

Guide to Chapter Four of Gareth Evans' *The Varieties of Reference*

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4.0 Chapter Four Overview

This chapter does two things. Both concern Russell's Principle (RP), which states that in order for a subject to be able to think about an object, the subject must be able to discern that object from all other things. The first is a constraint on what sorts of psychological states count as thoughts. It is the Generality Constraint (GC): the core idea is that thoughts are *structured*, that is, they result from the combination of components or component-abilities that permit recombination. One way to put this is that it is necessary, for two psychological states to count as i) a *thought* that a is F, and ii) a thought that b is G, that subject

also have the ability to think a is G, and b is F. Think of this as a test: if the state a subject is in does not satisfy the GC, then it doesn't qualify as a thought.

The second is Evans' take on what is involved in thinking of objects, an account which aims to explain what discriminating knowledge amounts to, and simultaneously to show how the GC is satisfied. The starting point is the fact that for objects of any type G, there are individuation conditions that not only specify in general terms how Gs are distinguished from each other, but also, for any particular G, specify what it is that distinguishes that G from the other Gs. For example, *in general* poker hands are distinguished from each other by the cards they consist of; but also *in particular* a royal flush is distinguished from other hands in that it consists in a 10, J, Q, K and A all of the same suit. The same is true of properties. For example, *in general* shape properties are distinguished by geometrical features; and *in particular* circularity is distinguished from other shapes by being a closed 2D curve all of whose points are equidistant from some point. These individuation conditions for kinds of objects and properties Evans calls their *fundamental ground of difference*. Clearly it is possible for one to think of an object or property as the thing that possesses the specific fundamental ground of difference it has — I can think of a circle *as a set of points equidistant from some other point*. Evans describes such thoughts as employing a *fundamental Idea* of the object or property.

Evans argues that our understanding of properties depends on our understanding of how objects of the relevant type can have those properties. That is, there is no possibility of understanding a property without understanding what it means for an object of the appropriate type to have that property. You can't understand the property '... is prime' without knowing what it means for *a number* to be prime. Since the ability to know what it would mean for any G to have property F is a special case of knowing what it would be for a G thing in general to be F, the account explains how the generality constraint is satisfied.

Finally, Evans argues that while not all thoughts involve fundamental Ideas, thoughts involving non-fundamental Ideas are underwritten by their connection to thoughts involving fundamental Ideas.

4.1 Its meaning and importance

In this section Evans motivates the need for an interpretation and defense of Russell's Principle. He begins with a fairly minimal interpretation: that it requires discriminating knowledge. That is, it is a necessary condition for a subject to be able to make a judgment about a that the subject be able to discriminate a from all other things. And he suggests that there appear to be three ways of doing this: one can perceive the object, one can recognize it, or one knows distinguishing features of it. He then provides two examples involving a subject attempting to form a judgment about one of two identical steel balls. One of these examples (he presumes) provides intuitive support for RP, and the other (he presumes) yields intuitions that run counter to RP. Evans uses these examples to motivate the need for a more thorough understanding of RP, so that its ability to provide theoretically satisfactory analyses of various specific cases, including the steel ball examples, is secured. Evans closes by remarking briefly on why an analysis of thought is important for his ultimate project of understanding reference. The reason is that Evans will argue that our theoretical grip on the meaning of a sentence consists in the thought someone would need to grasp in order to understand that sentence. (This does not eliminate the social component of linguistic semantics, because what thoughts or range of thoughts count as understanding a sentence is still determined by social norms, and can be different for different kinds of expressions. This means an analysis of linguistic semantics will have at least two parts: i) what requirements or restrictions do the social norms place on what

counts as understanding an expression?; and ii) what is required to have thoughts of the specified/allowed kinds?)

Evans' account of linguistic reference will make heavy appeal to the thoughts that one must have in order to understand a sentence, and so he must give some account of what is required to think about particular objects. He subscribes to Russell's Principle (RP), maintaining that in order for a subject to think about an object, the subject must know which object it is she is thinking about. As Russell put it in the passage Evans quotes:

...it is scarcely conceivable that we can make a judgment or entertain a supposition without knowing what it is that we are judging or supposing about. (Russell, B. *The Problems of Philosophy*, p. 58)

Evans points to three ways one might be able to distinguish an object from all other objects:

- i) when one can perceive the object,
- ii) when one can recognize the object, and
- iii) when one knows uniquely distinguishing features of the object.

(i) and (iii) come more or less straight from Russell. Evans follows Strawson in adding (ii) to the ways one might have discriminating knowledge (this will be discussed in Chapter 8, and will play a role in the account of proper names in Chapter 11).

Evans then highlights the need to explore RP by producing two thought experiments which yield, he assumes, conflicting intuitions. In the first, a subject S sees two identical steel balls suspended by string from a single point and rotating about it. Much later, the subject remembers that she saw two steel balls, but has, let us suppose, no ability (descriptive knowledge or recognitional capacity or current perceptual contact) to distinguish one of the balls from the other. Evans suggests that such a subject would not take herself to be able to think about just one of the balls. (Evans points out that if you imagine yourself in this situation, and trying to have a thought about just one of the balls “one finds oneself trying to exploit some distinguishing fact or other.”) The intuition that one would not be able to think about just one of the balls is in accord with RP.

The second thought experiment is a variant on the first. In this version, rather than seeing the two balls at the same time, the subject sees one (B1) on one day and the second (B2) on a later day. Furthermore, the subject, because of focal amnesia, retains no memory of the first encounter with B1. Such a subject would be unable to produce any facts which would discriminate between the two, without relying on descriptions like ‘the one from which my memories derive’.

Evans claims that even the subject would, upon learning about both balls and his amnesia, no longer claim to be thinking about ‘that ball’ (which would again be in accord with RP). But, he admits that it would nonetheless be ‘natural to say’ that the subject was thinking of the second ball, or had the second ball in mind. And this is in *prima facie* conflict with RP. The PM, according to which the thought is about the object causally responsible for it (so to speak) would say that the subject is able to think about the second ball. Given that there is nothing the subject can do to discriminate them, this would be a counter-example to RP.

Many readers find Evans discussion of these examples dissatisfying. It is often felt that in the first situation, one would be able to think about just one of the balls; and in the second, that the subject would be able to think of the ball that

was the causal source of the memories. I think that, initial appearances notwithstanding, the case for the conclusions Evans draws is much stronger than is often supposed. Making a convincing case for this now would move us out of the flow of this section, and moreover would best be attempted after some supporting remarks in Section 5.3, and so I have put this in the discussion of Chapter 5, section 5.D1. This will be a follow-up to 3.D1. For now, I just ask the skeptical reader to just put a temporary hold on their skepticism.

[Note that the second sentence on page 91 says that we have 'some apparent counter examples'. This seems to be a slip, as only the second is intended as a candidate counter-example. In the first case, Evans supposes all parties will agree that the subject would be unable to think of just one of the balls. It is only in the case of the second, where casual contact is with just one of the balls, that he suggests we are inclined to credit the subject with thought of one of the balls, contrary to RP.]

Evans then discusses the importance of a "theoretical defense" of RP. A defense of it will not only clarify what it means and provide a clearer idea of what it takes to satisfy it, but it also will help with two tasks that are important for Evans' project. First, it will (hopefully) shed light on what it is that unites the three broad categories of discrimination (perception, recognition, description). Second, it will help us to understand what is required in each of these three ways, to achieve discriminating knowledge. For instance, if we know exactly what work perception has to do in terms of allowing a subject to satisfy RP, then we get traction on what sorts of causal contact count as 'perception' in the relevant sense (e.g., does hearing someone on the radio, or in a recording, count?).

At the end, Evans reiterates that the reason for worrying so much about thought in a book about reference is that, as he will argue, the meaning of a sentence is the thought one must have in order to understand it, and in particular the meaning of a sentence about object *a* will be analyzed in terms of the thought,

about *a*, that one must have in order to understand that sentence. And so getting clear on how one can have a thought about a particular object will be key to his program.

4.2 Verificationism and ideal verificationism

*In this section Evans introduces one approach to understanding what discriminating knowledge might consist in: 'ideal' verificationism. The basic idea behind verificationism is that meaning — for example of the sentence *a is F* — is tied to experience-based verification. In this case, my understanding of *a is F* is analyzed in terms of my ability to verify its truth. Evans explains how this program, when spelled out, explains how the three modes of discrimination (perception, description, recognition) fall out.*

But the program has problems, in that we seem able to be able to understand sentences the truth of which we have no means of verification. And the proposals for expanding verificationism to cover them (ideal verificationism) manage to do so only at the cost of undercutting the original appeal of the program. Though Evans will argue that verificationism is inadequate, the verificationist position has some features that Evans will exploit in his own proposal, which will be given in Section 4.4.

Evans gives a brief overview of Dummettian verificationism, since it provides an account of what discriminating knowledge, of the sort needed to satisfy Russell's Principle, could consist in. Evans will not endorse verificationism, but will use it as a springboard to his own proposal, which he will provide in Section 4.4.

The basic idea behind verificationism is that the meaning of a sentence is explained in terms of how one would verify its truth. The primary sort of case is demonstrative verification: I am presented with (in perceptual contact with) some object, *a*, and this contact puts me in a position to assess whether that object has some properties. The properties in question are 'decidable' properties, meaning properties such that the perceptual contact puts me in a position to decide whether or not the object has them. When presented with an object visually, I can determine whether it is *red*, but I cannot, just in virtue of being presented with it visually, determine whether it was *once owned by a movie star*. So I can understand the sentence "that apple is red" if I can see *that apple*, and am able to decide whether it is *red*. This is what Evans calls a 'one-step' verification procedure, since one can verify that the object has the property immediately, in one step, so to speak. This will be more clear when we see the contrast with the two-step procedure.

Suppose there is some object *a* that I cannot currently perceive? How, according to a verificationist, might I be able to grasp a thought about *a*? One way is if I can recognize *a* as *a* if I am presented with it. So I can grasp the thought that *Paul Churchland is sunburnt* because I have the following two capacities: First, I can recognize Paul Churchland if I am presented with him, so to speak. If I identify someone demonstratively, I can tell whether that person is Paul Churchland. That is, for any 'that person' I can whether or not '*that person* = Paul Churchland'. And next, for any such person presented demonstratively, I can tell whether they are sunburnt. My ability to verify whether Paul Churchland is sunburnt is a two-step procedure: verify (via my recognition capacity) that *that person* = Paul Churchland; and then determine whether *that person* is sunburnt.

A similar story will explain my capacity to think of objects via a description. I can think the thought the tallest person in North America is bald if I have the ability to determine, of someone presented demonstratively, whether the

descriptive material is uniquely true of them — whether *that person* is the tallest person in North America — and second, of this demonstratively presented person, whether they are bald.

Starting at the bottom of p. 95 Evans brings up a number of objections against verificationism. There are two sorts of cases which give the model trouble: i) propositions involving very small, very large, very distant (etc.) objects. That is, spatiotemporal but imperceptible objects (e.g. electrons, the Milky Way Galaxy, black holes); and ii) propositions involving abstract objects.

In the first sort of case Dummett claims that we can extend the demonstrative model to include i) detection with instruments and ii) the idea of demonstrative verification procedures being carried out by beings with very different perceptual and cognitive abilities. Evans' objection to this line of extension is that it effectively undercuts the spirit of the verificationist model (this is the first full paragraph on page 97). Why? Because such extended procedures are unable to play the same sort of role that their non-extended counterparts play in deciding the truth value of propositions about the objects so identified. For example, if the thought is 'Quine is bald', then one can demonstratively identify some object, decide that it is Quine via one's recognitional capacities, and then decide of this demonstratively identified object if it is or is not bald. But a thought such as 'This plant's DNA is fragmented', does not proceed by singling out something demonstratively in this extended way, and then deciding whether or not this demonstratively identified object is fragmented. We can imaginatively extend the notion of demonstrative identification to such objects, but when we do we can no longer see it as playing a role in how we actually verify the truth of propositions concerning those objects. And securing the meaningfulness of thought on a bedrock of bona fide actual or (genuinely) possible experiential encounters was the whole point of verificationism.

In the case of abstract objects, Dummett's suggestion is that we adopt some preferred signs or names for such objects, and the verification procedure is then run not on the abstract objects themselves (which would be impossible), but on the preferred set of names. For example, to decide whether $[(5 \times 61) - 33] + (51 \times 23)$ is evenly divisible by 2, we first determine the number's canonical name, in whatever notation we use, and then decide, of the number represented in this way (1445) whether it is evenly divisible by 2. Or to determine whether 'Ashely's age in years' is a prime number, we first determine this number's canonical name, say '31', and then determine of that designation whether it is prime.

Evans' objection is that even if this works for numbers, it is not at all clear that it will work for all abstract objects, because there may not in general be anything like a canonical notation for such objects. Numbers appear to be a rather special case in this regard.

Near the top of page 99, Evans starts the paragraph with "As for the second of the two points..." He is referring to the sentence bridging pages 95 and 96. The first points were that while verificationism seems to handle some things well, there are others it doesn't handle so well. The second point, which he is turning to now, is that those things which it accounts for well are accounted for better by other models. One thing he thinks it accounts for is the fact that, e.g., imagined experiences or images of various sorts play a role in our thinking. Back on p. 96 he put it this way:

This model appeals to us because it finds an echo in the imaginings with which we are prone to accompany our reflections about the spatial world...

But he will argue that these imaginings can be explained in another way. In particular, he says that they are an index of the ineliminable role that our conception of the spatial world plays in our thinking, especially our thinking of

spatiotemporal objects. What he means is this. All sides can agree that the kinds of spatial imagery Evans describes in these pages occurs. The verificationist interprets this as a vindication that the meaning we attach to propositions we entertain is connected to a possible verifying experience, and the imaginings are attempts at filling out what such possible experience might be like. Evans offers a different explanation, which is that our understanding of propositions about objects hinges on our understanding of them as spatial things – in part because spatial location plays a major role in the individuation conditions of physical objects. It is because our understanding of objects involves conceiving of them as spatial that these conceivings are often accompanied by spatial imagery. But any such imagery is a by-product of the fact that we conceive of objects as spatial, rather than the basis upon which the meaningfulness of the propositions rests. The difference will be more clear after we have the details of Evans' proposal in hand, at the end of the chapter.

4.3 The generality constraint

In this section Evans introduces what he calls the Generality Constraint, which spells out a feature that any psychological state must have in order for that state to qualify as a thought. The basic idea is that thoughts are essentially structured, and this can be illustrated as: any subject that is capable of grasping the thought that Alice is friendly, and also capable of grasping the thought that Bill is grumpy will be able to grasp the thoughts that Alice is grumpy and Bill is friendly. Evans doesn't take it that this proposal will be terribly controversial, but he does think that once it is made explicit it will be a useful tool.

In this section Evans discusses what he calls the Generality Constraint (GC). This is a constraint on thought, meaning that it is a necessary condition that must be satisfied if one is to credit a subject with an ability to grasp some particular thought. The constraint is that thought is essentially structured, and an initial illustration of this is as follows: if there is a subject who can grasp the thought that *a is F* (Alice is friendly, say), and can also grasp the thought that *b is G* (Bob is grumpy), then this subject must also be able to grasp the thoughts that *a is G* and *b is F* (Alice is grumpy, and Bob is friendly). Note that this is a constraint on the *grasping* of thoughts, not on judging them to be true or false. The subject need not *believe* that Alice is grumpy, but she must be able to entertain (i.e. grasp) the thought, regardless of whether she judges it to be true, false, or is agnostic about it.

The GC might suggest something like a 'language of thought', according to which thought is to be understood as underwritten by something like symbols in an inner 'mentalese' language. Evans says this is consistent with the GC, but much stronger, and he doesn't necessarily want to endorse it. Rather, he speaks more generally in terms of the structure being something like an ability to think of objects, and an ability to think of properties. And indeed, it would be because of these component abilities that the thoughts that result from their joint exercise — thinking of Alice and the property of friendliness in the thought Alice is friendly — are structured. There is a crucial passage spanning pages 102-3:

It is a feature of the thought-content that John is happy that to grasp it requires distinguishable skills. In particular, it requires possession of the concept of happiness -- knowledge of what it is for a person to be happy; and that is something not tied to this or that particular person's happiness.

... Someone who thinks that John is happy must, we might say, have the idea of a happy man -- a situation instantiated in the case of John (he thinks), but in no way tied to John for its instantiation.

This might be put by saying that in crediting to someone the thought that John is happy, we are crediting to them an *understanding of what happiness is*. And it is part of the concept of happiness that it is not restricted in its application to any one person. The point requires careful statement. Suppose I believe that nobody is happy except John (the lucky man who is married to the woman I love). That is, I am unwilling to judge as true the thought that x is happy, for any person x other than John. There are two reasons I might be unwilling to do this. First, I might understand happiness as the sort of thing that could, in principle, apply to other people, but for whatever reason I judge that in fact none of these other people are happy. Second, I might simply not understand happiness as the sort of thing that even could apply to other people. Consider the property of being *prime* (as in a prime number). It is part of my understanding of this property that it simply does not apply to people, only numbers can be prime. The idea is that perhaps my understanding of 'happiness' is such that it only makes sense to apply it to John. The suggestion that Mary might be happy is, for me, as absurd as the idea that Mary is prime. If that were the way in which I conceived of happiness, then I would simply not understand what happiness is. And similarly, if I take myself to be able to grasp the thought that Mary is prime, then I don't really understand the concept of prime.

Evans is adding to this a parallel point about the *Ideas* that show up in the (so to speak) subject position of putative thoughts. 'Idea' is Evans' technical term for one's ability to think of an object — *Idea* is to *concept* (in thought) as subject is to predicate (in sentences). I cannot have an Idea of Alice, say, that restricts the applicable properties to friendliness, as though any other predicates (*grumpy* or

sleeping or *learned*) were just inapplicable (remember, not just *applicable but false*, because I judge that she is not sleeping, but *inapplicable*, as though *all* properties other than friendliness were in the same boat as *prime* with respect to Alice). In such a case, the suggestion is, I simply don't understand what Alice is. (The comment about pain on page 103 needs to be understood in this context. Of course an infant might *experience* pain even if they do not have the concept of pain, that is, even if they don't *understand*, in the sense here at issue, what pain is.) The link between GC and understanding will be explored more in Section 4.4.

Evans closes the section with a discussion of a proposal that putatively contradicts it:

It is not difficult to find work which infringes the Generality Constraint. There is a danger of infringing it whenever attention is focused exclusively upon the question 'What makes it the case that a person's belief is about such and such an object?' For example, Keith S. Donnellan has proposed an answer to that question along these lines: a belief state naturally expressed in the words 'a is F' is about the object x if and only if x is the object causally responsible -- in an appropriate way -- for this belief of the subject's that something satisfies 'F'. (VR, pp. 104-5)

In fairness, Donnellan's proposal could be understood in such a way that it does not violate GC. Perhaps Donnellan is assuming for purposes of the analysis he is providing that the subject is in a position to be able to think about people, and the proposal is about what makes it the case that the thought/belief is about person *x*, as opposed to some other person *y*. I will return to this example in the next section.

As a final note, on p. 101 Evans puts the GC this way:

If we hold that the subject's understanding of 'Fa' and his understanding of 'Gb' are structured, we are committed to the view that the subject will also be able to understand the sentences 'Fb' and 'Ga'.

And then follows up with this footnote 17:

With a proviso about the categorial appropriateness of the predicates to the subjects; but the substantive point is not affected. A similar proviso is needed at various places below.

There are two ways to interpret this footnote. One would interpretation would take the 'categorial' to be something along the lines of a grammatical or logical category, as in the categorial grammar Evans discussed in Chapter 1. Understood this way, the proviso is that we shouldn't require that a subject be able to grasp a thought combining an Idea with a predicate of requires more than one object (a relation). A different interpretation would interpret it as something like a semantic category. The example I will give below — 'Mary is prime' — would be an example of something that is not categorially appropriate. I think both are correct provisos needed, but I think that the second is what Evans must have had in mind here. The sentence to which the footnote was attached used as an example cases where the subject could grasp Fa and Gb, which seems to indicate that they are unary predicates. It's not clear how one could interpret the proviso in the first way while also taking it to be a constraint on the example is described in that sentence. The interpretation as a semantic proviso will connect to Evans claim, in the next section, concerning how our understanding of predicates is connected to the fundamental level of thought.

4.4 The fundamental level of thought

This is one of the most important sections of the book, as well as one of the most difficult. In it, Evans offers a minimal account of what is involved in thinking of an object, an account which simultaneously explains how thought conforms to RP and GC — and along the way we get refinements on both how RP and GC should be understood. The basic idea is that for objects of any sort there is what Evans calls a fundamental ground of difference. For purposes of this discussion this can be understood as something like the principle of individuation that is appropriate to — and in a sense defines — that type of object.

The proposal is that to think a thought about some particular G, one must have two kinds of knowledge. First, one must know what Gs are, which means one must understand the individuation conditions of Gs (in general, so to speak); and second one must also think of that G as the G thing that has the particular individuation conditions it has. So for example the individuation conditions for poker hands (a type of object that I might think about, when I think that a flush is likely to win most rounds of poker) is in terms of the card types that compose them. So a straight is five cards of consecutive rank, regardless of suit. My understanding of what a straight is consists both in knowing what poker hands in general are (their individuation conditions, aka fundamental grounds of difference), and also the specific individuation conditions that distinguish a straight from other hands.

In this section Evans provides an account of what is involved in thought, and his starting point is that in order to think that P, one must know what would make P true. Evans states:

... the difficulty ... is to give any substance to the notion of knowing what it is for a proposition to be true.. . I should explain at the outset that I am quite unable to give a general account of this notion. ... My strategy, rather, will be this: to make as precise as possible what notion of knowing what it is for a proposition to be true one is committed to by a denial of Russell's Principle; when this commitment is laid bare, I hope it will seem very unattractive, since it appears to involve the idea that there may be no difference, in respect of what they can do, between a thinker who knows what it is for some proposition to be true, and one who does not. (VR p. 106)

Despite his proviso, Evans does in fact provide a decent (in my opinion) account of what it is to know a proposition to be true, but the lesson I want to draw attention to from this quote is that one should not only focus on Evans' own positive account of what thought amounts to, but equally on the account of thought that anyone who denied RP (including the PM) is committed to. Evans takes it that his account here will shed light on this.

The lesson from the previous section is that a thought to the effect that *a is F* results from two distinct capacities, what he calls an *Idea* of an object, and an Idea of a property (aka concept). We start with Ideas of objects. The account analyzes an Idea of an object into two related components. The first is what would be familiarly understood as a sortal part, knowledge of the *kind of thing* that *x* is — a person, number, color, poker hand, physical object, emotion, and so on. Let's call this type *G*. The second part corresponds to knowledge of which, of all the *G* things, *x* is — which person, which color, which number, and so on.

Evans suggests that both parts of this derive from a common source. Here is one way to think of it. What defines a type of thing *as a type* just is a specification of the individuation conditions appropriate for individual examples of that type. Colors *just are* things that are distinguished from each other by visual phenomenal properties; chess board positions just are things distinguished from

one another by an arrangement of chess pieces on a chessboard; normal physical objects are distinguished from each other by their spatial location (at a time). The key part of teaching someone what the type *chemical element* is is teaching them how different elements (hydrogen, carbon, boron) are distinguished from each other. In a chemistry class this would be in terms of the number of protons in the nucleus. But these same conditions that define the type also are the means of distinguishing different entities of that type from each other. Hydrogen has one proton, while helium has two, carbon six, and so on. One's learning of some realm of objects *G* is a matter of learning what distinguishes one *G* from other *G*s. Evans' term for these individuation conditions that provide both for a conception of a type of thing and for what distinguishes specific instances of that type from each other is *fundamental ground of difference*.

So far none of this has anything to do with Ideas. Nevertheless, one could have an Idea of an object that keys on that object's fundamental ground of difference. Evans calls this a *fundamental Idea* of an object. So for example, in thinking of hydrogen as *the chemical element with one proton*, I would be using a *fundamental Idea* of hydrogen. (We will turn to what non-fundamental Ideas are shortly.) Speaking of fundamental Ideas, Evans says:

Such an Idea constitutes, by definition, distinguishing knowledge of the object, since the object is differentiated from all other objects by this fact. (VR, p. 107)

Note that this constitutes something of a refinement or clarification of RP. The standard formulation of RP so far has been that in order to grasp a thought about *a*, one must have discriminating knowledge of *a*, meaning (roughly) that one must be able to distinguish *a* from all other things. We can see now what this

means: one must know *the type of thing a* is, and also which, of all the things of that type, *a* is. So to grasp a thought about *three*, I must know a) that it is a number (this distinguishes three from other types of things, such as colors, physical objects, emotions, etc.), and also b) which number it is.

Evans now wants to show that there are three other thought-related abilities that can be explained by appeal to these fundamental grounds of difference. These will be: quantificational thoughts about Gs; properties appropriate to Gs; and non-fundamental Ideas of Gs. First to quantificational thoughts.

Evans wants to recognize a distinction between two kinds of fundamental Idea of an object that are made possible by one's grasp of the fundamental ground of difference appropriate to a type of object *G*. On the one hand, as already discussed above, there are particular fundamental Ideas of particular Gs. In the case of poker hands, I need to learn the specific combination(s) of cards that count as a *straight* in order to have a fundamental Idea of a straight. On the other hand, my knowledge of the sort of fundamental ground of difference that distinguishes poker hands from each other allows me to formulate the idea of 'a poker hand' in general. This is, as Evans put it, "... a general conception of the ways in which objects of that kind are differentiated from one another..." (p. 108)

Evans uses the Greek letter δ as a label for fundamental Ideas. For specific fundamental Ideas (of particular Gs, e.g., a straight, as opposed to a flush), Evans uses δ^* . So δ^* might be one's fundamental Idea of straight, and δ^{**} might be one's fundamental Idea of a full house, and so on. On the other hand, δ is used for one's Idea of a *G* (a poker hand 'in general') in general.

Evans maintains that one's grasp of quantificational *G* thoughts is underwritten by one's grasp of the fundamental ground of difference of Gs, and in particular the conception of something (in general) distinguished from other things by individuation criteria of the sort appropriate for Gs. So for instance if I hear that the International Federation of Poker has recognized a new hand in

poker, I can understand this, and my understanding is not to be explained as my grasp of any combination or disjunction of any specific poker hand Ideas (δ^* , δ^{**} , δ^{***} ...). Rather, I have a general conception of the ground of difference of poker hands, as things individuated by combinations of specific cards. And it is this general conception that allows me to grasp the thought that there is a new thing of this type recognized by the IPA. I need not speculate as to what the specific conditions are. This sort of general conception of an instance of the relevant fundamental ground of difference (individuation conditions) of a certain sort is what Evans means by an Idea δ . And Evans claims that such Ideas underwrite quantificational thought about Gs.

So while it is true that a quantificational thought about Gs will be made true, if it is true, in virtue of the truth of one or more particular G thoughts, it does not follow that one grasps the quantificational thought by grasping a disjunction of some series of particular G thoughts. (This might be impossible in any case, since the series might be infinite.) Rather, as Evans puts it:

One's grasp of the relevant series of particular-propositions is constituted, not by an ability to enumerate them, but by one's general conception of the way in which Gs are distinguished from one another, and from all other things. (VR, p. 109)

So one's grasp of individuation conditions for Gs lies at the foundation of quantificational thought about Gs. And this is via, so to speak, an arbitrary fundamental Idea δ .

The second of the three thought-related abilities Evans connects to fundamental grounds of difference concerns *concepts* of properties. This discussion starts at the top of p. 109. The idea is to point out that there is a certain assumption that is easy to make about our concepts of properties, and this assumption is mistaken. The mistaken assumption is that it is possible for

someone to understand a property independently of understanding the sort of objects that that property can be predicated of. Rather, one's grasp of a concept (of a property) depends upon one's ability to know what it would mean for objects *of an applicable type* to exhibit that property, and 'applicable type' here means an object understood in terms of fundamental Ideas of those objects, as described above.

The case for the plausibility of this principle is to consider the implausibility of its denial. What sense could be made of the idea that I have the concept PRIME, but not because I have any understanding of what it would be for a *number* to be prime. When I explain to someone learning math the property prime, what I do is explain what it is for a number to be prime. If someone were to give me the task of teaching someone the concept PRIME, but they stipulated that I was not to explain it in terms of what it means for a *number* to be prime, then it is not obvious to me what I could do. I learn something crucial about the property *prime* when I am told it is a property of numbers as opposed to a property of colors (like saturation). But until I am told what it would mean for a given (arbitrary) number to be prime, I can't really be said to understand the concept. Evans summarizes the point this way:

... we can say very generally what kind of knowledge is required for possession of a concept of being F, applicable to Gs: it is knowledge which, when conjoined with that knowledge which constitutes possession of a fundamental Idea, δ^* , of a particular G, yields knowledge of what it is for the proposition [δ^* is F] to be true. (VR, p. 109)

This is how, on Evans' account, the generality constraint is satisfied. And in explaining how, it allows us to refine the GC a bit. Suppose I can entertain the thoughts *a is F* and *b is G*. We can assume for now that my Ideas of *a* and *b* are

fundamental. And we must also assume that a and b are the same type of thing. So my thoughts can be expressed as $[\delta_a \text{ is } F]$ and $[\delta_b \text{ is } G]$. Because my understanding of the predicate F requires an understanding of what it would be for an arbitrary fundamental Idea of the relevant type to be F , it follows that if I can think $[\delta_a \text{ is } F]$, I must know what it would mean for $[\delta^* \text{ is } F]$ to be true for arbitrary δ^* . Therefore, I have the wherewithal to grasp $[\delta_b \text{ is } F]$. Similar remarks hold for my understanding of the concept G .

So the refinement of GC is that in the criterial test, a and b must be objects *of the same sort*. (This is what footnote 17 was gesturing at with its 'categorially appropriate' proviso.) This makes evident good sense, for surely we would not want to deny someone's ability to grasp the thought that 'seven is prime', on the grounds that the can also understand 'coffee is bitter' but don't know what it would mean for 'seven is bitter' or 'coffee is prime' to be true. (How could adding a willingness to entertain nonsense be a necessary condition for graduating from non-thought to thought?)

At the bottom of p. 109, Evans turns to "particular-thoughts about G s which do not involve fundamental Ideas of them...". An example might be "Plato's favorite number". This is an idea of a number as a number, and it is a particular-Idea in the sense that the Idea, while not fundamental itself, determines which fundamental Idea is relevant:

Which fundamental proposition is uniquely relevant to the truth of the particular-proposition must be determined in advance by the Idea a : the Idea a will determine some proposition $[\delta^* \text{ is } F]$ as uniquely relevant to the truth of the proposition $[a \text{ is } F]$ in virtue of the fact that $[\delta^* = a]$ is the only true proposition of the form $[\delta = a]$. (p. 110)

One can see how the two non-demonstrative modes of identification do this. A recognitional capacity I might have for some person is not, by itself, a fundamental identification of a person (people in general are not distinguished from one another by my ability to recognize them). But — if it is *adequate* — manage to isolate exactly one person, identified as such by the fundamental ground of difference that that person has. I italicized the word 'adequate' in the previous sentence since this is one of Evans' technical terms. A non-fundamental Idea is adequate iff that idea determines 'in advance' just one fundamentally identified object as relevant to the truth of propositions involving that Idea. If there was, unbeknownst to me, an identical twin of this person in the vicinity, it might be the case that my recognition-based Idea would not in fact be adequate. (This sort of case will be discussed more in Chapter 8.)

Evans then turns to generalizing this account to cover Ideas of temporal objects. Consider a proposition of the form $\langle \delta t' [is] Ft \rangle$ where $t' \neq t$. In such cases, the proposition is understood via an understanding of two propositions: one is what has just been discussed: $\langle \delta t [is] Ft \rangle$. The other involves one's knowledge of identity conditions for objects over time, which allow one to entertain propositions of the form $\langle \delta t = \delta t' \rangle$. For example, if I think of an elderly woman that she was once a great ballerina, this proposition, in order to be understood, must be articulated. Suppose that t is now, and t' is some time in the past when the woman in question was a ballerina. Then the proposition 'This woman was a great ballerina' is of the form $\langle \delta t' [is] Ft \rangle$. I must know what it would be for something like $\langle \delta t [is] Ft \rangle$ to be true, that is, what would make it the case that someone is (now) a great ballerina, and furthermore, I must have a grasp of identity conditions on objects (in this case persons) which allows me to understand $\langle \delta t' = \delta t \rangle$, that is, this elderly woman I see in front of me is the same woman as a woman at some time in the past.

For non-fundamental Ideas, three propositions are involved. A proposition of the form $\langle a \text{ [is] } F[t] \rangle$ involves

- i) knowledge of what it would be for a proposition of the form $\langle \delta t' = a \rangle$ to be true.
- ii) knowledge of what it would be for a proposition of the form $\langle \delta t = \delta 't' \rangle$.
- iii) knowledge of what it would be for a proposition of the form $\langle \delta t \text{ [is] } Ft \rangle$ to be true.

Evans closes, at the bottom half of p. 111, by discussing how his account addresses the GC. I want to discuss this a bit, because I don't think Evans expresses his position here as clearly as he could have. (Or maybe I am offering a friendly amendment.) As applied to fundamental Ideas of objects, the account as I discussed it above holds. The question concerns adequate but non-fundamental Ideas. Evans says:

When our Idea of an object is of a non-fundamental kind, we know what it is for a proposition of the form [a is F] to be true, because we know that it is true (if it is) in virtue of the truth of some pair of propositions of the forms [$\delta = a$] and [$\delta \text{ is } F$]; and our Idea of the object and our concept of the property constitute, respectively, knowledge of what it is for propositions of these forms to be true. Provided a subject knows what it is for identifications like [$\delta = a$] to be true, a link is set up between his Idea, a, and his entire repertoire of conceptual knowledge, and he will be able to grasp as many propositions of the form [a is F] as he has concepts of being F. His Ideas make contact with his concepts, so to speak, at the fundamental level ... (pp. 111-2, underlining added)

Strictly speaking, on Evans' account, understanding of predicates depends on an understanding of how the predicates can be true of entities of the applicable types, as discussed above — property of F, applicable to Gs. If δ s are fundamental Ideas of Gs, then in the first passage I underlined in the quote above, the fact that I know that a is a G is codified in the claim that some proposition of the form $[\delta = a]$. This is just another way of saying that I know that a is a G.

But in the second passage I underlined, Evans seems to be making a weaker claim, that all that is required is that I know what it would mean for $[\delta = a]$ to be true. But this does not seem to be enough. Instead of my thinking of 'Plato's favorite number', suppose I think of 'Plato's favorite object'. In the first case, I don't have a fundamental identification of a number, but the Idea is adequate because it determines one such fundamental Idea as uniquely relevant. The same could be said of the second case, in which I lack the sortal knowledge. But without the sortal knowledge — that I don't know whether the object in question is a number or a star or a childhood toy, it is not clear what sort of connection is set up between my Idea and any repertoire of conceptual knowledge. (This will be relevant when the topic of sortals comes up at several points in later chapters.)

Finally I want to return to what Evans' called his strategy, that is, making clear what one is committed to if one denies RP. The reason I want to return to this is that philosophers can often get tripped up by novel terminology and notation, mistaking the novelty for objectionable substance. When often in fact the novel terminology or notation is an attempt to be able to discuss, clearly, something that in itself is not objectionable. What would it mean to deny the points Evans is making? In short, the denial would be the claim that one could genuinely grasp the thought that a is F (when a is a G) even if one doesn't know what it is that distinguishes one G from other Gs. So for example, you can grasp the thought that 'p-adics are compact', even if you have no idea what type of thing a p-adic is, or what distinguishes one p-adic from another. Don't look it up,

but just ask yourself if you can grasp that thought. Of course you can repeat the sentence in your head, but do you *understand* it at all? (Note: the terminology itself is providing some clues as to the type of thing that a p-adic is, but how confident are you that it is a type of subatomic particle vs. a type of protein, or something else entirely? (Hint: it is something else.) And you probably don't even know whether being compact is even the sort of thing that could be true of a p-adic.

Returning to what Evans said earlier in the section:

My strategy, rather, will be this: to make as precise as possible what notion of knowing what it is for a proposition to be true one is committed to by a denial of Russell's Principle; when this commitment is laid bare, I hope it will seem very unattractive, since it appears to involve the idea that there may be no difference, in respect of what they can do, between a thinker who knows what it is for some proposition to be true, and one who does not. (VR p. 106)

We can now see what this means. The PM proponent is willing to attribute to someone an ability to grasp the thought that a is F based entirely on causal factors, independently of whether the person knows what a (or F) is. Suppose that the PM is right, and that just by hearing the sentence 'p-adics are dense' you can grasp the thought. Now consider someone who cannot grasp that thought — they were not, as the PM would have it, in earshot of the sentence when it was spoken, and have never heard of p-adics. Since you have no idea what type of thing a p-adic is (you don't know the fundamental ground of difference relevant to p-adics) there is nothing you can do that this other person cannot. Except for repeating the sentence (which you will probably be able to do correctly if you were listening closely, but who knows, you might have misheard and repeat it as b-adics, or spell it as 'beadix'). The denial of RP, if followed through, demotes knowledge to something fairly empty.

4.5 Comparison with verificationism

Evans draws attention to the similarities between his account and that of the ideal verificationist. On both programs there is a basic level – for the verificationist it is a demonstrative identification of an object and a concomitant ability to discern of such an object whether it has a property; for Evans, it is a conception of an object as the possessor of the fundamental individuation conditions it in fact has, and a concomitant ability to understand what it means for an object so conceived to have the relevant property. And both have a non-basic level to accommodate thought about objects not handled at the ground level. In both cases such thoughts are graspable if the subject can understand what it would mean for such an object to be identical to an object that is identified at the ground level.

In this section Evans draws out some parallels between his account, as described in Section 4.4, and the verificationist account he described in Section 4.2. In both cases there are two sorts of propositions/thoughts, what we might call basic and non-basic. For the verificationist, basic propositions are those whose truth can be determined directly via an assessment of the applicability of a decidable predicate to a demonstratively identified object. Non-basic propositions (employing names or descriptions rather than demonstrative identification) involve a two-step procedure: the ability to determine of a demonstratively identified object whether it is the bearer of the name (or the object of which the description is uniquely true), and then a determination of the basic type explained above.

Evans' account exhibits analogous structure. Instead of understanding a basic proposition as resting on an ability to verify applicability of a decidable predicate to an object given demonstratively, it recognizes a type of thought about an object that employs a fundamental Idea of an object, and knowledge of what it means for an object so identified to have this property. The non-basic sort employ an Idea that is adequate but not fundamental, and involves a two-step procedure: first, an ability to understanding an identity between the non-fundamental Idea a fundamental Idea; and then the fundamental thought-procedure as above.

A key difference is that Evans has not taken demonstrative identification as basic. And hence because actual encounters such as would be required to support demonstrative identification are not necessarily basic, abstract, small, distant, and past/future objects are not the problem for his account that they are for the verificationist. The kind of identification that is basic will be different for different kinds of objects, and so thought about abstract objects, such as numbers, while *analogous to* thought about physical objects, is not claimed to use the same machinery as that employed for physical objects. We don't need to try to analyze thought about numbers as a matter of verifying things about demonstratively identified symbols, for example.

Evans claims that his account explains why the verificationist model has some appeal in the case of demonstratively identifiable objects. For spatial objects, their fundamental ground of difference is their spatial location, and the prototypical way we can assess the precise spatial location of a physical object — that is, when we can employ a fundamental Idea of that physical object — is when we can perceive it. So for one type of object there is significant overlap between the two approaches. The difference is that for Evans, demonstrative identification of objects is *one instance* of a general account according to which, for objects of a type G, there will be some fundamental grounds of difference for objects of that

type. For Dummett, demonstrative identification of physical objects is the basic level, and all other kinds of thought are shoehorned into that mechanism.

Evans picks up on something he mentioned at the end of Section 4.2, when he was discussing the role of spatial imaginings in our thought. The fundamental ground of difference of spatial objects is their location in space, and so when thinking of arbitrary spatial objects we invoke a general idea of their fundamental ground of difference – that is, we imagine them as being in space:

When we represent material objects in the imagination, we ipso facto represent them as located and differentiated in space. We imagine the carpenter, as in the example of 4.2, as located in a particular position in space, though, of course, there is no particular position we imagine him as having. Such representations of objects in the imagination are just like arbitrary fundamental Ideas (to be understood on the model of the arbitrary names of certain formal systems). (p.114)

4.6 The counter-examples

In this section, Evans returns to the example of the subject who in the past encountered two steel balls that he can no longer distinguish, and is trying to think a thought of just one of them. Evans states this example in terms of the framework he developed in Section 4.4.

Evans starts with a discussion of the two kinds of non-fundamental identification, Ideas based on definite descriptions or recognition capacities. Such Ideas can be adequate, provided the subject *i*) has “knowledge of what it is for an arbitrary proposition of the form [$\delta = a$] to be true”, where *a* is such a

non-fundamental Idea; and ii) “the subject is disposed to identify just one object as that object.”

The point is that definite descriptions and recognitional capacities are adequate because they give the subject the capacity to make a specific identification of a single object of the relevant sort, that is, to assess it as identical to an Idea such as δ^* . Evans frames his discussion of the steel ball examples in terms of whether or not the subject has an adequate Idea of them. She is no longer seeing them, and by hypothesis she has neither a recognitional capacity, nor is employing any uniquely distinguishing description. So if thought about one of the balls is possible, it must be because some other kind of Idea of the ball, a , is also adequate, there would have to be some other way that the subject could know that $\langle \delta = a \rangle$.

Here is one way to understand the case. Suppose I tell you I am going to flip a coin, and you need to guess heads or tails. I flip the coin, catch it, and slap it on my forearm still covered by my hand. You say: “Heads.” But then you change your mind: “No, I changed my mind, tails.” Now suppose the coin slips off my arm so there is no way to tell if your guess was correct. Nevertheless, we understand what it would mean for it to have been correct or incorrect. And we know exactly what it means for you to have changed your mind. Your thought ‘the coin is heads’ has a meaning that determines, ‘in advance’ so to speak, which side is in question. It makes sense for you to wonder if your guess was right, change your guess, or even to complain that it was probably wrong. In Evans’ terminology, your Idea of ‘heads’ was adequate.

Now let’s change the example. I have a small coin-shaped metal disc, but it doesn’t have a heads or tails stamp, rather, the two sides are different colors. But I don’t tell you what the colors are. You might think ‘there are two colors’, you might even set up placeholders for the two colors in thought, such as ‘one color’

and 'the other color'. Now I ask you to call the coin flip. What can you do? You might say: "I think it is the one color!" I flip the coin, catch it, and slap it on my forearm still covered by my hand. What would it mean for you to change your guess now? Suppose you said: "Wait, I guessed the one color, but now I think it is the other color!" Indeed, if I remove my arm and you see the color of the disc, what would it mean for your guess to have been right or wrong?

There are some things it might mean for your guess to have been right or wrong. If, when you said 'the one color' you had in mind some descriptive material that would determine, in advance, one of the colors, this would be adequate. For instance, if you thought of 'the one color' as 'the darker color', or 'the more saturated color', or any other description that would single one of the colors out. But we are supposing that you are not using any surreptitious descriptive material in your thought.

Evans' point is that the putative thought about 'one of the balls' is on a par with 'the one color'. The comical senselessness of you changing your guess from 'the one color' to 'the other color' is a reflection of the same lack of determination. (I will return to a discussion of this case in 5.D1)

Evans anticipates an objection to his reasoning. In the case of the subject who encountered two steel balls on different days, but who because of focal amnesia retains information from only one of the balls, the proponent of the photograph model can suppose that the subject's ability to launch a thought at exactly one of the balls is underwritten by his causal contact with one of the balls, or more accurately from the fact that one of the balls is causally responsible for the information that the subject has about the balls. Evans has two connected replies to this.

The first is in the last paragraph of p. 116. Recall Evans' starting point in Section 4.4, the claim that "in order to think that P, one must know what would make P true." The PM theorist is claiming that having the right causal antecedent

is sufficient for such knowledge. Against this, Evans argues that this is, at best, a fairly radical view of what such knowledge can consist in.

... how can we suggest that the subject knows what it is for the identification $\langle \delta^* = \text{that ball} \rangle$ to be true, when he has not an inkling of the kind of consideration that in fact would make it true? (p. 117)

Remember that the argument we are trying to reconstruct on behalf of the PM theorist, is supposed to be an argument that will tell against RP. So it needs to be supposed that the subject is not thinking of the ball *as* the one from which his memory derives, or from which he retains information. If the subject were thinking about the causal connection, then that would be a definite description, which is a way that the subject might have discriminating knowledge. Rather, we are supposing the subject to be attempting a thought like ‘the ball I saw years ago’ (where ‘I saw x’ is consistent with me no longer retaining information from that perceptual encounter), or “that shiny steel ball”, that is, we are supposed to imagine a subject who is employing only resources that would not distinguish them.

Evans' reply to this is that in the example as described, the subject's thought about ‘that ball’ is on a par with your guess of ‘the one color’. There is nothing the subject can do, no resources she can marshal, that would get her supposed Idea of ‘that ball’ to attach to one of the balls any more than the other. As Evans puts it:

... how can we suggest that the subject knows what it is for the identification $[\delta^* = \text{that ball}]$ to be true, when he has not an inkling of the kind of consideration that in fact would make it true? (p. 117)

This leads to the water example. Evans imagines an objector who replies with something like this:

You (Evans) claim that the subject cannot really grasp the thought that [δ^* = that ball] because the subject has no inkling what would make it true. But this seems to be too strong. For surely we allow that ancient people could know that 'this is water' even though i) it is true in virtue 'this is H₂O'; and ii) such people had no inkling that water was H₂O.

Evans' reply is that it is true that we cannot attribute to such people knowledge that water is H₂O. But this is not what is required. What we need to attribute to them is a belief that there is some essence or fundamental characterization that this has in common with the stuff in lakes, etc. She does not know what this characterization is, but she knows there must be one. That is, she knows that the proposition 'this is water' is true in virtue of some other proposition 'this is X', where X is schematic for some suitable characterization or other of water.

But, Evans claims, there is no parallel move to be made in the case of thought about one of the balls. To be parallel, we would have to attribute to the subject knowledge that there is something that makes her thought concern just one of the balls even though she does not know what this is — and in particular does not know that it is a causal connection. Evans says:

I cannot see how we can, in a parallel way, permit our subject's supposed thought to be one which is rendered true by the truth of some proposition [δ^* = the object from which the subject's current conception causally derives]. The idea of the relevant causal connections, *ex hypothesi*, does not enter into the subject's thinking in the way in which the idea of a

fundamental characterization of the stuff in question enters into the thinking of someone who judges that something is water. (pp. 117-8)

I'm not sure Evans' response here is entirely adequate, since in order to make the case parallel, all we need to attribute to the subject is the idea that there is something in virtue of which $a = \textit{that ball}$ is true, not that we attribute to the subject that this think is a causal connection. But the argument can be filled out. In the case of water, we have license to attribute to subjects the relevant knowledge because subjects can in fact make true judgments about what is, and is not, water. They clearly have a practical mastery that is underwritten by this knowledge. But in the case of the steel balls, there is no parallel practical capacity. Unless the subject resorted to an explicit idea of a causal connection, there is nothing they can do to determine one as opposed to the other object as the ball in question.

Finally Evans addresses the following adversarial line of thought (paraphrased from the top of p. 118): The verificationists have given an analysis of what it is to know the truth conditions of a proposition. Their answer seems to be about the best one going. Nonetheless, they have difficulties with thoughts concerning certain things, such as space, time, theoretical entities like neutrinos, etc. Given that there are things like time and neutrinos that we have to admit that we have knowledge of despite the fact that we cannot give an account of our knowledge of the truth conditions for propositions involving reference to such entities to be true, we may as well also drop the requirement that understanding a sentence with other singular terms requires the audience to know which object is in question. In short, since we have to give up the idea that we have knowledge of truth conditions anyway, why not just drop Russell's Principle?

Evans' response is that just because there are some things which are difficult for the verificationist, it does not follow that we can just give up and drop all

empirical constraints on thought. And so if we don't allow the hasty generalization from the troublesome cases to cases like the steel balls, the opponent to RP must argue that the move is not one of generalization — that the steel balls are sufficiently like the troublesome cases (time and neutrinos).

The problematic cases fall into two classes: on the one hand our concepts of space, time and matter; and on the other, concepts supported by specific empirical theories. He claims that the case of the steel balls cannot be assimilated to either. It cannot be assimilated to the case of theoretical knowledge, because there is no theory. And it cannot be likened to the case of the verification transcendence of space, time, and matter (our conception of an objective world). Furthermore, as he has shown, treating the PM answer as a case of knowing which object is in question is inconsistent with the correct notion that knowledge must consist in capacities that the subject has, and thus would involve an overthrow of any reasonable account of concept or knowledge possession. Evans puts it this way:

To accept it as a case of knowing what it is for a proposition to be true seems to be inconsistent, not just with this or that particular theory of what it is to have such knowledge, but with any theory which places substantial restrictions, in terms of what a subject must be able to do, upon the use of that notion. The kind of consideration which must be regarded, by defenders of the case, as sufficient for possessing such knowledge is simply not a restriction of the right kind. (p. 119)

It does not place the right kind of restrictions on what counts as an ability to grasp, e.g., 'p-adics are compact'.

In the next chapter, Evans will explain why it seems 'natural to say' that the subject was thinking of just one of the balls, even though he was not. This explanation will take much of the motivation from the PM's sails.