation that we mean by 'looks the same as' (I discuss this in Section 8.5.1). Why, then, do we find it so plausible that such a series is possible? Because, I suggest, we confuse the meaning of 'looks the same as' with the meaning of 'is visually indiscriminable from'. Two things suggest this: first, these expressions are often used interchangeably in the relevant literature; second, arguments that the relation expressed by the former is not transitive typically proceed by showing that the relation expressed by the latter is not transitive, with no comment about the link between the two.[4] But it is one of the consequences of the account that I develop here that 'looks the same as' does not mean 'is visually indiscriminable from', and the relation expressed by the former is distinct from the relation expressed by the latter. The relation expressed by the latter might well not be transitive (perhaps explaining the persuasiveness of the arguments to that conclusion), but the relation expressed by the former is transitive. I think that a proper understanding of what we mean by VA sentences and, in particular, what we mean by sentences such as 'p_k looks the same as p_{k+1}', helps to make this clear.

The second issue, a more major one, is the nature of visual experience. What is it for someone to have a visual experience? That is, what is it for things to look some way to someone? Consider a more particular question: What is it for a table to look red to John? One fairly natural answer is that it is for John to stand in a certain relation to the table and to redness in the table. But according to the so-called *argument from illusion* this cannot be right: it might be that the table looks red to John, even though the table is not red (there is no redness in the table), so for the table to look red to John cannot be for John to stand in a certain relation to the table and to redness in the table. There are four main alternative kinds

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[3] For recent discussions see Raffman (2000) and Graff (2001). It is standardly assumed that there is exactly one relation expressed by 'looks the same as', and I shall go along with this assumption in this paragraph.

[4] See, for example, Graff (2001).

of account. According to *sense-datum* accounts, for the table to look red to John is for John to stand in a certain relation to a sense-datum and to redness in that sense-datum. According to *adverbial* accounts, for the table to look red to John is for John to be in a certain relational state involving the table, which is modified redly. According to *representational* accounts, for the table to look red to John is for John to be in a certain relational state involving the table, which represents that the table is red. Finally, according to *disjunctive* accounts, for the table to look red to John is for either condition C_1 or condition C_2 to obtain, where C_1 is the condition that John stands in a certain relation to the table and to redness in the table (and C_2 is a condition, to be specified, that can obtain when the table is not red). It is a consequence of the account of VA sentences that I develop in this thesis that the correct account of what is for the table to look red to John, and of visual experience in general, is a kind of adverbial account (I develop this consequence in a subsequent paper).[5]

As I have just been arguing, there are good reasons for developing semantic theories of various fragments of natural language. I hope that this thesis is also a contribution to this more general project. The verb 'look' is representative of a large class of verbs in the English language, so that a careful study of what we mean by 'look' and the sentences of which it is the main verb should yield wide-ranging results. First of all, 'look' is to the sense of sight as 'taste', 'feel', 'smell', 'sound' are to the senses of taste, touch, smell and hearing, so that what goes for the meaning of 'look' and VA sentences might well go for the meanings of these others and the sentences in which they are the main verb (with appropriate modification to suit each sense). Second, just as these five verbs have to do with how things appear via particular senses, 'seem' and 'appear' have to do with how things appear via no particular sense (at least intuitively), so that what goes for the meaning of 'look' and the other four sensual appearance verbs might also go for the meanings of the non-sensual appearance verbs 'seem' and 'appear' (with suitable modification to remove reference to any particular sense). Third, the expressions that 'look' (and the other six appearance verbs) take as complement are also used as complements and adjuncts of a great many other verbs, and intuitively they are used with the same meaning. We have, for example:

(3) a. John talks that way.
     b. John laughs the way Mary cries.
     c. John walks proud.
     d. John smiles a winner.[6]
     e. John eats like a pig.
     f. John drives how he has always driven.
     g. John cooks better than Mary.
     h. John swims as if he has a sore arm.

To develop a semantic theory of VA sentences we must develop a theory of what we mean by the various expressions that we use as the complement of 'look'. Since we use these expressions with the very same meaning in many other (non-VA) sentences, developing a semantic theory of VA sentences will contribute to developing a semantic theory of a much more inclusive class of English language constructions (but I will not discuss this in this thesis).

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[5] On sense-datum theories see Moore (1903), Broad (1923), Price (1932), Jackson (1977), O'Shaughnessy (1980), Robinson (1994) and Foster (2000); on adverbial theories see Ducasse (1942), Chisholm (1957), Sellars (1975) and Tye (1975, 1984); on representational theories see Anscombe (1965), Armstrong (1968), Dretske (1969), Pitcher (1970), Harman (1990), Tye (1992, 1995), Peacocke (1993), Lycan (1996) and Byrne (2001); on disjunctive theories see Hinton (1973), Snowdon (1979), McDowell (1982, 1987) and Martin (2002, 2003).

[6] Just as some speakers find examples (1d) and (1e) unacceptable, some also find (3c) and (3d) unacceptable. Again, I would be happy to omit (3c) and (3d) from this list of examples (although I find these constructions interesting and increasingly widely used).

1.2 The Approach

As I said above, my aim is to clarify what we mean by VA sentences. By 'what we mean by VA sentences' I mean what we, as a community of speakers, mean by these sentences. Sometimes what an individual speaker means by a VA sentence might be different from what the community as a whole means by that sentence (perhaps the speaker misunderstands the sentence, or perhaps she intends to use it in a different way). But I take it that there are facts about what we, as a community, mean by VA sentences, and these are the facts in which I am interested here. I take these to be *generic* facts. To claim that by the VA sentence *s* we mean *m* is to claim that by *s* we generally mean *m*, or, more specifically, that occasions on which *s* is used to mean something are generally occasions on which it is used to mean *m*. I also take it that what a sentence means is whatever it is that we (as a community) use it to mean: if it is true that by *s* we mean *m*, then it is thereby true that *s* itself means *m* (I will not argue for this here). So my interest in what we mean by VA sentences is equally an interest in what the VA sentences themselves mean. My aim, then, can be stated equally well in either of the following two ways: (a) to clarify what we mean by VA sentences, or (b) to clarify what VA sentences mean. I will use this terminology interchangeably.

Similar comments apply to sub-sentential constituents of VA sentences. As part of clarifying what we mean by VA sentences I shall be clarifying what we mean by their constituents. By 'what we mean by their constituents' I mean what we, as a community of speakers, mean by those constituents. I take it that there are facts about what we, as a community, mean by those constituents, and that these are generic facts. To claim that by the constituent *c* of the VA sentence *s* we mean *m* is to claim that by *c* in *s* we generally mean *m*, or, more specifically, that occasions on which *c* is used in *s* to mean something are generally occasions on which it is used to mean *m*. I also take it that what the constituent means is whatever it is that we (as a community) use it to mean: if it is true that by *c* in *s* we mean *m*, then it is thereby true that *c* itself in *s* means *m*. So my interest in what we mean by the constituents of VA sentences is equally an interest in what those constituents themselves mean.

I shall be talking about what a speaker S means by a sentence *s* on an occasion of use. Many people working in the philosophy of language would prefer to talk about 'the proposition that the speaker expresses', or 'the content of *s* relative to that context', or 'what S asserts by uttering *s* on that occasion', or 'the truth-conditions intuitively conveyed by the utterance', or one of various other alternatives. I find these ways of talking much less clear, so much so that I can only understand this way of talking by translating it into talk about what S means by *s*. The motivation for introducing this technical language seems to be this: sometimes there are two things that count as what a speaker means when she assertively utters a sentence, one of which is something that she merely implicates (in the Gricean sense). What we need is a way of referring to the other thing that she means – the thing that she does not merely implicate. I don't see any such need. I agree that there might in this way be two things that the speaker means when she assertively utters a sentence, but only one of these counts as what she means by the sentence. What she implicates is not something that she means by the sentence – rather, it is something that she means by uttering the sentence (or by saying what she did), and the sentence and her uttering of the sentence are distinct things (one is a sentence, one is an act). If I utter 'Mary has nice handwriting' and thereby implicate that Mary is not a good philosopher, then it is not the case that by 'Mary has nice handwriting' I mean that Mary is not a good philosopher – it is by saying that Mary has nice handwriting that I mean that she is not a good philosopher. If in response to my uttering 'Mary has nice handwriting' you ask me what I mean by that, seeking to clarify what I am implicating, then you are not using 'that' to refer to the sentence that I have uttered, but to my act of uttering it. I think it is bad methodology to introduce technical terms for phenomena that we already have perfectly good ways of talking about in natural language.

Again, similar comments apply to sub-sentential constituents of VA sentences. I shall be talking about what a speaker S means by a constituent *c* of a sentence *s* on an occasion of use. In more popular terminology, I mean the content of *c* relative to that context: when S assertively utters the sentence *s* she expresses a proposition, and by uttering *c* she expresses a constituent of that proposition – this is the content of *c* relative to the context. Again, I find it clearer to talk about what the speaker means by c on this occasion, and this is the terminology that I shall use throughout. If need be, everything that I say can be translated into the more popular (but, in my opinion, often more confusing) technical language.

There are at least three general approaches that one might take when developing a semantic theory of a class of sentences, which I shall call the *traditional* approach, the *Davidsonian* approach, and the *neo-Davidsonian* approach. The three approaches can best be compared by considering how they would have us formalize a sentence such as 'John hit Mary'. According to the traditional approach it should be formalized as in (4a) below; according to the Davidsonian approach it should be formalized as in (4b); and according to the neo-Davidsonian approach it should be formalized as in (4c).

(4)   a. Hit(John, Mary)
       b. $\exists e(\text{Hit}(e, \text{John}, \text{Mary}) \,\&\, \text{Past}(e, t_0))$
       c. $\exists e(\text{Hit}(e) \,\&\, \text{Agent}(e, \text{John}) \,\&\, \text{Patient}(e, \text{Mary}) \,\&\, \text{Past}(e, t_0))$

According to the traditional approach (yielding (4a)), what we mean by 'John hit Mary' is that a certain relation obtains. We use the verb 'hit' to specify which relation it is that obtains, and we use the subject of 'hit' ('John') and complement of 'hit' ('Mary') to specify which particulars the relation obtains between. In general, by the main verb of a sentence we mean either a property, a 2-place relation, or a 3-place relation, depending upon whether we use the verb non-transitively, mono-transitively, or di-transitively. If we use the verb non-transitively, then we use the subject of the verb to specify which particular has the property that we mean by the verb. If we use the verb mono-transitively, then we use the subject and complement of the verb to specify which two particulars stand in the 2-place relation that we mean by the verb. If we use the verb di-transitively, then we use the subject, direct complement, and indirect complement of the verb to specify which three particulars stand in the 3-place relation that we mean by the verb. On this approach, we use mono-transitive 'hit' in 'John hit Mary' to mean a 2-place relation whose extension is $\{(x, y): x \text{ hit } y\}$.[7]

This approach has at least two limitations. First, to say that by 'hit' in 'John hit Mary' we mean a relation whose extension is $\{(x, y): x \text{ hit } y\}$ is not to say what we mean by the bare verb 'hit', but what we mean by its simple past tense form 'hit'. This is not what we mean by 'hits' in 'John hits Mary', in which we use the verb 'hit' in its simple present tense form. In 'John hits Mary', we use 'hits' to mean a distinct relation whose extension is $\{(x, y): x \text{ hits } y\}$ (distinct because $\{(x, y): x \text{ hit } y\}$ is a different set from $\{(x, y): x \text{ hits } y\}$). Similarly, what we mean by the simple future tense form 'will hit' is a relation whose extension is $\{(x, y): x \text{ will hit } y\}$, what we mean by the present progressive tense form 'is hitting' is a relation whose extension is $\{(x, y): x \text{ is hitting } y\}$, what we mean by the past perfective tense form 'had hit' is a relation whose extension is $\{(x, y): x \text{ had hit } y\}$, and so on. It would be better to distinguish in each case what we mean by the bare verb 'hit' from what we mean by any tense modifiers that we include.

A second limitation is that, for reasons first given by Donald Davidson, it is difficult on this approach to adequately specify what we mean by variants of 'John hit Mary' that are obtained by adding adverbial modifiers.[8] The problem is to account for inferences such as: John hit

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[7] For a good account of the traditional approach (cast in functional terms) see Heim and Kratzer (1998), ch. 1-3.
[8] Davidson (1980).

Mary in the park, therefore John hit Mary. To validate this inference we might take it that by 'hit' we mean a 3-place relation, with an extra argument place for a location, and take the argument above to be an instance of existential generalisation:

(5) Hit(John, Mary, in the park)
     $\therefore \exists x$Hit(John, Mary, x)

But then it seems that to validate various other inferences we must take it that by 'hit' we mean a relation of much higher adicity: to validate the inference from 'John hit Mary at 3pm' to 'John hit Mary', we must add an argument place for a time; to validate the inference from 'John hit Mary with a book' to 'John hit Mary', we must add an argument place for an instrument; and so on.

Davidson's solution to this second limitation is to take the approach to our use of sentences that gives (4b) above. According to this approach, we use 'John hit Mary' to talk about an event (I shall call this the *underlying* event). By 'hit' we mean a certain relation, but it is a 3-place relation rather than a 2-place relation – it has an extra argument place for an event. We use 'hit' to specify that the underlying event stands in this relation, and we use the subject of 'hit' ('John') and complement of 'hit' ('Mary') to specify the other particulars that stand in this relation. Thus, what we mean by 'hit' is a 3-place relation between an event and two objects, whose extension is $\{(x, y, z): x$ is an event in which y hits $z\}$. In general, according to the Davidsonian approach, what we mean by the main verb of a sentence is a property or relation of one degree higher than on the first approach, with an extra argument place for an event.[9]

This Davidsonian approach has neither of the two limitations of the traditional approach. No matter how we modify it for tense, what we mean by the bare verb 'hit' is the same 3-place relation in each case. We use tense modifiers in addition to specify properties of the underlying event. In (4b) above, by the past tense inflection of 'hit' we mean the relation Past, which obtains between an event e and a time t just in case e occurred before t. In other cases we have:

(6) a. i. John hits Mary
         ii. $\exists e$(Hit(e, John, Mary) & Present(e, t_0))[10]
     b. i. John is hitting Mary
         ii. $\exists e$(Hit(e, John, Mary) & Present(e, t_0) & Progressive(e, t_0))
     c. i. John will hit Mary
         ii. $\exists e$(Hit(e, John, Mary) & Future(e, t_0))

On the Davidsonian approach, we also use adverbial modifiers to specify properties of the underlying event, so that the argument: John hit Mary in the park, therefore John hit Mary, can be formalised as follows:

(7) $\exists e$(Hit(e, John, Mary) & Past(e, t_0) & InThePark(e))
     $\therefore \exists e$(Hit(e, John, Mary) & Past(e, t_0))

The neo-Davidsonian approach, on which 'John hit Mary' is formalized as (4c) above, is a variation on the Davidsonian approach (as the name suggests). On the neo-Davidsonian approach, what we mean by 'hit' is not a 3-place relation between an event and two objects,

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[9] See Davidson (1980). Parsons (1990), Platts (1997) and Haegeman and Gueron (1999) also have good accounts of the Davidsonian approach.

[10] The sentence in (6a.i) is actually ambiguous, between a particular reading, on which it is used to talk about an event, and a generic reading, on which it is used to generalise over events. The formalization that I have given in (6a.ii) is of the particular rather than generic reading.

but a kind of event (that is, a property of events). In (4c), 'Agent' stands for a 2-place relation (called a *thematic role*) that obtains between an event e and an object o just in case o is an *agent* of e, and 'Patient' stands for a 2-place relation that obtains between an event e and an object o just in case o is a *patient* of e.[11] What we mean by 'John hit Mary' is true iff there was a hitting event e whose agent was John and whose patient was Mary.[12] Because this approach retains the appeal to underlying events, it also suffers neither of the limitations of the first approach.[13]

I shall take the neo-Davidsonian approach to our use of VA sentences, for two reasons. First, I find it more intuitive that by a verb we mean a kind of event, rather than a relation in which events participate. Second, and more significantly, we sometimes use pleonastic 'it' as the subject of VA sentences. Pleonastic 'it' is standardly thought to be semantically inert. So if by 'look' we mean a relation one of whose arguments is to be filled by the subject of the sentence, then an utterance of a VA sentence with pleonastic 'it' as subject would fail to express a proposition. But that is not the case – each of the sentences in (8) below can be used to express a proposition:

(8) a. It looks cloudy.
     b. It looks as if they are away.
     c. It looks to be raining.

For these two reasons I shall take the neo-Davidsonian approach to our use of VA sentences.[14]

In Chapter 2, I consider the commonly held view that we use 'look' with more than one meaning in VA sentences – that is, that in VA sentences 'look' is ambiguous. We can find, in the literature, reference to at least eight distinct meanings (or senses) of 'look'. There are senses of 'look', it is claimed, on which (a) 'Patch looks red' means that Patch looks the way red things look to normal observers in standard conditions, (b) 'It looks as if Patch is red' means that certain evidence, not necessarily visual, is evidence that Patch is red, (c) uttering 'Patch looks red' is a way of tentatively asserting that Patch is red, (d) 'Patch looks red to John' means that John believes, or is inclined to believe, on the basis of his visual experience of Patch, that Patch is red, (e) 'It looks as if Patch is red' means that certain visually acquired evidence is evidence that Patch is red, (f) 'Patch looks red' means that Patch looks the way it would look if it were red, (g) 'Patch looks red to John' means that were John to judge, on the basis of his visual experience of Patch, with no reason to think otherwise, he would judge that Patch is red, and (h) 'Patch looks red' means that Patch presents an appearance (sense-datum) that is red.

I argue, however, that we have no good reason to think that we do use 'look' with such a variety of meanings in VA sentences; in fact, I argue that we have no good reason to think that we use it with more than one meaning. My approach is as follows. First, although I have not seen or heard it actually given as a reason to think that 'look' is ambiguous, there is a certain fact about VA sentences that I suspect at least inclines people toward the view: the

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[11] Here I am talking about thematic roles of expressions in sentences, not about grammatical roles. These are distinct notions: in some sentences the thematic role of Agent is assigned to the subject of the main verb, whereas in others it is assigned to the object of the main verb. Thus, the thematic role of Agent cannot be identified with either the grammatical role of subject, nor the grammatical role of object.

[12] When I say 'whose agent was John' and 'whose patient was Mary' I do not mean to presuppose or suggest that the event has only one agent and only one patient. Throughout this thesis, by 'whose' I shall often mean 'one of whose'.

[13] For a good discussion of the third approach and how it contrasts with the second, see Parsons (1990).

[14] For a discussion of pleonastic 'it', see Carnie (2001), pp. 174-6.

fact that we use 'look' with complements from a variety of syntactic categories (or at least seem to on the surface). I argue that this is not in fact a good reason to think that 'look' is ambiguous. Second, I survey what has been said in the literature about 'look' being used with more than one meaning, and argue that we have been given no good reason to think that it actually is. Third, I consider what I take to be four of the best pieces of evidence that we have for thinking that various verbs are ambiguous, and argue that none of them applies to 'look' in VA sentences – 'look' does not behave in any of the ways typical of ambiguous verbs. There has been too great a tendency in the philosophy of perception to posit and appeal to ambiguities in the word 'look' in order to explain phenomena which have nothing to do with such lexical ambiguity, and I think we should look for the correct explanations. At the end of Chapter 2, I adopt the working hypothesis that in VA sentences we use 'look' with a single meaning.

In Chapter 3, taking the neo-Davidsonian approach discussed above, and following the working hypothesis adopted in Chapter 2, I propose that by 'look' in VA sentences we (unambiguously) mean a kind of event. Events of this kind I call *looking events*. A looking event occurs when things look some way to someone. The person to whom things look some way is a participant in the event, which I call an *experiencer* of the event. If there is something in particular that looks some way, then it is also a participant in the event, which I call a *stimulus* of the event. The way things look to an experiencer of the event is, I shall propose, a property of the event, which I call a *way* of the event. I propose that we optionally use the subject of 'look' to specify a stimulus of the underlying looking event (or underlying events, if we use the sentence generically – for simplicity, I shall often just say 'the underlying event'), by referring to or quantifying over objects, that we obligatorily use the complement of 'look' to specify a way of the underlying looking event(s), by referring to or quantifying over ways of looking, and that we optionally use modifiers of the form 'to S' to specify an experiencer of the underlying looking event(s), by referring to or quantifying over subjects. Thus, by 'Patch looks that way to John' (on its particular reading) we mean that there is a looking event whose stimulus is Patch, whose way is that way, and whose experiencer is John. Formally:

(9) $\exists e(\text{Look}(e)\ \&\ \text{Stimulus}(e, \text{Patch})\ \&\ \text{Way}(e, \text{that way})\ \&\ \text{Experiencer}(e, \text{John}))$.[15]

There are two kinds of VA sentence for which we do not use the subject of 'look' to specify a stimulus of the underlying looking event(s). The first includes VA sentences whose subject is pleonastic 'it' (such as (10a) and (10b) below). As discussed above, pleonastic 'it' is semantically inert, so we cannot use it to specify a stimulus of the underlying looking event(s). The second kind consists of VA sentences in which the subject of 'look' is used, not as an argument of 'look', but as an argument of the main verb of the complement of 'look' (such as (10c) and (10d)), so-called *subject-to-subject raising* sentences, or *raising* sentences for short. Since we use it as an argument of the main verb of the complement of 'look', we do not use it to specify a stimulus of the underlying looking event(s), but instead use it along with the complement to specify a way of the event.

(10)   a. It looks windy.
         b. It looks as if someone is sick.
         c. There looks to be a unicorn approaching.
         d. John looks to be sick.[16]

The formalisations of these sentences all have the following form:

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[15] I shall omit representation of tense throughout this thesis.

[16] In Chapter 8, I argue that (10d) is structurally ambiguous, between a reading on which 'John' is used to specify a stimulus of the relevant looking event, and a reading on which it is not.

(11) $\exists e(\text{Look}(e) \text{ \& Way}(e, \ldots))$

I take it to be plausible that we use the subject of 'look' in VA sentences in the way proposed – to specify a stimulus of the underlying looking event, by referring to or quantifying over objects, except when the subject of the sentence is pleonastic 'it', or used as an argument of the main verb of the complement of 'look'.

I take it to not be so plausible, however, that in every case we use the complement of 'look' in the way proposed – to specify a way of the underlying looking event, by referring to or quantifying over ways of looking. It is not at all obvious that that is so. It is plausible in the case of (1a) above that we use 'that way' to refer to a way of looking, and in the case of (1b) that we use 'the way Mary looks' to quantify over ways of looking, and perhaps also in the case of (1g) (although that is not so clear). It is not so plausible, however, for each of the remaining examples in (1), for which the complement of look is 'American', 'a character', 'in love', 'like a duck', 'longer than the bottom line', 'to be tired', 'as if these tomatoes are ripe', and 'to be a unicorn approaching'. These expressions seem to be unsuitable for such use. It is more intuitive that we use 'American', 'a character', 'in love', 'like a duck', and 'longer than the bottom line' as predicates, by which we mean a property of objects rather than a way of looking or a quantifier over ways of looking. And it is not at all clear what we mean by 'as if these tomatoes are ripe'. Nevertheless, I believe, and shall argue, that for every VA sentence (including those in (1)) we do use the complement of 'look' to refer to or quantify over ways of looking.

In Chapter 4, I consider VA sentences such as 'John looks American', in which the complement of 'look' in an adjective – I call this the 'XP looks Adj' construction. I argue that we use Adj in 'XP looks Adj' to definitely describe a way of looking. I propose that, in particular, we use Adj to mean [the w: things look w if f], where f is the property that we mean by Adj in 'XP is Adj'. So, for example, we use 'American' in 'John looks American' to mean [the w: things look w if American].

In Chapter 5, I ward off some obvious objections to this proposal by explaining in detail what I mean by '[the w: things look w if f]'. I explain that 'things look w if f' is to be understood *generically*, in the way that one might understand 'Cats are good pets', 'Turtles are long-lived', and 'Mary jogs in the park'.

In Chapter 6, I ward off further objections by arguing that what an individual speaker means by Adj in 'XP looks Adj' on an occasion of use is a quantifier that is more specific than just [the w: things look w if f] – she might mean [the w: things look w in these conditions if f], or [the w: things look w on twin-Earth if f], and so on. I argue that this ought not be surprising – it is a specific instance of the general phenomenon of implicit domain restriction. I argue that such implicit domain restriction explains a variety of phenomena associated with our use of the 'XP looks Adj' construction.

In Chapter 7, I consider modifiers of the form 'to S'. I argue that VA sentences that contain these modifiers are structurally ambiguous, and use this to account for three intuitions that might otherwise be a problem for the account of 'XP looks Adj' being developed.

Finally, in Chapter 8, I consider all of the remaining constructions exhibited by VA sentences, and in each case propose how it is that we use the complement of 'look' to refer to or quantify over ways of looking.

My first task, however, is to motivate the working hypothesis that we use 'look' with a single meaning in VA sentences, and that is the task to which I turn in the next chapter.

2 Is 'Look' Ambiguous?

Many philosophers have in the last 65 years made or endorsed what amounts to the following claim:

(1)   In VA sentences we use 'look' with more than one meaning

The claim is often put in terms of there being more than one use of 'look', or perhaps more than one sense, but what is meant in each case, I take it, is that there is more than one meaning with which 'look' is used. I take this to be the claim that in VA sentences 'look' is ambiguous.

The claim has been made in detail by H. H. Price (1941, 1932, 1964), Anthony Quinton (1955, 1973), Godfrey Vesey (1956, 1971a, 1971b), Roderick Chisholm (1957, 1965, 1966), and Frank Jackson (1977), and further endorsed by A. J. Ayer (1940, 1956), Stephen Leeds (1975), Fred Dretske (1995), Mike Martin (1997), Philip Pettit (2003), and Charles Travis (2004).[1] Given how often I hear the claim made (or at least assumed) in discussion, I think it is reasonable to say that (1) is currently the standard view among philosophers of perception.

My aim in this chapter is to argue that we have no good reason to think that (1) is true.

My approach is as follows. First, although it has not, as far as I know, been given as a reason to think that (1) is true, there is a certain fact about VA sentences that I suspect at least inclines people toward the view: the fact that in VA sentences 'look' takes complements from a variety of syntactic categories (or at least seems to on the surface). I argue that this is not in fact a good reason to think that (1) is true. Second, I survey what has been said in the literature mentioned above about 'look' having more than one meaning, and argue that it gives us no good reason to think that (1) is true. Third, I consider what I take to be four of the best pieces of evidence that we have for thinking that a verb is ambiguous, and argue that none of them applies to 'look' in VA sentences – 'look' does not behave in any of the ways typical of ambiguous verbs. I finish the chapter by adopting the working hypothesis that we use 'look' in VA sentences with just a single meaning.

A note before starting. I shall be arguing in this chapter that we have no good reason to think that we use 'look' with more than one meaning *in VA sentences*. The qualification 'in VA sentences' is important – I shall not be arguing that we have no good reason to think that we use 'look' with more than one meaning when we consider all of its uses (including its use in non-VA sentences, such as 'Mary looked out the window'); in fact, in Section 2.4 I will give what I take to be good evidence that we do.

2.1 A variety of complements

As the examples in (2) below show, surface form suggests that in VA sentences 'look' takes complements from a variety of syntactic categories: adjective phrase ('very American'), noun phrase ('a character'), preposition phrase ('in love'), comparative phrase ('like a duck', 'older

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[1]   Others who have endorsed (1) include David Armstrong (1961, 1968), J. L. Austin (1962), C. D. Broad (1923), John Campbell (1993), Gareth Evans (1982), Quinton Gibson (1966), Nelson Goodman (1966), George Pitcher (1970), J. W. Roxbee-Cox (1971), Wilfrid Sellars (1997), Jack Smart (1995), and Galen Strawson (1989).

than Mary'), relative clause headed by 'how' ('how he always looks'), phrase headed by 'as if' ('as if he is tired'), and 'to'-infinitive ('to be tired').

(2)   a. John looks very American
       b. John looks a character
       c. John looks in love
       d. John looks like a duck
       e. John looks older than Mary
       f. John looks how he always looks
       g. John looks as if he is tired
       h. John looks to be tired

I say that surface form suggests that 'look' takes complements from a variety of syntactic categories, not that 'look' actually does take such complements. This is to allow that the complement of 'look' includes one or more constituents that are not visible on the surface, possibly in such a way that the syntactic category of the complement is not what it appears to be.

It is not unusual for syntacticians to postulate the presence of such constituents. The surface form of the sentence in (3a) below suggests that the complement of 'want' is the bare infinitive 'to win'. According to one standard syntactic view, however, the complement of 'want' in (3a) is not the bare infinitive 'to win', but a clause whose subject is an unpronounced pronominal element 'PRO'. So at a more complete level of representation the structure of (3a) is as in (3b).

(3)   a. John wants to win
       b. John wants [PRO to win][2]

If this view is correct, then the syntactic category of the complement of 'want' in (3a) is not what it appears on the surface to be: on the surface it appears to be the infinitive 'to win', but in fact it is the clause 'PRO to win', of which the infinitive is a proper constituent.

I want to allow that something similar is true of some or all of the examples in (2) – that the complements of 'look' in these examples belong to fewer syntactic categories than surface form suggests (perhaps as few as one). Accordingly, we have:

(4)   Surface form suggests that in VA sentences 'look' takes complements from a variety of syntactic categories

I agree that (4) is true, but I deny that this is sufficient reason to think that (1) is true. In particular, I think that the move from (4) to (1) is too strong to be valid.

Why? Consider the 'live'-sentences in (5) below. Surface form suggests that 'live' takes complements from a variety of syntactic categories – noun phrase ('here'), preposition phrase ('in Melbourne', 'near the beach'), relative clause headed by 'where' ('where Mary lives'), and comparative phrase ('closer to home than Mary'):

(5)   a. John lives here
       b. John lives in Melbourne
       c. John lives near the beach
       d. John lives where Mary lives
       e. John lives closer to home than Mary[3]

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[2] See Carnie (2001, ch. 10). By 'clause' I mean an expression consisting of a subject and a predicate. I take it that a bare 'to'-infinitive is not a clause – it is a predicate with no subject.

So we have:

(6)   Surface form suggests that 'live' takes complements from a variety of syntactic categories

If (4) gives us sufficient reason to think that we use 'look' with a variety of meanings, then (6) gives us sufficient reason to think that we use 'live' with a variety of meanings as well. Moreover, corresponding facts give us sufficient reason to think that we use many more verbs with a variety of meanings. Surface form suggests that 'walk' and 'swim', for example, take complements from a variety of syntactic categories:

(7)   a. John {walks, swims} here
      b. John {walks, swims} in Melbourne
      c. John {walks, swims} near the beach
      d. John {walks, swims} where Mary does
      e. John {walks, swims} closer to home than Mary

I take it that (6) and the corresponding facts for 'walk' and 'swim' do not give us sufficient reason to think that we use 'live', 'walk' and 'swim' with a variety of meanings, and hence that (4) does not give us sufficient reason to think that we use 'look' with a variety of meanings. A more natural conclusion to draw, in the case of 'live', is that although we use it to unambiguously express a 2-place relation between an object and a location, we use expressions from a variety of syntactic categories (at least on the surface) to fill the location argument of this relation. Something similar may well be true of 'look' in VA sentences.

2.2 Claims of ambiguity

In this section and the next, I consider what has been said by the authors mentioned above about 'look' having more than one meaning. In this section I summarise their claims; in the next section I evaluate those claims.

2.2.1 Price (1941, 1932, 1964)

I think we can read Price as claiming that there are five different senses of 'look', which he calls the *inclination to believe* sense, the *verisimilitude* sense, the *safety-first* sense, the *basic* sense, and the *non-perceptual* sense (here I will focus on his discussion in (1964), pp. 12-16).

When 'look' is used in its inclination to believe sense, he claims, 'A looks F to X' means that X has some inclination to believe that A is F. Thus, in my mouth 'The sun looks oval to me' means, when 'look' is used in this sense, that I have some inclination to believe that the sun is oval. This inclination may or may not be resisted by X, so A's looking F to X is compatible both with X's believing that A is F and with X's not believing that A is F. Price is a little cagey about whether or not A's looking F to X entails that X actually does believe or is inclined to believe that A is F, but he says that even if X has no inclination to believe, "at least the proposition that A is F presents itself to X's mind and solicits her belief, even if she has no inclination to yield to this solicitation" (1964, p. 13).

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[3]   In these examples I am using 'lives' in the sense of 'resides', rather than 'is alive'.

Price gives two distinct accounts of what we mean by 'A appears F', when 'appear' is used in the second sense (I assume he would give the same two accounts for 'A looks F'). On the first account, he says that when 'appear' is used in this second sense, 'A appears F' means that there is some probability (though not certainty) that A is F, and he calls this sense the *probability* sense of 'appear'. On the second account, he claims that 'A appears F to X' means that in some respects the situation is like what it would be if A really were F and X saw it to be so, and he calls this sense the *verisimilitude* sense. It is to the latter account that he appeals in subsequent discussions of this sense, so I will take this to be his official account, and 'verisimilitude' to be his official label.

Price describes the safety-first sense of 'appear' (and, I assume, also of 'look') as a 'performatory' sense. A speaker utters 'A appears F' to disclaim the responsibility she would have incurred had she uttered 'A is F' instead. By using the word 'appears' rather than 'is', the speaker has insured herself against the charge of having been mistaken, or of having given false information.

Price claims that these three senses do not exclude each other, so that 'look' can be used with all three senses at the one time. I take it that what he means is this: by uttering 'A looks F to me' a speaker might (a) be saying that she has some inclination to believe that A is F, and (b) be saying that the situation is in some respects like what it would be like if A really were F and she were seeing it to be so, and (c) be insuring herself against the charge of having given false information – the speaker might be doing all of these things at once. Price suggests that perhaps these are not three distinct senses of 'appear' but rather three distinct *aspects* of the one sense.

Price goes on to argue for the existence of another sense (either a fourth sense or a second sense, depending on whether the previous three senses are actually three distinct senses or are instead three distinct aspects of a single sense). Price calls this sense of 'look' its *basic* or *primary* sense. His argument for the existence of this fourth sense goes as follows (1964, pp. 15-16). If the sun looks oval to me in the inclination to believe sense, then I have some inclination to believe that the sun is oval. Why do I have some inclination to believe that particular proposition? Because, he says, the sun does actually look oval. Since this is an informative answer, he goes on, 'look' cannot here be used in the inclination to believe sense, because then it would amount to saying that I have some inclination to believe that the sun is oval because I have some inclination to believe that the sun is oval, and that is not informative. Thus, there is a sense of 'look' distinct from the inclination to believe sense; it is a sense on which the sun's looking oval does not consist in my having the inclination to believe this particular proposition, but on which it is the cause of my having the inclination. Next, if the sun looks oval to me in the verisimilitude sense, then it is as if the sun were actually oval and I were seeing it to be so. Why is it as if the sun were actually oval and I were seeing it to be so? Because, he says, the sun actually does look oval. Again, since this is an informative answer, the sense in which 'look' is used here must be a sense that is distinct from the verisimilitude sense. Finally, if I say that the sun looks oval to me in the safety-first sense, then I am saying that the sun is oval, but in a way that insures me against the charge of having given false information. Why would I even suggest that the sun is oval? Because, he says, the sun actually does look oval. Again, since this is an informative answer, the sense in which 'look' is used here must be a sense that is distinct from the safety-first sense. Price takes it, as far as I know without argument, that in each case it is the same further sense of 'look' that is being used. About the basic sense of 'look' Price says: "When something looks F in the literal and visual sense of the word, there is no denying that 'looks' comes very close to being a kind of 'is'" (1964, p. 16). He suggests, although is perhaps a bit cagey, that when something looks F in this sense, it follows that we are aware of a particular that is F – an entity which does actually exemplify or instantiate the characteristic F.

Finally, Price talks about a metaphorical or non-perceptual sense of 'look', employed in sentences such as 'Jones looks the best candidate to me'. He suggests that using 'look' here is like using 'view' in 'My view is that he is the best candidate', where I do not mean to be saying anything about my field of vision.

2.2.2 Quinton (1955, 1973)

Quinton (1955) claims that there are three senses of 'look'.[4] We use 'look' in the first sense, he says, to tentatively assert conclusions that have been drawn from evidence (p. 33). When 'look' is used in this sense, 'They look to be away' is used to tentatively assert that they are away, where this is a conclusion that has been drawn from observation. The word 'look' is used to indicate that this assertion is made with less than full confidence – with less confidence than would be indicated had the speaker instead used 'is' instead: 'They are away'. 'X looks to be away' is not used to describe X, he explains, but to draw tentative conclusions about X from what is observed – it may be that X is not itself observed. He suggests that 'They look to be away', when 'look' is used in this sense, means something like 'they must be away' or 'they are probably away'.

We use 'look' in the second sense, he says, not to tentatively assert conclusions about things but to tentatively assert descriptions of things (pp. 33-4). If I think that I observe that an object is green, but am not sure, then I can use 'It looks to be green' to tentatively report that I observe it to be green. I am not drawing a conclusion, but am merely reporting my observation. 'It looks to be green' means, when 'look' is used in this sense, 'It's green, I think'. Each reports an observation in a tentative way where we know, believe or suspect, that there is something wrong or abnormal about the conditions of observation. Quinton claims that 'This looks to be F', 'This may be F', and 'This is probably F' are all simply modified ways of saying 'This is F', appropriate for a speaker to use if she is inclined, but not confidently enough, to make the categorical statement itself.

We use 'look' in a third sense, Quinton says, to describe experience (pp. 34-5). 'It looks to me elliptical' means, when 'look' is used in this sense, something like 'There is an elliptical patch in the centre of my visual field'. This is the only use, he claims, on which we describe appearances.

2.2.3 Vesey (1956, 1971a, 1971b)

Vesey talks about three senses of 'looks' (or 'looks like'), which he calls the *resemblance* sense, the *optical* sense, and the *epistemic* sense.

According to Vesey, 'His father looks like a stag', when 'look' is used in its epistemic sense, means that he would judge his father to be a stag, had he no reason to think otherwise. More generally, 'X looks F to S' means that S would judge X to be F, had he no reason to think otherwise. So, 'The lines look unequal in length to me' means (in my mouth) that I would judge them to be unequal in length, if it did not occur to me that I might be the subject of an illusion. It is in this sense, Vesey claims, that the lines in the Muller-Lyer illusion look unequal in length.

When 'look' is used in its resemblance sense, he says, 'My daughter looks like me' does not mean that I would judge her to be me if it did not occur to me that I might be the subject of an illusion (perhaps we can't even make sense of what it is to judge my daughter to be me) – would-be judgment does not come into it in this sense. Something can look like a stag to an observer in the resemblance sense, without the observer being inclined to judge that it is a

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[4] His actual claim is that there are three uses of 'appear' and its cognates, but among the cognates of 'appear' he includes 'look'.

stag. That is, it can look like a stag in the resemblance sense without looking like a stag in the epistemic sense, and vice-versa.

When 'look' is used in its optical sense, Vesey claims, 'The plate looks oval' means that if one put a transparent screen at right angles to one's line of vision, between oneself and the plate, and drew on it the outline of the plate seen through the screen, the shape drawn would be oval. The bent stick illusion, he claims, is an optical illusion (by which he means, I take it, that it is in the optical sense of 'look' that the stick looks bent). The Muller-Lyer illusion, he claims, is a non-optical illusion (by which he means, I take it, that it is not in the optical sense of 'look' that the top line looks longer than the bottom line (perhaps it is the epistemic sense of 'look' in which it does)).

2.2.4 Chisholm (1957, 1965, 1966)

Chisholm draws a distinction, most clearly in (1957) pp. 43-53, between three different senses of 'look', which he calls the *epistemic* sense, the *comparative* sense, and the *non-comparative* sense.[5]

When 'look' is used in its epistemic sense, he says, it follows from what is meant by 'The ship looks to John to be moving' that John believes, or is inclined to believe, that the ship is moving (and also that he has adequate evidence for doing so). So it cannot be that the ship looks to John to be moving, when 'look' is used in this sense, unless John believes or is inclined to believe that the ship is moving.

When 'look' is used in its comparative sense, he says, 'The stick looks to be bent' means that the stick looks the way bent sticks ordinarily look, or might ordinarily be expected to look, or some such qualified definite description. If the stick looks bent to John, when 'look' is used in this sense, it does not follow that John believes, or is inclined to believe, that the stick is bent (although he might).

When 'look' is used in its noncomparative sense, 'Patch looks red to John' means that Patch looks w, for a certain way of looking w (that's not how he puts it, but I think the best way to capture what he means). It does not mean that Patch looks the way red things look in such-and-such conditions (although Patch might), and it does not follow that John believes, or is inclined to believe, that Patch is red (although he might). Thus, according to Chisholm, these three senses of 'look' are mutually exclusive – 'look' cannot be used in more than one of three senses at the one time (this contrasts with what Price says about his inclination to believe, verisimilitude, and safety-first senses – Price claims that 'look' can be used in all three senses at once).

2.2.5 Jackson (1977, ch. 2)

Jackson endorses Chisholm's distinction between three uses of 'look' (he directs the reader to Chisholm's discussion). He follows Chisholm in calling the first two senses the *epistemic* and *comparative* senses, but whereas Chisholm calls the third sense the *noncomparative* sense, Jackson calls it the *phenomenal* sense.

According to Jackson, 'It looks as if it is about to rain', where 'look' is used in its epistemic sense, means that certain visually acquired evidence supports the proposition that it is about to rain. So, when a speaker utters, looking at the approaching thunder clouds, 'It looks as if it is about to rain', she is saying that what she can see supports the proposition that it is about to rain.

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[5]   More generally, he draws this distinction for all 'appear' words, among which he includes 'look'.

By 'It looks like a cow', where 'look' is used in its comparative sense, a speaker means that it looks the way a cow normally looks in C to S, for some conditions C and observer S. Thus, by 'His head looks like a dot' (said of a man 1000 yards away), a speaker probably means that his head looks like a dot does up close (rather than at a distance). And, by 'His head looks like a woman's', he probably means that his head looks like a woman's does at a distance (rather than up close). By 'Irish tweed looks like Harris tweed' a speaker probably means that Irish tweed looks like Harris tweed does to an expert (rather than to a normal observer). And, by 'A red stop light does not look like a green one' a speaker probably means that to normal observers (rather than to colour blind observers) a red stop light does not look like a green one does.

Jackson claims that the phenomenal use of 'look' is tied to terms for colour, shape, and distance: 'It looks blue to me', 'It looks triangular', 'The tree looks closer than the house', 'The top line looks longer than the bottom line', 'There looks to be a red square in the middle of the white wall'. He argues that these sentences cannot be analysed in either of the two ways above, and concludes that in these sentences 'look' is used with a sense that is distinct from both the epistemic and comparative senses.

Jackson also claims that there are "obviously non-visual uses of 'look'" (p. 30): 'It looks as if the government will be re-elected'. He claims that the non-perceptual use of 'look' is just the epistemic use without the requirement that the evidence be visually acquired; so, 'It looks as if the government will be re-elected' means that certain evidence supports the proposition that the government will be re-elected.

2.2.6 Ayer (1940, 1956)

Ayer claims, mostly clearly in (1956) pp. 111-15, that there are two senses of 'seem', 'appear' and 'look' (he uses all three verbs variously in his remarks, so I take it that he would make his remarks about each verb individually).

'It seems to me' (and, presumably, 'It looks to me') is most often used, he says, to express a tentative opinion. Elsewhere he describes it as expressing an inclination to judge, which is not the same thing, but I think he intends to be referring to the same sense of 'seem' (and 'look').

Ayer distinguishes this first sense of 'seem', 'appear' and 'look' from a second sense. In the second sense, to say that a thing appears to be such and such is not equivalent to saying that one is inclined to judge that it really is such and such. In this sense, the way that things appear "supplies both the cause of our tendency to judge that they really are whatever it may be and the ground for the validity of these judgments" (1956, p. 112).

2.2.7 Leeds (1975)

Leeds recognises at least two senses of the word 'appear' (I take it that he would recognise two corresponding senses of the word 'look').

He says, "There is a sense of the word 'appears' which has nothing to do with the ways in which physical objects present themselves to our senses" (p. 199). He claims that 'It appears that John has left town' means that all our evidence (none of which need consist in seeing John) leads us to the guess that John has left town.

He claims that there is another 'phenomenological' sense of 'appear', so labelled because to say in this sense that a book appears red is to say something about the nature of our experience of it. He calls it "a datum of linguistic intuition that seems to him quite correct" (p. 200) that 'appears red' can mean something like 'appears the way red things usually do in daylight', or perhaps better, 'appears the way red things characteristically would appear if

looked at in daylight', or 'in standard conditions'. He claims that even if these formulations are not quite correct, some such formulation is.

2.2.8 Dretske (1995, ch. 3)

Dretske draws a distinction between two senses of 'look' (although he admits to being unsure about the existence of the first).

Dretske calls the first sense the *doxastic* sense, and uses 'look$_d$' in place of 'look' when it is used in this sense. To say that a dog looks$_d$ like a poodle to S is to say, he claims, that in the absence of countervailing considerations S would take the dog to be a poodle – this is what S's perception of the dog would normally prompt S to believe.[6]

The second sense of 'look' he calls the *phenomenal* sense, and labels it 'look$_p$'. To say that a dog looks$_p$ like a poodle to S, he says, is to say two things: (1) that the dog looks to S the way poodles normally look to S, and (2) that the dog looks different to S from other dogs (this is what he calls the *discriminatory clause*). The discriminatory clause is necessary, he claims, to prevent a dog looking like a poodle to a toad (or a half blind person) to whom all dogs look the same. According to Dretske, if a subject is colour blind and cannot discriminate one colour from another, an object does not look$_p$ red to the subject, even if the object looks the way red objects normally look to her. For the object to look$_p$ red to her, it must be that red things look different to her than do objects of other colours. It follows that just because an object looks$_p$ F to two people that does not mean that it looks$_p$ the same to them – that the object looks to one the way it looks to the other.[7]

2.2.9 Martin (1997)

Martin (p. 82) appeals to a distinction between how things seem *epistemically* and how things seem *phenomenally* (I assume he would draw a similar distinction for how things *look*). Presumably, he thinks that the distinction should be drawn just as Jackson (1977, ch. 2) and Dretske (1995, ch. 3) draw their distinction between epistemic and phenomenal senses of 'look', because he refers the reader to their discussions. Martin claims that the firmest reason for recognising a distinction between epistemic and phenomenal senses of 'seem' is the non-transitivity of discrimination: it may be that two colour samples seem the same as each other, when compared as a pair, but only one seems the same as a third sample. To avoid inconsistency, he claims, it must be that the sense in which the experiences of the colour samples in the initial case seem the same can only be the epistemic sense of seeming (presumably he thinks that seeming the same in the phenomenal sense is transitive). Martin directs the reader to Jackson and Dretske for further reasons to insist on a distinction between epistemic and phenomenal seeming.

2.2.10 Pettit (2003)

Pettit draws a distinction between *functional* looks and *epistemic* looks (p. 221). An object functionally looks red to a subject, he says, "so far as visual exposure elicits the belief that it is red, and does so independently of collateral beliefs such as the belief that it is a ripe tomato". An object epistemically looks red to a subject "so far as visual exposure inclines the subject, independently of collateral beliefs, to believe it is red … and the subject is aware of it

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[6] Dretske says that this sense of 'look' is what Jackson calls the epistemic sense, but his account is different from Jackson's. On Jackson's account of the epistemic sense, to say that a dog looks like a poodle to S is to say that S has visually acquired evidence that the dog is a poodle.

[7] Dretske takes himself to be 'following a long tradition' in calling this the phenomenal sense, but it seems to me that the tradition has been to call this the comparative sense.

as having that effect: aware of it as visually eliciting the belief that it is red" (this is meant to be weaker than the first).

Pettit goes on to claim that there are two quite different things a speaker might mean by saying that something looks red, when 'look' is used epistemically (pp. 221-2). First, she might mean that overall she is unsure whether it is red, but that the evidence points in that direction: as far as she can judge, it is red. Second, she might mean that it has the visual cast of a red object (without implying that she is uncertain what to think overall). Saying that something looks red, when 'look' is used in the first sense, implies uncertainty in the speaker's global, epistemic stance, saying nothing on her perceptual or collateral reasons for the uncertainty. Saying that something looks red, when 'look' is used in the second sense, implies certainty but not in her global, judgmental take, only in her local perceptual processing.

2.2.11 Travis (2004)

Travis talks about "two notions of looks" (he does not label them). "On the first notion," he says, "something looks thus-and-so, or like such-and-such, where it looks the way such-and-such, or things which are (were) thus and so, does (would, might) look" (pp. 69-70). Thus, 'Pia looks like her sister' means that Pia looks the way her sister does; 'That man on the bench looks old' means that that man on the bench looks the way an old man would or might look; 'The shirt looks blue' means that the shirt looks the way a blue shirt does, or might look; 'Pia looks as though she had been in a fight' means that Pia looks how she might well have looked had she been in a fight.

On the second notion, something's looking as if p is very much a matter of what is suggested by or can be gathered from the facts at hand (at least those visibly at hand) (p. 76). It cannot look as if p on this notion where it is perfectly plain that p is not so, nor where one knows that p is so. According to Travis, when I say, 'It looks to Sid as if Pia will win the tournament', I credit Sid with a certain view of a certain matter: I say of him that he takes it, perhaps tentatively, hesitantly, with some uncertainty, that Pia will win the tournament. I will be speaking falsely if Sid knows full well that Pia will win, or if Sid does not think it at all probable that Pia will win. Sid thinks, or is inclined to think, going on the facts in hand, that Pia will win. That is what Sid thinks the facts indicate.

2.3 Assessment

According to the literature that I have just surveyed there are at least eight distinct senses with which we use 'look' in VA sentences, which I shall call the *comparative* sense, the *non-visual* sense, the *tentative assertion* sense, the *inclination to believe* sense, the *visual evidence* sense, the *how-it-would-look* sense, the *what-would-be-judged* sense, and the *phenomenal* sense. In this section, I will argue that there is no good reason to think that we use 'look' in VA sentences in any sense other than the comparative sense.

2.3.1 The comparative sense

Chisholm, Vesey, Jackson, Travis, Leeds, Dretske and Pettit all make something like the following claim (perhaps not so generally or carefully):

(8)   There is a sense of 'look' such that: if XP means o, an object, and Pred means f, a
         property, then 'XP looks Pred' means that o looks the way f things look.

Vesey calls this purported sense of 'look' the 'resemblance' sense; I shall follow Chisholm and Jackson in calling it the *comparative* sense.

None would agree that 'the way *f* things look' is the right definite description to use in (8) – each would use a more qualified one. Chisholm would use 'the way *f* things ordinarily look', or 'the way *f* things might ordinarily be expected to look'. Jackson would use 'the way an *f* normally looks in C to S', where 'C' is a variable that ranges over conditions of observation, and 'S' is a variable that ranges over observers, the values of which are determined by the context of utterance. Leeds would prefer 'the way *f* things usually look in daylight', or 'the way *f* things usually look in standard conditions'. Dretske would add reference to an observer, and also his 'discriminatory clause': if S means *s*, an observer, then 'XP looks Pred to S' means that *o* looks to *s* the way *f* things normally look to *s*, *and o* looks different to *s* from certain other non-*f* things. Despite these differences, they all agree that once the definite description in (8) is suitably qualified, perhaps in a way that allows the meaning of 'XP looks Pred' to vary across contexts of utterance, (8) is true.[8]

I also think that (8) is true. But I think it is true as formulated, without further qualification of the definite description, and that it would in fact be false if the definite description were qualified in any of the ways just described. There is, I believe, a sense of 'look' such that 'Patch looks red' means that Patch looks the way red things look. There is not, I believe, a sense of 'look' such that 'Patch looks red' means that Patch looks the way red things ordinarily look, or the way red things might ordinarily be expected to look, or the way red things normally look in C to S (for certain C and S), or the way red things usually look in daylight, or the way red things usually look in standard conditions, and so on. I shall have much to say about this in subsequent chapters (especially Chapter 5). The point for now is that I agree with these authors that (8) is true – there is such a sense of 'look' (although we disagree about some of the details). What I will argue in the rest of this section is that there is nothing in the literature as I have surveyed it that gives us good reason to think that there is any other sense of 'look'.

2.3.2 A non-visual sense?

Price, Jackson, and Leeds all claim that there is a *non-visual* sense of 'look', typically employed in utterances of sentences such as the following:

(9)   a. It looks as if the government will be re-elected. (Uttered, for example, in response to a radio news report.)
      b. Jones looks the best candidate to me. (Uttered, for example, upon reading a newspaper article about the candidates.)

Jackson and Leeds are clearest on the matter. They make something like the following claim:

(10) There is a sense of 'look' such that: if *S* means *p*, a proposition, then 'It looks as if *S*' means that certain evidence (not necessarily visual) supports the proposition *p*.[9]

Thus, when 'look' is used in this sense, (9a) means that certain evidence (not necessarily visual) supports the proposition that the government will be re-elected, and (9b) means that certain evidence (not necessarily visual) supports the proposition that Jones is the best candidate.

As I understand it, the idea is that when we use 'look' in the non-visual sense in a VA sentence, we do not use the sentence to describe how things visually appear. If that is right, then these uses are beyond the scope of the present project, and we can set them aside – I am interested only in sentences that we use to describe how things visually appear.

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[8]   See Chisholm (1957, pp. 45-6), Jackson (1977, pp. 31-3), Leeds (1975, p. 200), and Dretske (1995, pp. 67-9).
[9]   Jackson (1977, pp. 30-1), and Leeds (1975, p. 199).

But I do not want to set these uses aside so quickly. Even if there are occasions on which we use a sentence whose main verb is 'look' to do something other than describe how things visually appear, it does not follow that we are on those occasions using 'look' with a different sense.

If a speaker means something non-visual by (9a), then it is not at all clear that she is using the sentence literally. Suppose she were to utter (9a) upon hearing a news report on the car radio. Would she mean that it literally looks as if the government will be re-elected? I find that our intuitions about this are not clear.[10] Whether or not this is a literal use of (9a) is important. If it is not a literal use, then we should be careful about drawing conclusions about the sense in which 'look' is being used. A speaker might use the sentence 'Mary is a caged bird' non-literally, to mean something about Mary that has nothing to do with cages. But it does not follow that there is a sense of the word 'cage' that has nothing to do with cages. Here is one possibility: in order to mean what she does by the sentence, the speaker uses 'cage' literally to mean CAGE (what 'cage' literally means), and there is nothing else that she means by 'cage' – she uses 'cage' only literally (even if she uses a more complex expression that includes 'cage' non-literally). It clearly does not follow from this that there is a sense of 'cage' that has nothing to do with cages. Here is a second possibility: in order to mean what she does by the sentence, the speaker uses 'cage' literally to mean CAGE, thereby to mean something else, possibly having nothing to do with cages – she uses 'cage' both literally and non-literally. But just because she uses 'cage' to mean something that has nothing to do with cages, it does not follow that there is a sense of 'cage' that has nothing to do with cages – we often use words to mean things that they themselves do not mean. So it does not follow in this case either that there is a meaning of 'cage' that has nothing to do with cages. For the same reasons, I suggest, if a speaker uses (9a) non-literally to mean something that is non-visual, then it does not follow that there is a non-visual sense of 'look'.

So are our typical uses of (9a) literal or non-literal? As I said above, our intuitions are not clear. But it seems to me that we judge whether or not they are literal by judging whether or not they are appropriately visual. If a speaker utters (9a) in response to hearing a radio broadcast (a non-visual process), I'm inclined to think that her use of (9a) is non-literal; if she utters (9a) in response to reading a newspaper article (a visual process), I'm more inclined to think that her use of (9a) is literal. To alter the example, suppose that John has his eyes closed and his fingers in a glass of liquid, and he utters the sentence 'It looks to me as if this liquid is beer' – I'm inclined to think that it doesn't literally look to him as if the liquid is beer. But I am inclined to think that it literally feels to him as if the liquid is beer. These considerations suggest that a use of (9a) is literal iff it is visual. If that is so, then the only non-visual uses of (9a) are non-literal. Since we should not draw any conclusions about the meaning of 'look' from non-literal uses, as I argued in the previous paragraph, there are no uses of (9a) (or (9b)) which give us good reason to think that 'look' has a distinct non-visual sense.

2.3.3 A tentative assertion sense?

Price, Quinton, and Ayer each make something like the following claim:

(11)   There is a sense of 'look' such that: if XP means *o*, an object, and Pred means *f*, a property, then a speaker uses 'XP looks Pred' to tentatively assert that *o* is *f*.[11]

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[10] Price sometimes refers to this use of 'look' as a metaphorical use, so presumably he thinks it is non-literal.

[11] Quinton claims, if I understand him correctly, that there are two such senses: one in which a speaker uses 'look' to tentatively assert a conclusion that she has drawn from evidence, another in which she uses 'look' to tentatively assert a description of what she observes.

Price calls this purported sense of 'look' the 'safety-first' sense. I shall call it the *tentative assertion* sense.

When a speaker uses 'look' in this sense, she uses 'Patch looks red' to tentatively assert that Patch is red. I take it that tentative assertion is assertion, and that one can only assert what one says. So, by uttering 'Patch looks red', when 'look' is used in this sense, what a speaker says is that Patch is red. By using 'look' rather than 'is' she indicates that her assertion is only tentative.

As I understand it, the relationship between 'look' in this sense and 'is' is like the relationship between 'but' and 'and'. A speaker might use 'It's sunny but it's raining' to say that it's sunny and it's raining (and thereby assert that it's sunny and raining), although by using 'but' instead of 'and' she indicates that there is some contrast between its being sunny and its raining. So too, a speaker might use 'Patch looks red' to say that Patch is red (and thereby assert that Patch is red), although by using 'look' instead of 'is' she indicates that her assertion is only tentative. Just as we do with 'but', we use 'look' to indicate something beyond what we say. It is also helpful to compare our use of 'look' in this sense with our use of 'perhaps'. One way to assert that Patch is red with less force is to add 'perhaps': 'Patch is red perhaps'. The present proposal is that we can achieve the same effect by using 'look' in place of 'is'.

Perhaps in the case of 'but' it is too strong to say that what a speaker says using 'It's sunny but it's raining' is that it's sunny and it's raining. But at least what she says is true iff it's sunny and it's raining. So too, perhaps in the case of the tentative assertion sense of 'look' it is too strong to say that what a speaker says using 'Patch looks red' is that Patch is red. But I think that proponents of (11) would at least claim that what she says is true iff Patch is red. So if there is the sense of 'look' that (11) claims there to be, then we have at least the following consequence:

(12)   There is a sense of 'look' such that: if XP means *o*, an object, and Pred means *f*, a property, then what a speaker says by uttering 'XP looks Pred' is true iff *o* is *f*.

I should note at this point that it is not always clear in the literature whether the claim being made is the one in (11) above, or the following similar claim:

(13)   There is a sense of 'look' such that: If XP means *o*, an object, and Pred means *f*, a property, then a speaker uses 'XP looks Pred' to say that she tentatively believes that *o* is *f*.

The two should not be confused. According to (11), what a speaker says by uttering 'XP looks Pred' is that *o* is *f*; according to (13), what she says is that she tentatively believes that *o* is *f* (a distinct proposition). In this section I am not considering the claim in (13) – it is very much like the claim I discuss in the next section, so it will be covered by the remarks that I make there.

If there is a tentative assertion sense of 'look' then it cannot be the only sense. There is a sense of 'look' on which it can be true that Patch looks red but false that Patch is red (a standard case of illusion). Similarly, there is a sense of 'look' (perhaps the same sense) on which it can be false that Patch looks red but true that Patch is red. Neither of these two senses can be the tentative assertion sense, so if there is a tentative assertion sense of 'look' then it cannot be the only sense (and I take it that anyone who endorses (11) would agree with this).

Is there a tentative assertion sense? I don't think so, for the following reason. If there were, there would be a reading of 'Patch looks red' on which Patch looks red iff Patch is red. So

there would be a reading of the conversations in (14a) and (14b) below on which B's utterance is felicitous, and there would be a reading of the sentence in (14c.i) on which the speaker contradicts herself (in the same way she would contradict herself if she were to utter (14c.ii)).

(14) a. A: Patch looks red.
          B: That's false – Patch is not red.
      b. A: Patch looks red.
          B: That's true – Patch is red.
      c. i. Patch looks red, but it's not.
          ii. Patch is red, perhaps, but it's not.

I don't think there are any such readings of (14a-c). I conclude that there is no tentative assertion sense of 'look', and that (14) is false.

Why might anyone think that there is a tentative assertion sense of 'look'? Because, I suggest, for many sentences S we are prone to mistake what a speaker typically implicates by uttering S for something that she says by uttering S. Consider the conversation below:

(15) A: Is Patch red?
      B: Well, Patch looks red.

B's response typically implicates that he tentatively believes that Patch is red, and that if he were to assert that Patch is red he would do so only tentatively. But any of the following responses would implicate this as well:

(16) B: Well, Patch was red.
      B: Well, John says that Patch is red.
      B: Well, I believe that Patch is red.

It is implausible that in each of these cases B has tentatively asserted that Patch is red. It would be rash to conclude that there is a sense of 'was' on which 'Patch was red' means that Patch is red, that there is a sense of 'says' on which 'John says that Patch is red' means that Patch is red, and that there is a sense of 'believe' on which 'I believe that Patch is red' means that Patch is red. In the same way, I suggest, it would be rash to conclude that there is a sense of 'look' on which 'Patch looks red' means that Patch is red. Much more plausibly, what B is doing in each of his responses is (non-tentatively) giving a reason for thinking that Patch is red, thereby implicating that he tentatively believes that Patch is red.

2.3.4 An inclination to believe sense?

Price, Chisholm, and Travis all make something like the following claim:

(17) There is a sense of 'look' such that: if XP means *o*, an object, Pred means *f*, a property, and S means *s*, a person, then 'XP looks Pred to S' means that *s* believes, or is inclined to believe, on the basis of her visual experience of *o*, that *o* is *f*.

Chisholm calls this the 'epistemic' sense of 'look'; I shall follow Price in calling it the *inclination to believe* sense.

It is important to include the modifier, 'on the basis of her visual experience of *o*'. Each of the following simpler claims has false consequences and is therefore itself false:

(18) a. There is a sense of 'look' on which 'XP looks Pred to S' means that *s* believes, or is inclined to believe, that *o* is *f*.

b. There is a sense of 'look' on which 'XP looks Pred to S' means that *s* believes, or is inclined to believe, on the basis of her visual experience, that *o* is *f*.

Suppose that John cannot see Patch, but believes that Patch is red (perhaps on the basis of testimony). If (18a) were true, there would be a reading of 'look' on which Patch looks red to John in the circumstances, but as far as I can see there is no such reading (John cannot see Patch), so (18a) is not true. Suppose instead that John cannot see Patch, but believes that Patch is red on the basis of his visual experience of something other than Patch (perhaps a board that indicates the colour of Patch). If (18b) were true, there would be a reading of 'look' on which Patch looks red to John in the circumstances, but as far as I can see there is no such reading (John cannot see Patch), so (18b) is not true.

If there is an inclination to believe sense of 'look', as (17) claims, then it cannot be the only sense. There is a sense of 'look' on which it might be true that Patch looks red to me, even though I do not believe and am not inclined to believe (on any basis) that it is red (suppose I know that Patch is white but that lighting conditions make it look red). And there is a sense of 'look' (perhaps the same sense) on which it might be false that Patch looks red to me, even though I do believe or am inclined to believe, on the basis of my visual experience of Patch, that it is red (suppose that Patch looks green to me and I know that lighting conditions are such that only red things look green). Neither of these two senses can be the inclination to believe sense, so if there is an inclination to believe sense of 'look', then it cannot be the only sense.

Is there an inclination to believe sense of 'look', as (17) claims? I don't think so, for the following reason. If there were such a sense, then there would be some sentence 'XP looks Pred to S' such that the following has a contradictory reading:

(19)   XP looks Pred to S, but S does not believe and is not inclined to believe that XP is Pred.

But as far as I can see, there is no such sentence. The most likely candidates that I can think of are the following:

(20)   a. John looks American to Mary, but Mary does not believe and is not inclined to believe that John is American.
       b. They look to be away to me, but I do not believe and am not inclined to believe that they are away.

I don't think that either of these has a contradictory reading. In the case of (20b), having uttered 'They look to be away to me' it might be surprising for a speaker to follow with 'but I do not believe and am not inclined to believe that they are away.' But that need not be because she is contradicting herself – it might be that she is contradicting something that she merely implicated (perhaps in order to cancel that implication). I conclude that there is no inclination to believe sense of 'look', and that (17) is false.

So why might anyone think that (20a) or (20b) has a contradictory reading? I can think of two reasons. First, it might often be the case that when an object *o* looks *f* to an observer *s*, *s* believes, or at least is inclined to believe, that *o* is *f*. Because of this, it might be that sentences such as (20a) and (20b) are false in the majority of cases. That might lead someone to think that the sentence expresses a contradictory proposition, even though in fact it does not. Second, it may be another case of mistaking something that a speaker implicates for something that she says. It may be that when a speaker utters 'John looks American to Mary' she implicates that Mary believes, or is inclined to believe, that John is American. If we mistake this for something the speaker has said, then we will indeed find it contradictory of the speaker to add that Mary does not believe and is not inclined to believe that John is

American. But it is not in fact contradictory, because the speaker has merely implicated and not said that Mary believes or is inclined to believe that John is American.[12] We are prone to confuse what a speaker implicates and what she says, and I suggest that anyone who thinks that (20a) and (20b) have contradictory readings might be making this common mistake.

Before moving on to the next purported sense of 'look', I want to consider more carefully the formulation of (17). It seems to me that we should understand 'on the basis of her visual experience of o' to mean 'on the basis of how o looks to her'. Why? Because I think that what is typically meant by 's's visual experience of o' is 'the way o looks to s'. But also because we need to understand it in this way in order to avoid further false consequences. Suppose that John is reading a note that looks old to him, but the note, written by someone whom John trusts, says that it is a new note made to look old, so that John is inclined to believe, on the basis of his visual experience of the note, that the note is new. Then if the view as formulated in (17) were correct, there would be a reading of 'look' on which the note looks new to John. But I don't think there is any such reading, so I don't think the formulation in (17) is correct. We need to understand 'on the basis of his visual experience of the note' in such a way that John does not believe that the note is new on the basis of his visual experience of the note, and that is the case, I suggest, if we understand it to mean 'on the basis of how the note looks to him'. So I think we should formulate (17) as follows:

(21)   There is a sense of 'look' such that: if XP means o, an object, Pred means f, a property, and S means s, a subject, then 'XP looks Pred to S' means that s believes, or is inclined to believe, on the basis of how o looks to her, that o is f.

Now, when we formulate (21) in this way, we can see that even if it is true it does not follow that there is a sense of 'look' that is distinct from the comparative sense discussed in Section 2.3.1. (21) might be true, even if there is only the comparative sense of 'look': it may be that there is a reading of 'XP looks Pred' on which it means that o looks the way f things look, and a reading of 'XP looks Pred to S' on which it means that s believes, or is inclined to believe, on the basis of how o looks to her, that o is f, even though 'look' is used to mean the same thing in each case. How could that be? Suppose, for the sake of illustration, that in each case we use 'look' to mean a certain 2-place relation, LOOK, between an object and a way of looking (suppose that there are such things as ways of looking). Then we can understand the difference between these two readings of 'XP looks Pred', not as a difference in the sense with which 'look' is used, but as a difference in the way the complement of 'look' is used to fill the second argument place of LOOK. What is meant by 'XP looks Pred' in each case can be given as follows:

(22)   a.   [the w: f things look w]LOOK(o, w)
       b.   [some w: s believes, or is inclined to believe, on the basis that o looks w, that o is f]LOOK(o, w)

So even if (21) is true (I think it's not), it does not follow that there is a sense of 'look' distinct from the comparative sense.[13]

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[12]   Jackson (1977, p. 31) makes remarks along these lines.
[13]   If the complexity of the quantifier expression at the front of (22b) makes this seem like an implausible proposal, then it might help to consider the sentence 'John walks like Mary'. It is at least plausible (if not correct) that what we mean by this is that John walks a way like the way that Mary walks. If we formalize this we get: [some w: w is like the way that Mary walks](John walks w). The quantifier expression at the front of this formalization is fairly complex, so at least some plausible proposals lead to formalizations that involve complex quantifier expressions. Thus, the complexity of the quantifier expression at the front of (22b) should not by itself make us think that (22b) is implausible.

2.3.5 A visual evidence sense?

Jackson makes something like the following claim:

(23)   There is a sense of 'look' such that: if S means *p*, a proposition, then 'It looks as if S' means that certain visually acquired evidence is evidence that *p*.

Jackson calls this purported sense of 'look' the 'epistemic' sense, but to avoid confusion with how others have used the 'epistemic' label I shall call this the *visual evidence* sense.

The claim in (23) above, that there is a visual evidence sense of 'look', is similar to but distinct from the claim in (10) in Section 2.3.2, that there is a non-visual sense of 'look'. When 'look' is used in its purported non-visual sense, 'It looks as if S' means that certain evidence, not necessarily visual, is evidence that *p*. When 'look' is used in its purported visual evidence sense, however, 'It looks as if S' means that certain visually acquired evidence is evidence that *p*.

I think Jackson would be happy to claim that 'look' can be used in the visual evidence sense in sentences whose subject is not just pleonastic 'it':

(24)   There is a sense of 'look' such that: if XP means *o*, an object, and S means *p*, a proposition, then 'XP looks as if S' means that certain visually acquired evidence about *o* is evidence that *p*.

Nevertheless, I will confine my remarks here to the claim in (23), about VA sentences whose subject is pleonastic 'it'. What I have to say about these sentences can be modified to apply to VA sentences whose subject is not pleonastic 'it'.

Whether or not a set of propositions constitutes evidence for a proposition *p* is a relative matter – it is relative to certain background knowledge. Thus, we should make reference to such a background in the formulation of (23). One way is to include a variable, *K*, whose value is supplied by context:

(25)   There is a sense of 'look' such that: if *P* means *p*, a proposition, then 'It looks as if S' means that certain visually acquired evidence is evidence (relative to background *K*) that *p*.

If the VA sentence in question contains a modifier such as 'to John', then the most salient background knowledge is likely to be the set of propositions that John knows. We might say that 'It looks to John as if it is about to rain' means that certain visually acquired evidence is evidence for John that it is about to rain. If it does not contain such a modifier, then it might be the set of propositions that are known by the speaker, or just the set of propositions that are known (our collective knowledge). We might say that 'It looks as if it is about to rain' means that certain visually acquired evidence is evidence for us that it is about to rain (or is evidence, simpliciter, that it is about to rain). Adding reference to background knowledge in this way allows that on this sense of 'look' it is possible for it to look as if *p* to me, even though it does not look as if *p* to you, and even though it does not look as if *p* (simpliciter).

If there is a visual evidence sense of 'look' then there is reason to think that it is not the only sense. There is a sense of 'look' on which it might be false that it looks as if *p*, but true that certain visually acquired evidence is evidence that *p*. Suppose we know that whenever it is about to rain the sky is full of birds of a certain kind, but we do not know which kind. If we see that the sky is full of magpies, then we have evidence that it is about to rain, as can be seen from the appropriateness of B's response below:

(26)   A: Is it about to rain?
       B: Well, the sky is full of birds of one kind.

It is plausible that what B is doing here is giving evidence that it is about to rain. If that is right, then the fact that the sky is full of birds of one kind is evidence that it is about to rain. It may not be strong evidence, but it is at least some evidence. So it is true that we have certain visually acquired evidence that it is about to rain. But if magpies are the wrong kind of bird, then it is false in the circumstances that it looks as if it is about to rain, at least on one sense of 'look'. If (23) is right, then that sense cannot be the visual evidence sense, so if there is a visual evidence sense of 'look' then it cannot be the only sense.[14]

When faced with this kind of example, proponents of (23) might try modifying their account to require that the visually acquired evidence be *good* evidence. Then if the fact that the sky is full of birds of one kind is not good evidence that it is about to rain, it comes out false on their account that it looks as if it is about to rain, in accord with intuition. But I think we can modify the example to ensure that the evidence is good evidence, and yet it still be false that it looks as if it is about to rain. Suppose we know (a) that there are exactly 100 kinds of bird, (b) that 99 of these kinds are such that whenever the sky is full of birds of that kind it is about to rain, and (c) that the other kind is such that whenever the sky is full of birds of that kind it is not about to rain. Suppose that we do not know which kind of bird this last one is, and that it happens to be the magpie. Then if we see the sky full of magpies then we have very good (visually acquired) evidence that it is about to rain – it raises to 99/100 our subject probability that it is about to rain (and the numbers in the example can be adjusted to make this as high as we like). But it seems to me that it still does not look as if it is about to rain, at least on one sense of 'look' (magpies are the wrong kind of bird). So even on the modified account there is reason to think that if there is a visual evidence sense of 'look' then it cannot be the only sense.

Is there a sense of 'look' on which things are the other way around – on which it might be true that it looks as if *p*, even though it is false that certain visually acquired evidence is evidence that *p*? I don't think so, for reasons that I shall suggest later in this section.

I have just argued that if there is a visual evidence sense of 'look' then it cannot be the only sense. But is there a visual evidence sense? If there were, there would be a sentence, 'It looks as if S', that means, at least on one reading, that we have certain visually acquired evidence that *p* (where S means that *p*). Suppose, without loss of generality, that one such sentence is 'It looks as if it is about to rain'. Then there ought to be a reading of the following exchange on which B's final question is perfectly felicitous, because all that A has said in her second response (on this reading) is that we have certain visually acquired evidence – it ought to be felicitous for B to ask what that evidence is.

(28)   A: It is about to rain.
       B: Do we have any visually acquired evidence?
       A: Yes. It looks as if it is about to rain.
       B: What evidence do we have?

But as far as I can see, there is no such reading of this exchange – it seems to me that on any reading of this exchange, by her second utterance A has already given some evidence that it is about to rain, so that with his final question B is asking for something that A has already given, so that his question is infelicitous. I conclude that there is no visual evidence sense of 'look'.

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[14]   Thanks to Tim Williamson for this kind of example.

The problem with the account, as far as I can see, is this: when a speaker says that it looks as if p, she is not saying that there is evidence that p; rather, she is giving evidence that p. The evidence she is giving is that it looks as if p – this is evidence that p (for reasons that I shall suggest in following chapters). This explains why it is difficult to find a case in which it is true that it looks as if p (in some sense) and yet false that we have certain visually acquired evidence that p – the fact that it looks as if p is always (visually acquired) evidence that p.

Before moving on to the next section, I again want to tidy up the formulation of (23). I propose the following modification:

(29)   There is a sense of 'look' such that: if S means p, a proposition, then 'It looks as if S' means that the way it looks is evidence that p.[15]

By 'the way it looks', here, I do not mean w, where w is the way it looks. Rather, I mean the proposition that it looks w, where w is the way it looks.

Now, when we formulate (29) in this way we can see that even if it is true it does not follow that there is a sense of 'look' that is distinct from the visual evidence sense: (29) might be true, even if there is only the comparative sense of 'look'. It may be that there is a reading of 'XP looks Pred' on which it means that o looks the way f things look, and a reading of 'It looks as if S' on which it means that the way it looks is evidence that p, even though 'look' is understood in the same sense in each case. In Section 2.3.4 I supposed, for the sake of illustration, that by 'look' we mean a certain 2-place relation, LOOK, between an object and a way of looking. This won't do in this case, because the subject of 'It looks as if S' is pleonastic 'it', so it is implausible that by 'look' in this sentence we mean a 2-place relation, one of whose argument places is filled by the subject of the sentence (pleonastic 'it' is standardly taken to be semantically inert). So suppose instead, again just for the sake of illustration, that by 'look' we mean a kind of event, and that we (optionally) use the subject and complement of 'look' to specify participants in or properties of this event (as per the neo-Davidsonian approach, discussed in Section 1.2 above). Then we can formalize 'XP looks Pred' and 'It looks as if S' as in (30) below. The difference between the two sentences is not a difference in the sense with which 'look' is used, but a difference between two ways in which the complement of 'look' is used to specify a way of the underlying looking event.

(30)   a. [the w: things look w if f]∃e(Look(e) & Stimulus(e, o) & Way(e, w))
       b. [the w: o's looking w is evidence that p]∃e(Look(e) & Way(e, w))

So even if (29) is true (I think it's not), it does not follow that there is a sense of 'look' distinct from the comparative sense.

2.3.6 A how-it-would-look sense?

According to Price, there is a sense of 'look' on which 'The sun looks oval' means that in some respects the situation is like what it would be if the sun really were oval and it were being seen to be so. In what respect is the actual situation like the counterfactual situation? Presumably, in respect of how the sun looks. So I think we can take Price's claim to be this:

(31)   There is a sense of 'look' such that: if XP means o, an object, and Pred means f, a property, then 'XP looks Pred' means that o looks the way it would look if it were f.

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[15]   This formulation has the additional benefit of extending easily to verbs other than 'look': 'It F-s as if S' means that the way it f-s is evidence that p, and 'XP F-s as if S' means that the way o f-s is evidence that p. This is perhaps not much of an advantage if we limit our attention to the five appearance verbs: 'look', 'feel', 'smell', 'sound', and 'taste', but it is an advantage when we consider non-appearance verbs such as 'walk', 'talk', 'act', and so on.

Price calls this the 'verisimilitude' sense of 'look', but I like to call it the *how-it-would-look* sense.

(31) is in the same spirit as another claim that sometimes appears in the literature, and also in discussions that I have with people:

(32)   There is a sense of 'look' such that: if XP means *o*, an object, and S means *p*, a proposition, then 'XP looks as if S' means that *o* looks as it would look if it were the case that *p*.

I shall only discuss (31), but what I have to say applies equally well to (32) (with appropriate modification).

If there is a how-it-would-look sense of 'look', then there is reason to think it cannot be the only sense. It is possible that a woman walks into a café looking angry, even though if she were angry she would not look that way because she would pretend not to be. So there is a sense of 'look' on which it is true that the woman looks angry, even though it is false that she looks the way she would look if she were angry. If (31) is true, then this sense of 'look' cannot be the how-it-would-look sense. Suppose that John is not sad and does not look sad – in fact, he is happy and he looks happy – but there is someone on standby to make him look that way even if he were sad (by threatening him with violence). Then there is a sense of 'look' (perhaps the same sense) on which it is false that John looks sad, even though it is true that John looks the way he would look if he were sad. If (31) is true, then this sense of 'look' cannot be the how-it-would-look sense. So if there is a how-it-would-look sense of 'look' then it cannot be the only sense.[16]

Is there a how-it-would-look sense of 'look'? If the standard Lewisian semantics for counterfactual conditionals is correct, then there is reason to think not. According to standard Lewisian semantics, if John actually is tired, then it follows that John looks the way he would look if he were tired, because he looks the way he does in the closest possible world in which he is tired (the actual world).[17] In that case, if (31) is true then there is a sense of 'look' on which if John is tired then it follows that John looks tired. But as far as I can see there is no such sense of 'look', so (31) is false. At least if the standard Lewisian semantics for counterfactual conditionals is correct.

Proponents of (31) might say: so much the worse for the standard Lewisian semantics. Even so, we can make a similar point without appealing to Lewisian semantics. Even if it is not contradictory (as Lewisian semantics says it is), an utterance of (33a) below is at least pragmatically odd. If (31) were true, there would be a reading of 'he doesn't look tired' on which it means that he doesn't look the way he would look if he were tired, and so there would be a reading of (33b) on which it is pragmatically odd in the same way that (33a) is. But as far as I can see there is no such reading, so (31) is false.

(33)   a. John is tired but he doesn't look the way he would look if he were tired.
       b. John is tired but he doesn't look tired.

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[16] Here is an example due to Tim Williamson. Suppose that John has a full head of hair. Then (31) is committed to the implausible consequence that John looks as if he has even number of hairs. Why? If John has an even number of hairs, then he looks the way he would look if he had an even number of hairs. And if John has an odd number of hairs, then in the nearest possible worlds in which he has an even number of hairs he looks the way he does in the actual world (because they are closer than the worlds in which he does not), so again he looks the way he would look if he had an even number of hairs.

[17] See Lewis (2001, pp. 26-31).

There is further reason to think that (31) is false, also independently of any particular semantics for counterfactual conditionals. In the case of the woman above, it is false that she looks the way she would look if she were angry, and yet there is a sense of 'look' on which it is not false that she looks angry. Is there a sense of 'look' on which it is false? If (31) were true, there would be. But as far as I can see there is not. So (31) is not true. In the case of John, it is true that John looks the way he would look if he were sad, and yet there is a sense of 'look' on which it is not true that John looks sad. Is there a sense of 'look' on which it is true? If (31) were true, there would be. But as far as I can see there is not. So (31) is not true.[18]

Even if (31) were true, it would not follow that the how-it-would-look sense of 'look' is distinct from the comparative sense. Suppose, again, that by the comparative sense of 'look' we mean a 2-place relation, LOOK, between an object and a way of looking. Then rather than saying that 'XP looks Pred' means that o looks the way it would look if it were f, we can say that it means:

(34)   [the w: o would look w if it were f]LOOK(o, w)

So it is possible that there is a reading of 'XP looks Pred' on which it means that o looks the way f things look, and a reading on which it means that o looks the way it would look if it were f, even though 'look' in each case is used to mean the same 2-place relation between an object and a way of looking. The difference is in how the complement of 'look' is used to specify the second relatum of that relation. So even if (31) is true (I think it's not), it does not follow that there is a sense of 'look' distinct from the comparative sense.

2.3.7 A what-would-be-judged sense?

Vesey and Dretske each make what amounts to the following claim:

(35)   There is a sense of 'look' such that: if XP means o, an object, Pred means f, a property, and S means s, a subject, then 'XP looks Pred to S' means that if s were to judge, on the basis of how o looks, and with no reason to think otherwise, she would judge (or take it, or believe) that o is f.

Vesey calls this the 'epistemic' sense of 'look'; Dretske calls it the 'doxastic' sense. I will call it the *what-would-be-judged* sense.

It is important in (35) to include the modifier 'on the basis of how o looks'. The following simpler claim that omits this qualification has false consequences and is therefore itself false:

(36)   There is a sense of 'look' such that 'XP looks Pred to S' means that if s were to judge, with no reason to think otherwise, she would judge that o is f.

Suppose that John cannot see Patch, but believes that Patch is red (perhaps on the basis of testimony). If (36) were true, then there would be a reading of 'look' on which Patch looks red to John in the circumstances, but as far as I can see there is no such reading (John cannot see Patch), so (36) is not true. I take it that Vesey and Dretske would agree with this.

My remarks about the existence of the purported what-would-be-judged sense are very similar to my remarks in the previous section about the existence of the purported how-it-would-look sense. First of all, if there is a what-would-be-judged sense of 'look', then there is reason to think that it is not the only sense. There is a sense of 'look' on which it might be true that Patch looks red to John, but false that if John were to judge the colour of Patch, on

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[18] For a discussion of the kind of problem that I am raising here for (31), see Shope (1978).

the basis of how Patch looks to him, and with no reason to think otherwise, he would judge that Patch is red: suppose that Patch looks red to John, but if he were to judge the colour of Patch on the basis of how it looks to him an evil demon would make John believe that things that look that way are green, so that he would judge it to be green. If (35) is true, then this sense of 'look' cannot be the what-would-be-judged sense. Furthermore, there is a sense of 'look' (perhaps the same sense) on which it might be false that Patch looks red to John, but true that if John were to judge the colour of Patch, on the basis of how Patch looks to him, and with no reason to think otherwise, he would judge that Patch is red: suppose that Patch looks green to John, but if he were to judge the colour of Patch on the basis of how it looks to him an evil demon would make John believe that things that look that way are red, so that he would judge it to be red. If (35) is true, then this sense of 'look' cannot be the what-would-be-judged sense. So if there is a what-would-be-judged sense of 'look' then it cannot be the only sense.

Is there a what-would-be-judged sense of 'look'? Again, if the standard Lewisian semantics for counterfactual conditionals is correct, then there is reason to think not. According to standard Lewisian semantics, if John actually does judge, on the basis of how Patch looks, and with no reason to think otherwise, that Patch is red, then it follows that John would judge, on the basis of how Patch looks, and with no reason to think otherwise, that Patch is red, because the closest possible world in which the antecedent of the counterfactual is true is the actual world. In that case, if (35) is true there is a sense of 'look' on which if John judges, on the basis of how Patch looks, and with no reason to think otherwise, that Patch is red, then it follows that Patch looks red to John. But as far as I can see there is no such sense of 'look', so (35) is false. At least if the standard Lewisian semantics for counterfactual conditionals is correct.

But again, there is further reason to think that (35) is false, independently of any particular semantics for counterfactual conditionals. In the first case two paragraphs ago, it is false that if John were to judge, on the basis of how Patch looks, and with no reason to think otherwise, he would judge that Patch is red, and yet there is a sense of 'look' on which it is not false that Patch looks red to John. Is there a sense of 'look' on which it is false? If (35) were true, there would be. But as far as I can see there is not. So (35) is not true. In the second case, it is true that if John were to judge, on the basis of how Patch looks, and with no reason to think otherwise, he would judge that Patch is white, and yet there is a sense of 'look' on which it is not true that Patch looks white to John. Is there a sense of 'look' on which it is true? If (35) were true, there would be. But as far as I can see there is not. So (35) is not true.

Even if (35) were true, it would not follow that the what-would-be-judged sense of 'look' is distinct from the comparative sense. Suppose, again, that in its comparative sense 'look' means a 2-place relation, LOOK, between an object and a way of looking. Then rather than saying that 'XP looks Pred to S' means that if s were to judge, on the basis of how *o* looks, and without reason to think otherwise, she would judge that *o* is *f*, we can say that it means:

(37)   [the *w*: if *s* were to judge, on the basis that *o* looks *w*, and without reason to think otherwise, would judge that *o* is *f*]LOOK(*o*, *w*)[19]

So it is possible that there is a reading of 'XP looks Pred' on which it means that *o* looks the way *f* things look, and a reading on which it means that if *s* were to judge, on the basis of how *o* looks, and without reason to think otherwise, she would judge that *o* is *f*, even though 'look' in each case is used to mean the same 2-place relation between an object and a way of looking. The difference is in how the complement of 'look' is used to specify the second relatum of that relation. So even if (35) is true (I think it's not), it does not follow that there is a sense of 'look' distinct from the comparative sense.

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[19]   On the complexity of the quantifier expression here, see my remarks in footnote 13.

2.3.8 A phenomenal sense?

Price, Quinton, Vesey, Chisholm, and Jackson each claim that there is a sense of 'look' that we use in VA sentences to directly describe appearances. What is it to 'directly describe appearances'? I think we can understand the claim to be this:

(38)   There is a sense of 'look' such that: if XP means *o*, an object, and Pred means *f*, a property, then 'XP looks Pred' means that the appearance of *o* is *f*.

When we use 'look' in this sense we use the sentence 'XP looks Pred' to say that a certain entity, the appearance of *o*, has the property *f* – this is the sense in which we use 'XP looks Pred' to directly describe appearances. I take it that the appearances we are describing are what are often called *sense data*.

Price calls this sense of 'look' the 'basic' sense, Vesey calls it the 'optical' sense, and Chisholm calls it the 'non-comparative' sense. I will follow Jackson in calling it the *phenomenal* sense.

I take it that if we do use 'look' in such a sense then we use it with a restricted class of complements – restricted to colour adjectives such as 'red', and perhaps also shape adjectives such as 'round'. This is because it is implausible that there is a sense of 'look' on which 'John looks heavy', for example, means that the appearance of John is heavy – appearances, whatever they are, are not the kind of thing that can be heavy. Jackson explicitly acknowledges this restriction: "The phenomenal use is characterized by being explicitly tied to terms for colour, shape and/or distance… That is, instead of terms like 'cow', 'house', 'happy', we have, in the phenomenal use, terms like 'red', 'square', and 'longer than'" (1977, p. 33). So if there is a phenomenal sense of 'look', as (38) claims, then it cannot be the only sense – there is a sense of 'look' on which it might be true that John looks heavy, even though it is false that the appearance of John is heavy, so this sense of 'look' cannot be the phenomenal sense.

Is there a phenomenal sense of 'look'? There are well known metaphysical and epistemological objections to theories that posit entities which play the role that (38) claims. I will not rehearse those here.[20] Since my interest is in whether we have any positive reason for thinking that there is such a sense of 'look', I will consider the reasons that these authors have given for thinking that (38) is true, and argue that they are not good reasons to think that there is a sense of 'look' distinct from the comparative sense. Quinton and Vesey just make the claim that there is such a sense; Chisholm, Price and Jackson actually argue for it – my approach will be to consider their arguments in turn.

Before that, note that even if (38) is true, it does not follow that there is a sense of 'look' distinct from the comparative sense. It is possible that there is a sense of 'look' on which 'XP looks Pred' means that *o* looks the way *f* things look, that there is a sense of 'look' on which 'XP looks Pred' means that the appearance of *o* is *f*, and that these are identical senses of 'look'. I think that what proponents of the phenomenal sense of 'look' mean by 'the appearance of *o*' is 'the way *o* looks', so that on this sense of 'look', 'XP looks Pred' means that the way *o* looks is *f*. Then we can give the meaning of each as follows:

(39)   a. [the *w*: *f* things look *w*]LOOK(*o*, *w*)
        b. [some *w*: *f*(*w*)]LOOK(*o*, *w*)

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[20] For a recent discussion, see Robinson (1994), ch. 8.

In each case we can take the meaning of 'look' to be a 2-place relation LOOK between an object and a way of looking. The difference between the two readings is in what the complement of 'look' is being used to do. On the first reading, Pred is used to definitely describe a way. On the second reading it is used as a predicate of ways. It would be true that 'Patch looks red' is ambiguous, but not because of an ambiguity in 'look', but because there are two distinct ways of interpreting how the complement of 'look' is being used to fill the second argument place of LOOK. This would be a structural ambiguity, not a lexical ambiguity in the word 'look'.

Chisholm

Chisholm (1965, pp. 50-3) argues that there is a phenomenal sense of 'appear' (he calls it the 'noncomparative' sense) by appealing to the sentence in (40) below (I take it that he would argue in the same way about 'look'):

(40)   Things which are red usually appear red in daylight.

He claims that (40) is ambiguous, between a reading on which it is 'analytic', and a reading on which it is 'synthetic'. On its analytic reading it can be paraphrased as (41a) below, and on its synthetic reading it can be paraphrased as (41b).

(41)   a. Things which are red usually appear in daylight the way things which are red usually appear in daylight.
       b. There is a certain way of appearing, appearing red, such that things which are red happen to usually appear that way in daylight.[21]

The reason why (40) has these two readings, he seems to think, is that 'appear' in (40) itself has two readings – it can be read in the comparative sense, but also in a distinct phenomenal sense. When 'appear' is read in its comparative sense, to appear red in daylight is to appear the way things which are red usually appear in daylight, and this accounts for the analytic (41a) reading. When 'appear' is read in its phenomenal sense, however, 'appears red' is an unanalysable predicate, and it is this sense of 'appear' that accounts for the synthetic (41b) reading.

Leeds (1975) argues that if there is such an ambiguity in (40) there is no need to think that it is due to an ambiguity in 'appear', and I think that Leeds is right. Here I will present my own version of what is essentially Leeds' argument.

Leeds suggests, and I agree with him, that talk about (40) being ambiguous between analytic and synthetic readings is too unclear, and that the ambiguity Chisholm is pointing to is better brought out by embedding (40) in a modal context. Thus, rather than (40) being ambiguous between analytic and synthetic readings, let's take the fact to be explained to be that (42) below is ambiguous between true and false readings.

(42)   Necessarily, things which are red usually appear red in daylight.

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[21] Leeds (1975, p. 200) points out that (39) might not have an analytic reading as it stands. He suggests the following modification: 'If there is a way in which red things usually appear in daylight, then red things usually appear red in daylight.' On the comparative sense of 'appear' this then amounts to: 'If there is a way in which red things usually appear in daylight, then red things usually appear in daylight the way in which red things usually appear in daylight.' I agree with Leeds on this point, but will work with the Chisholm's original sentence to simplify the discussion.

Chisholm's claim then translates as this: (42) is ambiguous between a true and a false reading, and that is because 'appear' is ambiguous between the comparative and phenomenal senses.

The problem for Chisholm is that if there is a comparative reading of 'appear' which is as Chisholm claims it is, then it alone can account for the true and false readings of (42). On the comparative reading of 'appear', (42) can be paraphrased as (43a) below. But (43a) is structurally ambiguous, between a reading on which the definite description 'the way things which are red usually appear in daylight' is within the scope of the operator 'necessarily', and a reading on which the operator 'necessarily' is within the scope of the definite description 'the way things which are red usually appear in daylight'. We can represent the two readings as in (43b) and (43c).

(43)   a.   Necessarily, things which are red usually appear in daylight the way things which
            are red usually appear in daylight.
       b.   [the *w*: red things usually appear *w* in daylight](red things usually appear *w* in
            daylight).
       c.   [the *w*: red things usually appear *w* in daylight]   (red things usually appear *w* in
            daylight).

(43b) is true, but (43c) is false (it might have been that red things usually appear *w'* in daylight, where *w'* is not the way things actually appear in daylight). So the ambiguity of (42) can be explained as a structural ambiguity in the sentence, rather than as a lexical ambiguity in the verb 'appear'. There is, then, despite what Chisholm thinks, no good reason here to think that there is a sense of 'appear' distinct from the comparative sense (and the same goes for 'look').

Price

Price (1964, pp. 15-16) argues that there is a sense of 'look' which is not the inclination to believe sense, the how-it-would-look sense (he calls it the 'verisimilitude' sense), or the tentative assertion sense (he calls it the 'safety-first' sense). I have argued that there are no such senses as the inclination to believe sense, the how-it-would-look sense, or the tentative assertion sense, so I agree with Price that there is a sense of 'look' that is not one of these, and I shall not argue with him on this point. Nevertheless, it might be that an argument of the same style as Price's can be successfully used to show that there is a sense of 'look' that is not the comparative sense (whose existence I am endorsing). The argument would go something like this:

(44)   If Patch looks red in the comparative sense, then Patch looks the way red things look.
       Why does Patch look the way red things look? Because Patch looks red. Since this is
       an informative answer, 'look' here cannot be used in the comparative sense, because
       then it would amount to saying that Patch looks the way red things look because Patch
       looks the way red things look, and that is not informative. Thus, there is a sense of
       'look' distinct from the comparative sense.

If this argument succeeds, it does not show that the extra sense of 'look' is the phenomenal sense, but it does at least show that there is an extra sense of 'look', in addition to the comparative sense.

Nevertheless, I do not think that the argument does succeed. The argument goes as follows: there is a reading of (45a) below on which it is informative, but there is no reading of (45b) on which it is informative; so there is a reading of 'Patch looks red' on which it does not

mean 'Patch looks the way red things look', for otherwise there would be no such difference between (45a) and (45b); so there is a sense of 'look' distinct from the comparative sense.

(45) a. Patch looks the way red things look, because Patch looks red.
      b. Patch looks the way red things look, because Patch looks the way red things look.

It seems to me, however, that (45b) does have a reading on which it is informative – at least as informative as any reading of (45a). Consider the analogous sentence in (46a) below. (46a) does have a reading on which it is not informative. But it also has, I believe, a reading on which it is informative – the reading in (46b).

(46) a. John loves the prettiest girl in class, because John loves the prettiest girl in class.
      b. John loves the prettiest girl in class, because John loves x, and x is the prettiest girl in class.

In the same way, (45b) has a reading on which it is informative – a reading which can be represented as in (47):

(47) Patch looks the way red things look, because Patch looks w, and w is the way red things look.

It seems to me that this reading of (45b) is at least as informative as any reading of (45a) on which it is informative. For (45a) to be informative, we need to understand it as meaning something like 'Patch looks the way red things look, because Patch looks red (and that's the way red things look)'. This strikes me as no more informative than the (47) reading of (45b).

Jackson

Jackson (1977, ch. 2) argues that there is a sense of 'look' (which he claims to be the phenomenal sense) which is neither the comparative sense nor the inclination-to-believe sense (he calls it the 'epistemic' sense). His argument is this: there is a sense of 'look' on which the meaning of 'Patch looks red' cannot be given by reference to the way red things look to certain observers in certain conditions, nor by reference to beliefs; if this were the comparative sense of 'look', then the meaning of 'Patch looks red' could be given by reference to the way red things look to certain observers in certain conditions, so it is not the comparative sense of 'look'; if it were the inclination-to-believe sense of 'look', then the meaning of 'Patch looks red' could be given by reference to beliefs, so it is not the inclination-to-believe sense of 'look'; thus, it is neither the comparative sense nor the inclination-to-believe sense.

I agree with Jackson that there is a sense of 'look' on which the meaning of 'Patch looks red' cannot be given by reference to beliefs, nor by reference to the way red things look to certain observers in certain conditions. I have argued (Section 2.3.4) that there is no sense of 'look' which can be given by reference to beliefs, so I agree with Jackson that there is a sense that cannot. I also agree with Jackson that this sense cannot be given by reference to the way red things look to certain observers in certain conditions. But I disagree with Jackson that this sense is not the comparative sense of 'look', because unlike Jackson I do not think that the comparative sense itself can be given by reference to certain observers in certain conditions.

Jackson takes it that the comparative sense of 'look' is such that there is some expression, S, which refers to or quantifies over certain people, and some expression, C, which refers to or quantifies over certain conditions, such that the following is true:

(48) 'Patch looks red to John' means that Patch looks to John the way red things look to S in C.

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I believe, contrary to this, that 'Patch looks red' just means that Patch looks the way red things look, simpliciter. Jackson's arguments do not work against this account of the comparative sense. I will propose and defend this account of 'Patch looks red' in more detail in coming chapters; what I shall do here is consider Jackson's argument for why the meaning of 'Patch looks red' cannot be given by reference to the way red things look to certain observers in certain conditions, and briefly outline how the account of the comparative sense of 'look' that I shall propose will be immune to it.

Jackson argues that there are no expressions S and C which make (48) true but non-trivial. He starts by considering the following possible account:

(49)   'Patch looks red to John' means that Patch looks to John the way red things normally look to John in normal circumstances.

He points out that this cannot be right. Suppose that John sees in shades of grey, but with extremely good grey vision – he can make amongst the greys the same number of discriminations that a normal sighted person can make amongst the colours. Then it might be true that Patch looks the way red things normally look to John in normal circumstances, but false that Patch looks red to John. He next considers an account that refers to people other than John:

(50)   'Patch looks red to John' means that Patch looks to John the way red things look to most people in normal circumstances.

He points out that how things look to John does not depend on the existence of other people – things might look red to John, even if no one else did, does, or will exist. So it will not do to make reference to other people.

He also points out that there is a problem explicating 'normal circumstances' in either (49) or (50) in a way that does not make them trivial. What are normal circumstances? Perhaps circumstances in daylight:

(51)   'Patch looks red to John' means that Patch looks to John the way red things look to John in daylight.

But John's eyes might be dazzled in daylight in such a way that red things do not look red to John in daylight, but they do look red to him under low intensity light instead. He next considers explicating 'normal circumstances' for John as being circumstances in which John can make the most colour discriminations. But, he points out, they are circumstances that exaggerate colour differences, so they are circumstances in which things look more different in colour than they really are, so do not look the colour they are. The only way of correctly specifying what normal conditions are, he concludes, makes these accounts trivial: normal circumstances are those in which red things look red to John. But 'Patch looks red to me' does not express a trivial proposition.

Jackson then argues that there is reason to think that (48) cannot be right, for any actual observers or actual circumstances. There might be a shade of colour, call it *c*, such that Patch looks *c* to John even though no object actually is *c*. Then it would be true that Patch looks *c* to John but not true that Patch looks the way *c* things look to John (or anyone else) in normal circumstances (or any other circumstances) – since there are no *c* things there is no such way. This will be case for any value of S that is an actual observer and for any value of C that is an actual condition. Jackson considers a counterfactual fix to (49): 'Patch looks red to John' means that Patch looks the way red things would normally look to John in normal

circumstances if there were any. He argues (successfully, I think) that this cannot be right either.

Jackson concludes that 'Patch looks red to John' does not mean that Patch looks to John the way red things look to S in C, for any values of S and C.

I agree. I think that 'Patch looks red to John' means that Patch looks to John the way red things look, simpliciter. 'The way red things look' refers to the way w such that red things look w. Here, 'red things look w' is to be understood generically; it expresses a relation between the property of being an event in which red things look some way, and the property of being an event in which red things look w – it does not quantify over actual red things, or actual situations that contain red things. So it might be true even if there are actually no red things. Since there is no need to specify an observer or a set of conditions, the problem of not being able to is not actually a problem at all. I shall have more to say about this in later chapters.

2.4 Other evidence?

In Section 2.3, I argued that we have been given no good reason in the literature (as I have surveyed it) to think that we use 'look' in VA sentences in anything but its comparative sense, and thus no good reason to think that 'look' is ambiguous in VA sentences.

What good reason might we be given? If there are any verbs for which we do have good reason for thinking that they are ambiguous, they are verbs such as 'pick', 'fire', 'grow', 'toast', 'draw', 'bear', 'bank', and 'call'. In this section, I consider what I take to be four of the best reasons we have for thinking that these verbs are ambiguous, and argue that none of these is a reason for thinking that 'look' is ambiguous in VA sentences.

2.4.1 Evidence from paraphrasing

Here is one reason to think that the verb 'pick' is ambiguous. The sense in which it is typically used in (53a) below permits a different (approximate) paraphrase from the sense in which it is typically used in (53b):

(53) a. John picked some strawberries for dinner.
      b. John picked the door on the left.

In the first case (but not the second) it means something like 'pluck' – it is true of events which can (near enough) be described as 'plucking' events; in the second case (but not the first) it means something like 'choose' – it is true of events which can (near enough) be described as 'choosing' events. Say that this is *evidence from paraphrasing* that 'pick' is ambiguous.

There is evidence from paraphrasing that the verbs 'fire', 'grow', and 'toast' are ambiguous. In (54a.i) below (but not (54a.ii)) 'fire' means something like 'detonate'; in (54a.ii) (but not (54a.i)) it means something like 'sack'. In (54b.i) (but not (54b.ii)) 'grow' means something like 'cultivate'; in (54b.ii) (but not (54b.i)) it means something like 'become'. In (54c.i) (but not (54c.ii)) 'toast' means something like 'cook'; in (54c.ii) (but not (54c.i)) it means something like 'celebrate'.

(54) a. i. John fired the gun.
          ii. John fired his assistant.
      b. i. John grew basil.
          ii. John grew old.
      c. i. John toasted a bagel.

      ii. John toasted the groom.

What about the verb 'look'? There is evidence from paraphrasing that it is ambiguous, when considered in all of its uses. In (55a) below (but not (55b)), 'look' means something like 'visually appear', whereas in (55b) (but not (55a)) it means something like 'visually observe', or 'gaze':

(55) a. John looked embarrassed.
      b. John looked at his mum.

As far as I can tell, however, there is no evidence from paraphrasing that 'look' is ambiguous in VA sentences. When I ask people to use paraphrase to bring out any differences between the meaning of 'look' in each of the sentences in (56) below, they tend to not be able to – they typically come up with just one paraphrase of 'look' in each case, something like 'appears', or 'visually appears'.

(56) a. Patch looks that way.
      b. He looks the way Mary looks.
      c. John looks American.
      d. Someone looks a character.
      e. Those women look in love.
      f. John looks like a duck.
      g. John's mum looks how she always looks.
      h. The top line looks longer than the bottom line.
      i. They look to be tired.
      j. It looks as if these tomatoes are ripe.
      k. There looks to be a unicorn approaching.

It is important that the task in each case is to paraphrase just the word 'look', not the whole sentence. We would expect there to be differences between the meanings of the sentences in (56), differences that we might be able to bring out by paraphrasing the sentences. But we are looking for differences in the meaning of the word 'look' in these sentences, and evidence for that must come from paraphrasing just the word 'look'.

The fact that we have no evidence from paraphrasing that 'look' is ambiguous in VA sentences might itself be evidence that 'look' is not ambiguous: if we use 'look' with more than one meaning, then why can't we use paraphrasing to bring out the differences in those meanings? But perhaps we are just not aware of the ambiguity, or don't know how to do the paraphrasing – I will grant that possibility. My point here is just the negative one that we have no evidence from paraphrasing that 'look' is ambiguous in VA sentences.

2.4.2 Evidence from non-contradiction

Here is a second reason to think that the verb 'pick' is ambiguous. There is a reading of the sentence in (57) below on which it expresses a non-contradictory proposition, a reading that is made more salient by emphasising the second occurrence of 'pick'.

(57)   John picked the door on the left, but he didn't *pick* the door on the left.

This is evidence that 'pick' can be used with two distinct meanings; that is, that 'pick' is ambiguous (intuitively, between a sense on which to pick the door on the left is to choose it, and a sense on which it is to pluck it). Say that this is *evidence from non-contradiction* that 'pick' is ambiguous.

It is important that the reading in question is made more salient by emphasising the second occurrence of 'pick', rather than by emphasising some other expression in the sentence. If there were a non-contradictory reading of (57) that is made more salient by emphasising the second occurrence of 'door' instead, then that might be evidence that 'door' is ambiguous, but it would not be evidence that 'pick' is ambiguous:

(58)   John picked the door on the left, but he didn't pick the *door* on the left.

There is evidence from non-contradiction that the verbs 'bear', 'bank', and 'call' are ambiguous. There is a reading of (59a) below, one that is made more salient by emphasising the second occurrence of 'bear', on which it expresses a non-contradictory proposition (a proposition that is true if Mary can put up with her mother in law but can't give birth to her). There is a reading of (59b), one that is made more salient by emphasising the second occurrence of 'bank', on which it expresses a non-contradictory proposition (a proposition that is true if the pilot changed the plane's direction but did not deposit the plane in a bank). And there is a reading of (59c), one that is made more salient by emphasising the second occurrence of 'call', on which it expresses a non-contradictory proposition (a proposition that is true if John claimed that she was a whore but did not use the phone to order a whore for her).

(59)   a. Mary can bear her mother in law, but she can't *bear* her mother in law.
        b. The pilot banked the plane, but he didn't *bank* the plane.
        c. John called her a whore, but he didn't *call* her a whore.

What about the verb 'look'? There is evidence from non-contradiction that the verb 'look' is ambiguous, when considered in all of its uses. There is a reading of (60) below, one that is made more salient by emphasising the second occurrence of 'look', on which it expresses a non-contradictory proposition (a proposition that is true if John visually appeared over the moon but did not direct his gaze over the moon).

(60)   John looked over the moon, but he didn't *look* over the moon.

As far as I can tell, however, there is no evidence from non-contradiction that 'look' is ambiguous in VA sentences. None of the sentences in (61) below has a non-contradictory reading that is made more salient by emphasising the second occurrence of 'look', and as far as I know the same is true for all VA sentences.

(61)   a. Patch looks that way, but it doesn't *look* that way.
        b. He looks the way Mary looks, but he doesn't *look* the way Mary looks.
        c. John looks American, but he doesn't *look* American.
        d. John looks a character, but he doesn't *look* a character.
        e. Those women look in love, but they don't *look* in love.
        f. John looks like a duck, but he doesn't *look* like a duck.
        g. John's mum looks how she always looks, but she doesn't *look* how she always looks.
        h. The top line looks longer than the bottom line, but it doesn't *look* longer than the bottom line.
        i. They look to be tired, but they don't *look* to be tired.
        j. It looks as if these tomatoes are ripe, but it doesn't *look* as if they are ripe.
        k. There looks to be a unicorn approaching, but there doesn't *look* to be a unicorn approaching.

Note that some of these sentences do have non-contradictory readings, but they are readings that are made more salient by emphasising the second occurrence of some expression other than 'look':

(62)   a. Patch looks that way, but it doesn't look *that* way.
       b. John looks American, but *he* doesn't look American.

This might be evidence that it is ambiguous what 'that' refers to in (62a) and what 'he' refers to in (62b), but it is not evidence that 'look' is ambiguous in either of these two sentences.

Is the fact that there is no evidence from non-contradiction that 'look' is ambiguous in VA sentences evidence that it is not? Perhaps not. There are some ambiguous verbs for which there seems to be no evidence from non-contradiction that they are ambiguous. 'Run' and 'grow' are examples. These verbs are both ambiguous – 'run' is ambiguous between a sense in which it means something like 'jog' and a sense in which it means something like 'direct'; 'grow' is ambiguous between a sense in which it means something like 'cultivate' and a sense in which it means something like 'become'. But it is difficult to get a non-contradictory reading of (63a) below that is made more salient by emphasising the second occurrence of 'run', or a non-contradictory reading of (63b) that is made more salient by emphasising the second occurrence of 'grow'. It is possible that there are no such readings, compatible with 'run' and 'grow' both being ambiguous – it might just be that they are not ambiguous within the one sentence.

(63)   a. John ran home, but he didn't *run* home.
       b. John grew old, but he didn't *grow* old.

Similarly, the fact that there is no evidence from non-contradiction that 'look' is ambiguous may be evidence that 'look' is not ambiguous within the one sentence, but it is not evidence that it is not ambiguous in VA sentences as a whole. Even so, my point here is just the negative point that we have no evidence from non-contradiction that 'look' is ambiguous in VA sentences.

2.4.3 Evidence from conjunction reduction

Here is a third reason to think that 'pick' is ambiguous. Suppose that John wants to give a flower to his girlfriend; he doesn't know much about flowers, so his mum chooses an appropriate one in the garden, which he then plucks; but he does know a lot about timing, so he chooses the best moment to give the flower. There is an interpretation of the sentence in (64a) below on which it expresses a proposition that is true in these circumstances. But any such interpretation of the conjunction-reduced sentence in (64b) requires a zeugmatic interpretation of 'pick'.[22]

(64)   a. John picked a rose and John picked the ideal time to give it.
       b. John picked a rose and the ideal time to give it.

This is evidence that the sense of 'pick' on which John picked a rose is different from the sense of 'pick' on which John picked the ideal time to give it. Say that this is *evidence from conjunction reduction* that 'pick' is ambiguous.

There is evidence from conjunction reduction that the verbs 'call', 'toast', and 'grow' are ambiguous. If John described Mary as a fool then hailed her a cab, then there is a true interpretation of (65a.i) below, but any true interpretation of (65a.ii) requires a zeugmatic interpretation of 'call'. If John cooked two bagels then drank to his mum, then there is a true interpretation of (65b.i), but any true interpretation of (65b.ii) requires a zeugmatic interpretation of 'toast'. And if John cultivated basil and became old, then there is a true

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[22] On zeugma, see Quine (1960, p. 130).

interpretation of (65c.i), but any true interpretation of (65c.ii) requires a zeugmatic interpretation of 'grow'.

(65) a. i.   John called Mary a fool and John called Mary a cab.
           ii. John called Mary a fool and a cab.
       b. i.   John toasted two bagels and John toasted his mum.
           ii. John toasted two bagels and his mum.
       c. i.   John grew basil and John grew old.
           ii. John grew basil and old.

What about the verb 'look'? There is evidence from conjunction reduction that it is ambiguous, when considered in all of its uses. If John appeared embarrassed while gazing out the window, then there is a true interpretation of (66a) below, but any true interpretation of (66b) requires a zeugmatic interpretation of 'look'.

(66) a. John looked embarrassed and John looked out the window.
       b. John looked embarrassed and out the window.

As far as I can tell, however, there is no evidence from conjunction reduction that 'look' is ambiguous in VA sentences. For any circumstances in which there is a true interpretation of the sentence in (67a.i) below, there is a true interpretation of (67a.ii) that does not require a zeugmatic interpretation of 'look'. Similar remarks apply to examples (67b-e).

(67) a. i.   John looks smart and John looks a character.
           ii. John looks smart and a character.
       b. i.   John looks like a philosopher and John looks as if he thinks like one too.
           ii. John looks like a philosopher and as if he thinks like one too.
       c. i.   John looks American but John looks slightly darker than most.
           ii. John looks American but slightly darker than most.
       d. i.   John looks how he usually looks but John looks less tired.
           ii. John looks how he usually looks but less tired.
       e. i.   John looks smarter than Mary but John looks to be less wise.
           ii. John looks smarter than Mary but to be less wise.

The examples in (67) have been constructed from a more-or-less random sample of VA sentences, but as far as I know the result is quite general: for any expressions XP and YP, for any circumstance in which there is a true interpretation of the VA sentence in (68a) below, there is a true interpretation of the VA sentence in (68b) that does not require a zeugmatic interpretation of 'look':

(68) a. John looks XP and John looks YP.
       b. John looks XP and YP.[23]

There may be pragmatic reasons why it is odd to use instances of (68b) – it may, for example, be misleading to use 'and' rather than 'but'. But to be misleading in that kind of way is not to be zeugmatic.

The fact that we have no evidence from conjunction reduction that 'look' is ambiguous in VA sentences might in itself be evidence that 'look' is not ambiguous: if we use 'look' with one meaning in some VA sentence, s_1, and we use it with a distinct meaning in some VA sentence, s_2, then why can't we use conjunction reduction to bring out that difference? But

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[23] These all need to be VA sentences, or the generalisation is false: 'John looked out the window and John looked surprised' cannot be non-zeugmatically reduced to 'John looked out the window and surprised.'

perhaps there is an explanation here that I cannot see – I will grant that possibility. My point here, again, is just the negative one that we have no evidence from conjunction reduction that 'look' is ambiguous in VA sentences.

2.4.4 Evidence from question formation

Here is a fourth reason to think that 'pick' is ambiguous. There is a context in which the conversation in (69) below would be perfectly felicitous:

(69)   A: What did John pick?
         B: John picked a rose.
         A: No, that's not what I meant. What did John *pick*?

This is evidence that 'pick' can be understood in two distinct senses in A's question, and hence that 'pick' is ambiguous. Say that this is *evidence from question formation* that 'pick' is ambiguous.

For the felicity of (69) to be evidence that 'pick' is ambiguous, there needs to be emphasis on 'pick' when A repeats her question. There is a context in which the variant conversation in (70) below is felicitous:

(70)   A: What did John pick?
         B: John picked a rose.
         A: No, that's not what I meant. What did *John* pick?

This might be evidence that it is ambiguous who A meant by 'John', but it is not evidence that 'pick' is ambiguous.

There are contexts in which each of the conversations in (71) below is felicitous, so there is evidence from question formation that the verbs 'toast' and 'grow' are ambiguous:

(71)   a. A: Did you toast John?
             B: No - he wouldn't fit in the toaster.
             A: No, that's not what I meant. Did you *toast* John?
         b. A: What did Mary grow?
             B: Mary grew old.
             A: No, that's not what I meant. What did Mary *grow*?

What about the verb 'look'? There is evidence from question formation that 'look' is ambiguous, when considered in all of its uses: there is a context in which the conversation in (72) below is felicitous (take a context in which John looked through binoculars at the couple next door and what he saw made him look embarrassed).

(72)   A: How did John look?
         B: John looked through binoculars.
         A: No, that's not what I meant. How did John *look*?

As far as I can tell, however, there is no evidence from question formation that 'look' is ambiguous in VA sentences. There is no context in which any of the conversations in (73) below, for example, is felicitous.

(73)   A: How did John look?
         B: {John looked that way,
             John looked American,
             John looked a character,

John looked in love,
John looked like a duck,
John looked less relaxed than Mary,
John looked how he looked,
John looked as if he was embarrassed,
John looked to be tired}.
A: No, that's not what I meant. How did John *look*?

It may be that some of B's possible answers do not answer A's question as informatively as A would like: 'John looked how he looked', for example, is not very informative, whereas 'John looked that way' might be very informative if the utterance of 'that way' is accompanied by a demonstration of a faithful photo of John. So maybe if B were to respond with 'John looked how he looked' there would be a sense in which he hasn't answered A's question, and A would need to clarify. But A would not in this case clarify by repeating the question with emphasis on 'look', as she would if the problem were with B's understanding of 'look'. Rather, she might say something like, 'No, that's not what I meant. What *colour* did John look?'. So in these cases, B could not be accused of not answering A's question but only of not answering it in the right way.

The same phenomenon is exhibited by our use of verbs that are not ambiguous. Consider the conversation in (74) below. B's possible responses all answer the question (truly, we can assume), but might vary in how informative they are to the person who asked the question.

(74) A: Where does John live?
      B: {John lives in Jericho,
          John lives in Oxford,
          John lives in England,
          John lives where Mary lives,
          John lives somewhere}.

The fact that we have no evidence from question formation that 'look' is ambiguous in VA sentences might in itself be evidence that 'look' is not ambiguous: if we use 'look' with one meaning in some VA sentence, s_1, and we use it with a distinct meaning in some VA sentence, s_2, then why can't we use question formation to bring out that difference? But perhaps there is an explanation here that I cannot see – I will grant that possibility. My point here, again, is just the negative one that we have no evidence from question formation that 'look' is ambiguous in VA sentences.

2.5 A working hypothesis

I have argued (a) that the fact that in VA sentences 'look' takes complements from a variety of syntactic categories (at least on the surface) is not a good reason to think that we use 'look' with more than one meaning in VA sentences, (b) that we have been given no good reason in the literature to think that we use 'look' with more than one meaning in VA sentences, and (c) that none of what strike me as four of the best reasons for thinking that a verb is ambiguous in a given class of uses applies to 'look' in VA sentences. I think this is good reason to adopt the following as a working hypothesis:

(75) In VA sentences we use 'look' with just one meaning.

This will be my working hypothesis for the remainder of the thesis. In the next chapter, I propose an account of what that meaning is.

3 The Meaning of 'Look'

In Chapter 2, I argued against the idea that we use 'look' in VA sentences with more than one meaning, and adopted the working hypothesis that we use it with just a single meaning. In this chapter I propose an account of what that meaning is.

For reasons that I gave in Section 1.2, I shall take a neo-Davidsonian approach to our use of VA sentences. According to this approach, we use VA sentences to talk about events, and we use 'look' in VA sentences to specify the kind of events about which we are talking. Accordingly, I propose:

(1)   By 'look' in VA sentences we (unambiguously) mean a kind of event.

Events of this kind I shall call *looking* events.

Also according to the neo-Davidsonian approach, we use arguments and adjuncts of 'look' in VA sentences to specify further things about the events about which we are talking – to specify a participant in the events, or a time of the events, or a location of the events, and so on. Accordingly, in Section 3.1 I make some metaphysical proposals about looking events, and in Section 3.2 I make some semantic proposals about our use of arguments and adjuncts of 'look' in VA sentences. In the remaining sections of this chapter I discuss and make comments in defence of these proposals.

3.1 Metaphysical proposals

A looking event occurs when things look some way to someone.

By 'things' here I mean things in general, rather than things in particular. Sometimes there is something in particular that looks some way, as there is when a table looks red to John. But sometimes there is not, as when it looks dark outside to John. Either way, things in general look some way to John, and a looking event is occurring. If there is something that looks some way, then I will take that thing to be a participant in the looking event, which I will call a *stimulus* of the event. I am taking it that looking events need not have a stimulus, but I am not strongly committed to this. It may be that when it looks dark outside to John there is a stimulus of the looking event, perhaps something that we might call 'the world'. Nothing that I shall do hangs on this issue, and I will take it that looking events need not have a stimulus.

The person to whom things look some way I will also take to be a participant in the event, which I will call an *experiencer* of the event. I propose that a looking event always has an experiencer – things don't just look some way, they always look some way to someone. This proposal might seem a bit strange, given that my cup, for example, looks red right now, even though it is at home in my kitchen where no one is looking at it – here we seem to have a looking event that is occurring without an experiencer. But I think that when I say that my cup looks red right now I am using the sentence 'my cup looks red right now' *generically*. I do not mean that a certain looking event is occurring; rather, I am quantifying over looking events – what I mean is that (right now) events in which my cup looks some way to someone are events in which it looks red to that person. Each of the events over which I am quantifying has an experiencer – in each case, there is someone to whom my cup looks red. Why does it matter whether or not looking events must have an experiencer? Again, nothing that I shall do hangs on this issue. But it is plausible to think that looking events are mental events of their experiencer, and if that is right then looking events cannot occur without an

experiencer. In keeping with this, I shall assume throughout that looking events always have an experiencer.

I propose that when things look some way to someone, the way things look is a property of the looking event, which I shall call a *way* of the event.

I take it that there are such things as ways. There are ways of walking, ways of talking, ways of driving a car, and so on. In particular, there are ways of looking. I take it that these are all things of the same kind. I take it that we refer to and quantify over ways in a great deal of our ordinary talk, using expressions such as 'that way', 'this way', 'thus', 'the way John looks', 'one way that Mary talks', 'every way that you do it', 'however John likes', and so on.

What kinds of things are ways? The few people who have discussed ways in the literature have all taken them to be properties. Stephen Leeds (1975, p. 202) suggests that we take *ways of appearing* to be properties of seeing events. Robert Stalnaker (1976, p. 68) suggests that we take *ways things might be* or *might have been* to be properties or states of the world. Stanley and Williamson (2001, Section II) suggest that we take *ways of engaging in actions* to be properties of (token) events. Landman and Morzycki (2003) propose that we take ways (they call them *manners*) to be natural kinds of events – properties of events that realize a kind. I too shall take ways to be properties. It is plausible that in some cases ways are properties of events: ways of walking are properties of walking events, ways of talking are properties of talking events, and so on. I propose that ways of looking are properties of looking events.[1]

Not every property that an event has is a way property. The property of occurring in Sydney is not a way, nor is the property of occurring at 2pm. One test for whether or not a property P is a way property of the event of John's walking (for example) is whether or not 'P' is the right kind of answer to the question, 'How did John walk?' – 'In Sydney' and 'At 2pm' are not appropriate responses, whereas 'Clumsily' is. This suggests that by 'in Sydney' and 'at 2pm' we do not mean ways, but by 'clumsily' we do.

If ways are properties, then perhaps we can experience (see, hear, smell, feel and taste) them, just as we can experience other kinds of properties. I think that we can. We can see the way someone looks; not only can we see that she looks a certain way, but we can see her looking that way, in part by seeing the way itself. We can see the way someone walks, the way a building collapses, the way a cloud grows, the way someone returns a volley (I might ask, 'Did you see how she returned that volley?'). We can hear the way something sounds, or the way someone talks. We can smell the way something smells, feel the way something feels, and taste the way something tastes. In each case here I mean not just that we can see, hear, smell, feel and taste that an object looks, sounds, smells, feels or tastes a certain way, but that we can see, hear, smell, feel and taste the way itself.

Similarly, just as we know various things about other kinds of properties, we also know various things about ways. I know, of the way my sister looks, that it is distinct from the way my brother looks; I know, of the way sharks swim, that it is more like the way dolphins swim than it is like the way dogs swim; and I know, of the way red wine tastes, that it is a more general way than the way this particular bottle of red wine tastes, but a less general way than the way wine in general tastes (I discuss generality of ways in Section 5.3).

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[1] Tim Williamson has suggested the following reason to think that ways are properties rather than particulars. Suppose that the universe is reduplicated in causally isolated chunks. It seems possible that James in one chunk looks the same as John in another, even though that could not involve any relation to a common particular. It could, however, involve the possession of a common property.

I propose that looking events always have a way property – things do not just look to an observer, they always look some way (I shall argue later that they typically look many ways). Again, nothing hangs on this.

3.2 Semantic proposals

Having made these metaphysical proposals about looking events, I now make some semantic proposals about our use of arguments and adjuncts of 'look' in VA sentences.

I propose that in VA sentences:

(2)   a. We optionally use the subject of 'look' to specify a stimulus of the underlying looking event, by referring to or quantifying over objects.
        b. We obligatorily use the complement of 'look' to specify a way of the underlying looking event, by referring to or quantifying over ways of looking.
        c. We optionally use preposition phrase modifiers headed by 'to' to specify an experiencer of the underlying looking event, by referring to or quantifying over subjects.

By the sentence in (3a) below, for example, we mean the proposition in (3b). What we mean is that there is a looking event whose stimulus is Patch, whose way is that way, and whose experiencer is John.

(3)   a. Patch looks that way to John.
        b. $\exists e(\text{Look}(e)\ \&\ \text{Stimulus}(e, \text{Patch})\ \&\ \text{Way}(e, \text{that way})\ \&\ \text{Experiencer}(e, \text{John}))$

By 'Stimulus' in (3b) (and throughout this thesis) I mean a relation that obtains between an event and an object just in case the object is a stimulus of the event; by 'Way' I mean a relation that obtains between an event and a way just in case the way is a way of the event; and by 'Experiencer' I mean a relation that obtains between an event and a subject just in case the subject is an experiencer of the event.

3.3 The subject of 'look'

The VA sentence in (3a) above is one in which we use the subject of 'look' to specify a stimulus of the underlying looking event by referring to an object (Patch). Other such VA sentences include:

(4)   a. He looks the way Mary looks.
        b. John looks American.

We sometimes use the subject of 'look' to specify a stimulus of the underlying looking event by quantifying over objects:

(5)   a. Everyone looks that way.
        b. Someone looks tired.
        c. The man next door looks as if he is angry.

Assuming a standard analysis of the quantifier expressions 'everyone', 'someone', and 'the man next door',[2] what we mean by these sentences can be given as follows:

(6)   a. [every x: x is a person]$\exists e(\text{Look}(e)\ \&\ \text{Stimulus}(e, x)\ \&\ \text{Way}(e, \text{that way}))$
        b. [some x: x is a person]$\exists e(\text{Look}(e)\ \&\ \text{Stimulus}(e, x)\ \&\ \text{Way}(e, \ldots))$

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[2] See Heim and Kratzer (1998), chapters 6 & 7.

c. [the x: x is a man next door]$\exists e$(Look(e) & Stimulus(e, x) & Way(e, …))

Here I have left unspecified exactly which ways we mean by 'tired' in (5b) and 'as if he is angry' in (5c) – this is a complex issue to which I shall return in subsequent chapters.

The proposal in (2a) is that we optionally use the subject of 'look' to specify a stimulus of the underlying looking event. Sometimes we do not. In fact we cannot if the underlying looking event has no stimulus at all (at least if we are to speak truly). In such cases, we still use an expression in the subject position of the sentence, because it is a syntactic requirement of English that every well-formed sentence has a subject (if there were no such requirement, then sentences such as 'Looks windy' might count as syntactically well-formed). To meet this syntactic requirement we do one of two things. Sometimes we use the semantically inert pleonastic 'it' as the subject of 'look':

(7)   a. It looks as if John is tired.
       b. It looks as if a unicorn is approaching.
       c. It looks as if there is a crack in the wall.[3]

What we mean by each of these sentences is a proposition of the following form:

(8) $\exists e$(Look(e) & Way(e, …))

Exactly what should replace the '...' in each case depends upon what we mean by 'as if John is tired', 'as if a unicorn is approaching', and 'as if there is a crack in the wall' – an issue to which I shall return in Chapters 4 and 8.

Sometimes, in order to fill the requirement that every well-formed sentence has a subject, we 'raise' the subject of the complement of 'looks as if' and use it as the subject of 'look' instead (rather than use pleonastic 'it' as the subject of 'look'). Thus, rather than using the VA sentences in (7) above, we use the VA sentences in (9) below:

(9)   a. John looks to be tired.
       b. A unicorn looks to be approaching.
       c. There looks to be a crack in the wall.

What we mean by the 'raised' version in each case is the same as what we mean by the 'unraised' version. Thus, in the raised versions we do not use the subject of 'look' as an (semantic) argument of 'look', to specify a stimulus of the underlying looking event; rather, we use it as an argument of the main verb of the complement of 'look', just as we do in the unraised versions. This a phenomenon known to linguists as *subject-to-subject raising*, and is not peculiar to VA sentences. I shall discuss this use of VA sentences in more detail in Section 8.8, and shall set them aside until then.

Apart from these two cases, the first in which we use pleonastic 'it' as the subject of 'look', and the second in which we use the subject of 'look' as an argument of the main verb of the complement of 'look', I think it is plausible that we use the subject of 'look' in VA sentences to specify a stimulus of the underlying looking event, by referring to or quantifying over objects. I shall assume so throughout this thesis without further argument.

3.4 Modifiers headed by 'to'

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3   For a discussion of pleonastic 'it', see Carnie (2001), pp. 174-6.

The VA sentence in (3a) above is one in which we use the modifier 'to John' to specify an experiencer of the underlying looking event by referring to a subject (John). We sometimes use such modifiers to specify an experiencer by quantifying over subjects:

(10)   a. Patch looks that way to someone.
       b. John looks familiar to the teacher.

Assuming a standard analysis of the quantifier expressions 'someone' and 'the teacher', what we mean by these sentences can be given as follows:

(11)   a. [some x: x is a person]$\exists e$(Look(e) & Stimulus(e, Patch) & Way(e, that way) & Experiencer(e, x))
       b. [the x: x is a teacher]$\exists e$(Look(e) & Stimulus(e, John) & Way(e, …) & Experiencer(e, x))

Often we do not include modifiers of this kind in the VA sentences that we use, and so do not explicitly specify an experiencer of the underlying looking event. I proposed in the previous section, however, that looking events always have an experiencer. Accordingly, I take it that when we do not explicitly specify an experiencer there is, nevertheless, an experiencer of the underlying looking event. There are two cases: either (a) we are using the VA sentence to talk about a particular looking event, or (b) we are using it generically, to quantify over looking events. As an example of the first case, by uttering 'Patch looks red' while looking at Patch I probably mean to be speaking of a particular looking event – an event in which Patch looks red to me. That looking event has an experiencer – me. As an example of the second case, by 'John looks American' while not looking at John I probably mean to be quantifying over looking events – what I mean is that events in which John looks some way to someone are *generally* events in which John looks American to that person. Each of the looking events over which I am quantifying has an experiencer. So the fact that we often do not explicitly specify an experiencer of the underlying looking event is compatible with my proposal that looking events always have an experiencer.

I have just been discussing generic readings of VA sentences. These are readings on which we do not use the VA sentence to talk about a particular looking event, but to quantify over looking events. I propose that the existence of such readings explains the following fact: sometimes when asked how something looks we talk about how it is – you ask me how Mary looks, and I tell you that she is blonde; since it is a well-known fact that how something looks on a particular occasion is not determined by how it is (red things sometimes look green, for example), telling you about how Mary is ought to be an unsatisfactory response to your question about how she looks; but many times it is satisfactory. I propose the following explanation. What you are asking is not how she looks on a particular occasion, but how she looks in general (we might call this a *generic* reading of the interrogative that you used to ask the question). Since how she looks varies from occasion to occasion, depending upon both how she is and the conditions under which she is being observed, the best way for me to tell you how she looks in general is to tell you how she is, because there are general facts about how blondes look. It would not be informative to tell you that Mary lives in Sydney, for example, because there are no general facts about how people who live in Sydney look (at least no relevant facts).

3.5 The complement of 'look'

The VA sentence in (3a) above is one in which we use the complement of 'look' to specify a way of the underlying looking event by referring to a way of looking (using 'that way'). Other such VA sentences include:

(12)   a. John looks this way.

b. Mary looks thus.

We sometimes use the complement of 'look' to specify a way of the underlying looking event by quantifying over ways of looking:

(13)　a. John looks the way Mary looks.
　　　b. John looks some way.
　　　c. John looks every way Mary looks.

Assuming a standard analysis of the quantifier expressions 'the way Mary looks', 'some way', and 'every way Mary looks', what we mean by these sentences can be given as follows:

(14)　a. [the x: Mary looks x]$\exists e$(Look(e) & Stimulus(e, John) & Way(e, x))
　　　b. [some x: x is a way]$\exists e$(Look(e) & Stimulus(e, John) & Way(e, x))
　　　c. [every x: Mary looks x]$\exists e$(Look(e) & Stimulus(e, John) & Way(e, x))

In some cases in which we use the complement of 'look' to quantify over ways of looking, we also use the subject of 'look' to quantify over objects. That is typically the case with utterances of the following sentence:

(15)　Everyone looks some way.

If by 'Everyone' a speaker means [every x: x is a person], and by 'some way' she means [some y: y is a way], then by 'Everyone looks some way' she means either of the following two propositions:

(16)　a. [every x: x is a person][some y: y is a way]$\exists e$(Look(e) & Stimulus(e, x) & Way(e, y))
　　　b. [some y: y is a way][every x: x is a person]$\exists e$(Look(e) & Stimulus(e, x) & Way(e, y))

In the first case, what she means is true iff for every x such that x is a person, there is some y such that y is a way of looking, and such that there is a looking event whose stimulus is x and whose way is y. In the second case, what she means is true iff for some y such that y is a way of looking, every x such that x is a person is such that there is a looking event whose stimulus is x and whose way is y. A speaker can be interpreted as meaning either of two things by (15), depending on which of the quantifier expressions 'everyone' and 'some way' she means to have widest scope. In this case it makes a truth conditional difference how she is interpreted, but in some cases it makes no truth conditional difference (it makes no truth conditional difference in 'Everyone looks the way Mary looks').

There are many VA sentences for which it is not so plausible that we use the complement of 'look' to refer to or quantify over ways of looking. This is the case, I think, for each of the following VA sentences:

(17)　a. John looks American.
　　　b. Someone looks a character.
　　　c. Those women look in love.
　　　d. John looks like a duck.
　　　e. The top line looks longer than the bottom line.
　　　f. They look to be tired.
　　　g. It looks as if these tomatoes are ripe.
　　　h. There looks to be a unicorn approaching.

The complement of 'look' in each of these sentences seems to be unsuitable for such use. It is more intuitive that we use 'American', 'a character', 'in love', 'like a duck' and 'longer than the bottom line' as predicates, by which we mean a property of objects rather than a way of looking or a quantifier over ways of looking. And it is not at all clear what we mean by 'as if these tomatoes are ripe'. Nevertheless, I believe, and hope to show in the next several chapters, that in these and every other VA sentence we do use the complement of 'look' to refer to or quantify over ways of looking. In Chapters 4 to 7 I consider VA sentences in which the complement of 'look' is an adjective, and then in Chapter 8 I consider each of the remaining constructions.

But before doing so, I shall offer two pieces of general evidence that in every VA sentence we use the complement of 'look' to refer to or quantify over ways.

3.5.1 Echo questions

The first piece of evidence comes from the formation of echo questions. In the conversation in (18) below, it is appropriate for B to replace 'American' by 'how' to form an echo question in response to A:

(18)   A: John looks American.
       B: John looks how?

This is just what we would expect if A uses 'American' to refer to or quantify over ways:

(19)   A: John swims {thus, that way, those ways, the way Mary swims, every way}.
       B: John swims how?

It is not what we would expect if A does not use 'American' to refer to or quantify over ways:

(20)   a. A: John loves Mary.
            B: #John loves how?
       b. A: John goes everywhere that Mary goes.
            B: #John goes how?
       c. A: John knows that grass is green.
            B: #John knows how?

There are some expressions that, plausibly, are not used to refer to or quantify over ways, and yet can appropriately be replaced by 'how' to form echo questions. Degree words such as 'very', 'somewhat' and 'quite' form one set of examples:

(21)   A: John swims {very, somewhat, quite} fast.
       B: John swims how fast?

So the fact that B can form an appropriate echo question in (18) by replacing 'American' by 'how' is consistent with 'American' being used as a degree word, and not to refer to or quantify over ways. But I think that this possibility is sufficiently implausible that we can rule it out, and take the fact that 'American' can be appropriately replaced by 'how' in (18) to be evidence that A uses 'American' to refer to or quantify over ways.[4,5]

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[4]   As well as evidence from our use of echo questions there is equally good evidence from our use of direct questions (the former being transformational variants of the latter): the fact that 'John looks American' is an appropriate answer to the direct question 'How does John look?' is evidence that 'American' here is used to refer to or quantify over ways.

A similar conversation can be constructed for each of the other VA sentences in (17) above:

(22)　a.　A: Someone looks a character.
　　　　　B: Someone looks how?
　　　b.　A: Those women look in love.
　　　　　B: Those women look how?
　　　c.　A: John looks like a duck.
　　　　　B: John looks how?
　　　d.　A: The top line looks longer than the bottom line.
　　　　　B: The top line looks how?
　　　e.　A: They look to be tired.
　　　　　B: They look how?
　　　f.　A: It looks as if these tomatoes are ripe.
　　　　　B: It looks how?
　　　g.　A: There looks to be a unicorn approaching.
　　　　　B: It looks how?

(22g) needs special comment. It would not be appropriate for B, in the case of (22g), to ask 'There looks how?' Instead, the most appropriate echo questions for him to ask is 'It looks how?', although it is not clearly appropriate. I suggest that this can be explained as follows. The sentence that A utters in (22g) is a case of subject-to-subject raising, in which the subject of 'look' is used as an argument of the main verb of the complement of 'look' (see the discussion in Section 3.3 above). Thus, it is not the complement of 'look' in this sentence that she uses to refer to a way or to quantify over ways, but a more complex expression that includes the subject of 'look'. Thus, an appropriate echo question can only be formed if the subject of 'look' is included in the expression that is replaced by 'how', and if pleonastic 'it' is used instead as the subject of the question. This explains why the echo question I have given in (22g) is the most appropriate. And it explains why it is not clearly appropriate: B's question is not a full echo of A's sentence – the subject of 'look' is not echoed, as we would expect, but replaced by pleonastic 'it'.

As far as I know, similar conversations can be constructed for any VA sentence. Thus, we have evidence that in every case we use the complement of 'look' to refer to or quantify over ways (with the aforementioned complications in cases of subject-to-subject raising).

3.5.2 Anaphora

The second piece of evidence comes from anaphora using the complex demonstrative 'that way'. In the conversation in (23) below, it is appropriate for B to use 'that way' anaphorically upon A's use of 'American':

(23)　A: John looks [American]$_i$.
　　　B: Mary looks [that way]$_i$ too.[6]

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[5]　It is also appropriate in (18) for B to use 'what' rather than 'how' in place of 'American'. I don't
　　think that we can or should draw any conclusions from this about what 'American' is used by A to
　　mean. Virtually any expression can be appropriately replaced by 'what' to form an echo question,
　　no matter what that expression is used to mean: "John loves Mary. John loves what?", "John goes
　　everywhere that Mary goes. John goes what?", "John knows that grass is green. John knows what?"
[6]　I am using the subscript 'i' to indicate that 'that way' is used anaphorically upon 'American'.

This is just what we would expect if A uses 'American' to refer to a way or to singularly quantify over ways:

(24)   A: John looks {[this way]$_i$, [thus]$_i$, [a way]$_i$, [some way]$_i$, [the way]$_i$}.
       B: Mary looks [that way]$_i$ too.

It is not what we would expect if A does not use 'American' to refer to a way or to singularly quantify over ways:

(25)   a.   A: John loves [Mary]$_i$.
            B: #Jack loves [that way]$_i$ too.
       b.   A: John goes [everywhere that Mary goes]$_i$.
            B: #Jack goes [that way]$_i$ too.
       c.   A: John knows [that grass is green]$_i$.
            B: #Mary knows [that way]$_i$ too.

So the fact that it is appropriate for B to use 'that way' anaphorically upon A's use of 'American' is evidence that A uses 'American' to refer to a way or to singularly quantify over ways.

A similar conversation can be constructed for each of the other VA sentences in (17) above:

(26)   a.   A: Someone looks [a character]$_i$.
            B: John looks [that way]$_i$ too.
       b.   A: Those women look [in love]$_i$.
            B: These women look [that way]$_i$ too.
       c.   A: John looks [like a duck]$_i$.
            B: Mary looks [that way]$_i$ too.
       d.   A: The top line looks [longer than the bottom line]$_i$.
            B: The other line looks [that way]$_i$ too.
       e.   A: They look [to be tired]$_i$.
            B: They always look [that way]$_i$.
       f.   A: It looks [as if these tomatoes are ripe]$_i$.
            B: It always looks [that way]$_i$.
       g.   A: There looks to be a unicorn approaching.
            B: It always looks that way.

Like (22g) above, (26g) needs special comment. The sentence that A utters in this case is an instance of subject-to-subject raising, in which the subject of 'look' is used as an argument of the main verb of the complement of 'look'. So it is not the complement of 'look' in this sentence that A uses to refer to a way or to singularly quantify over ways, but a more complex expression that includes the subject of 'look'. Thus, it is difficult to use brackets and co-indexing to show which expression it is that 'that way' is anaphoric upon. The following extended conversation, however, suggests what it is that 'that way' is used anaphorically upon:

(27)   A: There looks to be a unicorn approaching.
       B: It always looks that way.
       A: Which way?
       B: As if there is a unicorn approaching.

This conversation supports the claim that I made above, that A's initial utterances in (26g) and (27) can be paraphrased as follows:

(28)   It looks as if there is a unicorn approaching. [7]

As far as I know, for every VA sentence in which we do not explicitly use the complement of 'look' to refer to or quantify over ways, it is appropriate to use 'that way' anaphorically upon the complement of 'look' (with complications in subject-to-subject raising cases). If that is right, then there is evidence that in each of these cases we do use the complement of 'look' to refer to or quantify over ways, and so there is evidence that for every VA sentence we use the complement of 'look' to refer to or quantify over ways.

In the next chapter I consider VA sentences such as 'John looks American', in which the complement of 'look' is an adjective (at least on the surface). I shall argue that in these cases we use the complement of 'look' to *definitely describe* a way of looking.

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[7]   Rather than using 'as if there is a unicorn approaching' in (27) and (28), we would more naturally use 'as if a unicorn is approaching.'

4 The 'XP looks Adj' Construction

In Chapter 3, I made the following three proposals: (a) in VA sentences we (unambiguously) use 'look' to mean a kind of event, (b) we (optionally) use the subject of 'look' to specify a stimulus of the underlying looking event, by referring to or quantifying over objects, and (c) we (obligatorily) use the complement of 'look' to specify a way of the underlying looking event, by referring to or quantifying over ways of looking.

I take it that (b) is a plausible proposal. In Chapter 3, I pointed to two kinds of VA sentence in which we do not use the subject of 'look' to specify a stimulus of the underlying looking event – sentences such as (1a) below, in which the subject of 'look' is the semantically inert pleonastic 'it', and sentences such as (1b), which have a reading on which the subject of 'look' is used as an argument, not of the main verb 'look', but of the main verb of the complement of 'look'.

(1)   a. It looks as if a unicorn is approaching.
       b. A unicorn looks to be approaching.

Apart from VA sentences of these two kinds, which I shall consider in detail in Sections 8.6 to 8.8, I think it is plausible that in every other case we use the subject of 'look' to specify a stimulus of the underlying looking event, by referring to or quantifying over objects, and I shall assume so without argument.

I take it that (c), however, is not such a plausible proposal. There are several constructions in which it is not at all clear that we use the complement of 'look' to refer to or quantify over ways of looking. One such construction is the 'XP looks Adj' construction, where Adj is an adjective:

(2)   a. John looks American.
       b. Patch looks red.
       c. My cat looks scared.

I will spend this and the next three chapters examining this construction in detail. This might seem like a disproportionate amount of time to spend on just one construction, but it turns out that an understanding of this construction leads without too much further work to an understanding of all the remaining constructions, which I will then be able to examine in just a single chapter (Chapter 8). In this chapter, I argue that in the 'XP looks Adj' construction we do indeed use the complement of 'look' to refer to or quantify over ways of looking, and that in fact we use it to definitely describe a way of looking – we use it to mean [the w: $f(w)$], for some property f of ways of looking. I propose, in particular, that we use it to mean [the w: things look w if f], where f is the property that we mean by Adj in the 'XP is Adj' construction. Thus, by 'American' in (2a) above we mean [the w: things look w if American], by 'red' in (2b) we mean [the w: things look w if red], and by 'scared' in (2c) we mean [the w: things look w if scared].

4.1 First evidence

In Section 3.5.1, I gave evidence from our use of echo questions that we use Adj in 'XP looks Adj' to refer to or quantify over ways. The evidence was as follows. In the conversation in (3) below, it is appropriate for B to replace 'American' by 'how' to form an echo question in response to A:

(3)   A: John looks American.
       B: John looks how?

This is just what we would expect if A uses 'American' to refer to or quantify over ways, and not what we would expect if she does not (on the plausible assumption that Adj is not used as a degree word in these sentences). Similar conversations can be constructed for any adjective:

(4)   a. A: Patch looks red.
          B: Patch looks how?
       b. A: My cat looks scared.
          B. Your cat looks how?

In Section 3.5.2, I gave evidence from anaphora that, in particular, we use Adj in 'XP looks Adj' to singularly (rather than plurally) refer to or quantify over ways. The evidence was as follows. In the conversation in (5) below, it is appropriate for B to use 'that way' anaphorically upon A's use of 'American', and not appropriate to use 'those ways':

(5)   A: John looks [American]$_i$.
       B: Mary looks {[that way]$_i$, #[those ways]$_i$} too.

This is just what we would expect if A uses 'American' to singularly refer to or quantify over ways, and not what we would expect if she uses it to plurally refer to or quantify over ways. Similar conversations can be constructed for any adjective:

(6)   a. A: Patch$_1$ looks [red]$_i$.
          B: Patch$_2$ looks {[that way]$_i$, #[those ways]$_i$} too.
       b. A: My cat looks [scared]$_i$.
          B. My cat looks {[that way]$_i$, #[those ways]$_i$} too.

If we accept these results then we are left with just the following three possibilities:

(7)   a. We use Adj in 'XP looks Adj' to directly refer to a way (that is, by Adj we mean w, for some way w).
       b. We use Adj in 'XP looks Adj' to indefinitely describe a way (that is, by Adj we mean [a w: $f(w)$], or [some w: $f(w)$], or [one w: $f(w)$], for some property of ways f).
       c. We use Adj in 'XP looks Adj' to definitely describe a way (that is, by Adj we mean [the w: $f(w)$], for some property of ways f).

I think that we can rule out (7b), the possibility that we use Adj in 'XP looks Adj' to indefinitely describe a way. I find that many people judge the following argument to be valid (and I do too):

(8)   John looks American
       Mary looks American
       Therefore, there is a way that John and Mary both look

(Intuitively, John and Mary both look American.) But if we use 'American' in 'looks American' to indefinitely describe a way of looking then this argument ought not be valid. For then it would be like the following argument:

(9)   John looks a way that Jack looks
       Mary looks a way that Jack looks
       Therefore, there is a way that John and Mary both look

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I find that many people judge this argument to be invalid (and I do too) – intuitively, there need not be a single way that John and Mary both look. I conclude that we do not use 'American' in 'looks American' to indefinitely describe a way, and so too in general for Adj in 'looks Adj'. These considerations are admittedly a bit quick, but I think that they at least give us reasonably good reason to rule out possibility (7b).

Given a choice between possibilities (7a) and (7c), I think there is evidence that favours (7c) over (7a) – that we use Adj to definitely describe a way rather than to directly refer to a way. There is a truth conditional ambiguity in certain sentences that can be explained on the assumption that we use Adj to definitely describe a way, but not on the assumption that we use it to directly refer to a way. Suppose that John is the tallest man in town, and consider the sentence in (10) below (where YP is an expression from any syntactic category):

(10)   John might not have been YP.

If a speaker uses YP in (10) to mean [the x: x is a tallest man in town] (that is, to definitely describe the tallest man in town), then she can be interpreted as using (10) to mean either of the following two propositions, depending on whether she means the quantifier expression '[the x: x is a tallest man in town]' to be used inside or outside the scope of the possibility operator '$\Diamond$':

(11)   a. $\Diamond$[the x: x is a tallest man in town](John $\neq$ x)
      b.   [the x: x is a tallest man in town]$\Diamond$(John $\neq$ x)

(11a) is true iff there might have been a man in town who was taller than John. Since there might have been a man in town who was taller than John (we can assume), (11a) is true. (11b), on the other hand, is true iff John might not have been John. Since it is not the case that John might not have been John (I take it), (11b) is false. Thus, if a speaker uses YP in (10) to mean [the x: x is a tallest man in town] then she can be interpreted as using (10) to mean either of two propositions, one of which is true, the other of which is false. That is, there is a truth conditional ambiguity in (10).

In contrast to this, if a speaker uses YP in (10) to directly refer to John, then by (10) she can only be interpreted as meaning the following false proposition:

(12) $\Diamond$(John $\neq$ John)

So whether or not there is a truth conditional ambiguity in (10) depends on whether or not the speaker uses YP to definitely describe John or to directly refer to John.

I find that competent speakers find the sentence in (13) below to be truth conditionally ambiguous – a speaker can be interpreted as meaning either of two things by it, one of which is false, the other of which is true. Moreover, which one it is understood to mean depends upon whether the second occurrence of 'red' is understood to be used inside or outside the scope of 'might'.

(13)   Red things might not have looked red.

As the considerations above show, this is just what we would expect if the speaker uses the second occurrence of 'red' to definitely describe a way, and not what we would expect if she uses it to directly refer to a way. Similar examples can be constructed for any adjective Adj:

(14)   a.   Americans might not have looked American.
      b.   Embarrassed people might not have looked embarrassed.
      c.   Steep hills might not have looked steep.

I conclude that, given a choice between (7a) and (7c), there is evidence that we should choose (7c) over (7a). Again, these considerations are admittedly a bit quick, but I think that they at least give us reasonably good reason to favour (7c).

I conclude that we have evidence against (7a) and (7b) and in favour of (7c) – that we use Adj in the 'XP looks Adj' construction to definitely describe a way; to mean [the w: $f(w)$], for some property of ways f.

4.2 Second evidence

People often have the intuition that we use Adj in 'XP looks Adj' to mean the same thing that we use it to mean in 'XP is Adj' – that we use 'red' in 'Patch looks red', for example, to mean the same thing that we use it to mean in 'Patch is red', that we use 'American' in 'John looks American' to mean the same thing that we use it to mean in 'John is American', and so on.

There is evidence from our use of deletion and anaphora to support this intuition. We can use the sentence in (15a.i) below to express a proposition. But we do not need to use the complete sentence to express that proposition: instead, we can use its elliptical variant (15a.ii), obtained from (15a.i) by deleting the second occurrence of 'red'. Similarly, rather than use the sentence in (15b.i) to express a proposition, we can express the same proposition using its elliptical variant (15b.ii), obtained from (15b.i) by deleting the first occurrence of 'red'; and rather than use (15c.i) to express a proposition, we can express the same proposition using (15c.ii), obtained from (15c.i) by replacing the second occurrence of 'red' by 'it' and using it anaphorically on the first occurrence of 'red'.

(15)   a.   i.   Patch looks red and it is red.
              ii.   Patch looks red and it is.
         b.   i.   Patch looks red and is red.
              ii.   Patch looks and is red.
         c.   i.   Patch is red and it looks red too.
              ii.   Patch is red and it looks it too.

None of this would be possible if 'red' were not used with the same meaning in each of its two occurrences in (15a.i), (15b.i), and (15c.i). We could not use (15a.ii) to express the same proposition as (15a.i), unless the first occurrence of 'red' in (15a.i), the occurrence that is not deleted, is used with the same meaning as the second occurrence of 'red', the occurrence that is deleted. This can be seen from the modified examples in (16) below. The sentence in (16a) can be used to express a proposition. The sentence in (16b) is an elliptical variant of (16a), obtained by deleting the word 'blue', a word that is used with a different meaning from 'red'. In this case, we cannot use (16b) to express the proposition that we use (16a) to express.

(16)   a.   Patch looks blue and it is red.
         b.   Patch looks blue and it is.

Similarly, we could not use (15b.ii) above to express the same proposition as (15b.i) unless the second occurrence of 'red' in (15b.i), the occurrence that is not deleted, is used with the same meaning as the first occurrence, the occurrence that is deleted. This can be seen by observing that (17b) below cannot be used to express the same proposition as (17a).

(17)   a.   Patch looks red and is blue.
         b.   Patch looks and is blue.

Finally, we could not use (15c.ii) above to express the same proposition as (15c.i) unless the first occurrence of 'red' in (15a.i), the occurrence not replaced by 'it', is used with the same meaning as the second occurrence, the occurrence that is replaced by 'it'. This can be seen by observing that (18b) below cannot be used to express the same proposition as (18a).

(18) a. Patch is blue and it looks red too.
      b. Patch is blue and it looks it too.

For us to be able to use the (ii) sentences in (15) to express the same propositions as the (i) sentences, it is not sufficient for the deleted expression to be the same expression, or an expression with the same surface form, as an antecedent expression – it must be an expression used with the same meaning. This can be seen from the examples in (19) below. The two occurrences of 'bank' in (19a) can be used with different meanings, so that (19a) can be used to express the proposition that John thought it was a financial bank but it was a river bank. The sentence in (19b) is an elliptical variant of (19a), obtained by deleting the second occurrence of 'a bank', an expression the same as the antecedent expression 'a bank', or at least with the same surface form as the antecedent expression 'a bank'. We cannot, however, use (19b) to express the proposition that we have used (19a) to express. It can only be used to express the proposition that John thought it was a financial bank but it was a financial bank, or the proposition that John thought it was a river bank but it was a river bank.

(19) a. John thought it was a bank, but it was a bank.
      b. John thought it was a bank, but it was.

So the fact that we can use the (ii) sentences in (15) to express the same proposition as the (i) sentences is strong evidence that we use 'red' with the same meaning in each of its two occurrences in the (i) examples, and thus that we use 'red' with the same meaning in 'Patch looks red' as we do in 'Patch is red'. Similar arguments can be constructed for any pair of sentences 'XP looks Adj' and 'XP is Adj', providing evidence that we use Adj with the same meaning in both the 'XP looks Adj' and 'XP is Adj' constructions.

4.3 A problem

I have given evidence (Section 4.1) that we use Adj in 'XP looks Adj' to definitely describe a way – to mean [the w: $f(w)$], for some property of ways f. I have also given evidence (Section 4.2) that we use Adj in 'XP looks Adj' to mean the same thing as we use it to mean in 'XP is Adj'. I shall now argue that this poses a problem. The problem is this: if we do use Adj in 'XP looks Adj' to definitely describe a way, then it is (a) implausible and (b) false that we use it in 'XP looks Adj' to mean the same thing as we use it to mean in 'XP is Adj'.

If we do use Adj in 'XP looks Adj' to definitely describe a way, then I take it that the way we use it to describe is a way of looking. But then it is implausible that we use it to mean the same thing in 'XP is Adj'. For that would mean that we use Adj in 'XP is Adj' to definitely describe a way of looking, and that is implausible – it is implausible that we use 'American' in 'John is American', for example, to definitely describe a way of looking, because being American has nothing to do with a way of looking. It is more plausible that we use Adj in 'XP is Adj' to mean a property of objects (rather than a way, a property of events) – that we use 'American' in 'John is American', for example, to mean AMERICAN, the property of being American (which is not a way of looking, because it is not a property of looking events).

Moreover, if we do use Adj in 'XP looks Adj' to definitely describe a way of looking, then it is arguably false that we use it to mean the same thing in 'XP is Adj'. For suppose that in 'XP looks Adj' we use XP to mean o, an object, and we use Adj to definitely describe w, a way of looking. If in 'XP is Adj' we also use XP to mean o, and we also use Adj to definitely

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describe *w*, then what we mean by 'XP is Adj' is true iff *o* is *w*. But no matter which object is *o* and which way of looking is *w*, it is false that *o* is *w*, on either the identity or predication reading of 'is' – objects are not identical to ways of looking, nor do they have ways of looking as properties. But often what we mean by 'XP is Adj' is true. So we do not use Adj to mean the same thing in 'XP is Adj'.

Some might object to these claims about plausibility, in the following way. If Adj is a colour adjective, then it is plausible that we use Adj in 'XP is Adj' to definitely describe a way of looking. What we mean by 'Patch is red', for example, has something to do with Patch looking a certain way (in certain conditions). It might be that although for most adjectives we do not use Adj in 'XP looks Adj' to definitely describe a way of looking, we do so at least in the case of colour adjectives.

I don't find this plausible, but for the sake of argument I will grant that it is. Even so, the second problem remains: if we use Adj in 'XP is Adj' to definitely describe a way of looking, then what we mean by 'XP is Adj' is true iff *o* is *w*, where *w* is a way of looking; but this is false, even if Adj is a colour adjective – no object is identical to a way of looking, nor does it have ways of looking as properties. Thus, not even in the case of colour adjectives is it true that we use Adj in 'XP is Adj' to definitely describe a way of looking.

Moreover, I take it that even if some find it plausible that if Adj is a colour adjective then we use it in 'XP is Adj' to describe a way of looking, they will not find it plausible that we use it in 'XP tastes Adj' to describe a way of looking – it is much less plausible that what we mean by 'The lemon tastes bitter', for example, has anything to do with any way of looking. In that case, we can generate the problem I am pointing to by considering the 'XP tastes Adj' construction instead. The sentence in (20a.ii) below can be used to express the same proposition that an utterance of (20a.i) expresses. This can only be so if 'red' is used with the same meaning in both occurrences in (20a.i). If it were used with a different meaning in its first occurrence in (20a.i), then the sentence in (20a.ii) could not be used to express the proposition expressed by (20a.i). (20b.ii), for example, cannot be used to express the proposition that is expressed by an utterance of (20b.i).

(20) a. i. The wine looks red and tastes red.
          ii. The wine looks and tastes red.
      b. i. The wine looks white and tastes red.
          ii. The wine looks and tastes red.

This is evidence that we use 'red' in 'The wine looks red' to mean the same thing as we use it to mean in 'The wine tastes red'. If that is right, then it is implausible that we use it in the former to definitely describe a way: if we use 'red' in 'The wine looks red' to definitely describe a way, then we use it to definitely describe a way of looking; but it is implausible that we use it in the latter to definitely describe a way of looking – it is implausible that what we mean by 'The wine tastes red' has anything to do with a way of looking.

A similar argument can be constructed for any colour adjective, so there is alternative reason to think that for no colour adjective Adj do we use Adj in 'XP looks Adj' to definitely describe a way.

4.4 A proposal

I think that there is a way to reconcile the apparently conflicting evidence from Sections 4.1 and 4.2. I propose the following:

(21) By Adj in 'XP looks Adj' we mean *f*, the property that we mean by Adj in 'XP is Adj',
and by the complement of 'look' in 'XP looks Adj' (an expression possibly distinct
from Adj) we mean [the *w*: things look *w* if *f*].

Here I am allowing, but not assuming, that the complement of 'look' in 'XP looks Adj', call
it Adj^+, is an expression that is distinct from Adj – an expression that contains Adj and also
additional aphonic material. If it is, then according to (21) the situation is this: by Adj we
mean *f*, and by Adj^+ (a distinct linguistic item) we mean [the *w*: things look *w* if *f*]. If it is not,
then the situation is this: by Adj (and Adj^+) we mean both *f* and [the *w*: things look *w* if *f*].

If Adj^+ is an expression distinct from Adj, then it contains aphonic material – constituents
that are semantically significant but unpronounced. It might be that it contains sufficient
aphonic material for there to be a one-to-one correspondence between the constituents of
Adj^+ and the constituents of that which we mean by Adj^+. If so, at a fuller level of
representation the structure of 'XP looks Adj' might be as in (22a) below. (Here I am using
'~~the~~' to represent a lexical item that is used with the same meaning as 'the' but is
unpronounced – similarly for '~~way~~', '~~things~~', '~~look~~', and '~~if~~'.) Or it might be that the
complement of 'look' contains some but not so much aphonic material, perhaps as little as
one aphonic item, as in (22b). (Here, 'F' is an unpronounced lexical item, which we can take
to mean a function from properties to quantifiers, whose value for the property *f* is the
quantifier [the *w*: things look *w* if *f*].)

(22) a. XP looks [~~the way things look if~~ [Adj]].
b. XP looks [F [Adj]].

Whether or not the complement of 'look' in 'XP looks Adj' is distinct from Adj is a syntactic
matter that requires careful syntactic investigation. The proposal that I have made in (21)
above does not take a stand – it simply claims that by Adj we mean *f*, and that by the
complement of 'look' (which may or may not be identical to Adj) we mean [the *w*: things
look *w* if *f*].

This proposal allows us to reconcile the apparently conflicting evidence from Sections 4.1
and 4.2 – (a) that we use Adj in 'XP looks Adj' to definitely describe a way, and (b) that we
use it to mean the same thing as we use it to mean in 'XP is Adj'. The reconciliation goes as
follows. First, we do use Adj in 'XP looks Adj' to mean the same thing as we use it to mean
in 'XP is Adj' – in both cases we use it to mean *f*, for some property of objects *f*. Second, if
the complement of 'look', Adj^+, is identical to Adj, then the evidence that we use Adj to
definitely describe a way that we thought conflicted with the evidence that we use it to mean
the same thing as we use it to mean in 'XP is Adj' does not conflict at all – in actual fact we
use it both to definitely describe a way and to mean *f*, the property that we mean by Adj in
"XP is Adj', and we have evidence for both usages; on the other hand, if Adj^+ is distinct from
Adj, then what appears to be evidence that we use Adj to definitely describe a way is actually
evidence that we use Adj^+ to definitely describe a way, and there is such evidence because we
do use Adj^+ to definitely describe a way – it merely appears to be evidence that we use Adj to
definitely describe a way, because Adj^+ has the same surface form as Adj and is thus easily
mistaken for it.

4.5 A stronger proposal

The proposal in (21) is as strong as I need it to be – it makes true my claim that we use the
complement of 'look' in 'XP looks Adj' to refer to a way or to quantify over ways of looking
(it says that, in fact, we use it to quantify over them).

It will be convenient, however, to make the following stronger but simpler proposal instead:

(23) By Adj in 'XP looks Adj' we mean *f*, and we also mean [the *w*: things look *w* if *f*], where *f* is the property that we mean by Adj in 'XP is Adj'.

(That is, the complement of 'look' in 'XP looks Adj' consists of just Adj – it contains no aphonic material.) I need not make such a strong proposal, and can retreat to the weaker (21) if need be. But it will simplify the discussion in the remainder of this thesis to work with (23) instead.

It is not just for convenience, however, that I prefer to work with (23) rather than (21). I find it quite plausible that (23) is true.

First, I find it quite plausible that we can mean two distinct things by the one use of a linguistic item. It is a general fact about usage that we can use something to do more than one thing in the one use. I might use a button to explode a bomb and thereby explode a dam, thus using the button to explode two distinct things with the one use. I might use a match to light some paper and thereby light a bonfire, thus using the match to light two distinct things with the one use. I might use a noise to frighten a person and thereby frighten a crowd, thus using the noise to frighten two distinct things with the one use. There are some obvious differences, but no obvious relevant differences (as far as I can see), between using buttons to explode things, using matches to light things, using noises to frighten things, and using words to mean things. If there is no relevant difference, then we might just as well use Adj to mean *f*, and thereby to mean [the *w*: things look *w* if *f*], thus using Adj to mean two distinct things with the one use. I don't think that we can rule out this possibility, at least not without arguing for a relevant difference between the cases.

Second, the way we talk about our use of linguistic expressions suggests that we at least take ourselves to be able to mean two distinct things by the one utterance of a linguistic item. In an appropriate context I might utter (24) below to mean that the man on table six left without paying:

(24) Table six left without paying.[1]

It is very natural to describe this as follows: by 'Table six' I mean table six, and I also mean the man on table six (I mean the former and thereby mean the latter). Of course this natural description may be an incorrect description, but if it is incorrect then it is not obviously so. My point here is not that we do mean two distinct things by Adj in 'XP looks Adj', but that it is natural to think that we do, and not at all obvious that we don't.

Perhaps it is not possible for us to mean two distinct things by the one use of a linguistic item. If not, then it is a consequence of (21) that the complement of 'look' in 'XP looks Adj' is an expression distinct from Adj, and that the stronger (23) is false and retreat should be made to the weaker proposal (21). But I find it plausible that we can, and, in particular, that we use Adj in 'XP looks Adj' to mean two distinct things – both *f* and [the *w*: things look *w* if *f*]. Since at this stage I see no reason to think that we cannot, and that the complement of 'look' must contain aphonic material, I'm inclined to think that (23) is true.

4.6 Inexplicit speech

It will be convenient to think of (23) (and (21)) as claiming that our use of Adj in 'XP looks Adj' is a specific instance of a more general phenomenon that I shall call *inexplicit speech*.

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[1] This is a variant of an example due to Nunberg (1995). His example is 'The ham sandwich has left without paying.'

According to (23), we use Adj in 'XP looks Adj' to mean [the *w*: things look if *f*]. So there are constituents of that which we mean by Adj which we do not explicitly mention or make reference to when we use Adj.[2] So we are not fully explicit about what we mean by Adj – we speak *inexplicitly*. We could make more explicit what we mean by Adj in 'XP looks Adj' by uttering 'the way things look if Adj' instead, and we could make more explicit what we mean by 'XP looks Adj' by uttering 'XP looks the way things look if Adj'.

I take it that inexplicit speech is a general and very common phenomenon. Consider again the example in (24) above. A speaker might use 'Table six' in (24) to mean THE MAN ON TABLE SIX, and were she to do so she would be speaking inexplicitly. To be more explicit about what she means, she could use 'The man on table six' instead of 'Table six', and 'The man on table six left without paying' instead of 'Table six left without paying'.[3] Examples can be multiplied. A speaker might use 'The Russian' in (25a) below to mean THE RUSSIAN JUDGE, 'bottle' in (25b) to mean PUT INTO A BOTTLE, 'Everyone' in (25c) to mean EVERYONE WHO WAS INVITED, 'belt' in (25d) to mean PUT ON A BELT, and 'hungry' in (25e) to mean THE HUNGRY BOY.

(25)　a.　The Russian voted for the German.
　　　b.　John bottled some water.
　　　c.　Everyone came to the party.
　　　d.　I've misbelted myself.
　　　e.　I gave the last piece of cake to hungry.[4]

Just as the proposal (23) is stronger than it needs to be, so too these claims are stronger than they need to be. It might be that it is not by 'Table six' in (24) above that a speaker means THE MAN ON TABLE SIX, but rather by a more complex expression that has the same surface form as 'Table six' but contains aphonic material – call it 'Table six'$^+$. Then it is false that by 'Table six' she means THE MAN ON TABLE SIX – rather, it is by 'Table six'$^+$ that she means THE MAN ON TABLE SIX. Similarly, it might be that a speaker uses an expression 'The Russian'$^+$ in (25a) (and not 'The Russian') to mean THE RUSSIAN JUDGE, that she uses an expression 'bottle'$^+$ in (25b) (and not 'bottle') to mean PUT INTO A BOTTLE, that she uses an expression 'Everyone'$^+$ in (25c) (and not 'Everyone') to mean EVERYONE WHO WAS INVITED, that she uses an expression 'belt'$^+$ in (25d) (and not 'belt') to mean PUT ON A BELT, and that she uses an expression 'hungry'$^+$ in (25e) (and not 'hungry') to mean THE HUNGRY BOY. The claims that I made above can all be replaced by weaker claims that allow for the presence of aphonic material in the sentences in (25), just as the proposal (23) above can be replaced by the weaker proposal (21) to allow for the presence of aphonic material in the complement of 'look' in 'XP looks Adj'.

Aphonics or not, these uses of the sentences (25), and our uses of 'XP looks Adj', are still all instances of inexplicit speech, as I am using the term. If a speaker uses 'Table six'$^+$ to mean THE MAN ON TABLE SIX then she has not been fully explicit and hence spoken inexplicitly, even if there is sufficient aphonic material in 'Table six'$^+$ for there to be a one-to-one correspondence between the constituents of 'Table six'$^+$ and the constituents of THE MAN ON TABLE SIX. The issue here is not whether the speaker has used an expression inexplicitly to mean THE MAN ON TABLE SIX, but which expression it is that she has used inexplicitly – 'Table six', or 'Table six'$^+$. So too, if it is by some expression Adj$^+$ in 'XP looks Adj', and

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[2]　These are sometimes called *unarticulated constituents*. See, for example, Perry (1986, p. 206) and Crimmins (1992, p. 16).

[3]　She might not say that the man on table six left without paying, but that is what she means.

[4]　Note that in the case of (27b), if the speaker were to utter the more explicit 'put into bottles' in place of 'bottle' her utterance might be difficult to interpret for stylistic reasons, but with suitable transformation she could produce a more explicit utterance that is easier to interpret. Similarly for (27d).

not Adj, that we mean [the *w*: things look *w* if *f*], then our use of 'XP looks Adj' still counts as inexplicit.

If it is 'Table six' that she uses inexplicitly in (24), then we have here an example in which the one expression is used to mean two distinct things – the speaker uses 'Table six' to mean both TABLE SIX (that which we mean by 'table six' in sentences such as 'Table six needs wiping down'), and THE MAN ON TABLE SIX. So too with the examples in (25) – each is a case in which the one expression is used to mean two distinct things. By 'The Russian' in (25a) the speaker means both THE RUSSIAN (what we mean by 'the Russian' in sentences such as 'The Russian skater was very good') and THE RUSSIAN JUDGE. By 'bottle' in (25b) the speaker means both BOTTLE (what we mean by 'bottle' in sentences such as 'The bottle is full of beer') and PUT INTO A BOTTLE. By 'Everyone' in (25c) the speaker means both EVERYONE (what we mean by 'everyone' in sentences such as 'Mary loves everyone') and EVERYONE WHO WAS INVITED. By 'belt' in (25d) the speaker means both BELT (what we mean by 'belt' in sentences such as 'I bought a new belt') and PUT ON ONE'S BELT. By 'hungry' in (25e) the speaker means both HUNGRY (what we mean by 'hungry' in sentences such as 'The boy was hungry') and THE HUNGRY BOY.

It is not surprising that we speak inexplicitly as often as we do – our interpretative abilities are so good that very often a speaker does not need to be fully explicit about what she means. In fact, in very many cases (perhaps all) it would be tedious for a speaker to be fully explicit.[5] Given that inexplicit speech is such a widespread phenomenon, it should not be surprising to find that our utterances of 'XP looks Adj' are inexplicit, and in particular that our utterances of Adj in 'XP looks Adj' are inexplicit. Of course, it is an interesting and difficult question how we manage to achieve this interpretation, but this is a separate issue.[6]

I finish this section by making three important remarks about inexplicit speech. First, the claim that I am making, that we speak inexplicitly when we utter 'XP looks Adj', should not be confused with a distinct claim that I am not making, that the sentences 'XP looks Adj' are elliptical sentences. An elliptical sentence is one that is grammatically incomplete, such as the second sentence in (26) below:

(26)   John is not at home. Mary is.

A speaker can utter the elliptical sentence 'Mary is' inexplicitly to mean that Mary is at home, so an inexplicit utterance may be an utterance of an elliptical sentence. But it need not be, as each of the examples in (25) above show – in each of those cases, the sentence that is uttered inexplicitly is not itself elliptical (it is grammatically complete). It seems to me that sentences of the form 'XP looks Adj' are not grammatically incomplete and hence are not elliptical sentences. But whether or not they are is a matter for syntacticians to determine. What I am claiming is that we speak inexplicitly when we utter sentences of the form 'XP looks Adj', whether or not those sentences are elliptical sentences.[7]

Second, if, as I have proposed, we could make more explicit what we mean by 'XP looks Adj' by uttering 'XP looks the way things look if Adj' instead, it does not follow that a

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5   Neale (2004) makes something like this point. He says, "Our interpretive abilities are so good that we can reasonably expect our audiences to identify the thoughts we seek to express even when we use expressions whose linguistic meanings fall short of serving up the precise concepts involved in the thought" (p. 102).
6   See Neale (2004), p. 103.
7   Neale (2004, p. 99) is careful to draw this distinction. He says, "Although the linguistic expression 'the table' is not itself elliptical, one may use it elliptically in the sense that understanding an utterance of ['The table is large'] will typically involve recovering more than the lexical meanings of 'the', 'table', 'is' and 'large', and projecting these in some way in accordance with the way they are syntactically combined."

speaker who utters the former first formulates the latter and then chooses to remove or leave unpronounced some of its constituents. She may have no particular more explicit formulation in mind. This is very plausibly the case with utterances of 'John bottled some water' and 'I've misbelted myself', and so might be the case also with utterances of 'XP looks Adj'. Indeed there is some evidence that this is the case with at least some utterances of 'XP looks Adj'. Even competent users of 'Patch looks red' find it unnatural to paraphrase it as 'Patch looks the way things look if red'. This suggests that when they utter 'Patch looks red' they do not first formulate the sentence 'Patch looks the way things look if red', and then utter a reduced version instead. Nevertheless, I maintain that we could make more explicit what we mean by 'Patch looks red' by uttering 'Patch looks the way things look if red' instead.

Third, even if we could make more explicit what we mean by 'XP looks Adj' by uttering 'XP looks the way things look if Adj' instead, it might be that even then we would still be speaking inexplicitly. I might utter 'I am not ready' to mean that I am not ready to leave the party. I could make what I mean more explicit by uttering 'I am not ready to leave'. But if I were to do so I would still be speaking inexplicitly – I could be even more explicit by uttering 'I am not ready to leave the party'. It may be the case, then, that by uttering 'XP looks the way things look if Adj' in place of 'XP looks Adj' we would still be speaking inexplicitly. I think that is indeed the case, and I will consider this in detail in Chapter 6.

4.7 Alternative formulations

I have proposed that by Adj in 'XP looks Adj' we mean [the w: things look w if f], where f is the property that we mean by Adj in 'XP is Adj'. The precise wording does not much matter – I could equally well say that we mean any of the following:

(27)   a. [the w: things look w when f]
      b. [the w: things look w if they are f]
      c. [the w: f things look w]
      d. [the w: fs look w]

In terms of inexplicit speech, we could make more explicit what we mean by Adj in 'XP looks Adj' by uttering any of the following instead:

(28)   a. the way things look when Adj
      b. the way things look if they are Adj
      c. the way Adj things look
      d. the way Adjs look

I take it that these all (near enough) mean the same thing. Some speakers find instances of 'the way things look if Adj' ungrammatical, and prefer 'the way things look if they are Adj' instead (as in (28b)) – I will grant that. Some speakers find (28c) or (28d) more natural, but a problem for (28d) is that it yields an ungrammatical sentence for some values of Adj (for example: *'John looks the way talls look'). I find that 'XP looks the way things look if Adj' is the most convenient, and yields grammatical and sensible sentences for all values of Adj – that is the formulation that I shall use throughout.

4.8 Semantics

If the proposal (23) is right then the semantics of the 'XP looks Adj' construction can be given as follows:

(29)   If by XP a speaker means o, an object, and by Adj in 'XP is Adj' she means f, a property, then by 'XP looks Adj' she means [the w: things look w if f]$\exists e$(Look(e) &

Stimulus(e, o) & Way(e, w)). What she means is true iff there is a looking event whose stimulus is o and whose way is the way things look if f.

(30)   If by XP a speaker means [d x: $g(x)$], a quantifier over objects, and by Adj in 'XP is Adj' she means f, a property, then by 'XP looks Adj' she means either [d x: $g(x)$][the w: things look w if f]∃e(Look(e) & Stimulus(e, x) & Way(e, w)), or [the w: things look w if f][d x: $g(x)$]∃e(Look(e) & Stimulus(e, x) & Way(e, w)).

Note that in the second case, 'XP looks Adj' is structurally ambiguous, but because one of the quantifiers is a definite description the ambiguity makes no truth-conditional difference.

In this chapter I have proposed that by Adj in 'XP looks Adj' we mean [the w: things look w if f]. In the next chapter I explain in more detail what I mean by '[the w: things look w if f]'.

5 '[the *w*: things look *w* if *f*]'

In Chapter 4, I proposed that by Adj in 'XP looks Adj' we mean [the *w*: things look *w* if *f*], where *f* is the property that we mean by Adj in 'XP is Adj'. If by XP a speaker means *o*, an object, then by 'XP looks Adj' she means [the *w*: things look *w* if *f*]∃*e*(Look(*e*) & Stimulus(*e*, *o*) & Way(*e*, *w*)). What she means is true iff there is a looking event whose stimulus is *o* and whose way is *w*, where *w* is the way things look if *f*.

It is important to correctly understand what I mean in this account by the quantifier expression '[the *w*: things look *w* if *f*]', and my task in this chapter is to make this clear.

5.1 An incomplete account?

It might seem that this cannot be a complete account of what we mean by Adj in 'XP looks Adj'. According to this account, what a speaker means by 'Patch looks red' is true iff there is a looking event whose stimulus is Patch and whose way is *w*, where *w* is the way things look if red; since red things look all kinds of ways, depending on the conditions in which they are observed and on the person by whom they are being observed, there is no such thing as *the* way things look if red (simpliciter); so what a speaker means by 'Patch looks red' cannot be true (it is either false or lacks a truth value); but what a speaker means by 'Patch looks red' is sometimes true, so this cannot be a complete account. It seems that to correctly formulate an account of what we mean by Adj in 'XP looks Adj' we need to employ a predicate that is guaranteed to be true of exactly one way of looking in each case. Perhaps we should propose instead that by Adj we mean [the *w*: things look *w* in standard conditions to normal observers if *f*], or some other of the various suggestions that have been made in the literature (see Section 2.3.1 above).

I don't think that we should be swayed by these concerns, for two reasons. First, as well as using Adj on an occasion to mean [the *w*: things look *w* if *f*], it might be that we also use it to mean a more specific quantifier. In fact, in the next chapter I shall argue that we often do – we often use it to mean such things as [the *w*: things that are people look *w* if *f*], [the *w*: things that are John look *w* if *f*], [the *w*: things look *w* in circumstances C if *f*], and so on. In fact, we often use it to mean a quantifier that is specific enough that what we mean by 'XP looks Adj' is true. For none of these more specific quantifiers Q is it generically true that by Adj in 'XP looks Adj' we mean Q, so none of these is what Adj itself means in 'XP looks Adj'. But it is generically true that by Adj in 'XP looks Adj' we mean the more general quantifier [the *w*: things look *w* if *f*], and this is what Adj itself means in 'XP looks Adj'.

I do not mean to suggest by these remarks that our use of Adj in 'XP looks Adj' is particularly special. We might make the following similar remarks about our use of definite descriptions such as 'the chair'. It is generically true that by 'the chair' we mean the quantifier [the *x*: *x* is a chair], and this is what the expression itself means. But on any given occasion of use a speaker might also use 'the chair' to mean a more specific quantifier, such as [the *x*: *x* is a chair in R] (for some room R), or [the *x*: *x* is a chair that P was thinking of buying] (for some person P), or [the *x*: *x* is a chair that M bought his mum] (for some man M), and so on. For none of these more specific quantifiers Q is it generically true by 'the chair' we mean Q, so none of these is what 'the chair' itself means. But the quantifier [the *x*: *x* is a chair] is general enough for it to be generically true that by 'the chair' we mean it, and this is what 'the chair' itself means.

Second, in the quantifier expression '[the *w*: things look *w* if *f*]' I intend 'things look *w* if *f*' to be understood *generically*, as we might understand the sentences 'Cats are good pets', 'Turtles are long-lived', and 'Mary jogs in the park'.[1] A key fact about generic readings is that they are often readings on which the proposition expressed is a generalisation that is stronger than existential. There is a generic reading of 'Cats are good pets' on which for it to be true it is not sufficient that some cat is a good pet; there is a generic reading of 'Turtles are long-lived' on which for it to be true it is not sufficient that some turtles are long-lived; and there is a generic reading of 'Mary jogs in the park' on which for it to be true it is not sufficient that some events in which Mary jogs are events in which she jogs in the park. So too, there is a generic reading of 'things look *w* if *f*' on which for it to be true it is not sufficient that some events in which *f* things look some way are events in which they look *w*. It is in such a way that I intend 'things look *w* if *f*' to be read. The upshot of this is that there might not be as many ways that things look if *f* as the concern voiced above makes it sound. I believe, in fact, that there are not.

5.2 'Things look *w* if *f*'

As I said in the previous paragraph, I intend 'things look *w* if *f*' to be understood generically. Because of this, it is important to clarify what I mean by it, because often the one sentence has a variety of generic readings. A speaker might use the sentence in (1a) below, for example, to mean any of the three distinct propositions in (1b):

(1)　a. Mary jogs in the park.
　　　b. i.　Events in which Mary jogs are generally events in which Mary jogs in the park.
　　　　　ii.　Events in which Mary jogs are sometimes events in which Mary jogs in the park.
　　　　　iii. Events in which Mary does something in the park are generally events in which Mary jogs in the park.

To see this we need only generate appropriate contexts of use of (1a). The following three contexts should suffice:

(2)　a. A: Where does Mary jog?
　　　　　B: Mary jogs in the park.
　　　b. A: Mary never jogs in the park.
　　　　　B: That's not true, Mary jogs in the park.
　　　c. A: What does Mary do in the park?
　　　　　B: Mary jogs in the park.[2]

Following Lewis (1975), I take it that we use the adverbs 'generally' and 'sometimes' in the sentences in (1b) to quantify over *cases*: by 'generally' we mean 'in most cases', and by 'sometimes' we mean 'in some cases'. In these instances, the cases over which we quantify happen to be events, so that by 'generally' we mean 'in most events', and by 'sometimes' we mean 'in some events'. On this approach, we can formalise the sentences in (1b) as follows:

(3)　a. [most *e*: Mary jogs in *e*](Mary jogs in the park in *e*)
　　　b. [some *e*: Mary jogs in *e*](Mary jogs in the park in *e*)
　　　c. [most *e*: Mary does something in the park in *e*](Mary jogs in the park in *e*)

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[1]　These are sometimes called *characterising* sentences – see Krifka et. al. in their (1995) survey article.
[2]　The speaker might use emphasis to make clear which of (1b.i) and (1b.iii) she means. Emphasising 'park', as in 'Mary jogs in the *park*', makes the (1b.i) reading more salient; emphasising 'jogs', as in 'Mary *jogs* in the park', makes the (1b.iii) reading more salient.

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We can think of the determiners 'most' and 'some' in (3) as expressing relations between properties of events (or between *kinds* of events). (3a) is true iff the relation MOST obtains between properties p_1 and p_2, where p_1 is the property of being an event in which Mary jogs, and p_2 is the property of being an event in which Mary jogs in the park. (3b) is true iff a different relation obtains between p_1 and p_2 – this time the relation SOME. (3c) is true iff MOST obtains between a different pair of properties – this time p_3 and p_2, where p_3 is the property of being an event in which Mary does something in the park.[3,4]

In general, what a speaker means by (1a) is a proposition of the form in (4) below, where D is a determiner (that denotes a relation between properties of events), and Φ and Ψ are predicates (that denote properties of events).

(4) $[D\ e: \Phi(e)]\Psi(e).$[5]

What I mean by 'things look w if f' is a proposition of the same form. In particular, what I mean is a proposition of the form in (5a) below, more naturally read as in (5b) (where A is an adverb of quantification that corresponds to the determiner D):

(5)   a. $[D\ e: e$ is an event in which f things look some way](e is an event in which they look w).
       b. Events in which f things look some way are A events in which they look w.

The question now is, which determiner D (adverb A) do I mean?

I do not mean 'some' (or, correspondingly, 'sometimes'):

(6)   a. $[some\ e: f$ things look some way in e](f things look w in e).
       b. Events in which f things look some way are sometimes events in which they look w.

As discussed in Section 5.1, things that are red (for example) look such a variety of ways in different situations, depending upon the conditions in which they are observed and the observer by whom they are being observed, that plausibly for any way of looking w there is some event in which a red thing looks w. If (6) were the right way to understand 'things look w if f' then it would be a consequence of the account that I am developing that everything looks red; since things sometimes do not look red, (6) is not the right way to understand 'things look w if f'.

Nor do I mean 'every' (or 'always'):

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[3]   By 'MOST' and 'SOME', here, I mean the relations expressed by the determiners 'most' and 'some'.

[4]   I am not claiming that the sentence (1a) is ambiguous. I am claiming that it can be used by a speaker to mean a variety of propositions, not that the sentence itself means a variety of propositions. I don't think that the sentence means any of the three propositions in (1b) that the speaker might mean. In other words, I don't think that the speaker says any of these three things, even if he means them. It is not at all unusual for a speaker to mean something by a sentence that the sentence itself does not mean. For example, by 'There is no more beer' a speaker might mean that there is no more beer in the fridge, but that is not what the sentence means. For a discussion of this phenomenon, see Bach (1994) and Recanati (2002). So what does (1a) mean? My own view is that it means a kind of event; an event is of this kind just in case it is an event in which Mary jogs in the park. My reason for thinking this is that a commentator might use (1a) to describe an event. A speaker might use (1a) to assert that there is an event of this kind, or that the events in some domain are generally of this kind, but neither of these propositions is what the sentence itself means, because a speaker might use it to simply describe an event. But nothing in this thesis depends upon this particular view.

[5]   The standard view in the generics literature is that it is the same determiner that is understood in each case, often called 'gen', expressing the relation GEN – see Krifka et. al. (1995). I see no reason to think this.

(7)   a. [every e: f things look some way in e)](f things look w in e).
       b. Events in which f things look some way are always events in which they look w.

Again, since things that are red (for example) look such a variety of ways in different situations, depending upon the conditions in which they are observed and the observer by whom they are being observed, it is implausible that there is a way w such that every event in which a red thing looks some way is an event in which it looks w. If (7) were the right way to understand 'things look w if f' then it would be a consequence of the account that I am developing that nothing ever looks red; since things sometimes do look red, (7) is not the right way to understand 'things look w if f'.

Nor do I mean 'every' (or 'always'), but meaning to quantify over a class of events restricted to just those involving 'normal observers' and 'standard conditions':

(8)   a. [every e: f things look some way in standard conditions to normal observers in e)](f things look w in e).
       b. Events in which an f thing in standard conditions looks some way to a normal observer are always events in which it looks w to that observer.

I doubt that the terms 'standard conditions' and 'normal observers' can be understood in such a way that (8) yields a correct but non-trivial account. To make (8) correct, they would have to be understood as meaning whatever it takes to make (8) correct. But then (8) would amount to claiming that by 'things look w if f' we mean the following trivial truth (see my discussion of Jackson in Section 2.3.8):

(9)   Every event in which an f thing looks some way is an event in which it looks w, unless it is not.

Then it would be a consequence of the proposed theory that anything that looks any way at all looks f. For suppose that some object x looks some way w. Then it is true that x looks w, and also true that every event in which an f thing looks some way is an event in which it looks w, unless it is not. So if (8) were the right way to understand 'things look w if f' then we would have that x looks f, and thus that any object that looks any way looks f; since this is not the case, (8) is not the right way to understand 'things look w if f'.

There is an additional problem with (8). Even if it can be made to work for colour and shape properties, it is difficult to see how it can be made to work for all properties (remember: our working hypothesis is that 'look' is used with just a single meaning). People who are American look all sorts of ways, even in standard conditions and to normal observers (if there are such things), so it is implausible that there is a way w such that every event in which an American in standard conditions looks some way to normal observers is an event in which he looks w to that observer in that situation.

The following might be a better account:

(10)   Events in which an f thing looks some way are generally events in which it looks w.

But this account has problematic consequences. Suppose that w is a way that dishonest people generally look. Then dishonest people generally look w, where w is a way such that dishonest people generally look w. If (10) were the right way to understand 'things look w if f' then it would be a consequence of the proposal that dishonest people generally look dishonest; but they do not (they have learned to disguise their dishonesty), so (10) is not the right way to understand 'things look w if f'.

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The determiners that I have considered so far, 'every' and 'most', both denote extensional relations between properties of events: if it is true that [every e: $\Phi(e)$]$\Psi(e)$, then it is true that [every e: $\Phi'(e)$]$\Psi'(e)$, where Φ' and Ψ' are any predicates that are coextensional with Φ and Ψ respectively; similarly, if it is true that [most e: $\Phi(e)$]$\Psi(e)$, then it is true that [most e: $\Phi'(e)$]$\Psi'(e)$. Any account that employs an extensional determiner will predict that 'things look w if f' is extensional in 'f', so that 'f' can be replaced by an expression coextensional with 'f' without affecting the truth conditions of the sentence. Thus, it will predict that 'XP looks Adj' is extensional in Adj. But there is reason to think that 'XP looks Adj' is not extensional in Adj. If it were, then the following would be valid arguments:

(11) a. John looks American.
          The American people are the intelligent people.
          Therefore, John looks intelligent.
      b. Patch looks red.
          The red things are the round things.
          Therefore, Patch looks round.

But these are not valid arguments: it is possible that John looks American, that the American people happen to be the intelligent people, but that John does not look intelligent (he prides himself on disguising his intelligence); and it is possible that Patch looks red, that the red things happen to be the round things, but that Patch does not look round (it is a square white thing in red light).

For the proposal to be correct, I think that we must understand 'things look w if f' as being non-extensional in 'f'. That is, we must understand it in such a way that the following is not a valid inference: things look w if f, the f-s are the g-s, therefore things look w if g. By doing so, we can explain the fact that the 'XP looks Adj' construction is not extensional in Adj: it is not extensional in Adj because 'things look w if f' is not extensional in 'f'. So we need a reading of 'things look w if f' on which the determiner D in (5a) denotes a non-extensional relation between properties of events.

Is there such a reading of 'things look w if f'? I believe that there is. There is a reading of (12a) below on which it expresses a true proposition, even though most turtles die at a very young age. This is not a reading on which it is extensional in 'turtle'. For suppose that 'turtle' happens to be coextensive with 'animal with a hard shell'. If the intended reading of (12a) were extensional in 'turtle', then on the same reading (12b) would be true as well. But on this reading (12b) is not true, so the intended reading of (12a) is not extensional in 'turtle'. This reading is, however, one on which 'turtle' can be replaced by any other expression for the same property without affecting the truth-value of (12a). I suggest that on this reading, (12a) expresses a certain non-extensional relation between the property of being a turtle and the property of being long-lived – some kind of law-like connection between the two properties.

(12) a. Turtles are long-lived.
      b. Animals with a hard shell are long-lived.

I propose that there is a similar reading of 'things look w if f' – a reading on which it expresses a non-extensional relation between the property of being an event in which f things look some way, and the property of being an event in which f things look w – some kind of law-like connection between the two. It is on such a reading that I intend 'things look w if f' to be understood.

If this account is right, then for there to be such a property as looking f, there needs to be a property of being f, and there needs to be a way w such that things look w if f. So if there is no such property as being non-self-identical, then there is no such property as looking non-self-identical. And if there is no way w such that things look w if self-identical (which

plausibly there is not, since everything is self-identical), then there is no such property as looking self-identical (but for a different reason). But there can be such a property as looking f, even if nothing actually is f – all that is needed is for there to be such a property as being f; this property need not have any actual instances. Thus, there might such a thing as looking supersaturated red, even if nothing actually is supersaturated red.

In the next several sections I develop some results about the metaphysics of ways, one of which will lead to a slight modification of the proposal that I have made.

5.3 Generality of ways

Suppose that $Patch_1$ and $Patch_2$ both look red, but look slightly different shades of red. Since they look different shades of red, there are distinct ways of looking w_1 and w_2, such that $Patch_1$ looks w_1 in respect of colour but $Patch_2$ does not, and $Patch_2$ looks w_2 in respect of colour but $Patch_1$ does not. Here, w_1 and w_2 are ways of a certain degree of specificity. At this level of specificity, it is implausible that there is a way w such that things look w if red: it is implausible, for example, that things look w_1 if red, or that things look w_2 if red: each is too specific a way. For a way w to be such that things look w if red, w needs to be a way that is less specific (more general) than both w_1 and w_2. I propose that there are ways of such generality, and that there is a way w more general than both w_1 and w_2 such that things look w if red.

I take it that ways vary in their degree of generality. We ought not be surprised to find that they do – ways are properties (of events), and properties vary in their degree of generality. If this triangle is equilateral and that triangle is scalene, then this triangle has a shape property that that triangle does not (the property of being equilateral), and that triangle has a shape property that this triangle does not (the property of being scalene). But there is more general shape property that they both have – the property of being triangular. Similarly, if this wine is light red and that wine is dark red, then this wine has a colour property that that wine does not (the property of being light red), and that wine has a colour property that this wine does not (the property of being dark red). But there is a more general colour property that they both have – the property of being red.

$Patch_1$ (above) looks w_1 in respect of colour. But since it looks red, and since w_1 is too specific a way for it to be true that things look w_1 if red, there is a way w_1', more general than and hence distinct from w_1, such that $Patch_1$ looks w_1', where things look w_1' if red. Thus, $Patch_1$ looks at least two distinct ways in respect of colour. Similarly, $Patch_2$ (above) looks w_2 in respect of colour. But since it looks red, and since w_2 is too specific a way for it to be true that things look w_2 if red, there is a way w_2', more general than and hence distinct from w_2, such that $Patch_2$ looks w_2', where things look w_2' if red. Thus, $Patch_2$ looks at least two distinct ways in respect of colour.

$Patch_1$ looks both w_1 and w_1' in respect of colour. Thus, the definite description 'the way $Patch_1$ looks in respect of colour' can be used to refer to either of the ways w_1 or w_1', and the predicate 'how $Patch_1$ looks in respect of colour' is true of both w_1 and w_1'. Similarly, $Patch_2$ looks both w_2 and w_2' in respect of colour, so the definite description 'the way $Patch_2$ looks in respect of colour can be used to refer to either w_2 or w_2', and the predicate 'how $Patch_2$ looks in respect of colour' is true of both w_2 and w_2'. For all that has been said so far, w_1' and w_2' need not be identical. But if they are, then there is a sense in which the way (how) $Patch_1$ looks in respect of colour is different from the way (how) $Patch_2$ looks in respect of colour, but also a sense in which it is the same. In a context in which the difference between how $Patch_1$ and $Patch_2$ look in respect of colour matters, 'the way $Patch_1$ looks in respect of colour' and 'the way $Patch_2$ looks in respect of colour' might be used to refer to the more specific w_1 and w_2. In a context in which the difference is best ignored, they might be used to refer to the more general w_1' and w_2'.

5.4 A relation between ways

Considerations like those of the previous section show that if Patch looks any way in respect of colour, then Patch looks more than one way in respect of colour. For suppose that Patch looks red. Patch will also look a more specific shade of red. Thus, there is a way w_C ('C' for colour) such that Patch looks w_C, where w_C is too specific for it to be true that things look w_C if red. But since Patch looks red, and w_C is too specific for it to be true that things look w_C if red, there is a way w_C', more general than and hence distinct from w_C, such that Patch looks w_C' and things look w_C' if red. So Patch looks both w_C and w_C' in respect of colour, where w_C and w_C' are distinct ways.

Similar considerations show that if Patch looks any way in respect of shape, then Patch looks more than one way in respect of shape. For suppose that Patch looks rectangular. Patch will also look a more specific rectangular shape. Thus, there is a way w_S ('S' for shape) such that Patch looks w_S, where w_S is too specific for it to be true that things look w_S if rectangular. But since Patch looks rectangular, and since w_S is too specific for it to be true that things look w_S if rectangular, there is a way w_S', more general and hence distinct from w_S, such that Patch looks w_S' and things look w_S' if rectangular. So Patch looks both w_S and w_S' in respect of shape, where w_S and w_S' are distinct ways.

Although w_C' and w_S' are both more general than w_C and w_S, there is a relation which obtains between w_C' and w_C and between w_S' and w_S, which does not obtain between w_C' and w_S, nor between w_S' and w_C. w_C' is what I shall call a *generalisation* of w_C (equivalently, it stands in the generalisation relation to w_C); conversely, w_C is what I shall call a *specification* of w_C' (equivalently, it stands in the specification relation to w_C'). w_C' is a generalisation w_C, but is not a generalisation of w_S; w_S' is a generalisation of w_S, but it not a generalisation of w_C. If we abbreviate 'is a generalisation of' by '$\geq$' and 'is a specification of' by '$\leq$', then it is true that $w_C \leq w_C'$ and that $w_S \leq w_S'$, but false that $w_C \leq w_S'$ or that $w_S \leq w_C'$.

The generalisation relation that I am discussing here is one that can obtain between any two properties, not just ways (recall that ways are properties of a certain kind). Being red is more general than both being light red and being dark red, and is in fact a generalisation of each. Being triangular is more general than both being equilateral and being scalene, and is in fact a generalisation of each. But being red is not a generalisation of being equilateral, or of being scalene, and being triangular is not a generalisation of being light red, or of being dark red. I take it that we have the following result:

(13)   Property p' is a generalisation of property p (p is a specification of p') if and only if: necessarily, for all x, if x has p then x has p'.[6]

In the particular case of ways of looking we have:

(14)   Way of looking w' is a generalisation of way of looking w (w is a specification of w') if and only if: necessarily, for all looking events e, if e has w then e has w'. In other words, if and only if: necessarily, for all x, if x looks w then x looks w'.

One way to see that w_C' above is not a generalisation of w_S is to note that it is possible for an object to look w_S without looking w_C' – then by (14) we have that w_C' is not a generalisation of w_S. Similarly, since it is possible for an object to look w_C without looking w_S', we have by (14) that w_S' is not a generalisation of w_C.

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[6]   Instead of saying that property p' is a generalisation of property p, some would say that p is a *determinate* property of the *determinable* property p'. I take it that we are talking about the same relation.

The generalisation relation is an order relation. That is, it is reflexive, antisymmetric, and transitive. *Proof.* Suppose that p_1, p_2, and p_3 are properties. Necessarily, for all x, if x has p_1 then x has p_1; so $p_1 \geq p_1$ and the generalisation relation is reflexive. Next, suppose that $p_1 \geq p_2$ and $p_2 \geq p_1$. Since $p_1 \geq p_2$ we have that necessarily, for all x, if x has p_1 then x has p_2; since $p_2 \geq p_1$ we have that necessarily, for all x, if x has p_2 then x has p_1; so we have that necessarily, for all x, x has p_1 iff x has p_2; so $p_1 = p_2$, and the generalisation relation is antisymmetric.[7] Finally, suppose that $p_1 \geq p_2$ and $p_2 \geq p_3$. Since $p_1 \geq p_2$ we have that necessarily, for all x, if x has p_1 then x has p_2; since $p_2 \geq p_3$ we have that necessarily, for all x, if x has p_2 then x has p_3; so we have that necessarily, for all x, if x has p_1 then x has p_3; so we have that $p_1 \geq p_3$, and the generalisation relation is transitive. ∎ Since the generalisation relation is an order relation we have the following result, to which I shall appeal in the following sections:

(15)   The generalisation relation induces an order on any given set of ways of looking.

5.5 Three sets of ways of looking

I argued in the previous section that if Patch looks any way in respect of colour, then Patch looks at least two distinct ways in respect of colour. Consider, then, the set of ways that Patch looks in respect of colour. By (15), the generalisation relation induces an order on this set. I propose that this order has a bottom member; that is, a way w_0 such that for any way w in the order, $w_0 \leq w$. This bottom member is, I propose, what we naturally call the *maximally specific* way that Patch looks in respect of colour. Every way that Patch looks in respect of colour is a generalisation of this maximally specific way. I also argued in the previous section that if Patch looks any way in respect of shape, then Patch looks at least two ways in respect of shape. Similarly, the generalisation relation induces an order on the set of ways that Patch looks in respect of shape. I propose that this order has a bottom member – the maximally specific way that Patch looks in respect of shape. Every way that Patch looks in respect of shape is a generalisation of this maximally specific way. In general:

(16)   For all objects x and respects r: the generalisation relation induces an order on the set of ways that x looks in respect of r. This order has a bottom member, the maximally specific way that x looks in respect of r. Any way that x looks in respect of r is a generalisation of this maximally specific way.

There is a similar result for the set of ways that an object looks, in no particular respect. Suppose that John and Mary both look American but still look slightly different (John, for example, looks male whereas Mary does not). Since they look slightly different, there are distinct ways w_1 and w_2 such that John looks w_1 but Mary does not, and Mary looks w_2 but John does not. w_1 and w_2 are each too specific for it to be true that things look w_1 if American, or that things look w_2 if American. So there is a way w_1', more general than and hence distinct from w_1, such that John looks w_1' and things look w_1' if American. And there is a way w_2' (not necessarily identical to w_1'), more general than and hence distinct from w_2, such that Mary looks w_2 and things look w_2 if American. The generalisation relation induces an order on the set of ways that John looks (simpliciter). I propose that this order has a bottom element, the maximally specific way that John looks. Every way that John looks is a generalisation of this maximally specific way. In general:

(17)   For all objects x: the generalisation relation induces an order on the set of ways that x looks. This order has a bottom member, the maximally specific way that x looks. Any way that x looks is a generalisation of this maximally specific way.

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[7]   Here I am assuming that necessarily coextensive properties are identical.

There is a similar result for the set of ways that things look if *f*, where *f* is a property. There is a way *w* such that things look *w* if red, but which is too specific for it to be true that things look *w* if coloured. Now, things that look red also look coloured, or:

(18)   Necessarily, for all *x*, if *x* looks red then *x* looks coloured.

Since *w* is too specific for it to be true that things look *w* if coloured, there is a way *w'*, more general than and hence distinct from *w*, such that things look *w'* if red, and things look *w'* if coloured. So there are at least two distinct ways that things look if red – *w* and *w'*. The generalisation relation induces an order on the set of ways that things look if red. This order has a bottom element, the maximally specific way that things look if red. Every way that things look if red is a generalisation of this maximally specific way. In general:

(19)   For all properties *f*: the generalisation relation induces an order on the set of ways that things look if *f*. This order has a bottom member, the maximally specific way that things look if *f*. Any way that things look if *f* is a generalisation of this maximally specific way.

5.6 Extending the generalisation relation

If *f* and *g* are properties, then looking *f* and looking *g* are properties as well. According to (13) we have:

(20)   Looking *f* is a generalisation of looking *g* if and only if: necessarily, for all *x*, if *x* has the property of looking *g*, then *x* has the property of looking *f*; that is: necessarily, for all *x*, if *x* looks *g* then *x* looks *f*.

From this result and (18) above we have that looking coloured is a generalisation of looking red.

Why is (18) above true? One thought is that it is because *being* coloured is a generalisation of *being* red – necessarily, for all *x*, if *x* is red then *x* is coloured. But that cannot be the right explanation. It might have been the case that, even though being coloured is a generalisation of being red, conditions were such that red things looked radically different from other coloured things, so much so that they did not look coloured (so that (18) is false). Changing the example might help illustrate this. Being American is a generalisation of being native American since, necessarily, for all *x*, if *x* is native American then *x* is American.[8] It might have been the case, however, consistent with this, that people who look native American do not look American (it might even actually be the case). Then looking American would not be a generalisation of looking native American, because it would be possible to look native American without looking American. If the reason why (18) is true is that being coloured is a generalisation of being red, then in the counterfactual situation, where being American is a generalisation of being native American, it ought to be the case that looking American is a generalisation of looking native American, so that people who look native American also look American. Since that is not the case in the counterfactual situation, the reason why (18) is true is not that being coloured is a generalisation of being red.

I propose that (18) is true because the maximally specific way that things look if coloured is a generalisation of the maximally specific way that things look if red. In general:

(21)   For all properties *f* and *g*: looking *g* is a generalisation of looking *f* (conversely: looking *f* is a specification of looking *g*) iff the maximally specific way that things look if *g* is a generalisation of the maximally specific way that things look if *f*.

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8   We might also say, 'John is American – specifically, he is native American'.

The maximally specific way that things look if red, call it w_{red}, and the maximally specific way that things look if rectangular, call it w_{rec}, are both more specific than the maximally specific way that things look if coloured, call it w_{col}. Conversely, w_{col} is more general than both w_{red} and w_{rec}. But whereas w_{col} is a generalisation of w_{red} it is not a generalisation of w_{rec}. It is possible for an object to look w_{rec} and yet not look w_{col} (it is often the case with rectangular plates made of colourless glass). So we have the following:

(22)   a. $w_{\text{red}} \leq w_{\text{col}}$ (looking coloured is a generalisation of looking red)
         b.   not $w_{\text{rec}} \leq w_{\text{col}}$ (looking coloured is not a generalisation of looking rectangular)

Note that we have the following result:

(23)   If looking g is a generalisation of looking f, then every way that things look if g is a way that things look if f.

Proof. Let w be a way that things look if g. Let w' be the maximally specific way that things look if g. Since w' is the bottom member of the set of ways that things look if g, $w' \leq w$. Let w_0 be the maximally specific way that things look if f. Since looking g is a generalisation of looking f, w' is a generalisation of w_0, so $w_0 \leq w'$. Since $w_0 \leq w'$ and $w' \leq w$, we have that $w_0 \leq w$. Since things look w_0 if f, and $w_0 \leq w$, we also have that things look w if f, so w is a way that things look if f. ∎

5.7 The maximally specific way

I have proposed that by 'red' in 'Patch looks red' we mean [the w: things look w if red]. But I have also argued that there are at least two distinct ways that things look if red: one specific enough that it is not a way that things look if coloured, and one general enough that it is a way that things look if coloured. If that is right, then there is no such thing as *the* way things look if red, simpliciter – there are some specific such ways, and there are some more general such ways.

This raises an important question: when I say that by 'red' in 'looks red' we mean [the w: things look w if red], am I allowing that we use it to definitely describe a way that things look if red of *any* degree of generality? Or do we use it to definitely describe only ways of a particular degree of generality? In the former case, say that our use of 'red' in 'looks red' is *generality flexible*. In this section I shall argue that our use of 'red' in 'looks red' is not generality flexible. I shall propose that we use it to definitely describe just the *maximally specific* way that things look if red.

Suppose that Patch looks coloured. Then, according to the account that I am developing, Patch looks w, where w is a way that things look if coloured. According to result (23) above, if f is any property such that looking coloured is a generalisation of looking f, then any way that things look if coloured is a way that things look if f. Plausibly, looking coloured is a generalisation of looking red. If so, then any way that things look if coloured is a way that things look if red. Since w is a way that things look if coloured, w is also a way that things look if red. So Patch looks w, where w is a way that things look if red. Now, if our use of 'red' in 'looks red' were generality flexible, then there would be a reading of 'red' in 'Patch looks red' on which it is used to definitely describe w. So there would be a reading of 'Patch looks red' on which it is true that Patch looks red (in the circumstances described). So, if our use of 'red' in 'looks red' were generality flexible, then whenever Patch looks coloured there would be a reading of 'looks red' on which it follows that Patch looks red. Now suppose that Patch looks green. According to result (20) above, if h is any property such that looking h is a generalisation of looking green, then anything that looks green also looks h. Plausibly,

looking coloured is a generalisation of looking green. If so, then anything that looks green also looks coloured. Since Patch looks green, Patch also looks coloured. But then, by the argument just given, if our use of 'red' in 'looks red' were generality flexible, there would be a reading of 'Patch looks red' on which it is true. So, if our use of 'red' in 'looks red' were generality flexible, then whenever Patch looks green there would be a reading of 'looks red' on which it follows that Patch looks red.

I have just argued that if our use of 'red' in 'looks red' were generality flexible, then whenever Patch looks coloured there would be a reading of 'looks red' on which it follows that Patch looks red, and whenever Patch looks green there would be a reading of 'looks red' on which it also follows that Patch looks red. I take it that there are no such readings, and that our use of 'red' in 'looks red' is not generality flexible.

We can abstract away from the particular object, Patch, and the particular adjective, 'red', in these arguments. Suppose that an object, o, looks h, and that looking h is a generalisation of looking f. Since Patch looks h, Patch looks w, where w is a way that things look if h (according to the account that I am developing). According to result (23) above, since looking h is a generalisation of looking f, any way that things look if h is a way that things look if f. Since w is a way things look if h, w is also a way things look if f. So Patch looks w, where w is a way that things look if f. Now, if our use of 'f' in 'looks f' were generality flexible, then there would be a reading of 'f' in 'Patch looks f' on which it is used to describe w. So there would be a reading of 'Patch looks f' on which it is true that Patch looks f (in the circumstances described). In other words, if our use of 'f' in 'looks f' were generality flexible, then whenever Patch looks h there would be a reading of 'looks f' on which it follows that Patch looks f. Now suppose that Patch also looks g, where looking h is a generalisation of looking g. According to result (20) above, since looking h is a generalisation of looking g, anything that looks g also looks h. Since Patch looks g, Patch also looks h. But then, by the argument just given, if our use of 'f' in 'looks f' were generality flexible, there would be a reading of 'looks f' on which it follows that Patch looks f. So if our use of 'f' in 'looks f' were generality flexible, then whenever Patch looks g there would be a reading of 'looks f' on which it follows that Patch looks f. Thus, if our use of 'f' in 'looks f' were generality flexible, then we would have the following results:

(24)   a.   For all properties h and f: if looking h is a generalisation of looking f, then whenever an object looks h there is a reading of 'looks f' on which it follows that it looks f.
        b.   For all properties f and g: if there is a property h such that looking h is a generalisation of both looking f and looking g, then whenever an object looks g there is a reading of 'looks f' on which it follows that it looks f.

Now, just as it is plausible that looking coloured is a generalisation of both looking red and looking green, it is plausible that looking human is a generalisation of both looking American and looking Japanese.[9] If so, then if our use of Adj in 'looks Adj' were generality flexible then we would have the following consequences:

(25)   a.   Whenever a person looks human there is a reading of 'looks American' on which it follows that he looks American.
        b.   Whenever a person looks Japanese there is a reading of 'looks American' on which it follows that he looks American.

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[9]   Quick argument: it makes sense to utter, 'John looks human – specifically, he looks American'. This suggests that looking American (as applied to humans, rather than, say, cars) is a specification of looking human (conversely, that looking human is a generalisation of looking American). Similarly, it makes sense to utter, 'John looks human – specifically, he looks Japanese.

I take it that the implausibility of either of these two consequences gives us good reason to think that our use of Adj in 'looks Adj' is not generality flexible.

I shall take it that our use of Adj in 'looks Adj' is not generality flexible. It is not hard to see that we would get similarly problematic consequences if there were a reading of 'red' in 'looks red' on which it is used to describe any but the most specific way that things look if red, and, more generally, if there were a reading of Adj in 'looks Adj' on which it is used to describe any but the most specific way things look if f. Accordingly, I propose the following:

(26)   By Adj in 'XP looks Adj' we mean [the maximally specific w: things look w if f].

If this is right, then we do not have the problematic consequences that we would have if our use of Adj were generality flexible. First, if Patch looks coloured, it does not follow that Patch looks red (on any reading of 'looks red'). If Patch looks coloured, then Patch looks the maximally specific way things look if coloured. It might be that Patch also looks the maximally specific way things look if red, in which case Patch looks red as well. But it might be instead that Patch looks the maximally specific way things look if green, in which case it does not look the maximally specific way things look if red, and hence does not look red. Second, if Patch looks green, it does not follow that Patch looks red (on any reading of 'looks red'). If Patch looks green, then Patch looks the maximally specific way things look if green, so Patch does not look the maximally specific way things look if red, so Patch does not look red. Similar considerations show that if John looks human, or if John looks Japanese, then it does not follow that John looks American (on any reading of 'looks American').

From here on I will typically drop the 'maximally specific' qualification, but will add it whenever I need to emphasise that this is the proposal.

I finish this chapter with two final points. First, if (26) is correct, then we can explain why anything that looks red also looks coloured. We have the following general result:

(27)   For all objects x and properties f and g: if x looks f and looking g is a generalisation of looking f then x looks g.

Proof. If x looks f then x looks w, where w is the maximally specific way things look if f. Let w' be the maximally specific way things look if g. Since looking g is a generalisation of looking f, $w \leq w'$. Since x looks w and $w \leq w'$, we have that x looks w'. So x looks the maximally specific way things look if g, so x looks g. ∎

Since looking coloured is a generalisation of looking red, (27) explains why anything that looks red also looks coloured. So too, since looking human is a generalisation of looking American, it explains why anyone who looks American also looks human.

Second, if (26) is correct, then we also have the following general result:

(28)   For all objects x and y and properties f: if x and y both look f then there is a way w such that x and y both look w.

Proof. If x and y both look f, then x and y both look w, where w is the maximally specific way things look if f. ∎

So, if John and Mary both look American then there is a way w such that John and Mary both look w (namely, the maximally specific way that things look if American), even if there are ways w_1 and w_2 at a higher level of specificity such that John looks w_1 but Mary does not, and Mary looks w_2 but John does not.

I hope that I have now clarified what I mean by '[the *w*: things look *w* if *f*]', at least enough to make more plausible the claim that by Adj in 'XP looks Adj' we mean [the *w*: things look *w* if *f*]. In the next chapter, I shall argue that by Adj we often also mean a more specific quantifier.

6 Implicit Domain Restriction

In Chapter 4, I proposed that we use Adj in 'XP looks Adj' to definitely describe a way of looking – by Adj we mean [the *w*: things look *w* if *f*] (where *f* is the property that we mean by Adj in 'XP is Adj'). In Chapter 5, I made this more explicit: by Adj we mean [the *w*: events in which *f* things look some way are events in which they look *w*] – we use Adj to definitely describe a way of looking, in part by quantifying over events in which *f* things look some way.

If this is right, then we would expect to find that sometimes we use Adj in 'XP looks Adj' (perhaps often) to quantify, not over absolutely every event in which *f* things look some way, but over some restricted domain of such events, without necessarily making that restriction explicit.

This is the kind of thing that we often do. A speaker might use the quantifier expression 'every seat' to quantify, not over a domain consisting of absolutely every seat in the universe, but over a restricted domain, perhaps consisting of every seat on her train, or of every seat in her lecture theatre, and so on. These would be cases in which she means to quantify over a restricted domain of seats, without making that explicit – she implicitly restricts the domain of seats over which she means to quantify. She need not make this restriction implicitly – she could make it explicitly instead. Rather than use 'every seat' to quantify over the seats on her train, she could use the more qualified quantifier expression 'every seat on this train' – then she would be explicitly restricting the domain of seats over which she means to quantify.

If we use Adj in 'XP looks Adj' in part to quantify over looking events, as I have proposed, then we would expect to find that we also sometimes use Adj to implicitly quantify over a restricted domain of looking events, in a way that we can make explicit. I believe that in fact we do, and that this can account for various intuitions about our use of 'XP looks Adj'. In this chapter I look at various examples of this, and make explicit the domain restrictions that we typically make only implicitly.

Even if on a particular occasion what a speaker means by 'every seat' is [every *x*: *x* is a seat on T] (for some train T), or [every *x*: *x* is a seat in L] (for some lecture theatre L), neither of these is what the expression 'every seat' itself means – it is not *generically* true that we use 'every seat' to mean either of these two quantifiers. But it is generically true that we use it to mean [every *x*: *x* is a seat], and this is what 'every seat' itself means. So too, even if on a particular occasion what a speaker means by 'American' in 'John looks American' is [the *w*: things look *w* if American people], or [the *w*: things look *w* if American cars], or [the *w*: things look *w* if American on twin Earth] (as I shall argue), none of these is what the adjective 'American' itself means in 'John looks American' – it simply means [the *w*: things look *w* if American]. So I will not, in this chapter, be retracting my claim that by Adj in 'XP looks Adj' we mean [the *w*: things look *w* if *f*]. On the contrary, my aim is to further defend this claim, by showing that it is compatible with various intuitions about our use of 'XP looks Adj' that it might not seem to be.

6.1 Example 1

By 'tired' in 'John looks tired' we typically do not mean [the *w*: things in general look *w* if tired] – that is, we do not mean to quantify over events in which any tired thing looks some way. It is implausible that there is any way *w* such that things in general look *w* if tired (is there a way *w* such that people, cattle, mosquitos, and so on, all look if tired?), and even if

there were it would likely be a more general way than the way that we mean by 'tired' in 'John looks tired'. I suggest that we typically mean to quantify just over events in which tired people look some way, so that what we mean by 'tired' in 'John looks tired' is, more explicitly, [the *w*: things that are people look *w* if tired], or, more naturally:

(1)   [the *w*: people look *w* if tired]

(1) makes more explicit the domain restriction that we make only implicitly in our typical uses of 'tired' in 'John looks tired'.

6.2 Example 2

By 'tired' in 'John looks tired' a speaker might mean to quantify over events involving a specific class of people, rather than events involving people in general. Suppose a speaker knows that John is from New Zealand and that the way New Zealanders look if tired is a way *w*, quite different from the way the rest of us look if tired. Seeing John looking *w*, she might use 'John looks tired' to mean something that is true, even though John does not look the way people in general look if tired. I suggest that she would be using 'tired' to quantify just over events involving people from New Zealand – events in which things that are people from New Zealand look some way are events in which they look *w*. So what she means by 'tired' in 'John looks tired' in this case is, more explicitly:

(2)   [the *w*: New Zealanders look *w* if tired]

6.3 Example 3

By 'tired' in 'John looks tired' a speaker might mean to quantify just over events in which John looks some way – to mean [the *w*: John looks *w* if tired]. Suppose that John is different: when he is tired he looks the way the rest of us look when we are wide-awake, and when he is wide-awake he looks the way the rest of us look when we are tired. Suppose that, in the circumstances, John looks the way the rest of us look when we are tired. In these circumstances, does John look tired, or does he look wide-awake? I find that people are initially inclined to judge that he looks tired, but on reflection judge that in one sense he looks tired, but that in another sense he looks wide-awake.

I suggest the following explanation. By 'tired' in 'John looks tired' and by 'wide-awake' in 'John looks wide-awake' a speaker can be interpreted as meaning either the pair of quantifiers in (3a) below, or the pair in (3b):

(3)   a. i. [the *w*: things that are people look *w* if tired]
            ii. [the *w*: things that are people look *w* if wide-awake]
       b. i. [the *w*: things that are John look *w* if tired]
            ii. [the *w*: things that are John look *w* if wide-awake]

If she is interpreted as meaning the quantifiers in (3a), then John looks tired in the described circumstances, because John does look the way people (in general) look if tired; John does not look wide-awake, because John does not look the way people (in general) look if wide-awake. If, on the other hand, she is interpreted as meaning the quantifiers in (3b), then John looks wide-awake, because John does look the way that John looks if wide-awake; John does not look tired, because John does not look the way that John looks if tired. It may be more natural to interpret her as meaning the quantifiers in (3a) rather than (3b), but the latter interpretation is a possible interpretation, and I suggest that it is this possibility that explains the two inclinations that I find people to have.

If what I have said in these first three sections is right, then we use 'tired' in 'John looks tired' sometimes to mean [the w: people look w if tired], sometimes to mean [the w: New Zealanders look w if tired], and sometimes to mean [the w: John looks w if tired]. It would be wrong, I think, to claim that the adjective 'tired' itself means any of these three things in 'John looks tired', because it is not generically true that we use it to mean any of these three things. Another way to see this is as follows. Suppose that 'tired' in 'John looks tired' means [the w: people look w if tired] (for example); then a speaker could not be interpreted as using it to mean [the w: John looks w if tired] – the meaning of 'tired' in this sentence would impose too tight a constraint on what the speaker can be interpreted as using it to mean; since a speaker can be interpreted as using it to mean [the w: John looks w if tired], 'tired' in 'John looks tired' does not mean [the w: people look w if tired].[1] The right thing to say, I propose, is that the adjective 'tired' in 'John looks tired' means [the w: things look w if tired], but sometimes what a speaker means by the adjective is a more specific quantifier.

6.4 Example 4

By 'American' in 'The car looks American' we typically do not mean to quantify over events in which American people look some way – any way that people look if American is not the kind of way that cars look (I shall assume). What we typically mean, I suggest, is to quantify over events in which American cars look some way, so that what we mean by 'American' in this case is the quantifier in (4a) below. Similarly, by 'American' in 'The restaurant looks American' we typically do not mean to quantify over events in which American people or cars look some way, but over events in which American restaurants look some way, so that what we mean by 'American' in this case is the quantifier in (4b).

(4)   a. [the w: cars look w if American]
       b. [the w: restaurants look w if American]

This raises a question.[2] If what we typically mean by 'American' in 'John looks American' is [the w: people look w if American], and what we typically mean by 'American' in 'The car looks American' is [the w: cars look w if American], then what we typically mean by 'American' in the first is distinct from what we typically mean by 'American' in the second. This suggests that typical utterances of 'John and his car look American' ought to be *zeugmatic*, requiring that 'American' be understood in two different ways in the one use (just as 'The chair and questions were hard' is zeugmatic, requiring that 'hard' be understood in two different ways in the one use).[3] But 'John and his car look American' is not zeugmatic, or at least not as obviously so as 'The chair and questions were hard'. How can the theory that I am developing account for this?

I suggest in the following way. Even though we use 'American' to mean two distinct things in 'John looks American' and 'The car looks American', we also use it to mean the same thing in each case – AMERICAN (the property of being American, the property that we mean by 'American' in 'John is American'). In 'John looks American' we use it to mean AMERICAN, and thereby to mean [the w: people look w if American]; in 'The car looks American' we also use it to mean AMERICAN, but thereby to mean [the w: cars look w if American]. That is not so in the case of 'hard' in 'The chair was hard' and 'The questions were hard' – it is not the case that we use 'hard' in both cases to mean m, for some m, thereby to mean 'firm' in the first case and 'difficult' in the second. I propose that this is why 'John and his car look American' is not zeugmatic, whereas 'The chair and questions were hard' is.

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[1] I am assuming in this argument that 'tired' is not multiply ambiguous in 'John looks tired'.
[2] Thanks to Sarah Moss.
[3] On zeugma, see Quine (1960), p. 130.

The explanation that I am offering here works more generally. What we typically mean by 'big' in 'The ant is big' is BIG FOR AN ANT, whereas what we typically mean by 'big' in 'The elephant is big' is BIG FOR AN ELEPHANT. But in both cases we also use 'big' to mean the same thing – BIG (which, for definiteness, we can take to be a relation between objects and classes of objects). In the first case we use it to mean BIG, and thereby to mean BIG FOR AN ANT; in the second case we use it to mean BIG, and thereby to mean BIG FOR AN ELEPHANT. This is why the sentence 'The ant and elephant are big' is not zeugmatic, or at least not as obviously so as 'The chair and questions were hard'.

Here are two more sentences that are not zeugmatic, as we might expect them to be, and for which I would offer an explanation along the same lines:

(5)   a.   John loves his mum, and Jim does too.
       b.   John and Jim live in the biggest house in town.

There is a reading of (5a) on which it means something like 'John loves John's mum, and Jim loves Jim's mum (its so-called 'bound' reading). To get this reading, we must understand 'loves his mum' as being used to mean two distinct properties – 'loves John's mum', or the property $\lambda x(x$ loves John's mum), and 'loves Jim's mum', or the property $\lambda x(x$ loves Jim's mum). Despite this, (5a) is not zeugmatic. It is not zeugmatic, I suggest, because in both cases 'loves his mum' is understood as being used to mean the property $\lambda x(x$ loves x's mum) – it is understood as being used to mean $\lambda x(x$ loves x's mum) and thereby to mean $\lambda x(x$ loves John's mum), and also thereby to mean $\lambda x(x$ loves John's mum).[4] Similarly, there is a reading of (5b) on which it means something like 'John lives in the biggest house in John's town, and Jim lives in the biggest house in Jim's town (its bound reading). To get this reading, we must understand 'town' as being used to mean two distinct things – 'John's town' and 'Jim's town'. Despite this, (5b) is not zeugmatic. It is not zeugmatic, I suggest, because in both cases 'town' is understood as being used to mean TOWN (which, for definiteness, we can take to be the property of being a town) – it is understood as being used to mean TOWN and thereby to mean JOHN'S TOWN, and also thereby to mean JIM'S TOWN.

6.5 Example 5

Suppose that on twin-Earth red things look (in respect of colour) the way green things look on Earth, and that green things look (in respect of colour) the way red things look on Earth. Suppose that on Earth Patch looks red, and that on twin-Earth twin-Patch looks the way that Patch looks on Earth. Does twin-Patch look red on twin-Earth?

I find that people tend to judge 'yes' at first – twin-Patch looks red on twin-Earth, because it looks the way that Patch looks, and Patch looks red. But when reminded that on twin-Earth it is green things that look that way, not red things, they tend to become ambivalent.

I suggest that these observations can be explained as follows. When I ask whether or not twin-Patch looks red, it is most natural to interpret that what I mean by 'red' here is [the w: red things look w on Earth]. But when I remind my audience about the situation on twin-Earth I make more salient an interpretation on which I mean [the w: red things look w on twin-Earth]. Then there are two salient interpretations of what I mean by 'red':

(6)   a.   [the w: things look w on Earth if red]
       b.   [the w: things look w on twin-Earth if red]

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[4]   This example is closely related to a phenomenon often called *sloppy identity*. See Heim and Kratzer (1998), pp. 254-8.

If what I mean by 'red' is (6a), then twin-Patch does look red, because it does look the way things on Earth look if red; if what I mean by 'red' is (6b), then twin-Patch does not look red, because it does not look the way things on twin-Earth look if red. I suggest that the reason why people judge, at first, that twin-Patch looks red is that (6a) is the most natural interpretation of what I mean by 'red' in my question, and that the reason why they become ambivalent when reminded how things look in twin-Earth is that the reminder makes the (6b) interpretation more salient. Their ambivalence is due, I suggest, to the availability of the two interpretations of what I mean by 'red' in my question.

6.6 Example 6

In Section 5.5, I argued that there are many ways that things look if red, varying in their degree of generality, and that what we mean by 'red' in 'Patch looks red' is [the maximally specific w: things look w if red]. These are all ways that red things look in respect of colour, and not, say, in respect of shape – there is (plausibly) no way in respect of shape that things look if red. Nor do we intend to use 'red' to single out anything other than a way things look in respect of colour if red. So what we mean by 'red' in 'Patch looks red' is the more specific quantifier in (7a) below. We do not mean [the maximally specific w: things look w in respect of shape if red] (there may well be no such way). In the case of 'round' in 'Patch looks round', on the other hand, we do not mean [the maximally specific w: things look w if round in respect of colour] (there may well be no such way). What we mean, rather, is the more specific quantifier in (7b).

(7)   a. [the maximally specific w: things look w in respect of colour if red]
       b. [the maximally specific w: things look w in respect of shape if round]

6.7 Example 7

Suppose that Patch is white, but illuminated by red light in such a way that it looks red. I find that many people have the intuition that in these circumstances there is a sense in which Patch looks white.

I suggest the following explanation. Whether or not Patch counts as looking white depends upon the domain of events over which we mean to quantify with our use of 'white' in 'Patch looks white'. There is a sense in which Patch looks white, because Patch looks the way Patch looks in these circumstances if white. There is also a sense in which Patch does not look white, because Patch does not look the way things look in general if white.

Note that no matter what colour Patch actually is, say c, and no matter what colour the lighting conditions make Patch look, there is always a sense in which Patch looks c – it looks c in the sense that it looks the way Patch looks in these conditions if c. Thus, if Patch is green but illuminated in such a way that it looks purple, then there is a sense in which it looks green. It seems to me that that is the right result.

Note also that it is more natural, in the initial case, not to say that Patch looks white, but that Patch looks *to be* white. I will offer an explanation of this fact when I consider the 'looks to be' construction in Section 8.8.

6.8 Example 8

It is not hard to imagine a context in which a speaker means something true by 'The stick looks 6cm long'. Plausibly, there is no way w such that things look w if 6cm long, simpliciter, because how an object that is 6cm long looks to an observer S depends upon its location relative to S, and there are no general truths about how such objects are located relative to observers. I suggest that in this case the speaker is implicitly restricting her quantification to

events in which objects that are 6cm are located in a certain position relative to the observer – most likely the position in which the stick is located relative to her. What she means by '6cm long', more explicitly, is something like the following:

(8)   [the w: things 6cm long look w from here when they are there]

6.9 Example 9

Suppose that John is even more peculiar than described in Section 6.3 above. How he looks when he is tired depends upon which day of the week it is: on Mondays when he is tired he looks red, on Tuesdays when he is tired he looks orange, on Wednesdays when he is tired he looks yellow, on Thursdays when he is tired he looks green, and on Fridays when he is tired he looks blue (on weekends when he is tired he looks the way the rest of us look when we are tired). Knowing this, if a speaker sees John on Wednesday looking yellow, she might use 'John looks tired' to mean something that is true, even though there is no way that John looks if tired, simpliciter (we can grant). I suggest that what the speaker means by 'tired' in 'John looks tired' in this case is [the w: things that are John look w on Wednesdays if tired], or, more naturally:

(9)   [the w: John looks w on Wednesdays if tired]

6.10 Example 10

People sometimes argue about the rim of a cup when viewed at an angle. Does it look round? Does it look elliptical? Some say that it looks round, not elliptical. Some say that it looks elliptical, not round. Some say that it looks round if you take into account its depth, but it looks elliptical if you ignore its depth.

I propose the following explanation of these judgments. According to what I have proposed:

(10)   a. By 'The rim looks round' we mean that the rim looks the way things look if round.
       b. By 'The rim looks elliptical' we mean that the rim looks the way things look if elliptical.

Of the various ways of looking w such that the rim looks w, at most two are relevant here. One is the way the rim looks if you take into account its depth; call this w_{3D}. The other is the way the rim looks if you ignore its depth; call this w_{2D}. Similarly, of the various ways of interpreting the domain of events over which a speaker means to quantify in using 'round' in (10a) and 'elliptical' (10b), at most two are relevant. On the first interpretation, she means to quantify over events in which 3-dimensional objects look some way; on the second interpretation she means to quantify over events in which 2-dimensional objects (viewed square-on) look some way.

Given that there are at most two relevant ways of looking and at most two relevant domains of quantification, there are at most four propositions relevant to the truth of (10a) and (10b). They are listed below, with what I take to be their truth values:

(11)   a. i.   3D things look w_{3D} if round. (True)
          ii. 3D things look w_{2D} if round. (False)
          iii. 2D things look w_{3D} if round. (False)
          iv. 2D things look w_{2D} if round. (False)
       b. i.   3D things look w_{3D} if elliptical. (False)
          ii. 3D things look w_{2D} if elliptical. (False)
          iii. 2D things look w_{3D} if elliptical. (False)
          iv. 2D things look w_{2D} if elliptical. (True)

Given this, what a speaker means by 'The rim looks round' is true iff the rim looks w_{3D} and she means to quantify over 3D objects, and what she means by 'The rim looks elliptical' is true iff the rim looks w_{2D} and she means to quantify over 2D objects. Anyone who is ignoring w_{3D} will judge that the rim looks elliptical, not round. Anyone who is ignoring w_{2D} will judge that the rim looks round, not elliptical. Anyone else will judge that in one sense the rim looks round (a sense in which the quantification is over 3D objects, and the relevant way is w_{3D}), and in another sense the rim looks elliptical (a sense in which the quantification is over 2D objects, and the relevant way is w_{2D}).

6.11 Example 11

I described cases above in which a speaker uses 'John looks tired' to mean that John looks the way John looks if tired. It would be more natural to say that in these cases she means:

(12)   John looks the way he looks if tired.

The sentence in (12) is structurally ambiguous, between a reading on which 'he' is coreferential with 'John' (and hence on which it refers to that to which 'John' refers) and a reading on which it is bound by 'John' (and hence on which it does not refer, but functions as a bound variable). The difference is between which of the following two properties John is said to have:

(13)   a. $\lambda x(x$ looks the way John looks if tired)
       b. $\lambda x(x$ looks the way x looks if tired)

The ambiguity in (12) can be made evident by embedding it in certain contexts, such as in (14a) below. The sentence in (14a) is ambiguous between the readings in (14b) and (14c), which are not truth-conditionally equivalent. This truth-conditional ambiguity in (14a) comes about because of the non-truth-conditional ambiguity in 'John looks the way he looks if tired'. If 'he' is understood as coreferential with 'John', then what (14a) means is true iff (14b) is true; if 'he' is understood as bound by 'John', then what (14a) means is true iff (14c) is true instead. The (truth-conditional) ambiguity in (14a) makes evident the (non-truth-conditional) ambiguity in (12).

(14)   a. John looks the way he looks if tired, and so does James.
       b. John looks the way John looks if tired, and James looks the way John looks if tired.
       c. John looks the way John looks if tired, and James looks the way James looks if tired.

This raises a question: if 'John looks tired' can be used to mean that John looks the way he looks if tired, and if 'John looks the way he looks if tired' is ambiguous between a coreferential reading (on which 'he' is coreferential with 'John') and a bound reading (on which 'he' is bound by 'John'), then is 'John looks tired' ambiguous in the same way?

Just as the ambiguity in (14a) above makes evident the ambiguity in (12), perhaps there is an ambiguity in (16) below which makes evident an ambiguity in 'John looks tired'.

(15)   John looks tired, and so does James.

If 'John looks tired' has a coreferential reading – that is, a reading on which it means that John looks the way he looks if tired, where 'he' is coreferential with 'John' – then there ought to be a reading of (15) on which what it means is true iff (16a) below is true. If 'John looks tired' has a bound reading – that is, a reading on which it means that John looks the way he

looks if tired, where 'he' is bound by 'John' – then there ought to be a reading of (15) on which what it means is true iff (16b) below is true.

(16)   a. John looks the way John looks if tired, and James looks the way John looks if tired.
        b. John looks the way John looks if tired, and James looks the way James looks if tired.

We do, I think, get the bound reading of (16b). Suppose, as in Section 6.3 above, that John looks a peculiar way when he is tired – he looks the way the rest of us look when we are wide-awake. Suppose also that James looks a peculiar way when he is tired – he looks the way the rest of us look when we are embarrassed. Suppose that, in the circumstances, John looks the way the rest of us look when we are wide-awake, and James looks the way the rest of us look when we are embarrassed. Then I think there is a reading of (15) on which it is true, which I propose is the bound reading (16b).

It is perhaps clearer that we can get a bound reading of sentences such as 'John looks tired' by considering cases in which the subject of the sentence is not a name such as 'John' but a quantifier expression such as 'everyone': 'Everyone looks tired'. Suppose that each of the five people in a room looks a peculiar way if tired: the first looks red, the second looks orange, the third looks yellow, the fourth looks green, and the fifth looks blue. Suppose that in the circumstances, the first person looks red, the second looks orange, the third looks yellow, the fourth looks green, and the fifth looks blue. Then the sentence in (17) below can be used, it seems to me, to mean something that in the circumstances is true:

(17)   Everyone looks tired.

What is meant cannot be the proposition given by (18a) below. I suggest, rather, that it is the proposition given by (18b), where 'he' is bound by the quantifier expression 'Everyone'.

(18)   a. Everyone looks the way people look if tired.
        b. Everyone looks the way he looks if tired.

Does (15) have a coreferential reading – that is, a reading on which it means the proposition in (16a)? Continue to suppose that when John is tired he looks the way the rest of us look when we are wide-wake, and that when James is tired he looks the way the rest of us look when we are embarrassed. Suppose that in the circumstances both John and James looks the way the rest of us look when we are wide-awake. If there is a coreferential reading of (15), then there ought to be a reading of (15) on which what it means is true in these circumstances. It's not clear to me whether or not there is.

If there is only the bound reading of (15), then 'John looks tired' is like the sentence in (19a) below. We can make more explicit what a speaker means by (19a) using the sentence in (19b), but only if 'himself' in (19b) is understood to be bound by 'John'. (19b) is truth-conditionally ambiguous, according to whether 'himself' is understood as bound by 'John', or as coreferential with 'John'. This ambiguity is made evident by an ambiguity in (19c) – on one reading it means that James wants himself to win; on another reading it means that James wants John to win. There is no such ambiguity in (19d), however, so (19a) is not ambiguous in the way that (19b) is. Thus, if we use (19b) to make more explicit what a speaker means by (19a), then we must specify that 'himself' in (19b) is to be understood as bound by 'John'.

(19)   a. John wants to win.
        b. John wants himself to win.
        c. John wants himself to win, and James does too.
        d. John wants to win, and James does too.

If there is both a bound and coreferential reading of (15), then it is like the sentence in (20a) below instead. We can make more explicit what a speaker means by (20a) using the sentence in (20b). (20b) is ambiguous, between a reading on which 'him' is bound by 'John', and a reading on which it is coreferential with 'John'. This ambiguity is made evident by a truth-conditional ambiguity in (20c) – on one reading it means that James believes it would be wrong for James to cheat; on another reading it means that James believes it would be wrong for John to cheat. (20d) is ambiguous in the same way, which shows that (20a) is ambiguous in the same way that (20b) is. Thus, when we use (20b) to make more explicit what is meant by (20a), we might need to specify that 'him' in (20b) is to be understood as bound by 'John', or to specify that it is to be understood as coreferential with 'John', according to which of the two readings of (20a) is meant by the speaker.

(20) a. John believes it would be wrong to cheat.
      b. John believes it would be wrong for him to cheat.
      c. John believes it would be wrong for him to cheat, and James does too.
      d. John believes it would be wrong to cheat, and James does too.

6.12 Summary

In Chapter 5, I proposed that by Adj in 'XP looks Adj' we mean [the w: things look w if f], where f is the property that we mean by Adj in 'XP is Adj'. In this chapter, I have proposed that in many particular cases what a speaker means by Adj in 'XP looks Adj' is a more specific quantifier, such as the following:

(21) a. [the w: things that are people look w if f]
      b. [the w: things that are New Zealand people look w if f]
      c. [the w: things that are John look w if f]
      d. [the w: things look w on Earth if f]
      e. [the w: things look w in these circumstances if f]
      f. [the w: things that are John look w on Mondays if f]

In each of these cases it is true to say that by Adj in 'XP looks Adj' the speaker means [the w: things look w if f]. But this does not make fully explicit what she means – in each case she also means a more specific quantifier; she means to quantify over a more restricted domain of events.

This is a general phenomenon, not peculiar to our use of Adj in 'XP looks Adj'. At the start of this chapter I drew parallels with our use of 'every seat' – what a speaker means by 'every seat' on a given occasion is often not just [every x: x is a seat] but a more specific quantifier: [every x: x is a seat on T] (for some train T), [every x: x is a seat in L] (for some lecture theatre L), and so on. This is so whenever the speaker means to quantify over a domain more restricted than absolutely every seat.

We can also find many examples of implicit domain restriction in our use of what we might call *adjectives of quantification*. Plausibly, (22a) below can be paraphrased as (22b). Following Lewis (1975), we might take it that we use the adverb 'normally' in (22b) to quantify over cases, so that what we mean by (22b) can more explicitly be given by (22c). If this is right, then we can understand ourselves as using the adjective 'normal' in (22a) to quantify over cases as well, just as we use the adverb 'normally' in (22b), so that what we mean by (22a) can also be given by (22c).

(22) a. It is normal to have two legs.
      b. Things normally have two legs.
      b. Cases in which a thing has some number of legs are normally cases in which it has two legs.

If this is right, then we would expect to find that we sometimes (perhaps often) use (22a) to implicitly quantify over a restricted domain of cases, in a way that we might make more explicit. Indeed we do. By (22a) a speaker typically does not mean that it is normal for things in general to have two legs – as far as things in general are concerned it is probably not normal to have legs at all, let alone two of them. What a speaker typically means is that it is normal for some particular class of things to have two legs – perhaps humans, in which case what she means by (22a) can be given by (23) below. So she uses (22a) to quantify over an implicitly restricted domain, and this restriction is made more explicit by (23).[5]

(23)   It is normal for humans to have two legs.

Examples can be multiplied. It is easy to think of contexts in which what a speaker means by the (i) sentences below can be made more explicit by the (ii) sentences. In each case, the speaker uses the (i) sentence to quantify over an implicitly restricted domain of cases, in a way that the (ii) sentence makes explicit.

(24)   a. i.   It is rare to have blonde hair.
           ii. It is rare for Japanese to have blonde hair.
        b. i.   It is unusual to have breakfast so late.
           ii. It is unusual for John to have breakfast so late.
        c. i.   It is common to be automatic.
           ii. It is common for cars in the US to be automatic.
        d. i.   It is common to go to church.
           ii. It is common to go to church on Sundays.
        e. i.   It is normal to be nervous.
           ii. It is normal to be nervous in these circumstances.
        f. i.   John knows where to buy milk.
           ii. John knows where he can buy milk.

Throughout this chapter, I have been talking about what we as a community typically mean by Adj in various sentences of the form 'XP looks Adj'. But, of course, on any occasion of use a speaker need not mean what the community typically means. A speaker might use 'American' in 'John looks American', for example, not to mean the way people look if American, but to mean the way cars look if American: if John is dressed as an American car at a come-as-a-car fancy dress party, then the speaker might utter this sentence to mean something that is true, even if John himself looks Japanese. So too, by 'American' in 'John looks American' a speaker might mean the way restaurants look if American: if he is dressed as an American diner at a come-as-a-restaurant fancy dress party, then a speaker might utter the sentence to mean something that is true, even if John himself looks Japanese.

This concludes my discussion of the implicit domain restriction that often accompanies our use of the 'XP looks Adj' construction. In the next chapter, I consider in more detail what we mean when we add modifiers of the form 'to S'.

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[5]   Again, (23) does not give what the sentence (22a) means, only what the speaker means by it on this occasion.

7 Modifiers of the Form 'to S'

In Chapter 3, I proposed that in VA sentences we use 'look' to mean a kind of event, that we use the subject of 'look' to specify a stimulus of the underlying looking event, by referring to or quantifying over objects, and that we use the complement of 'look' to specify a way of the underlying looking event, by referring to or quantifying over ways of looking. Thus, if by XP a speaker means o, an object, then by 'XP looks Adj' she means the proposition in (1a) below (where f is the property that we mean by Adj in 'XP is Adj'). I also proposed that when we include preposition phrases headed by 'to' we do so to specify an experiencer of the underlying looking event, by referring to or quantifying over subjects. Thus, if by S a speaker means s, a subject, then by 'XP looks Adj to S' she means the proposition in (1b).

(1) a. [the w: things look w if f]∃e(Look(e) & Stimulus(e, o) and Way(e, w))
     b. [the w: things look w if f]∃e(Look(e) & Stimulus(e, o) and Way(e, w) & Experiencer(e, s))

In this chapter, I shall argue that we sometimes use preposition phrases headed by 'to' to do something other than specify an experiencer of the underlying looking event. Because of this, there is a structural ambiguity in VA sentences that contain such modifiers, the recognition of which is important in accounting for certain intuitions that might otherwise be a problem for the account of VA sentences that I am developing.

I shall continue to focus on VA sentences of the form 'XP looks Adj', where Adj is an adjective. In this chapter I shall consider VA sentences obtained from these by the addition of modifiers of the form 'to S', where S is an expression that is used to mean s, a subject.[1] That is, I shall consider our use of sentences of the following four forms:

(2) a. XP looks Adj to S.
     b. XP looks to S Adj.
     c. XP to S looks Adj.
     d. To S XP looks Adj.[2]

I shall argue that because of the presence of 'to S' sentences of these forms are structurally ambiguous, between a reading on which they express the proposition in (1b) above, and a reading on which they express a second distinct proposition.

7.1 A structural ambiguity

I shall assume that in sentences of the forms in (2) we use 'to S' in adjunct rather than argument position. This is suggested by the following two facts: (a) that 'to S' is grammatically optional in these sentences, and (b) that we can be interpreted as meaning the same thing by these sentences, even though 'to S' is used in a variety of positions.

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[1] The subject s need not be a person – it could be any being that can be an experiencer of a looking event (it could be a non-human animal, for instance).

[2] Sentences of the form in (2b) tend to sound awkward: 'John looks to Mary American'. I suspect that there is nothing syntactically or semantically significant about this awkwardness, however, because sentences such as 'John looks to Mary {like a duck, more tired than Jack, as if he is lying}' are all judged perfectly acceptable.

Sentences that contain expressions in adjunct position can be structurally ambiguous.[3] A good illustration of this is the following sentence:

(3)   John saw a man with binoculars.

This sentence is structurally ambiguous, between a reading on which 'with binoculars' is adjoined to and modifies 'man', and a reading on which it is adjoined to and modifies 'saw a man'. We can represent the two readings as follows:

(4)   a. John saw a [[man] with binoculars].
       b. John [[saw a man] with binoculars].

If (3) is used with the structure in (4a), then what is meant is that John saw a man who had binoculars; if it is used with the structure in (4b), then what is meant is that John used binoculars to see a man. There is a truth conditional difference between what is meant in each case – it might be true that John saw a man who had binoculars, but false that he saw a man using binoculars, and vice-versa.

Note that although they would be unusual we can make perfect sense of the following sentences, each of which contains two occurrences of 'with binoculars':

(6)   a. John saw a man with binoculars with binoculars.
       b. John saw with binoculars a man with binoculars.
       c. John with binoculars saw a man with binoculars.
       d. With binoculars John saw a man with binoculars.

This can be explained on the assumption that 'with binoculars' can be understood as occurring in either of two positions within the structure of the sentence. In each case, one occurrence of 'with binoculars' can be understood as modifying 'man', and the other can be understood as modifying 'saw a [man with binoculars]'. Thus each sentence can be understood as having the structure represented in (7) below, and as meaning that John used binoculars to see a man who had binoculars.

(7)   John [[saw a [[man] with binoculars]] with binoculars].

I propose that sentences of the forms in (2) are structurally ambiguous in a similar way. (8a) below, for example, is ambiguous between the reading represented in (8b), on which 'to John' is adjoined to and modifies the VP 'looks red', and the reading represented in (8c), on which 'to John' is adjoined to and modifies the sentence 'Patch looks red':

(8)   a. Patch looks red to John.
       b. Patch [[looks red] to John].
       c. [[Patch looks red] to John].

A speaker who uses (8a) uses the VP 'looks red' as a predicate – one that is true of an individual x iff x looks red. If she uses 'to John' to modify this VP, as in (8b), then she uses the modified VP 'looks red to John', I propose, as a predicate – one that is true of an individual x iff John is an experiencer of x looking red. Thus, what she means by (8a) is the proposition in (9) below. What she means is true iff there is a looking event whose stimulus is Patch, whose way is the way things look if red, and whose experiencer is John.[4]

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[3]   See Carnie (2001) , pp. 49-51.
[4]   I am taking it here that the speaker uses (8a) particularly rather than generically.

(9)   [the *w*: things look *w* if red]∃*e*(Look(*e*) & Stimulus(*e*, Patch) & Way(*e*, *w*) &
       Experiencer(*e*, John)).

I shall call this the *VP-modifier* reading of (8a), and of sentences of the forms in (2). In
general, what a speaker means by a sentence of any of the forms in (2), on its VP-modifier
reading, is the proposition in (10) below. What she means is true iff there is a looking event
whose stimulus is *o*, whose way is the way things look if *f*, and whose experiencer is *s*.

(10)   [the *w*: things look *w* if *f*]∃*e*(Look(*e*) & Stimulus(*e*, *o*) & Way(*e*, *w*) & Experiencer(*e*,
       s)).

It will be convenient to paraphrase the VP-modifier reading of (8a) as (11a) below, and the
VP-modifier readings of sentences of the forms in (2) as (11b):

(11)   a. John experiences Patch looking red.
       b. S experiences XP looking Adj.[5]

I suggest that we typically use sentences of the forms in (2) on their VP-modifier readings
when describing cases of colour inversion:

(12)   Things that look red to Mr Normal look blue to Mr Invert, and things that look blue to
       Mr Normal look red to Mr Invert.

I take it that here we use 'to Mr Normal' and 'to Mr Invert' as VP-modifiers. What we mean
by (12) is that objects that Mr Normal experiences as looking red, Mr Invert experiences as
looking blue, and that objects that Mr Normal experiences as looking blue, Mr Invert
experiences as looking red.[6]

Now to the second reading of sentences of the forms in (2). A speaker who uses (8a) might
instead use 'to John' to modify the sentence 'Patch looks red', as in (8c). When she does, she
uses 'to John', I propose, to mean that John has a certain propositional attitude to the
proposition that she means by 'Patch looks red', which I shall take to be the attitude of belief.
Thus, what she means is the proposition in (13) below – what she means is true iff there is a
state of belief whose subject is John and whose content is that Patch looks red (that is, whose
content is that there is a looking event whose stimulus is Patch and whose way is the way
things look if red).

(13)   ∃*s*(Believe(*s*) & Subject(*s*, John) & Content(*s*, [the *w*: things look *w* if red]∃*e*(Look(*e*)
       & Stimulus(*e*, Patch) & Way(*e*, *w*))))

Here I am taking it that by 'believe' we mean a kind of state, and states of this kind I shall
call *belief* states. Belief states have at least two participants – a *subject* and a *content*: the
subject of the state is the person who has the belief, and the content of the state is the
proposition that is believed. What I am proposing, then, is that what we mean by (8a) on this

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[5] These are not perfect paraphrases. An appropriate way to disagree with a speaker who utters (11a) is
     to utter 'No, he does not', but this is not an appropriate way to disagree with a speaker who utters
     (8a). In the latter case, it would be appropriate to utter 'No, it does not' instead. This is like the
     relationship we have between 'It is possible that John will win' and 'John will possibly win'. These
     are rough but not perfect paraphrases of each other – an appropriate way to disagree with a speaker
     who utters the first is to utter 'No, it is not', but this is not an appropriate way to disagree with a
     speaker who utters the second.
[6] We might use 'to Mr Normal' and 'to Mr Invert' in (12) as sentence-modifiers, in the way about to
     be discussed, but I take it that when we are describing cases of colour inversion we use them as VP-
     modifiers.

reading is that a certain belief state obtains, and that we use 'to S' to specify the subject of that state.[7]

I shall call this the *sentence-modifier* reading of (8a), and of sentences of the forms in (2). In general, what a speaker means by a sentence of any of the forms in (2), on its sentence-modifier reading, is the proposition in (14) below. What she means is true iff there is a belief state whose subject is s and whose content is that o looks f (that is, whose content is that there is a looking event whose stimulus is o, and whose way is the way things look if f).

(14) $\exists s'(\text{Believe}(s') \,\&\, \text{Subject}(s', s) \,\&\, \text{Content}(s', [\text{the } w: \text{things look } w \text{ if } f]\exists e(\text{Look}(e) \,\&\, \text{Stimulus}(e, o) \,\&\, \text{Way}(e, w))))$

It will be convenient to paraphrase the sentence-modifier reading of (8a) as (15a) below, and the sentence-modifier readings of sentences of the forms in (2) as (15b):

(15) a. John believes that Patch looks red.
      b. S believes that XP looks Adj.[8]

I suggest that we typically use sentences of the forms in (2) on their sentence-modifier readings when expressing opinions about how things look, even if at the time we have no visual experience of those things. Suppose that Jack and Jill are discussing Mary, whom they met at a party the night before. In particular, they are discussing how she looks. Jack utters the following sentence:

(16) Mary looks Lithuanian to me.

We have no problem interpreting Jack to mean something that is true. When we do, we cannot be interpreting him as using 'to me' to modify the VP 'looks Lithuanian'. Since at the time of his utterance Jack was having no visual experience of Mary, he cannot be using 'to me' to specify that he was experiencing a state of Mary's looking Lithuanian. Perhaps he meant (16) to be interpreted generically, and meant that when he does experience Mary looking a certain way he experiences her looking Lithuanian. But we can add to the story that Jack and Jill only met Mary once, briefly, and know that they will never meet her again. Then it is implausible that when we interpret Jack's utterance of (16) as true we interpret it generically. I conclude that we do not interpret 'to me' as modifying the VP 'looks Lithuanian'. I propose instead that we interpret Jack as using 'to me' to modify the sentence 'Mary looks Lithuanian', to specify that he believes the proposition that he means by that sentence.

This claim is supported by the fact that upon hearing Jack's utterance we might respond by uttering:

(17) Well, you are wrong. She doesn't look Lithuanian.

It is difficult to make sense of this response if 'to me' is interpreted as modifying the VP 'looks Lithuanian' in the way suggested, but not if it is interpreted as modifying the sentence 'Mary looks Lithuanian' in the way suggested. This can be seen from the following two conversations:

(18) a. A: I experience Mary looking Lithuanian.
          B: #Well, you are wrong. She doesn't look Lithuanian.

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[7] As I shall discuss in footnote 9, there are reasons to think that the attitude in question here is not quite belief. Nevertheless, taking it to be belief will do no harm for our purposes.

[8] Again, these are not perfect paraphrases. See footnote 5.

b. A: I believe that Mary looks Lithuanian.
   B: Well, you are wrong. She doesn't look Lithuanian.

The sentence-modifier use of 'to S' that I am proposing here is not peculiar to 'look' sentences. We often use modifiers of the form 'to S' to modify sentences whose main verb is not 'look' or any other appearance verb, and plausibly do so to mean something like 'S believes that'. Here are some uses that I have heard:

(19) a. Friday is the best day of the week to me.
      b. To you he is just your little boy.
      c. To me this was my mother's German potato salad.
      d. To me it is going to rain.
      e. To people who live there Melbourne is the capital of Australia.
      f. Runners high to me resembles a perfect golf shot.
      g. To me it's just a pile of bricks.

Plausibly, what the speaker meant by (19a) is that she believes that Friday is the best day of the week, and that in each other case the speaker meant to be attributing beliefs. This is a general pattern of use, so we should not be surprised to find that we use 'to S' in the same way in VA sentences.[9]

Further support for the claim that there is this structural ambiguity in the sentences in (2) comes from the fact that we can make perfect sense of utterances of VA sentences that contain two modifiers of the form 'to S'. Suppose that Jack and Jill agree about which experience it is that John has when he looks at Patch, but disagree about how to correctly describe that experience. Then we might use the sentences in (20a) below to describe their situation, or perhaps more naturally the sentences in (20b):

(20) a. i. Patch looks pink to John to Jack.
          ii. Patch looks salmon to John to Jill.
      b. i. To Jack, Patch looks pink to John.
          ii. To Jill, Patch looks salmon to John.

In the case of (20a.i), we can interpret 'to John' as modifying the VP 'looks pink', and 'To Jack' as modifying the sentence 'Patch looks pink to John'. In the case of (20a.ii), we can interpret 'to John' as modifying the VP 'looks salmon', and 'To Jill' as modifying the sentence 'Patch looks salmon to John'. The structures of (20a.i) and (20a.ii) under these interpretations can be represented as follows:

(21) a. [Patch [[looks pink] to John]] to Jack.
      b. [Patch [[looks salmon] to John]] to Jill.[10]

Of course, instead of (20a.i) it might perhaps be clearer to use 'Jack believes that Patch looks pink to John', but the point is that we can make sense of (20a.i), and so too with (20a.ii).

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[9] If we do have such a pattern of use, then we ought to be able to report John's mistaken beliefs that Sydney is the capital of Australia and that $2 + 2 = 5$ by saying that Sydney is the capital of Australia to John, and that $2 + 2 = 5$ to John. But these reports sound slightly inappropriate. Furthermore, if I believe that Mary looks Lithuanian on the basis of testimony, then it would sound slightly inappropriate if I were to report that Mary looks Lithuanian to me. This suggests that perhaps belief is not quite the attitude that we use 'to S' to attribute. But I think that it does no harm to take it to be belief.

[10] I think that we can interpret them the other way as well: [Patch [[looks pink] to Jack]] to John, and [Patch [[looks salmon] to Jill] to John. But these are much less natural interpretations.

As a second example, suppose that Jack and Jill are arguing about our twin Earth example from Section 6.5: John on Earth is looking at Patch, and twin-John on twin-Earth is looking at twin-Patch; the maximally specific way that Patch looks to John in respect of colour is identical to the maximally specific way that twin-Patch looks to twin-John; Patch looks red to John; on twin-Earth, red things look green and green things look red; does twin-Patch look red to twin-John, or does it look green? Jack thinks that it looks red to twin-John; Jill disagrees – she thinks it looks green to twin-John. We might use the following sentences to describe their disagreement:

(22)   a. Twin-Patch looks red to twin-John to Jack.
       b. Twin-Patch looks green to twin-John to Jill.

One final piece of evidence in favour of the existence of a sentence-modifier reading comes from opacity effects. I have proposed that sentences of the forms in (2) are structurally ambiguous, between readings on which they express (near enough) the following two propositions:

(23)   a. *s* experiences *o* looking *f*.
       b. *s* believes that *o* looks *f*.

Plausibly, (23a) can only be interpreted as transparent in '*o*': if *s* experiences *o* looking *f*, and *o*' is identical to *o*, then it follows that *s* experiences *o*' looking *f*. If John experiences Hesperus looking bright, for example, then it follows that John experiences Phosphorus looking bright, because Hesperus is Phosphorus.[11]

(23b), on the other hand, can be interpreted as either transparent or opaque in '*o*': on the opaque reading, if *s* believes that *o* looks *f*, then it is not enough that *o*' is identical to *o* for it to follow that *s* believes that *o*' looks *f* (or at least intuitively that is so). It might be that John believes that Hesperus looks bright, but that John does not believe that Phosphorus looks bright, even though Hesperus is Phosphorus.

Sentences of the forms in (2) have a reading on which they are opaque in 'XP'. There is a reading of the sentence in (24a) below, for example, on which it means something that is true. This cannot be a reading on which it is transparent in 'Superman', because then it would entail the false proposition in (24b), and so could not be true. It is thus a reading on which it is opaque in 'Superman'.

(24)   a. Superman looks strong to Lois, but Clark Kent does not.
       b. Clark Kent looks strong to Lois but Clark Kent does not.

If sentences of the forms in (2) have only a VP-modifier reading, on which they express the proposition in (23a), then it is difficult to account for the reading of (24a) on which it is opaque in 'Superman'. But if they also have a sentence-modifier reading, on which they express the proposition in (23b), then we can account for this reading of (24a) – the opacity of (24a) in 'Superman' is due to the opacity of 'Superman' in 'Lois believes that Superman is strong'. This is evidence that sentences of the forms in (2) do not just have a VP-modifier reading, but have a sentence-modifier reading as well.

7.2 Three problematic intuitions

I have argued that sentences of the forms in (2) are structurally ambiguous, between the VP-modifier reading in (25a) below, on which 'to S' modifies the VP 'looks Adj', and the sentence-modifier reading in (25b), on which 'to S' modifies the sentence 'XP looks Adj':

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[11] This can be contested. See the examples in Saul (1997).

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(25) a. XP [[looks Adj] to S].
     b. [[XP looks Adj] to S].

If XP is used to mean *o*, an object, Adj is used to mean *f*, a property, and S is used to mean *s*, a subject, then what (25a) and (25b) are used to mean are true iff:

(26) a. *s* experiences *o* looking *f*.
     b. *s* believes that *o* looks *f*.

In this section I shall argue that the availability of the sentence modifier reading (25b) is important in accounting for three intuitions, each of which might otherwise be a problem for the account of 'XP looks Adj' that I am developing.

The three intuitions are as follows:

The conceptual capacity intuition. It is possible for John to look happy to three year old Pebbles, but it is not possible for him to look American to Pebbles, even if Pebbles' visual experience of John is no different from that of an adult's. Although Pebbles is old enough to have acquired the concept HAPPY, she is not old enough to have acquired the concept AMERICAN, and John can only look American to Pebbles if Pebbles has the concept AMERICAN.[12]

The discriminatory capacity intuition. It is possible that Julia looks Bulgarian to John but not to Mary, even though Mary's visual experience of Julia is the same as John's. Whether or not Julia looks Bulgarian to a person depends upon whether or not that person has had enough experience of Bulgarians to be able to visually discriminate them from non-Bulgarians. If John has but Mary has not, then it might be that Julia looks Bulgarian to John but not to Mary, even if Mary's visual experience of Julia is the same as John's.

The infallibility intuition. Perhaps I can't be certain, looking at John, whether or not John looks American (simpliciter), but I can be certain of whether or not he looks American to me.

If sentences of the forms in (2) had only a VP-modifier reading, then these three intuitions would pose a problem for the account that I have been developing.

Why? First, suppose that adult Mary and three year old Pebbles are both currently enjoying the same visual experience of John, and that John looks American to Mary. If 'to Mary' here is understood as modifying the VP 'looks American' then we have:

(27) Mary is experiencing John looking the way things look if American.

Since Pebbles' experience of John is the same as Mary's experience of John, Pebbles is experiencing John looking the very same way that Mary is experiencing John looking. So we then also have:

(28) Pebbles is experiencing John looking the way things look if American.

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[12] I shall use a word in block capitals to stand for the concept that the word expresses, so that by 'AMERICAN' I mean the concept expressed by 'American'. I have also been using a word in block capitals to stand for the content of the word, so that by 'AMERICAN' I mean the content of 'American'. These are merely different uses of the one notation that I hope will cause no confusion; I am not assuming that the concept expressed by a word is identical to the content of the word – that is, I am not assuming that words have concepts as their contents.

So John looks American to Pebbles as well, where 'to Pebbles' is understood as modifying the VP 'looks American'. If sentences of the form 'XP looks Adj to S' have only the VP-modifier reading, then it is difficult to account for the intuition that John can look American to Mary but not to Pebbles, even if Mary and Pebbles have the same visual experience of John.[13]

Second, suppose that John and Mary are both currently enjoying the same visual experience of Julia, and that Julia looks Bulgarian to John. If 'to John' here is understood as modifying the VP 'looks Bulgarian' then we have:

(29)   John is experiencing Julia looking the way things look if Bulgarian.

Since Mary's visual experience of Julia is the same as John's visual experience of Julia, Mary is experiencing Julia looking the very same way that John is experiencing Julia looking. So we also have:

(30)   Mary is experiencing Julia looking the way things look if Bulgarian.

So Julia looks Bulgarian to Mary as well, where 'to Mary' is understood as modifying the VP 'looks Bulgarian', even if Mary does not have the capacity to visually discriminate Bulgarians from non-Bulgarians. If sentences of the form 'XP looks Adj to S' have only the VP-modifier reading, then it is difficult to account for the intuition that Julia can look Bulgarian to John but not to Mary, even if John and Mary have the same visual experience of Julia.[14]

Third, if 'to me' in 'John looks American to me' is understood as modifying the VP 'looks American' then the infallibility intuition is that I can be certain that:

(31)   I am experiencing John looking the way things look if American.

But if I can be certain of that then I can be certain that John does look the way things look if American – that is, I can be certain that John looks American, simpliciter. I ought not have the intuition that I can be certain about one but not about the other. If sentences of the form 'XP looks Adj to S' only have the VP-modifier reading, then the present theory is unable to account for the infallibility intuition.

It might be possible to explain away these intuitions by pragmatic means. Perhaps an utterance of 'John looks American to Pebbles' does not express a proposition that is true only if Pebbles has the concept AMERICAN, but merely conveys such a proposition (a proposition that would not be conveyed if, for instance, the way John looks were referred to by a demonstrative 'that way', rather than by the adjective 'American'). Then we might try explaining away the conceptual capacity intuition by claiming that anyone who has the intuition that John cannot look American to Pebbles if she does not have the concept AMERICAN is mistaking what is merely conveyed by the sentence for what is expressed

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[13]   There is a closely related intuition that does not pose the same problem: if Pebbles does not have the concept AMERICAN, then Pebbles cannot have certain visual experiences at all. The truth of this intuition is compatible with there being just the VP-modifier reading of 'XP looks Adj to S' – it may be, for all I have said, that if s does not have the concept AMERICAN then s cannot be an experiencer of a looking event whose way is a member of a certain class of ways. Perhaps looking events are mental events that can only have certain way properties if the experiencer of those events has certain concepts.

[14]   Again, there is a closely related intuition that does not pose the same problem: if Mary cannot visually discriminate Bulgarians from non-Bulgarians then she cannot have certain visual experiences. The truth of this intuition is also compatible with there being just the VP-modifier reading of 'XP looks Adj to S'.

(something that we seem prone to do in many cases). Perhaps we could explain away the other two intuitions along similar lines, and maintain that all three intuitions are compatible with 'XP looks Adj to S' having just the VP-modifier reading.

Whether or not such pragmatic explanations are available, I propose that the three intuitions should be accounted for by appealing to the sentence-modifier readings of the sentences in (2). I suggest that we have these intuitions – that John can look American to Mary but not to Pebbles, that Julia can look Bulgarian to John but not to Mary, and that I can be certain that John looks American to me even if not simpliciter – because we understand 'to Pebbles', 'to Mary', and 'to me' not as VP-modifiers but as sentence-modifiers.

How does this account for the intuitions? On their sentence-modifier readings, 'John looks American to Pebbles', 'Julia looks Bulgarian to Mary', and 'John looks American to me' mean (near enough) the following:

(32) a. Pebbles believes that John looks American.
      b. Mary believes that Julia looks Bulgarian.
      c. I believe that John looks American.

I propose the following: the intuition that if Pebbles does not have the concept AMERICAN then John cannot look American to Pebbles, is just the intuition that if Pebbles does not have the concept AMERICAN then Pebbles cannot believe that John looks American; the intuition that if Mary does not have the capacity to visually discriminate Bulgarians from non-Bulgarians then Julia cannot look Bulgarian to Mary, is just the intuition that if Mary does not have the capacity to visually discriminate Bulgarians from non-Bulgarians then Mary cannot believe that Julia looks Bulgarian, at least not on the basis of her visual experience of Julia; the intuition that I can be certain about whether or not John looks American to me, is just the intuition that I can be certain about whether or not I believe that John looks American. The first two are intuitions about conditions that are necessary for a person to hold certain beliefs, not about conditions that are necessary for things to look certain ways to people; the third is an intuition about our access to our beliefs, not about our access to the way things look to us. The intuitions that seem to be about looks are really intuitions about beliefs. It is not clear whether or not these intuitions about beliefs are true, but even if they are, their being true is compatible with the account of VA sentences that I have been developing, and pose no particular problem for it.

One final thing to note. If sentences of the forms in (2) have a VP-modifier reading, as I have proposed, and if each of the three intuitions is false on the VP-modifier readings of their VA sentences, then there ought to be a reading of each intuition on which it is false. I think that that is indeed the case. There are readings on which: If John looks American to Mary, and Pebbles' experience of John is the same as Mary's, then John looks American to Pebbles (even if Pebbles is too young to have the concept AMERICAN); on which: If Julia looks Bulgarian to John, and Mary's visual experience of Julia is the same as John's, then Julia looks Bulgarian to Mary (even if she cannot visually discriminate Bulgarians from non-Bulgarians); and on which: if John looks American to me then John looks American.

This concludes my discussion of the 'XP looks Adj' construction. In the next chapter, I consider all of the remaining constructions exhibited by VA sentences, and in each case propose how it is that we use the complement of 'look' to refer to or quantify over ways of looking.

8 Other Complements

In Chapter 3, I proposed that in VA sentences we use the complement of 'look' to refer to or quantify over ways of looking.

It is plausible that in at least some cases we use the complement of 'look' in this way. It is plausible, for example, that a speaker might use 'this way', 'that way', or 'thus' in (1a) below to demonstrate and thereby refer to a way of looking, or that she might use 'the way that Mary looks', 'some way that Mary looks', or 'every way that Mary looks' in (1b) to quantify over ways of looking.

(1) a. John looks {this way, that way, thus}.
     b. John looks {the way, some way, every way} that Mary looks.

In many cases, however, it is not so plausible that we use the complement of 'look' in this way. It is not so plausible, for example, that we use the complement of 'look' in (2a-i) below to refer to or quantify over ways of looking:

(2) a. John looks American.
     b. John looks a character.
     c. John looks in love.
     d. John looks very American.
     e. John looks like a duck.
     f. John looks older than Mary.
     g. John looks the same as Mary.
     h. John looks as if he is tired.
     i. John looks to be tired.

Nevertheless, I think that we do. In Chapters 4 to 7, I examined in detail our use of VA sentences such as (2a) in which the complement of 'look' is an adjective – the 'XP looks Adj' construction. I argued that in this construction we use Adj to definitely describe a way of looking – by Adj we mean [the *w*: things look *w* if *f*], where *f* is the property that we mean by Adj in 'XP is Adj'. In this chapter, I consider our use of sentences such as (2b-i) in which the complement of 'look' is an expression other than an adjective, and I propose in each case how it is that we use the complement of 'look' to refer to or quantify over ways of looking.

8.1 Direct and indirect uses of the complement

I propose that our uses of the complement of 'look' in VA sentences fall into two main kinds, which I shall call the *direct* use and the *indirect* use.

On the *indirect* use, we use the complement of 'look' to refer to or quantify over properties of objects, and thereby to refer to or quantify over ways of looking – we use it to do the latter by first using it to do the former. This is why I call it the 'indirect' use. If the proposals of the previous chapters are correct, then we use the complement of 'look' in the 'XP looks Adj' construction indirectly – we use Adj in this construction to mean *f*, the property of objects that we mean by Adj in 'XP is Adj', and thereby to mean [the *w*: things look *w* if *f*], a quantifier over ways of looking. Thus we use Adj indirectly to quantify over ways of looking.

On the *direct* use of the complement of 'look', on the other hand, we use it to refer to or quantify over ways of looking without first using it to refer to or quantify over properties of objects (or anything else). This is why I call it the 'direct' use. If a speaker uses 'this way',

'that way' or 'thus' in (1a) above to demonstrate and thereby refer to a way of looking, then, as I am using the term, she uses it directly to refer to a way of looking. Similarly, if by 'way' in (1b) a speaker means 'way of looking', then she uses '{the way, some way, every way} that Mary looks' directly to quantify over ways of looking.

I propose that all of our uses of the complement of 'look' in VA sentences are either direct or indirect. Thus, in every case we use the complement of 'look' to refer to or quantify over ways of looking, either indirectly, by first using it to refer to or quantify over properties of objects, or directly, without first using it to refer to or quantify over properties of objects.

In the rest of this chapter, I shall discuss these two uses in more detail. I shall start in Section 8.2 by discussing the indirect use, and then in the remaining sections I shall discuss various instances of the direct use.

8.2 The indirect use

In Section 4.4, I proposed that we use Adj in 'XP looks Adj' to mean f, the property that we mean by Adj in 'XP is Adj', and thereby to mean [the w: things look w if f].

One of the key facts that led to this proposal was that we use Adj *predicatively* in this construction, by which I mean that we use it to mean the same thing as we use it to mean in 'XP is Adj': we use 'red' in 'Patch looks red', for example, to mean the same thing as we use it to mean in 'Patch is red' – namely, RED, the property of being red.

We often use the complement of 'look' predicatively, even when that complement is not an adjective. Most of the sentences in (2) above have a reading on which the complement of 'look' is used predicatively – (2a-g) all do. Here is some evidence in the case of (2f): it is possible to interpret that what a speaker means by the sentence in (3a) below is the proposition in (3b); that would not be possible unless 'older than Mary' in (3a) can be understood as being used predicatively; so there is a reading of (3a) (and hence of (2f)) on which 'older than Mary' is used predicatively (this is the same style of argument that I used in Section 4.2).

(3)   a. John looks older than Mary, and he is.
       b. John looks older than Mary, and he is older than Mary.

We do not always use the complement of 'look' predicatively, however. It seems that (2h) and (2i) have readings on which we do not. Here is a reason to think that (2h) has a reading on which the complement of 'look' is not used predicatively: there is a reading of (4a) below on which it is not possible to interpret that what a speaker means by it is the proposition in (4b); if this reading of (4a) were one on which 'as if he is tired' were used predicatively, then the (4b) interpretation would be possible; so there is a reading of (4a) (and hence of (2h)) on which 'as if he is tired' is not used predicatively.

(4)   a. John looks as if he is tired, and he is.
       b. John looks as if he is tired, and he is as if he is tired.
       c. John looks as if he is tired, and he is tired.

Note that there is a reading of (4a) on which it means the proposition in (4c) (the most natural reading). That might be evidence that on this reading of (4a) 'tired' is used predicatively, but it is not evidence that 'as if he is tired' is used predicatively.

Many of the claims that I have made in previous chapters about our use of the 'XP looks Adj' construction generalise to our use of any VA sentence in which we use the complement of 'look' predicatively. When we use the complement of 'look' in a VA sentence predicatively,

say that the sentence is an instance of the 'XP looks Pred' construction. I propose that the semantics of this construction be given in the same way as the semantics of the 'XP looks Adj' construction:

(5)   By Pred in 'XP looks Pred' we mean [the w: things look w if f], where f is the property that we mean by Pred in 'XP is Pred'.

Thus, on the predicative readings of the (a) sentences below, what we mean by them can be given by the (b) sentences:

(6)   a. John looks {a character, in love, very American, like a duck, older than Mary, the same as Mary}.
        b. John looks the way things look if {a character, in love, very American, like a duck, older than Mary, the same as Mary}.

In Chapters 5 and 6, I developed two results about our uses of the 'XP looks Adj' construction. Each of these results applies, more generally, to our use of the 'XP looks Pred' construction. The general results are as follows:

(7)   a. By Pred in 'XP looks Pred' we mean [the *maximally specific w*: things look w if f].
        b. By Pred in 'XP looks Pred' a speaker sometimes means to implicitly quantify over a *restricted domain* of looking events, rather than over the domain of absolutely every looking event.

8.3 'How'-phrase complements

In some VA sentences, the complement of 'look' is a 'how'-phrase:

(8)   a. John looks how Mary looks.
        b. It looks how it always looks. (Pleonastic 'it')
        c. John looks how Mary feels.

I shall argue that we use the complement of 'look' in these sentences to quantify over ways of looking, typically directly, but sometimes indirectly (by first quantifying over properties of objects).

It will help to first consider what we mean by 'where Mary lives' in the sentence in (9a) below. It is standard to take it that we use 'where Mary lives' here to quantify over things that satisfy the predicate 'Mary lives at x' – by 'where Mary lives' we mean [some x: Mary lives at x], or [the x: Mary lives at x], or [every x: Mary lives at x], and so on.[1] If what is meant by 'where Mary lives' in (9a) is [some x: Mary lives at x], then (9a) can be formalised as in (9b):

(9)   a. John lives where Mary lives.
        b. [some x: Mary lives at x](John lives at x)

On this reading of (9a), if there is a location x such that John and Mary both live at x, then (9a) is true. The speaker may intend the domain of locations over which she is quantifying to include more than just maximally specific locations, so that if John lives in Sydney and Mary lives in Melbourne then it might still be true that John lives where Mary lives (because, for example, they both live in Australia). It might be misleading of her in some contexts to include such locations in the domain (the audience might conclude from (9a) that John and Mary live, for example, in the same city), but she nevertheless can.

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[1]   For a clear overview of embedded 'wh'-questions, see Stanley and Williamson (2001), Section 2.

Following this same approach, I propose that in (8a) we use 'how Mary looks' to quantify over things that satisfy the predicate 'Mary looks x' – by 'how Mary looks' we mean [some x: Mary looks x], or [the x: Mary looks x], or [every x: Mary looks x], and so on. If what is meant by 'how Mary looks' in (8a) is [some x: Mary looks x], then (8a) can be formalised as in (10a) below:

(10)   a. [some x: Mary looks x](John looks x)
        b. [some x: It always looks x](It looks x)
        c. [some x: Mary feels x](John looks x)

Similarly, I propose that in (8b) we use 'how it always looks' to quantify over things that satisfy the predicate 'it always looks x'; if what is meant is [some x: it always looks x], then (8b) can be formalised as in (10b). And I propose that in (8c) we use 'how Mary feels' to quantify over things that satisfy the predicate 'Mary feels x'; if what is meant is [some x: Mary feels x], then (8c) can be formalised as in (10c). I propose a similar treatment for all VA sentences in which the complement of 'look' is a 'how'-phrase.

If there is a way of looking x such that John and Mary both look x, then on the (10a) interpretation of (8a), (8a) is true. The speaker may intend the domain over which she is quantifying to include more than just maximally specific ways of looking, so that if John looks Swedish and Mary looks Japanese then it might still be true that John looks how Mary looks (because, for example, they both look human – they both look w, where w is the way things look if human). It might be misleading of her in some contexts to include such ways of looking in the domain (the audience might conclude, for example, that John and Mary both look a way that is more specific than w), but she nevertheless can.

The present account of (8c) might seem to face the following problem. If what we mean by (8c) is the proposition in (10c), then it seems that for an utterance of (8c) to be true, some ways of feeling must also be ways of looking – for x to be such that Mary feels x it must be a way of feeling, but for x to be such that John looks x it must also be a way of looking. But it seems implausible that any ways of feeling are also ways of looking – that something can look x if x is a way of feeling. Nevertheless, by sentences such as (8c) we do mean things that are true. So it seems that (10c) cannot be what we mean by (8c).

I could reply to this objection by insisting that some ways of feeling are also ways of looking – that there are some way properties that can be had by both feeling and looking events alike. But I don't think that I should reply in this way, nor that I need to. The correct reply, I propose, is that in (10c) x need not be a way of looking. It can, for example, be TIRED, the property of being tired. This is because there is an indirect reading of 'looks x', on which 'x' is used indirectly to refer to or quantify over ways of looking. For Mary to feel tired and John to look tired, there need not be a way of looking x such that Mary feels x and John looks x – it is enough that there is a property of objects x such that Mary feels x and John looks x (namely, TIRED, the property of being tired). In 'Mary feels tired' and 'John looks tired' there are two things that we mean by 'tired' in each case: in the first case we mean TIRED, and thereby mean [the w: things feel w if tired]; in the second case we mean TIRED, and thereby mean [the w: things look w if tired]. It is because 'tired' is used to mean TIRED in each case that there is an x such that Mary feels x and John looks x, and this is why there is a sense in which John looks how Mary feels. If 'x' were restricted to ranging just over ways of looking, then there might well be no such x (I shall grant): the way that 'tired' is used to mean in 'Mary feels tired' might not be a way of looking.

Many other VA sentences are like (8c) in this respect. If Patch$_1$ looks square and Patch$_2$ feels square, then there is a sense in which Patch$_1$ looks how Patch$_2$ feels. This need not be because there is a way of looking x such that Patch$_2$ feels x and Patch$_1$ looks x – ways of looking need

not be properties that feeling events can have. It is enough that there is a property of objects x such that $Patch_2$ feels x and $Patch_1$ looks x (namely, SQUARE, the property of being square).

Every VA sentence in which the complement of 'look' is a 'how'-phrase is like (8c) in this respect. It is also true of the formalisations of (10a) and (10b) that x need not be a way of looking – in (10a) it could be a property of objects (TIRED, for example), and in (10b) it could be a property of the world (WINDY, for example). As it turns out, if there is a property of objects x such that John looks x and Mary looks x, then there is also a way of looking w such that John looks w and Mary looks w – the way things look if x. And if there is a property of the world x such that it looks x and it always looks x, then there is also a way of looking w such that it looks w and it always looks w – the way it looks if x. But semantically there need not be such ways for (10a) and (10b) to be true – it is enough that there be the properties TIRED and WINDY.

This phenomenon to do with our use of 'looks how' is just one instance of a more general phenomenon.[2] We find the same thing with our use of 'lives where' in (9a) above. If John lives in the basement of his home and Mary lives in the basement of her home then there is a sense in which John lives where Mary lives – they both live in the basement – even if John's home is not Mary's home. There need not be a location x such that Mary lives at x and John lives at x (it may be that the location that is meant by 'the basement' in 'John lives in the basement' is distinct from the location that is meant by 'the basement' in 'Mary lives in the basement'). It is enough that there is another kind of thing x such that Mary lives at x and John lives at x – namely, THE BASEMENT, the meaning of 'the basement', which we can take to be a 2-place relation whose extension is $\{(x, y): x$ is the basement of $y\}$. By 'the basement' in 'John lives in the basement' we mean THE BASEMENT, and thereby mean a certain location (the basement of John's home); by 'the basement' in 'Mary lives in the basement' we mean THE BASEMENT, and thereby mean a certain distinct location (the basement of Mary's home); it is because we use 'the basement' to mean THE BASEMENT in each case that there is a sense in which John lives where Mary lives. In the formalisation in (9b), x need not be a location – it can also be a relation such as THE BASEMENT.[3]

To give one more example, we find the same phenomenon exhibited by our use of 'met who'. If John met the prime minister of Australia and Mary met the prime minister of England, then there is a sense in which John met who Mary met, even though they met different people. Even though there is no person x such that John met x and Mary met x, there is an x of a different kind (THE PRIME MINISTER) such that John met x and Mary met x. It is in virtue of this that there is a sense in which John met who Mary met, not in virtue of there being a single person whom they both met.

There is another related phenomenon. If John looks and feels tired, then there is a sense in which the following sentence is true:

(11)   John looks [tired]$_i$, and he feels [that way]$_i$ too.

What is meant by 'that way' here? It is being used anaphorically upon 'tired' – that is, to mean the same thing as 'tired'. But 'tired' is used to mean two things (according to the account that I am developing) – TIRED, and [the w: things look w if tired]. If 'that way' were

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[2]   See the discussion of sloppy identity in Heim and Kratzer (1998), pp. 254-8.

[3]   There is also a sense in which John does not live where Mary lives. How should we account for this? I propose: by appeal to implicit domain restriction. If 'x' in (9b) is implicitly restricted to ranging over locations, then (9b) is false – there is no location at which John and Mary both live. This might also explain why the interpretation in which John does live where Mary lives is slightly odd – it is odd, I suggest, because normally the domain of 'x' in (9b) is understood to be restricted to locations; interpreting (9b) in such a way that it is true requires an abnormal relaxation of this restriction.

used to mean [the w: things look w if tired], then perhaps what is meant by (11) would be false, because John cannot feel w if w is a way of looking (I am allowing). So 'that way' must be used to mean TIRED, and thereby to mean [the w: things feel w if tired]. This is an interesting phenomenon: 'that way' can be used (a) anaphorically upon 'tired', and (b) to mean a way of feeling, even though (c) the way of feeling that is meant by 'that way' is not anything that is meant by 'tired'. What happens, I propose, is this: 'that way' is used anaphorically upon 'tired' to mean TIRED (rather than to mean [the w: things look w if tired]), and thereby to mean [the w: things feel w if tired]. 'That way' is used to mean only one of the two things that 'tired' is used to mean.

Again, this is a general phenomenon, not restricted to our use of 'that way'. We find the same phenomenon exhibited in our use of 'that location' (or 'there'), and of 'that man' (or 'him'). If John lives at home and Mary lives at home (a different home), then there is a sense in which (12a) below is true. 'There' is used anaphorically upon 'at home', not to mean the specific location that is meant by 'at home', but to mean AT HOME (and thereby to mean a distinct specific location). If John loves his dad and Peter loves his dad (a different dad), then there is a sense in which (12b) below is true. 'Him' is used anaphorically upon 'his dad', not to mean the specific person that is meant by 'his dad', but to mean HIS DAD (and thereby to mean a distinct specific person).

(12)   a.   John lives [at home]$_i$, and Mary lives [there]$_i$ too.
       b.   John loves [his dad]$_i$, and Peter loves [him]$_i$ too.

8.4 'Like'-phrase complements

In some VA sentences, the complement of 'look' is a 'like'-phrase:

(13)   a.   John looks like Mary.
       b.   John looks like a duck.[4]

I propose that these sentences are ambiguous, between a reading on which the complement of 'look' is used indirectly to refer to or quantify over ways of looking, and a reading on which it used directly to refer to or quantify over ways of looking.

On the indirect readings of (13a) and (13b), a speaker who utters the sentences in (i) below can be interpreted as meaning the propositions in (ii):

(14)   a.   i.   John looks like Mary, but he's not.
             ii. John looks like Mary, but he's not like Mary.
       b.   i.   John looks like a duck, but he's not.
             ii. John looks like a duck, but he's not like a duck.

According to the proposal made in Section 8.2 above, what we mean by (13a) and (13b), on their indirect readings, is as follows:

(15)   a.   i.   John looks the way things look if like Mary.
             ii. [the w: things look w if like Mary](John looks w)
       b.   i.   John looks the way things look if like a duck.
             ii. [the w: things look w if like a duck](John looks w)

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[4]   There are also sentences such as 'John looks like he is tired', where the expression that follows 'like' is a sentence. I consider this construction separately, in Section 8.7.

Note that because (13b) contains the quantifier expression 'a duck' it is ambiguous, between a reading on which 'a duck' is used to mean a particular duck, and a reading on which it is not. Thus, there are actually two indirect readings of (13b):

(16) a. [the w: things look w if like a duck)](John looks w)
      b. [some x: x is a duck][the w: things look w if like x](John looks w)

On the direct readings of (13a) and (13b), on the other hand, a speaker who utters the sentences in (i) in (14) above cannot be interpreted as meaning the propositions in (ii). I propose that on these readings, what we mean by (13a) and (13b) is as follows:

(17) a. i.   John looks a way like the way Mary looks.
          ii. [some w_1: [the w_2: Mary looks w_2](w_1 like w_2)](John looks w_1)
      b. i.   John looks a way like the way a duck looks.
          ii. [some w_1: [the w_2: a duck looks w_2](w_1 like w_2)](John looks w_1)

What I am proposing is that, on their direct readings, we use the complement of 'look' in (13a) and (13b) directly to quantify over ways of looking, but we do not make that quantification explicit in the sentences that we use – what I have done in (17a.i) and (17b.i) is make that quantification explicit.

Again, because it contains the quantifier expression 'a duck' there are actually two direct readings of (13b):

(18) a. [some w_1: [the w_2: a duck looks w_2](w_1 like w_2)](John looks w_1)
      b. [some x: x is a duck][some w_1: [the w_2: x looks w_2](w_1 like w_2)](John looks w_1)

By the definite descriptions in (15a) and (15b) – 'the way things look if like Mary' and 'the way things look if like a duck' – I mean the maximally specific such ways (for the reasons that I gave in Section 5.7 above). But by the definite descriptions in (17a) and (17b) – 'the way Mary looks' and 'the way a duck looks' – we need not mean the maximally specific way Mary looks, nor the maximally specific way a duck looks: we can mean any one of the ways Mary looks, or any one of the ways a duck looks. If John looks Japanese and Mary looks Swedish then there is a reading of (17a) on which it is true. Intuitively, it is made true (at least) by the fact that John and Mary both look human – they both look w, where w is the way things look if human. Thus, there is a way that John looks (w) that is like the way that Mary looks (w) (it is, in fact, identical to it). Here w is not the maximally specific way that Mary looks, but it is one of the (more general) ways that Mary looks.

The proposal that (13a) and (13b) are ambiguous between direct and indirect readings is consistent with our meaning exactly the same thing by 'like' on both readings. It is consistent, for example, with our meaning the same 2-place relation in each case. On its indirect reading, an utterance of (13a) is true iff John looks the way things look if they stand in the 'like' relation to Mary. On its direct reading, an utterance of (13a) is true iff John looks a way that stands in the 'like' relation to the way that Mary looks. We can take it that by 'like' in each case we mean the same 2-place relation, a relation whose extension is $\{(x, y): x$ is like $y\}$, where x and y might be people, or ways of looking, or many other kinds of thing.

I propose that every VA sentence in which the complement of 'look' is a 'like'-phrase is ambiguous, between a reading on which the complement of 'look' is used indirectly, and a reading on which it is used directly. If YP is an expression used to refer to or quantify over objects, then 'XP looks like YP' can be paraphrased as follows:

(19) a. XP looks the way things look if like YP.
      b. XP looks a way like the way YP looks.

It will be instructive to consider three more examples:

(20) a. John looks like this.
      b. John looks like her.
      c. John looks very much like Mary.

If 'this' in (20a) is used to refer to an object, then on its indirect reading 'like this' is used to mean 'the way things look if like this', and on its direct reading it is used to mean 'a way like the way this looks'. If 'this' is used to refer to a way of looking, then the most salient reading of 'like this' is its direct reading, on which it is used to mean 'a way like this way'. Some might suggest that because (20b) ends with 'her' and not 'she' it does not have a direct reading (it cannot be read as 'John looks a way like the way she looks'). But by the same token it ought not have an indirect reading either (because it cannot be read as 'John looks the way things look if like she is'). I don't think there is anything semantically significant about using 'her' instead of 'she' in (20b) – even with 'her', (20b) has both a direct and indirect reading. (20c) shows that sentences of the form being considered might also contain degree modifiers – they, too, have both a direct and an indirect reading: on these readings, by 'very much like Mary' in (20c) a speaker is understood to mean either 'the way things look if very much like Mary', or 'a way very much like the way Mary looks'.

Note that sometimes the 'like'-phrase complements of 'look' have a verb at the end:

(21) a. John looks like Mary looks.
      b. John looks like Mary feels.

The presence of this verb might make one reading more salient than the other. In the case of (21a), it may be difficult to generate the indirect reading, 'John looks the way things look if like Mary looks', and most natural to generate the direct reading, 'John looks a way like the way Mary looks'. Nevertheless, (21a) does have both readings (I propose), and it may even be true on the indirect reading (suppose that John and Mary both look old). In the case of (21b), it may be difficult to generate the direct reading, 'John looks a way like the way Mary feels', and most natural to generate the indirect reading, 'John looks the way things look if like Mary feels'. Nevertheless, (21b) does have both readings (I propose), even if it cannot be true on the direct reading (perhaps ways of looking cannot be sufficiently like ways of feeling).

8.5 Complements of the form 'the same …'

In some VA sentences, the complement of 'look' is an expression of the form 'the same …':

(22) a. John looks the same as Mary.
      b. John looks the same as Mary looks.
      c. John looks the same age as Mary.
      d. John looks the same way as Mary feels.

In many cases, a speaker who utters a sentence of this form is not being explicit in at least one of two ways. If she were to utter (22a) she might sensibly be asked, 'the same as Mary *what* – the same as she *is*, or the same as she *looks*, or what?' If she were to utter (22b) she might sensibly be asked, 'the same *what* as Mary – the same *way*, or the same *age*, or what?' I propose that in each case in (22) what we mean by the complement of 'look' is 'the same N as Mary Vs', for some common noun N and some verb V (even though in some cases we do not make this explicit, and perhaps do not know how to). Thus, what we mean by the sentence is:

(23)   John looks the same N as Mary Vs.

Surface form suggests that in (23) we use the complement of 'look' to definitely describe something of the kind we mean by N. I propose that that is how we do indeed use it. In (22c) above, we use the complement of 'look' to definitely describe an age; in (22d) we use it to definitely describe a way (in (22a) and (22b) we are not explicit about what kind of thing we mean to describe). I propose that if by N in (23) a speaker means *n*, a kind of thing, and by V she means *v*, a kind of event, then by (23) she means the following proposition:

(24)   [the *x*: *x* is an *n* and Mary *v x*](John looks *x*).

Whether or not a speaker uses the complement of 'look' in (23) directly or indirectly depends upon the kind of thing she means by N. If by N she means 'way of looking', then she uses the complement of 'look' to definitely describe a way of looking, and hence uses it directly to quantify over ways of looking. If by 'way' in (22d) above the speaker means 'way of looking', then she uses the complement of 'look' directly; what she means is the proposition in (25a) below. If by N she means something other than 'way of looking', then she uses the complement of 'look' only indirectly to refer to or quantify over ways of looking, by first definitely describing something of the kind she means by N. In (22c) above, the speaker uses the complement of 'look' to definitely describe an age, and thereby indirectly to definitely describe a way of looking; what she means is either the proposition in (25b) below, or the proposition in (25c) – she can be interpreted as meaning either of two things, depending upon which of 'the *w*' and 'the *x*' she means to take widest scope.

(25)   a.   [the *w*: *w* is a way of looking and Mary looks *w*](John looks *w*)
        b.   [the *w*: things look *w* if [the *x*: *x* is an age and Mary is *x*](*x*)](John looks *w*)
        c.   [the *x*: *x* is an age and Mary is *x*][the *w*: things look *w* if *x*](John looks *w*)

Note that a speaker can be interpreted as meaning either (25b) or (25c) by the sentence in (22c). On the interpretation in (25b), for what she means to be true there need be no particular age that John looks; on the interpretation in (25c), there need be a particular age that John looks. Do we find this ambiguity in practice? I think that we do. Suppose that the men in a room are wearing green shirts just in case they are the same age as Mary. If John is wearing a green shirt then there is a reading of 'John looks the same age as Mary' on which it is true. But if there is no particular age that John looks (suppose he has a bag over his head), then there is a reading of 'John looks the same age as Mary' on which it is false (or at least is not true) – it is not the case that John looks the same age as Mary. These two readings are, I suggest, the readings in (25b) and (25c) (respectively).

The general result is this: if by N in (23) a speaker means 'way of looking', then what she means by (23) is the proposition in (26a) below; otherwise, what she means by (23) is either the proposition in (26b), or the proposition in (26c).

(26)   a.   [the *w*: *w* is a way of looking and Mary *v w*](John looks *w*)
        b.   [the *w*: things look *w* if [the *x*: *x* is an *n* and Mary *v n*](*x*)](John looks *w*)
        c.   [the *x*: *x* is an *n* and Mary *v x*][the *w*: things look *w* if *x*](John looks *w*)

We can generalise this result to any VA sentence which, in place of 'John' and 'Mary', has an expression used to refer to or quantify over objects.

In (24), *x* can be an *n* of any degree of generality – it need not be the maximally specific *n* that Mary *v*s. If Patch$_1$ and Patch$_2$ both look red, then there is a sense in which Patch$_1$ looks the same colour as Patch$_2$, even if they look slightly different shades of red. This would not be the case if we could only interpret 'the same colour as Patch$_2$' here as definitely describing the maximally specific colour that Patch$_2$ looks (because Patch$_1$ does not look that colour).

Similarly, there is a sense in which $Patch_1$ looks the same way as $Patch_2$ (where by 'way' I mean 'way of looking'). This also would not be the case if we could only interpret 'the same way as $Patch_2$' here as definitely describing the maximally specific way that $Patch_2$ looks (because $Patch_1$ does not look that way). I propose that in '$Patch_1$ looks the same N as $Patch_2$ looks', the complement of 'look' can be interpreted as describing any one of the things of kind n that $Patch_2$ looks (not just the maximally specific such n). So too in the general case.

8.5.1 The transitivity of 'looks the same as'

As I mentioned in Section 1.1, there has recently been some interest in whether or not the relation expressed by 'looks the same as' is transitive. More precisely, the question is whether or not the proposition in (27a) below is true, or whether or not the argument in (27b) is valid:

(27)   a. If x looks the same as y, and y looks the same as z, then it follows that x looks the same as z.
       b. x looks the same as y; y looks the same as z; therefore, x looks the same as z.

These formulations can be made more explicit. First, what is meant by 'x looks the same as y' is 'x looks the same as y *looks*'. It is possible to read it as meaning 'x looks the same as y *is*', but this is not what is generally meant in discussions of the transitivity of 'looks the same as'. Similar remarks apply to the other VA sentences in (27). Second, it needs to be made more explicit what kind of things are being compared in 'x looks the same as y looks' (and the other VA sentences in (27)). There are several possibilities here – ways of looking, colours, shapes, and so on. Here, then, are two ways of making the argument in (27b) more explicit:

(28)   a. x looks the same way (of looking) as y looks; y looks the same way as z looks; therefore, x looks the same way as z looks.
       b. x looks the same colour as y looks; y looks the same colour as z looks; therefore, x looks the same colour as z looks.

I think we need not, however, make the formulations in (27) more explicit in order to see that (27a) is true and that (27b) is valid – (27a) is true, and (27b) is valid, no matter how they are made more explicit. The key fact is that, if my proposal above is correct, in the VA sentences in (27) we use the complement of 'look' to definitely describe something.

It is helpful to consider the question of whether or not the following argument is valid:

(29) x hit the person that y hit; y hit the person that z hit; therefore, x hit the person that z hit.

If we allow the definite descriptions in (29) to be used to describe distinct people, then the argument in (29) is not valid. Suppose that x hit a, that y hit both a and b, and that z hit b (and that there were no other hittings). Then it is true that x hit the person that y hit (they both hit a), it is true that y hit the person that z hit (they both hit b), but it is false that x hit the person that z hit (there is no one that they both hit) (at least there is a reading on which this is the case). So there is a possible situation in which the premises are true but the conclusion is false, and the argument is invalid. But to claim that (29) is invalid on this ground is to misunderstand what is meant by the claim that (29) is valid. Of course (29) is invalid, if we allow the definite descriptions to refer to distinct people. The claim that (29) is valid is interesting only on the assumption that the definite descriptions are used to describe the same person throughout. But then the argument is clearly valid (and, I take it, anyone who properly understands the claim that (29) is valid agrees that it is clearly valid).

I think we should make the very same remarks about the validity of (27b) (and, with appropriate modification, about the truth of (27a)). The claim that (27b) is valid is interesting only on the assumption that the definite descriptions throughout are used to describe the same

thing (way of looking, or colour, or whatever). But then the argument is clearly valid, just as (29) is clearly valid. I conclude that the relation expressed by 'looks the same as' is a transitive relation.

8.6 Complements of the form 'as if S'

In some VA sentences, the complement of 'look' is an expression of the form 'as if S', where S is a sentence:

(30) a. It looks as if John is tired.
       b. John looks as if he is tired.
       c. Diane looks as if it is Monday.

It is difficult to get a reading of these sentences on which the complement of 'look' is used indirectly. If they have indirect readings, then it should be possible to interpret that what a speaker means by the sentences in (i) below are the propositions in (ii):

(31) a. i. It looks as if John is tired, and it is.
          ii. It looks as if John is tired, and it is as if John is tired.
       b. i. John looks as if he is tired, and he is.
          ii. John looks as if he is tired, and he is as if he is tired.
       c. i. Diane looks as if it is Monday, and she is.
          ii. Diane looks as if it is Monday, and she is as if it is Monday.

It is difficult to get these interpretations. It is difficult to interpret what a speaker might mean by (31a.i) and (31c.i) at all, let alone as meaning the propositions in (31a.ii) and (31c.ii). It is possible to interpret what a speaker means by (31b.i), but it is not an interpretation on which she means the proposition in (31b.ii). Rather, it is one on which she means 'John looks as if he is tired, and he is tired'. This is no reason to think that there is an indirect reading of (31b.i). Despite these difficulties, I allow that there are these interpretations of (30a-c), and in general that every VA sentence of this form has a reading on which the complement of 'look' is used indirectly to refer to or quantify over ways of looking. On their indirect readings, (30a-c) can be paraphrased as follows:

(32) a. It looks the way it looks if as if John is tired.
       b. John looks the way he looks if as if he is tired.
       c. Diane looks the way she looks if as if it is Monday.

The more natural interpretation of these sentences is one on which we use the complement of 'look' directly to refer to or quantify over ways of looking. I will now propose an account of how it is that we do so.

There is one question that we should consider, at least in passing: What is the constituent structure of 'as if S' in these sentences? There are at least two plausible options: (a) the complement of 'look' is a complementizer phrase headed by the complementizer 'as if' (rather than the complementizers 'that', 'if', or 'whether') which takes a sentence as complement – call this the *CP analysis* of 'as if S' ('CP' for 'complementizer phrase'); (b) the complement of 'look' is a prepositional phrase headed by the preposition 'as', which takes a complementizer phrase headed by 'if' as complement – call this the *PP analysis* ('PP' for 'prepositional phrase'). In favour of the CP analysis, it seems that 'as if' can be replaced by 'like' without change of meaning, which suggests that 'as if' has no structure (because 'like' has no structure). On the other hand, it seems that 'if' can be replaced by 'though' without change of meaning, which suggests that 'if' is a constituent of 'as if', so that 'as if' does have structure. Further against the CP analysis, 'as if' is two words, whereas all other complementizers in English are just one word, and in fact all other members of functional

categories in English are just one word. These considerations are murky. Asudeh (2002) argues convincingly that the PP analysis is the correct analysis, and that is what I shall assume (I will not rehearse his arguments here).

There are two kinds of VA sentence in which the complement of 'look' is an expression of the form 'as if S' – ones like (30a) above, in which the subject of 'look' is pleonastic 'it', and ones like (30b) and (30c), in which it is not. I will consider each in turn, starting with the first.

In Section 2.3.6 above I rejected a fairly intuitive account of the semantics of this construction (one that fits comfortably with the PP analysis):

(33)   By 'It looks as if S' we mean that it looks as it would look if it were the case that p.
        (Where S means that p.)

The main problem with (33), I argued, is that it suffers at the hands of side-effects: if (33) were a true account, then the truth of (30a) would depend on how things would look if John were tired. But the truth of (30a) does not depend on this, so (33) is not a true account.

I propose that the truth of (30a) depends only on how things *do* look if John *is* tired. I propose the following account instead (one that also fits comfortably with the PP analysis), with my preferred formulation in (34b):

(34)   a. By 'It looks as if S' we mean that it looks as it does look if it is the case that p.
        b. By 'It looks as if S' we mean that it looks the way it looks if p.

So, by (30a) we mean:

(35)   a. It looks the way it looks if John is tired.
        b. [the w: it looks w if John is tired](it looks w)
        c. [the w: it looks w if John is tired]$\exists e$(Look(e) & Way(e, w))

This makes more explicit how we use the complement of 'look' in this construction directly to quantify over ways of looking.

Again, 'It looks w if John is tired' in (35b) and (35c) is to be understood generically, as expressing a certain non-extensional relation between the property of being an event in which it looks some way and John is tired, and the property of being an event in which it looks w (the same relation that 'things look w if f' expresses between the property of being an event in which f things look some way, and the property of being an event in which they look w). Everything that I have said in previous chapters about 'Things look w if f' translates to corresponding claims about 'It looks w if p'.

Some comment should be made about the following fact: that there seems to be a reading of these VA sentences on which the complement of 'look' is an opaque context. There seem to be readings of (36a.i) and (36a.ii) below, for example, on which the first can be true while the second false (suppose that someone dressed in a superman outfit is seen at the doctor's surgery), and there seem to be readings of (36b.i) and (36b.ii) on which the first can to true while the second false (suppose that a bright star is seen on the horizon in the morning).

(36)   a. i. It looks as if Superman is sick.
           ii. It looks as if Clark Kent is sick.
        b. i. It looks as if Hesperus is rising.
           ii. It looks as if Phosphorus is rising.

This might appear to be a problem for the present proposal. According to the present proposal, what we mean by the sentences in (36) can be made more explicit as follows:

(37)   a.   i.   It looks the way it looks if Superman is sick.
              ii. It looks the way it looks if Clark Kent is sick.
       b.   i.   It looks the way it looks if Hesperus is rising.
              ii. It looks the way it looks if Phosphorus is rising.

Any situation in which Superman is sick is a situation in which Clark Kent is sick, and vice-versa. Thus, the way it looks if Superman is sick ought to be the very same way as the way it looks if Clark Kent is sick, and, if this proposal is right, there ought to be no reading of (36a.i) and (36a.ii) on which they express different propositions.

I propose the following explanation. This might be right – it might be that the way things look if Superman is sick is identical to the way things look if Clark Kent is sick. But we do at least have the intuition that these ways are not identical. We have the intuition that, in a sense, the way it looks if Superman is sick is distinct from the way it looks if Clark Kent is sick, and that, in a sense, the way it looks if Hesperus is rising is distinct from the way it looks if Phosphorus is rising. It is because we have these latter intuitions, I propose, that we have the former intuitions about the sentences in (36). In further support of this, I find that if I shake people's intuition that the way it looks if Superman is sick is distinct from the way it looks if Clark Kent is sick, then I thereby shake their intuition that it can look as if Superman is sick without looking as if Clark Kent is sick (and so too in the Hesperus/Phosphorus case). The intuitions about the sentences in (36) are generated, I propose, by corresponding intuitions about the sentences in (37) (whether or not those intuitions are correct). So the intuitions about the sentences in (36) can be accounted for by the account that I am developing (with no need to take a stand on the truth of these intuitions).

Now consider the second kind of sentence – those such as (30b) and (30c) in which the subject of 'look' is not pleonastic 'it'.[5] I propose an account of this construction along very similar lines to the account I just proposed for the 'It looks as if S' construction:

(38)   If by XP we mean o, an object, then by 'XP looks as if S' we mean that o looks the way o looks if p.

So, by (30b) we mean:

(39)   a.   John looks the way John looks if John is tired.
       b.   [the w: John looks w if John is tired](John looks w)
       c.   [the w: John looks w if John is tired]$\exists e$(Look(e) & Stimulus(e, John) & Way(e, w))

There is something a bit odd about sentences of the form 'XP looks as if S', especially if S does not contain a pronoun that is used anaphorically upon XP (as in (30c) above). I suggest the following explanation: if S contains an expression used anaphorically upon XP, then o is a salient object in the situation in which p, and it is easier to determine how o looks in that situation. If S does not contain such an expression, then o is not a salient object in the situation in which p, and it is more difficult to determine how o looks in that situation. It would typically be odd to say that Diane looks as if it is Monday. This is because, according to my explanation, Diane is typically not a salient object in a hypothesised situation in which it is Monday; if it is not odd in a context to say that Diane looks as if it is Monday, that is because it is a context in which Diane is a salient object in the hypothesised situation.

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[5]   There is some linguistics literature on this construction, in which it is sometimes called *copy raising*. See Rogers (1971, 1972, 1974), Potsdam and Runner (2001), and Asudeh (2002).

8.7 Complements of the form 'as though S' and 'like S'

Sometimes, instead of using an expression of the form 'as if S' as the complement of 'look' (where S is a sentence), we use an expression of the form 'as though S' or 'like S':

(40) a. i. It looks as though you are right.
          ii. It looks like you are right.
      b. i. John looks as though he is tired.
          ii. John looks like he is tired.

It is a very natural thought that we use 'as though S' and 'like S' as the complement of 'look' to mean the same thing that we use 'as if S' to mean, so that (40a.i) and (40a.ii) above can be paraphrased as (41a) below, and (40b.i) and (40b.ii) can be paraphrased as (41b):

(41) a. It looks as if you are right.
      b. John looks as if he is tired.

If that is right, then we can treat our use of this construction in the same way that we treated our use of the 'XP looks as if S' construction in the previous section: what we mean by (40a.i) and (40a.ii) can be made more explicit by (42a) below, and what we mean by (40b.i) and (40b.ii) can be made more explicit by (42b).

(42) a. It looks the way it looks if you are right.
      b. John looks the way he looks if he is tired.

There do seem, however, to be subtle differences in the way we use 'as though S', 'like S', and 'as if S'. Sometimes it is more natural to use 'as if' rather than 'as though', or vice-versa. Travis (2004) claims that we mean something different by 'as if S' and 'as though S'. For one, if I know that it is not the case that p then it might look to me as though p, but it cannot look to me as if p (p. 75). In the remainder of this section I shall make some of my own (inconclusive) suggestions about the differences (if any) between what we mean by 'as though S', 'like S', and 'as if S'.

In the previous section I proposed that what we mean by 'It looks as if S' can be made more explicit by the sentence in (43a) below, so that if by S we mean p, a proposition, then by 'It looks as if S' we mean the proposition in (43b).

(43) a. It looks the way it looks if S.
      b. [the w: it looks w if p]$\exists e$(Look(e) & Way(e, w))

One natural suggestion for how to treat our use of 'It looks as though S' is to replace 'if' by 'though' throughout (43):

(44) a. It looks the way it looks though S.
      b. [the w: it looks w though p]$\exists e$(Look(e) & Way(e, w))

In many cases we use 'S though T' to mean 'S and T', with an additional implication that there is a contrast between its being the case that S and its being the case that T. It would be satisfying to say that we use 'though' in (44) in the same way. But that would amount to saying that by 'It looks as though S' we mean, roughly, 'It looks the way it looks and S', so that the truth of 'It looks as though S' entails the truth of S. That seems to be wrong – the truth of 'It looks as though you are right', for example, does not entail the truth of 'you are right' (an utterance of the sentence might implicate that you are right, but the truth of the sentence does not entail that you are right).

I suggest the following instead: by 'S though T' in these sentences we mean 'S if T' (rather than 'S and T'), but still with an implication that there is a contrast between its being the case that S and its being the case that T. So what we mean by 'though' in 'It looks as though it might rain' is different from what we mean by 'though' in 'I'm going for a walk though it might rain', although we implicate the same kind of contrast. If this is right, then using 'though' in (44) has the effect of implicating a contrast between its looking w and its being the case that p, an implication that would not be made by using 'if' instead of 'though'.

As for 'like', here is one natural suggestion for what we mean by 'It looks like S':

(45)   a. It looks like it looks if S.
       b. It looks a way like the way it looks if S.
       b. [some w: [the w': it looks w' if p]($w \approx w'$)](It looks w)

This might make the 'looks like S' construction seem more complicated than the 'looks as if S' construction. We can, however, view the two as being more closely related by formalizing 'It looks as if S' as follows:

(46)   a. It looks as it looks if S.
       b. It looks a way identical to the way it looks if S.
       b. [some w: [the w': it looks w' if p]($w = w'$)](It looks w)

Then the difference between what we mean by 'It looks as if S' and 'It looks like S' is just that by 'as' we mean '=', whereas by 'like' we mean '$\approx$'.

Note that this proposal about 'looks like S' allows us to say, pleasingly, that we use 'like' to mean the same thing in the following two sentences (in each case we use it to mean '$\approx$'):

(47)   a. i.   John looks like a duck.
           ii. [some w: [the w': a duck looks w']($w \approx w'$)](John looks w).
       b. i.   John looks like he is a duck.
           ii. [some w: [the w': John looks w' if he is a duck]($w \approx w'$)](John looks w).

8.8 'To'-infinitive complements

In some VA sentences the complement of 'look' is a 'to'-infinitive:

(48)   a. Patch looks to be red.
       b. John looks to love Mary.
       c. A unicorn looks to be approaching.
       d. It looks to be windy.
       e. There looks to be a problem.

In this section, I shall argue that VA sentences of this form can be paraphrased by VA sentences in which the complement of look is an expression of the form 'as if S', where S is a sentence. If this is right, then the semantics of this construction requires no special further discussion – it reduces to the semantics of the '{It, XP} looks as if S' construction, which I discussed in detail in Section 8.6.

I shall argue, in fact, that these sentences are structurally ambiguous, and can be paraphrased by two such sentences. The sentences in (48) above, for example, can be paraphrased by the following pairs of sentences:

(49)   a. i.   It looks as if Patch is red.

      ii. Patch looks as if it is red.
  b. i. It looks as if John loves Mary.
      ii. John looks as if he loves Mary.
  c. i. It looks as if a unicorn is approaching.
      ii. A unicorn looks as if it is approaching.
  d. i. It looks as if it is windy.
      ii. It looks as if it is windy.
  e. i. It looks as if there is a problem.
      ii. There looks as if there is a problem.[6]

In general, a VA sentence of the form 'XP looks to VP', where XP is any expression (including pleonastic 'it' and existential 'there') and VP is a verb phrase, is structurally ambiguous between a reading on which it can be paraphrased as (50a) below, and a reading on which it can be paraphrased as (50b):

(50) a. It looks as if XP VP.
      b. XP looks as if XP VP.[7]

For reasons that I will explain below, I shall call the first reading the sentence's *raising* reading, and the second reading its *control* reading.

8.8.1 Raising readings

It is standardly accepted among syntacticians that there is a reading of (51a) below (in fact, its only reading) on which 'John' is interpreted, not as a (semantic) argument of the main verb 'seem', but as an argument of the main verb of the complement of 'seem', 'love'.[8] On this reading, (51a) can be paraphrased by the sentence in (51b).

(51) a. John seems to love Mary.
      b. It seems that John loves Mary.

Our use of (51a) in place of (51b) is an instance of a phenomenon known to linguists as *subject-to-subject raising*, the name coming from the idea that (51a) is a transformational variant of (51b), obtained from (51b) by raising 'John' from the subject position of 'love' into the subject position of 'seem'. Because 'seem' sentences such as (51a) can be interpreted in this way, 'seem' is called a *raising verb*.[9]

I propose that each of the sentences in (48) above has a raising reading, on which the subject of 'look' is interpreted, not as an argument of 'look', but as an argument of the main verb of the complement of 'look'. On their raising readings, they can be paraphrased by sentences of the form 'It looks as if XP VP':

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[6] In the case of (49d), the two readings coincide. In the case of (49e), the two readings also coincide, although (49e.ii), in which the subject of the sentence is existential 'there', is judged by many to be ungrammatical. Nevertheless, a Google search shows that a significant number of speakers judge it to be acceptable, so I include it as a possible reading.

[7] To achieve a grammatical paraphrase, VP sometimes needs to be modified for agreement with XP: 'John looks to love Mary' is paraphrased as 'It looks as if John loves Mary' ('love Mary' is modified to 'loves Mary'); 'John looks to have been sick' is paraphrased as 'It looks as if John has been sick' ('have been sick' is modified to 'has been sick'); and so on. If XP is pleonastic 'it', then the two readings in (50) coincide; if it is existential 'there', then the two readings have the same meaning, although many speakers judge the (50b) reading to be ungrammatical.

[8] See Carnie (2001), ch. 10.

[9] Another well-known raising verb is 'appear' – we sometimes use 'John appears to love Mary' instead of 'It appears that John loves Mary' (to mean the same thing).

(52) a. It looks as if Patch is red.
    b. It looks as if John loves Mary.
    c. It looks as if a unicorn is approaching.
    d. It looks as if it is windy.
    e. It looks as if there is a problem.

By analogy with the case of 'seem', we might expect to find that if there are such raising readings of the sentences in (48), then on those readings they can be paraphrased by sentences of the form 'It looks that XP VP':

(53) a. It looks that Patch is red.
    b. It looks that John loves Mary.
    c. It looks that a unicorn is approaching.
    d. It looks that it is windy.
    e. It looks that there is a problem.

This is generally not what we find. The natural paraphrases are those in (52) which employ 'as if', and not those in (53) which employ 'that'. But I don't think that there is anything semantically significant about this. Even if a little odd, each of the sentences in (53) above can be perfectly well interpreted, and each is perhaps even grammatical if 'to me' is included after 'looks': 'It looks to me that Patch is red', 'It looks to me that John loves Mary', and so on (I have heard people use VA sentences like this). Furthermore, a Google search shows that a significant number of people do in fact use sentences similar to those in (53) (and hence, presumably, judge them to be grammatical), even without modifiers of the form 'to S'. Perhaps one day sentences like those in (53) will be used sufficiently often to be judged grammatical by a greater number of speakers. Finally, it is equally acceptable to paraphrase (51a) as 'It seems as if John loves Mary' (using 'as if' rather than 'that'), which suggests that any unacceptability of the paraphrases in (53) is just a quirk of usage.

What evidence is there that (48a-e) have raising readings? The evidence is this: first, each has a reading on which it is true in circumstances in which it ought to be false if the subject of 'look' is used as an argument of 'look', to specify a stimulus of the underlying looking event; second, on these readings, they are very naturally paraphrased by the sentences in (52), in which the subject of 'look' in the original sentence is used as the subject and an argument of the main verb of the complement of 'look'. Suppose that we cannot see Patch, but an indicator light is showing a colour that suggests that Patch is red. Then there is a reading of (48a) on which it is true in the circumstances. This cannot be a reading on which 'Patch' is used as an argument of 'look', to specify a stimulus of the underlying looking event (we cannot see Patch). Furthermore, this is a reading of (48a) which is very naturally paraphrased by (52a). It is not hard to come up with circumstances that provide evidence of raising readings for each of the remaining sentences in (48).

8.8.2 Control readings

It is standardly accepted among syntacticians that there is a reading of (54a) below (in fact, its only reading) on which it can be paraphrased as in (54b), and perhaps also as in (54c).[10]

(54) a. John wants to win.
    b. John wants John to win.
    c. John wants that John wins.

This is a reading of (54a) on which it seems that 'John' is used both as an argument of the main verb 'want', and also of the main verb of the complement of 'want', 'win'. But,

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[10] See Carnie (2001), ch. 10.

upholding the so-called *theta criterion*, according to which 'John' cannot be used as an argument of more than one verb, syntacticians standardly posit the existence of an unpronounced pronominal element 'PRO' in the subject position of the complement of 'want', which is bound by 'John'. So, at a more complete level of representation the structure of (54a) is the following:

(55)   John wants [PRO to win].

In (55), 'PRO' is bound by 'John' – it is understood as referring to whomever it is that 'John' is used to refer to (hence the paraphrase in (54b)). Strictly speaking, then, 'John' is used only as an argument of 'want', and it is the distinct syntactic element 'PRO' that is used as the argument of 'win'. Our use of (54a) in place of (54b) or (54c) is an instance of a phenomenon known to syntacticians as *subject control*. Because 'want' sentences such as (54a) can be interpreted in this way, 'want' is called a *control verb*.[11]

I propose that each of the sentences in (48) above has a control reading, on which it is interpreted to have the following structure:

(56)   a. Patch looks [PRO to be red].
   b. John looks [PRO to love Mary].
   c. A unicorn looks [PRO to be approaching].
   d. It looks [PRO to be windy].
   e. There looks [PRO to be a problem].[12]

On their control readings, (48a-e) can be paraphrased as follows:

(57)   a. Patch looks as if it is red.
   b. John looks as if he loves Mary.
   c. A unicorn looks as if it is approaching.
   d. It looks as if it is windy.
   e. There looks as if there is a problem.[13]

What evidence is there that (48a-e) have control readings? The evidence is this: first, each has a reading on which it is false in circumstances in a way that is very naturally explained on the assumption that the subject of 'look' is used as an argument of 'look', to specify a stimulus of the underlying looking event(s); second, on these readings, they are very naturally paraphrased by the sentences in (57), in which the subject of 'look' in the original sentence remains as the subject of 'look', and an expression anaphoric upon that subject is used as the subject of the main verb of the complement of 'look'. Suppose, again, that we cannot see Patch, but an indicator light is showing a colour that suggests that Patch is red. Then there is a reading of (48a) on which it is false in the circumstances. It is very natural to explain this as follows: this is a reading on which 'Patch' is used to specify that Patch is a stimulus of the underlying looking event(s); since Patch is not a stimulus of that event, this is a reading on which (48a) is false. Furthermore, this is a reading of (48a) which is very naturally paraphrased by (57a). It is not hard to come up with circumstances that provide evidence of control readings for each of the remaining sentences in (48).

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[11] Other well-known control verbs are 'hope' and 'forget' – we sometimes use 'John hopes to win' in place of 'John hopes that he wins', where 'he' is bound by 'John', and we sometimes use 'John forgot to buy milk' in place of 'John forgot that he buy milk', where 'he' is bound by 'John'.

[12] To maintain that 'PRO' is controlled by the subject of the sentence in every case, even in (56d) and (56e) where the subject is a pleonastic 'it' or 'there' (and hence non-referential), I need to say the following about what it is for 'PRO' to be controlled by the subject: either the subject and 'PRO' both fail to refer, or they refer to the same thing.

[13] On the grammaticality of (57e), see footnote 6 above.

8.9 Final remarks

I have now been through all of the remaining constructions exhibited by VA sentences, and suggested in each case how it is that we use the complement of 'look' to refer to or quantify over ways of looking. The mechanisms that I have appealed to are ones that we use more generally throughout English, in a wide variety of non-VA sentences. The fact that such a systematic account is possible is, I take it, a strong mark in favour of the account of VA sentences that I have been developing.

Bibliography

Anscombe, G. E. M. (1965), 'The Intentionality of Sensation: a Grammatical Feature', in R. J. Butler (ed.), *Analytical Philosophy: First Series* (Oxford: Blackwell).

Armstrong, D. M. (1961), *Perception and the Physical World* (London: Routledge & Kegan Paul).

Armstrong, D. M. (1968), *A Materialist Theory of the Mind* (London: Routledge and Kegan Paul).

Asudeh, A. (2002), 'Richard III', *CLS* **38**, pp. 31-46.

Austin, J. L. (1962), *Sense and Sensibilia* (Oxford: Oxford University Press).

Ayer, A. J. (1940), *The Foundations of Empirical Knowledge* (London: MacMillan Press).

Ayer, A. J. (1956), *The Problem of Knowledge* (London: MacMillan).

Bach, K. (1994), 'Conversational Impliciture', *Mind and Language* **9**, pp. 124-62.

Bach, K. (2001), 'Speaking Loosely: Sentence Nonliterality', *Mid West Studies in Philosophy* **25**, pp. 249-63.

Bach, K. (2001), 'You Don't Say?', *Synthese* **128**, pp. 15-44.

Broad, C. D. (1923), *Scientific Thought* (New York: Harcourt).

Byrne, A. (2001), 'Intentionalism Defended', *Philosophical Review* **110**, pp. 199-240.

Campbell, J. (1993), 'A Simple View of Colour', in J. Haldane and C. Wright (eds.), *Reality, Representation, and Projection* (New York: Oxford University Press).

Carlson, G. and Pelletier, F. J. (eds.) (1995), *The Generic Book* (Chicago: University of Chicago Press).

Carnie, A. (2001), *Syntax: A Generative Introduction* (Oxford: Blackwell).

Chisholm, R. M. (1957), *Perceiving: A Philosophical Study* (Ithaca, NY: Cornell University Press).

Chisholm, R. M. (1965), "'Appear', 'Take', and 'Evident'", in R. Swartz (ed.) (1965), *Perceiving, Sensing and Knowing* (New York: Anchor Books), pp. 473-85.

Chisholm, R. M. (1966), *Theory of Knowledge* (London: Prentice-Hall).

Crimmins, M. (1992), *Talk about Belief* (Cambridge, MA: MIT Press).

Davidson, D. (1980), 'The Logical Form of Action Sentences', in his *Essays on Actions and Events* (Oxford: Clarendon Press), pp. 105-48.

Dretske, F. (1969), *Seeing and Knowing* (Chicago: Chicago University Press).

Dretske, F. (1995), *Naturalizing the Mind* (Cambridge, MA: MIT Press).

Ducasse, C. J. (1942), 'Moore's Refutation of Idealism', in P. Schilpp (ed.), *The Philosophy of G. E. Moore* (Chicago: Northwestern University Press).

Evans, G. (1982), *The Varieties of Reference* (Oxford: Clarendon Press).

Fara, M. (2005), 'Dispositions and Habituals', *Nous* **39**, pp. 43-82.

Foster, J. (2000), *The Nature of Perception* (Oxford: Oxford University Press).

Gibson, Q. (1966), 'Is There a Problem About Appearances?', *The Philosophical Quarterly* **16**, pp. 319-28.

Goodman, N. (1966), *The Structure of Appearance* (Indianapolis: Bobbs-Merrill).

Graff, D. (2001), 'Phenomenal Continua and the Sorites', *Mind* **110**, pp. 905-35.

Haegeman, L. and Gueron, J. (1999), *English Grammar: A Generative Perspective* (Oxford: Blackwell).

Harman, G. (1990), 'The Intrinsic Quality of Experience', in J. Tomberlin (ed.), *Philosophical Perspectives* **4** (Atascadero: Ridgeview).

Heim, I. and Kratzer, A. (1998), *Semantics in Generative Grammar* (Oxford: Blackwell).

Hinton, J. M. (1973), *Experiences* (Oxford: Clarendon Press).

Jackson, F. (1976), 'The Existence of Mental Objects', *American Philosophical Quarterly* **13**, pp. 33-40.

Jackson, F. (1977), *Perception: A Representative Theory* (Cambridge: Cambridge University Press).

Jackson, F. and Pinkerton, R. J. (1973), 'On an Argument Against Sensory Items', *Mind* **82**, pp. 269-72.

Krifka, M., Pelletier, F. J., Carlson, G., ter Meulen, A., Link, G. and Chierchia, G. (1995), 'Genericity: An Introduction', in G. Carlson and F. J. Pelletier (eds.) (1995), *The Generic Book* (Chicago: University of Chicago Press), pp. 1-124.

Landman, M. and Morzycki, M. (2003), 'Event-Kinds and the Representation of Manner', in N. Antrim, G. Goodall, M. Schulte-Nafeh, and V. Samiian (eds.), *Proceedings of the Western Conference in Linguistics* **11**.

Leeds, S. (1975), 'Two Senses of 'Appears Red'', *Philosophical Studies* **28**, pp. 199-205.

Lewis, D. (1975), 'Adverbs of Quantification', in E. Keenan (ed.) (1975), *Formal Semantics of Natural Languages* (Cambridge: Cambridge University Press), pp. 3-15.

Lewis, D. (2001), *Counterfactuals* (Oxford: Blackwell).

Lycan, W. G. (1996), *Consciousness and Experience* (Cambridge, MA: MIT Press).

Martin, M. G. F. (1997), 'The Reality of Appearances', in M. Sainsbury (ed.), *Thought and Ontology* (Milan: Franco Angeli), pp. 81-106.

Martin, M. G. F. (2002), 'The Transparency of Experience', *Mind and Language* **17**, pp. 376-425.

Martin, M. G. F. (2003), 'Particular Thoughts and Singular Thought', in A. O'Hear (ed.), *Thought and Language* (Cambridge: Cambridge University Press).

McDowell, J. (1982), 'Criteria, Defeasibility, and Knowledge', *Proceedings of the British Academy*, pp. 455-79.

McDowell, J. (1987), 'Singular Thought and the Extent of Inner Space', in J. McDowell and P. Pettit (eds.), *Subject, Thought and Context* (Oxford: Oxford University Press).

Moore, G. E. (1903), 'The Refutation of Idealism', *Mind* **12**, pp. 433-53.

Neale, S. (2004), 'This, That, and the Other', in M. Reimer and A. Bezuidenhout (eds.) (2004), *Descriptions and Beyond* (Oxford: Oxford University Press), ch. 3.

Nunberg, G. (1995), 'Transfers of Meaning', *Journal of Semantics* **12**, pp. 109-32.

O'Shaughnessy, B. (1980), *The Will: A Duel Aspect Theory* (Cambridge: Cambridge University Press).

Parsons, T. (1990), *Events in the Semantics of English* (Cambridge, MA: MIT Press).

Peacocke, C. (1993), *A Study of Concepts* (Cambridge, MA: MIT Press).

Perry, J. (1986), 'Thought Without Representation', *Proceedings of the Aristotelian Society Supplementary Volume* **60**, pp. 263-83.

Pettit, P. (2003), 'Looks as Powers', *Philosophical Issues* **13**, pp. 221-52.

Pitcher, G. (1970), *A Theory of Perception* (Princeton: Princeton University Press).

Platts, M. (1997), *Ways of Meaning* (Cambridge, MA: MIT Press).

Potsdam, E. and Runner, J. T. (2001), 'Richard Returns: Copy Raising and its Implications', *CLS* **37**, pp. 453-68.

Price, H. H. (1941), 'Review of Ayer', *Mind* **50**, pp. 280-93.

Price, H. H. (1932), *Perception* (London: Methuen).

Price, H. H. (1964), 'Appearing and Appearances', *American Philosophical Quarterly* **1**, pp. 3-19.

Quine, W. V. (1940), *Mathematical Logic* (Cambridge, MA: Harvard University Press).

Quine, W. V. (1960), *Word and Object* (Cambridge, MA: MIT Press).

Quinton, A. M. (1955), 'The Problem of Perception', *Mind* **64**, pp. 28-51.

Quinton, A. M. (1973), *The Nature of Things* (Boston: Routledge & Kegan Paul).

Raffman, D. (2000), 'Is Perceptual Indiscriminability Nontransitive?', *Philosophical Topics* **28**, pp. 153-75.

Recanati, F. (2002), 'Unarticulated Constituents', *Linguistics and Philosophy* **25**, pp. 299-345.

Robinson, H. (1994), *Perception* (London: Routledge).

Rogers, A. (1971), 'Three Kinds of Physical Perception Verbs', *CLS* **7**, pp. 206-22.

Rogers, A. (1972), 'Another Look at Flip Perception Verbs', *CLS* **8**, pp. 303-15.

Rogers, A. (1974), 'A Transderivational Constraint on Richard?', *CLS* **10**, pp. 551-8.

Roxbee Cox, J. W. (1971), 'An Analysis of Perceiving in Terms of the Causation of Beliefs I', in F. N. Sibley (ed.), *Perception: A Philosophical Symposium* (London: Methuen), pp. 23-64.

Saul, J. M. (1997), 'Substitution and Simple Sentences', *Analysis* **57**, pp. 102-8.

Sellars, W. (1975), 'The Adverbial Theory of the Objects of Sensation', *Metaphilosophy* **6**, pp. 144-60.

Sellars, W. (1997), *Empiricism & The Philosophy of Mind* (Cambridge, MA: Harvard University Press).

Shope, R. K. (1978), 'The Conditional Fallacy in Contemporary Philosophy', *Journal of Philosophy* **75**, pp. 397-413.

Smart, J. J. C. (1995), "'Looks Red' and Dangerous Talk", *Philosophy* **70**, pp. 545-54.

Snowdon, P. F. (1979), 'Perception, Vision, Causation', *Proceedings of the Aristotelian Society*.

Stalnaker, R. (1976), 'Possible Worlds', *Nous* **10**, pp. 65-75.

Stanley, J. and Williamson, T. (2001), 'Knowing How', *The Journal of Philosophy* **98**, pp. 411-44.

Strawson, G. (1989), "Red and 'Red'", *Synthese* **78**, pp. 193-232.

Travis, C. (2004), 'The Silence of the Senses', *Mind* **113**, pp. 57-94.

Tye, M. (1975), 'The Adverbial Theory: A Defence of Sellars Against Jackson', *Metaphilosophy* **6**, pp. 136-43.

Tye, M. (1984), 'The Adverbial Approach to Visual Experience', *The Philosophical Review* **93**, pp. 195-225.

Tye, M. (1992), 'Visual Qualia and Visual Content', in T. Crane (ed.), *The Contents of Experience* (Cambridge: Cambridge University Press).

Tye, M. (1995), *Ten Problems of Consciousness* (Cambridge, MA: MIT Press).

Vesey, G. (1956), 'Seeing and Seeing As', *Proceedings of the Aristotelian Society* **56**, pp. 109-24.

Vesey, G. (1971a), 'Analysing Seeing II', in F. N. Sibley (ed.), *Perception: A Philosophical Symposium* (London: Methuen), pp. 133-7.

Vesey, G. (1971b), *Perception* (London: MacMillan Press).