1. *PI* 185ff drove home that by themselves neither the audible instructions concerning (+2) nor its visible initial segment nor any introspectible mental content (the ‘intuition’ of *PI* 186) can settle how I am to continue it: if God had looked into my mind then, He would not have known which continuation I was thinking of. The conclusion is that at each step of the series a decision—or really not even that, rather a sort of leap in the dark—is necessary (see also *On Certainty* 204).

2. The focus on a single mathematical sequence is unnecessary. The point applies to all cases where something ‘means’ something. An order places a kind of shadow on what follows it: if it is carried out then what is performed is the act that it meant; and if it is not carried out then still there is something that it meant—but how can an order mean one thing and not another? (See *PI* 433 (order), 437 (wish), 691 (drawing)).

3. Thinking about machines is a way of putting our perplexity in a very acute form: ‘A machine can follow [a] rule: whence does a human being gain a freedom of choice in this matter which a machine does not possess?’ (Dummett)—and the difficult discussion in the early 190s can be read as a response.

4. As well as treating a machine as a possibly malfunctioning physical object we can treat it as a symbol of its motion. Thus we might say: this is a pendulum with this length etc. and so (we calculate that) this is how it is going to move. For these purposes we ignore certain possibilities e.g. that the cord might interfere with the motion or that the whole contraption might break etc. (*PI* 193a).

5. The typically philosophical mistake occurs when we cross these pictures: as if the real physical object somehow contains within itself the motion that the mathematical theory predicts. That is why we think that these movements are somehow already in it.

6. Now consider somebody who has been taught (+2) by learning its initial segment. This state of the person corresponds to the machine in its initial condition. And we can treat the initial segment *either* as a symbol of its own future continuation (in which case we will derive a unique series of further steps) *or* as something directly apprehended by the learner (that he might continue in many ways). It is when we confuse these that we think that the learner has grasped: something that uniquely determines its own continuation.

7. From 195b until the summary at 201 *W* returns to the problem that generated the alleged clash between meaning and use in the first place (see *PI* 138). That was supposed to be the conflict between the grasp of meaning—which can allegedly happen in a flash—and the *use*, which is extended in time. The point is that what occurs to your mind in an instant—what he calls the ‘interpretation’ of the rule—does *not* determine the use (*PI* 198). This generates the famous paradox of *PI*
201a. If you think that the only way to grasp a rule is to have in mind an interpretation then yes, you will have to deny the equation of meaning and use; but you will also have to admit the paradox that any course of action fits as well with that grasp as any other.

8. PI 201 is perhaps the best place to introduce Kripke’s WRPL, which is a less rich but more focused version of PI 138-201. Consider K’s sceptic, who introduces you to the function quus as follows. There is some pair of numbers higher than any that you have added: we can suppose without any harm that 57 and 68 form such a pair. Then \( x \oplus y \), written \( x \oplus y \), is a function that takes \( x + y \) as its value if \( x \) and \( y \) are both below 57. Otherwise it takes the value 5.

9. Now the sceptic raises the following challenge. Look back at your past uses of ‘+’: include if you like your training and the introspectible contents of your mind. What fact is there in all this, the sceptic asks, in virtue of which you initially meant plus rather than quus by ‘+’? To put it another way: what fact is there about your past in virtue of which your now answering ‘125’ is, and your answering ‘5’ is not, faithful to your original intention? That is the ‘sceptical challenge’. It is important to see that the challenge is asking for something that not only makes ‘125’ the right answer; it must also be something awareness of which guides you to that answer (WRPL: 11; cf. my Saul Kripke: 103-7).

10. K goes through a number of answers to the sceptic: all of them fail. For instance, we cannot say that you meant plus in virtue of the fact that you initially associated ‘+’ with a verbal rule: for that rule too is open to reinterpretation (WRPL: 15-17). Here K is elaborating on PI 185.

11. K’s most important extension of W’s line is the discussion of dispositions (WRPL: 22-37). The idea is that there is something that makes ‘125’ the answer that is faithful to your past intention: namely the fact (which K does not dispute) that at that earlier time it was the case that if you had then been asked the sum of 68 and 57 you would have said ‘125’.

12. K makes various responses to this: for instance, that we are disposed to make mistakes, that we have only finite dispositions etc. But his first, crushing, objection is that no disposition could ever guide me in the use of an expression: a disposition determines how I would answer or would have answered: but it does not tell me how to act (WRPL: 23).

13. K’s conclusion is that there is no fact about what you then meant by ‘+’. This is the ‘sceptical paradox’; and K sees PI 201a as a concise statement of it. His W accepts the paradox. ‘There can be no such thing as meaning anything by any word. Each new application we make is a leap in the dark; any present intention could be interpreted so as to accord with anything we may choose to do. So there can be neither accord, nor conflict’ (WRPL: 54).