***Persuading the Tortoise***

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**1.** In *On Certainty*, Wittgenstein addressed the issue of beliefs that are not to be argued for, either because any grounds we could produce are less certain that the belief they are supposed to ground or because our interlocutors would not accept our reasons. However, he did not address the closely related issue of justifying a conclusion to interlocutors who don't see that it follows from premises they accept. In fact, Wittgenstein had discussed the issue in the *Remarks on the Foundations of Mathematics*; his view had been that certain inferential practices are constitutive of our notions of thinking and inferring. I argue that his treatment of unfounded beliefs in *On Certainty* essentially replicates, *mutatis mutandis*, his treatment of basic logical inference.

 In *On Certainty*, Wittgenstein addressed the issue of "how far do [reasons] go".[[1]](#footnote-1) What he meant in that context was whether, in arguing for a claim by giving reasons for it -i.e. by introducing premises from which the original claim is supposed to follow- one may, or must, come to a point at which such premises cannot in turn be argued for by introducing further premises. *Prima facie*, "cannot" hints at either of two different situations, both described and discussed by Wittgenstein:

 (A) I, the arguer, cannot produce further premises because, in a sense, I have none; not in the sense that there are no valid arguments from plausible premises to the conclusion I wish to draw, but in the sense that none of the grounds we can think of producing would be "as certain as the very thing they were supposed to be grounds for".[[2]](#footnote-2) For example,

My not having been on the moon is as sure a thing for me as any grounds I could give for it.[[3]](#footnote-3)

Or again,

What reason have I, now, when I cannot see my toes, to assume that I have five toes on each foot? Is it right to say that previous experience has always taught me so? Am I more certain of previous experience than that I have ten toes?[[4]](#footnote-4)

 (B) Though I, the arguer, could indeed produce the required premises, some or all of them would not be accepted by my interlocutors. For example, I could produce a scientific argument, but that would be pointless if my interlocutors don't know the first things about science and find scientific arguments unintelligible:

I could imagine Moore being captured by a wild tribe, and their expressing the suspicion that he has come from somewhere between the earth and the moon. Moore tells them that he knows etc. but he can't give the grounds for his certainty, because they have fantastic ideas of human ability to fly and know nothing about physics.[[5]](#footnote-5)

It may be that some seeming B-cases are really not such. For example, in the situation that Wittgenstein describes we might think of teaching our "wild" interlocutors a good deal of physics (which they might well accept), *then* construct arguments to show that Moore cannot have come from somewhere between the earth and the moon. On the other hand, it cannot be ruled out that they would keep asking for grounds for each physical thesis we put forth until we find ourselves in an A-case: we feel that no ground we can produce would be more certain than the claim it is supposed to justify. Or again, the whole thing might have no end: for each claim we put forth they would ask for some reason which we would promptly produce, and so on forever.

 Be that as it may, Wittgenstein thought that both kinds of cases shared a significant feature: both involve our picture of the world (*Weltbild*), "the inherited background against which I distinguish between true and false".[[6]](#footnote-6) In the B-cases, our interlocutors do not share our world picture (not just some beliefs of ours): they do not take for granted what we take for granted. Suppose someone, having grown up in particular circumstances, had formed the belief that the earth came into being 50 years ago.[[7]](#footnote-7) He believes the opposite of something we don't just believe but take for granted; it is plausible to conjecture that he likewise doesn't share many other beliefs we take for granted. There may be little common ground for us to argue for our belief that the earth has existed for a very long time; it would almost certainly be pointless to try and construct an argument to that effect relying on astronomy, physics, mathematics, etc. If he believes that the earth came into being 50 years ago he is likely not to share any such knowledge. What we could do, Wittgenstein says, is telling him a long story: that would amount to "trying to give him our picture of the world".

 Similarly, in the A-cases what characterises the premises that we would find pointless to argue for is not their Cartesian indubitability but their being matter-of-course:

Lavoisier makes experiments with substances in his laboratory and now he concludes that this and that takes place when there is burning. He does not say that it might happen otherwise another time. He has got hold of a definite world-picture - not of course one he has invented: he learned it as a child. I say world-picture and not hypothesis, because it is the matter-of-course foundation for his research and as such also goes unmentioned.[[8]](#footnote-8)

Thus our world picture includes beliefs that are taken for granted: we do not feel the need of arguing for them, and understandably so, for anything we could mention as a supporting ground is less secure than they. This should not be read as primarily a psychological remark (though it does have psychological significance as well): the main point is epistemological. Challenging such matter-of-course beliefs would involve challenging indefinitely many other beliefs, in a devastating *modus tollens*:[[9]](#footnote-9) though they are not the kind of beliefs that Quine would have regarded as central (they are not logical or mathematical principles), they enjoy a sort of Quinean centrality as distinct from Cartesian fundamentality.[[10]](#footnote-10) This, I believe, is what Wittgenstein means when he describes them as "foundation walls that are carried by the whole house", or as "hinges" on which disputes turn.[[11]](#footnote-11)

 With respect to the activity of giving reasons and asking for reasons, such beliefs and the propositions that express them represent a limit. They are not beliefs or propositions one argues for. If an interlocutor does not accept one such proposition we will not prove him wrong by giving him reasons to accept it. Instead, we might do something else: try to give him our picture of the world. A couple of times, Wittgenstein calls this alternative form of belief-inducing interaction 'persuasion'.[[12]](#footnote-12) He does not expand on the notion, though it seems clear that persuasion is not an argumentative procedure.[[13]](#footnote-13) Later on, we shall have something more to say about what persuasion may consist in.

**2**. Matter-of-course beliefs -"hinges"- may be said to represent a *material* limit of argumentation. We are unable to justify a particular belief or proposition (though we firmly believe it to be true) because of the belief (or proposition) it is, i.e. because of its content. By contrast, there may be cases in which we feel unable to justify a claim not because of the particular claim it is, but because we seem to be unable to show that it follows from certain accepted premises (from which, as we firmly believe, it does follow); indeed, we seem to be unable to prove that if *any* premises of that form (say, A, A  B) are accepted, then *any* conclusion of the appropriate form (B) ought to be accepted as well. Call this a *formal* limit of argumentation.

 Such cases should be distinguished from ordinary cases in which participants in a discussion agree on a given set of premises but disagree on whether they entail a certain conclusion. For example, though they agree that an experiment shows that P they disagree on whether P counts as disconfirming theory T. In such cases, disagreement about the inferential connection between P and ~T often depends on the connection being enthymematic: P alone does not entail ~T, though P & Q does. However, one participant is taking Q for granted whereas his opponent is not - in fact, she tacitly rejects Q. Here, disagreement really concerns the argument's premises, not the inferential connection between premises and conclusion. By contrast, in the situations I have in mind all the relevant premises are both explicit and shared; nevertheless, there is disagreement on whether they count as compelling reasons for some conclusion. A standard, much discussed example is the controversy of Achilles and the Tortoise in Lewis Carroll's (1895). Readers will remember that though the Tortoise accepts two premises, A and B, which logically entail conclusion Z, she is not prepared to accept Z.[[14]](#footnote-14) As Achilles insists that it is certainly true that A and B together entail Z, the Tortoise does not object to the truth of the *proposition* "if A and B then Z"; however, even though at that point she accepts A, B, and "if A and B then Z", still she is not prepared to accept Z. Again, she doesn't intend to challenge the truth of

 (1) If A, B, and if A and B then Z, then Z;

nevertheless, even adding (1) to the other premises she doesn't see why she ought to accept Z. And on it goes. The situation could be described as follows: the Tortoise is not disposed to apply the rule of Modus Ponens, though she is willing to accept any propositional formulation of the rule. As if she believed that it is one thing to accept the proposition "if P and (if P then Q), then Q", and quite another thing to be disposed to accept Q, having accepted both P and "if P then Q".

 It may be argued, however, that the description I just offered of the Tortoise's stand must be incorrect, as it is inconsistent. I said the Tortoise accepts A, B, and "if A and B then Z". But her acceptance of "if A and B then Z" presupposes that she understands it. Hence, she understands the idiom 'if...then...'. But understanding that idiom *amounts to* –among other things- being disposed to accept Z if one accepts A, B, and "if A and B then Z";[[15]](#footnote-15) indeed, it amounts to finding inferences of that form "primitively compelling" in virtue of their form, i.e. independently of which particular sentences A, B and Z are. Yet the Tortoise does not accept Z. Hence, she does not understand 'if...then...'; consequently, she does not really accept "if A and B then Z". If meaning what we mean by 'if...then...' entails being disposed to make inferences of a certain form, then either the Tortoise does not understand "if A and B then Z" or she attaches a deviant meaning to it: in both cases, she does not *really* accept "if A and B then Z", or anyway not the sentence that Achilles is asking her to accept (assuming Achilles is semantically like us). So my description is inconsistent.[[16]](#footnote-16) As an alternative, one might take accepting as not entailing understanding: the Tortoise accepts the relevant premises just in the sense that she assents to them, whether or not she understands them (and however she interprets them).[[17]](#footnote-17) In that case the description may be consistent: it would represent the Tortoise as unaware of the real content of what she is accepting.

 However, the inferentialist account of logical words and concepts is not universally agreed upon: it has been argued that one may understand 'if...then...' perfectly well while not being disposed to reason by Modus Ponens.[[18]](#footnote-18) If so, then my description of the Tortoise's stand may be all right. In what follows, I'll be assuming that the description *is* consistent, in the following limited sense: it is not *prima facie* impossible that one may assent to A and "if A then B" while not feeling compelled, or even entitled, to also assent to B.

**4.** In her (2014), Annalisa Coliva, partly following Engel (2007), finds in the Tortoise's stand a good reason to raise doubts concerning the inferentialist account (which she calls "the meaning-constitutive account"). She notices that the Tortoise, by accepting

(2) If A and B are true, then Z must be true,

displays perfect grasp of the meaning of 'if...then...', yet she refuses to reason in accord with it and thus to infer Z. So, "it remains difficult to see how meaning-constitutive considerations could provide a justification of Modus Ponens capable of overcoming the eventual doubts of the unconverted".[[19]](#footnote-19) But, as should be clear from the previous discussion, her argument is circular. *Of course* if a certain description of the Tortoise's stand (such as the one I offered) is consistent, then the inferentialist/meaning constitutive account is inadequate: for if the description is consistent, it is possible to understand 'if...then...' while not being disposed to reason by Modus Ponens, contrary to the inferentialist account. The issue is exactly whether the description is consistent. For an inferentialist, it is not, unless accepting does not entail understanding. But in that case –if 'accept' refers to mere assent, with or without understanding- surely from the fact that the Tortoise "accepts" (2), or any other sentence involving the idiom 'if...then', *nothing* follows as to whether she understands 'if...then...'. In other words, the inferentialist account cannot be refuted just by assuming that the problematic description is all right, for this amounts to begging the question.[[20]](#footnote-20)

 Having rejected the inferentialist account, Coliva advances her own solution to the problem of justification of deductive inference, or of its basic principles such as Modus Ponens. She calls it a "hinge" solution, as it is structurally similar to Wittgenstein's solution to the problem of justifying the "hinge" beliefs. As we recalled, "hinge" beliefs are "foundation walls that are carried by the whole house": the whole fabric of what we call 'knowledge' requires that the hinges are left unchallenged.[[21]](#footnote-21) Similarly, the very notion of logical rationality depends on a practice of reasoning that employs certain basic patterns of inference: "we are mandated by logical rationality itself to reason in accord with Modus Ponens".[[22]](#footnote-22) This does not entail that we can prove the validity of Modus Ponens to an interlocutor who is not already committed to reasoning by Modus Ponens, as any proof we might give is bound to make use of Modus Ponens (as Quine (1936) and others have shown). However, an interlocutor who, like the Tortoise, stubbornly refuses to reason by Modus Ponens places herself "outside the scope of logical rationality": as Frege said, she would exhibit "a hitherto unknown kind of madness".[[23]](#footnote-23)

**5.** Later in this paper I'll have something to say about Coliva's characterization of the Tortoise's stubbornness. Right now, I should like to raise a different issue. Coliva presents her (sceptical?) solution to the problem of justifying deductive inference as an extension of Wittgenstein's solution to the problem of justifying the hinges: as assumption of the hinges is mandated by epistemic rationality, likewise adherence to basic logical principles is mandated by logical rationality.[[24]](#footnote-24) So, her solution is "in the spirit" of Wittgenstein. In fact, it seems to me that her solution is, in essence, Wittgenstein's own solution as offered in the *Remarks on the Foundations of Mathematics* and elsewhere. As so often, Wittgenstein's remarks are not explicitly presented as the solution to a precisely characterised problem; however, their point appears to be very close to Coliva's more definite suggestions. Wittgenstein first states the Tortoise's case:

One is often in the dark about what following and inferring really consist in; what kind of fact, and what kind of procedure, it is. The peculiar use of these verbs suggests to us that following is the existence of a connexion between propositions, which connexion we follow up when we infer. This comes out very instructively in Russell's account (*Principia Mathematica*). That a proposition |-q follows from a proposition |- p  q . p is here a fundamental law of logic:

 |- p  q . p. . |- q

Now this, one says, justifies us in inferring |-q from |-p  q . p. But what does 'inferring', the procedure that is now justified, consist in? Surely in this: that in some language-game we utter, write down (etc.), the one proposition as an assertion after the other; and how can the fundamental law justify me in *this*?.[[25]](#footnote-25)

Let alone *force* me to do this, the Tortoise would add. Wittgenstein agrees that no argument could be produced to make an interlocutor accept the conclusion of a logically valid inference:

All I should further say as a final argument against someone who did not want to go that way [i.e. who refused to draw the conclusion according to the rule] would be: "Why, don't you see...!" – and that is no *argument.*[[26]](#footnote-26)

No argument indeed, but rather the expression of Achillean exasperation. Wittgenstein's further discussion has much in common with the better known discussion of rule-following in the *Investigations*. A leading idea, also to be found there,[[27]](#footnote-27) is that certain inferential practices are part of what we mean by 'inferring',[[28]](#footnote-28) so that of one who did not share the practices we wouldn't say she is inferring. This, however, should not be understood in a conventionalist sense: it is not just that we arbitrarily chose to call such practices 'inferring' (or 'continuing a series', etc.).

...thinking and inferring (like counting) is of course bounded for us, *not by an arbitrary definition, but by natural limits corresponding to the body of what can be called the role of thinking and inferring in our life*.[my it.] // For we are at one over this, that the laws of inference do not compel him to say or to write such and such like rails compelling a locomotive. And if you say that, while he may indeed *say* it, still he can't *think* it, then I am only saying that that means, not: try as he may he can't think it, but: *it is for us an essential part of 'thinking' that – in talking, writing, etc. – he makes* this *sort of transition* [my it.].[[29]](#footnote-29)

"You admit *this –* then you must admit *this* too." – He *must* admit it- and all the time it is possible that he does not admit it! You want to say: "if he *thinks*, he must admit it".[[30]](#footnote-30)

In other words, reasoning in a certain way –i.e. conforming to logical laws- is constitutive of thinking (of Coliva's "logical rationality").[[31]](#footnote-31) It doesn't just exhibit how human beings think as a matter of anthropological fact; it shows what thinking *is* – for us:

The laws of logic are indeed the expression of 'thinking habits' but also of the habit of *thinking*. That is to say they can be said to shew: how human beings think, and also *what* human beings call "thinking".[[32]](#footnote-32)

The propositions of logic are 'laws of thought', 'because they bring out the essence of human thinking' – to put it more correctly: because they bring out, or shew, the essence, the technique, of thinking. They shew what thinking is and also shew kinds of thinking.[[33]](#footnote-33)

Thus (just as Coliva holds, see above) reasoning in a certain way is a requirement of thinking. Someone who didn't acknowledge the validity of certain patterns of inference would not count as a thinking being:

This is a demonstration for whoever acknowledges it as a demonstration. If anyone *doesn't* acknowledge it, doesn't go by it as a demonstration, then he has parted company with us even before anything is said.[[34]](#footnote-34)

"Even before anything is said", i.e. whether or not he subscribes to certain propositions such as explicit statements of logical laws: by failing to accept Z the first time, the Tortoise has already shown that she is not "one of us" as far as thinking goes; her acceptance of propositional formulations of Modus Ponens is immaterial.

**6.** So, Wittgenstein was fully aware of the formal limit of argumentation: ultimately, there is no argumentative way of bringing an interlocutor to accept the conclusion of a valid argument, even if she accepts its premises (and even adding a propositional formulation of the very principle that underlies the argument's validity[[35]](#footnote-35)). Though he explored the inferentialist solution,[[36]](#footnote-36) eventually his tentative view appears to be close to the remarks that temporarily conclude the rule-following considerations: inferring is a practice characterised by certain patterns; it is constitutive of our notion of thinking; the principles of inference - the "laws of thought"- can be seen as expressing certain "thinking habits", but at the same time they individuate what we call 'thinking'.

 In *On Certainty*, Wittgenstein reflects at some length on the material limit of argumentation but he seems to have forgotten about its formal limit: very few remarks deal with reasoning or inferring as such.[[37]](#footnote-37) Is it possible that he didn't notice the resemblance between being unable to argue for a premise and being unable to argue for the legitimacy of drawing a certain conclusion from accepted premises? Given his previous work on the latter issue, this seems unlikely. In any case, I would like to put forth a different hypothesis, which is, in a sense, the converse of Coliva's suggestion. As we saw, Coliva proposes to deal with the formal limit of argumentation on the pattern of Wittgenstein's treatment of the material limit. By contrast, I propose that we look at the treatment of the "hinges" in *On Certainty* as replicating –*mutatis mutandis*- Wittgenstein's own treatment of the formal limit in the *Remarks on the Foundations of Mathematics*. His treatment of the hinges is a further application of the philosophical attitude he took up with respect to rule-following in general and inferring in particular, in both the *Remarks* and the *Investigations.*

 The first point I would like to make is that Wittgenstein constantly characterises the hinges as part of *logic*, or as rules of the game:

... It belongs to the logic of our scientific investigations that certain things are *in deed* not doubted.[[38]](#footnote-38)

The *truth* of certain empirical propositions belongs to our frame of reference.[[39]](#footnote-39)

The propositions describing this world picture might be parts of a kind of mythology. And their role is like that of rules of a game; and the game can be learned purely practically, without learning any explicit rules.[[40]](#footnote-40)

Hence, they share the peculiar foundational role of logical laws in the narrow sense:

I want to say: propositions of the form of empirical propositions, and not only propositions of logic, form the foundation of all operating with thoughts (with language).[[41]](#footnote-41)

...certain propositions seem to underlie all questions and all thinking.[[42]](#footnote-42)

The foundational role of logic, however, does not consist in its being absolutely secure or in its "certainly correspond[ing] to the truth", but in its being constitutive of the procedures we regard as rational: "it is just this that is called 'thinking', 'speaking', 'inferring', 'arguing'".[[43]](#footnote-43) In an argument, logically motivated steps are taken for granted, as challenging them would amount to being confused about what an argument is. Indeed, this counts as a definition of logical inference:

The steps which are not brought in question are logical inferences.[[44]](#footnote-44)

This also shows that hinges play a quasi-logical role: as we saw, being taken for granted is what characterises them.

 Having thus presented the hinges as akin to logical rules, it is quite natural for Wittgenstein to conceive of their role on the pattern of the role of logic. As making certain "transitions" is an essential aspect of thinking, similarly certain propositions "form the foundation of all operating with thoughts"; as logical steps go unchallenged, similarly "certain things are *in deed* not doubted" (though no impossibility, either physical or logical, is involved in either case);[[45]](#footnote-45) as the person who does not acknowledge a logical proof "has parted company with us", so

One might simply say "O, rubbish!" to someone who wanted to make objections to the propositions that are beyond doubt. That is, not reply to him but admonish him.[[46]](#footnote-46)

Epistemologically, inferring according to valid logical rules is justified as giving it up would amount to giving up what we call 'inferring', 'arguing', and 'thinking'; similarly, hinges are justified for giving them up would involve giving up what we call 'knowledge'.

 By emphasising these analogies, I am not claiming that in *On Certainty* Wittgenstein was mechanically applying to the hinges a pattern he had derived from reflection on logical inference. Rather, I am suggesting that in dealing with Moore's platitudes and other comparable beliefs, he was naturally drawn to an attitude he had first taken up while reflecting on logical inference and rule following; this involved rediscovering (and partly reshaping) arguments he had already used in his treatment of those issues. Coliva is right in claiming that there is a "hinge solution" to the problem of answering the Tortoise, except that she ignores that it is just Wittgenstein's solution.

**7.** Having characterised (and, in a sense, legitimised) reasoning by Modus Ponens as a condition of logical rationality, Coliva opposes a right way and a wrong way of reproaching the Tortoise for her stubbornness. The right way consists in saying that she is irrational, "as she refuses to take part in an activity which is constitutive of logical rationality".[[47]](#footnote-47) The wrong way would consist in saying "that she [doesn't] know the meaning of 'if...then', or that she [merely prevents herself] from taking part in a project which is extremely valuable or even indispensible for us".[[48]](#footnote-48) Leaving aside the inferentialist ("meaning constitutive") retort, can the distinction between being irrational and refusing to take part in our rationality project be upheld, from a Wittgensteinian viewpoint? Obviously, Coliva's idea is that the "wrong reproach" is relativistic while the "right reproach" isn't; or in other words, that the "wrong reproach" presupposes that the rationality project is merely *our* project – there may be others. Her rejection of the wrong reproach is in line with her firm belief that Wittgenstein was no relativist, not even a "virtual" relativist[[49]](#footnote-49): he did not believe that alternative patterns of rationality were even *conceivable*.[[50]](#footnote-50) However, even accepting her arguments to that effect (in spite of recalcitrant quotations concerning tribes that measure wood in a different way, etc.), it doesn't follow that the "right" and the "wrong" reproach are essentially different (discounting different rhetorics). We cannot disregard the fact that, ultimately, logical rationality is characterised by Wittgenstein in terms of what *we*, human beings, *do*: on the one hand, "This is simply what I do";[[51]](#footnote-51) on the other, "there is great – and interesting – agreement here".[[52]](#footnote-52) The laws of logic are the expression of *our* thinking habits, and they show, at the same time, what *we*, human beings,call 'thinking'.[[53]](#footnote-53)

As *our* practices together with their role in *our* life – and nothing else – are constitutive of logical rationality, logical rationality is inherently *our* project: this in itself does not entail that there are or could be any others, but at the same time, that there neither are nor could be any others does not entail that logical rationality is *not* inherently our project, i.e. that it could be characterised independently of our practices and their role in our life. Taking (e.g.) Modus Ponens as constitutive of logical rationality as opposed to what is "merely" a valuable, indeed indispensible project *of ours* seems to me a way of turning an essentially antifoundationalist view (Wittgenstein's view) into a para-foundationalist one. That Coliva would endorse such an opposition is surprising, given her definitely non-foundationalist interpretation of *On Certainty* and her staunch criticism of foundationalist interpretations.[[54]](#footnote-54)

 What about people who, like the Tortoise, reject our rationality project by rejecting a constitutive feature of it, or who, like the tribesmen who captured Moore, simply do not participate in it? Wittgenstein said that "at the end of reasons comes *persuasion*",[[55]](#footnote-55) but he didn't explain what persuasion is. However, it would seem that if the Tortoise's and the tribesmen's position can be characterised as "not being one (some) of us", then persuasion must be an operation or process by which an interlocutor is made to join our community, as far as rationality is concerned. How is this achieved? While explaining that "We are quite sure of it" doesn't mean that every single person is certain of it, Wittgenstein, hinting at the social phenomenon that is nowadays called 'deference', says that "we belong to a community which is bound together by science and education".[[56]](#footnote-56) Similarly, when he describes our possible behavior towards a person "who had grown up in quite special circumstances and been taught that the earth came into being 50 years ago", he says: "We might instruct him: the earth has long...".[[57]](#footnote-57) He comments that that would be trying to give him our world picture, and calls "a kind of *persuasion*" the process through which this might happen. Most clearly, when he discusses the obnoxious pupil who keeps asking all sorts of "fundamental" questions concerning the existence of things, the meaning of words, the uniformity of nature, and so forth Wittgenstein comments that "the teacher will get a bit impatient, but think that the boy will *grow out of* asking such questions".[[58]](#footnote-58) Wittgenstein's main point here[[59]](#footnote-59) is that the pupil's doubts "don't make sense at all" because the pupil "has not [yet] learned how to ask questions": *reasonable* doubts and questions only arise on (and from) a background of shared premises (what we call 'knowledge'). But Wittgenstein is also pointing out that such a background comes to be shared through instruction and education: indeed, this is what instruction and education *are*. Thus Wittgenstein's persuasion is not some kind of subliminal conditioning of defenseless subjects; it simply is what we call 'instruction' and 'education'. But on the other hand, in his picture education and instruction are *not* essentially argumentative, rational procedures: in educational processes, particularly at the beginning, most contents are just asserted, not argued for, as there are no shared grounds on which arguments could be based. Hence the essential role of ungrounded belief, and of trust, in education:

The schoolboy *believes* his teachers and his schoolbooks.[[60]](#footnote-60)

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1. Wittgenstein (1969: §612). Henceforth referred to as OC. [↑](#footnote-ref-1)
2. OC §307. [↑](#footnote-ref-2)
3. OC §111; see also §250. [↑](#footnote-ref-3)
4. OC §429. [↑](#footnote-ref-4)
5. OC §264. [↑](#footnote-ref-5)
6. OC §94. [↑](#footnote-ref-6)
7. OC §262. [↑](#footnote-ref-7)
8. OC §167. [↑](#footnote-ref-8)
9. OC§§234, 419. [↑](#footnote-ref-9)
10. ThoughWittgenstein often uses foundationalist vocabulary, e.g. when he writes that such beliefs (or "certain propositions") are "at the basis" (*am Grunde*) of belief (OC §253), of knowledge (OC §380) or of "all asking and thinking" (OC §415), it is pretty clear that he does not intend to ascribe them either inherent indubitability or the role of primary truths from which all other truths are derivable. For converging interpretations see Phillips (1988), Perissinotto (1991), Garavaso (1998),Williams (2005)***.*** For a resolutely foundationalist reading, Moyal-Sharrock (2005). [↑](#footnote-ref-10)
11. OC §248 and §655, respectively. [↑](#footnote-ref-11)
12. OC §§262, 612. [↑](#footnote-ref-12)
13. See e.g. OC §612, "Think of what happens when missionaries convert natives", and §669, "a kind of exaggeration which perhaps is used only with a view to persuasion". [↑](#footnote-ref-13)
14. Suppose A is "Things that are equal to the same are equal to each other", B is "The two sides of this triangle are things that are equal to the same", Z is "The two sides of this triangle are equal to each other", as in Carroll (1895). [↑](#footnote-ref-14)
15. Peacocke (1992); see also Boghossian (2001), (2003). [↑](#footnote-ref-15)
16. An analysis along these lines was offered by Black (1971/1965). [↑](#footnote-ref-16)
17. Using Dummett's distinction (1976: 106), we might say that though the Tortoise believes that the premises are true, she does not believe the propositions they express. [↑](#footnote-ref-17)
18. Williamson (2003), Casalegno (2004). [↑](#footnote-ref-18)
19. Coliva (2014: 705). [↑](#footnote-ref-19)
20. According to Coliva, doubting that the Tortoise really accepts (2) "would imply that Carroll himself was unclear about his own tale, which is a difficult consequence to swallow" (2014: 705). Even if it did imply such a consequence, it wouldn't be the first time a philosophical anecdote turns out to be incoherent on a more careful analysis of the notions involved (e.g. Putnam's (1975) Oscar1 and Oscar2 cannot be identical "molecule by molecule", as we are about 70% water). Anyway, the consequence doesn't follow: it merely follows that Carroll's tale is incompatible with the inferentialist account. [↑](#footnote-ref-20)
21. It should be kept in mind, however, that at least for some propositions or beliefs being a hinge is a functional role, not an intrinsic epistemological property. An empirical proposition may be turned into a "norm of description" (OC §167), and conversely, a hinge may become "a move in one of our language-games" (OC §622). See also OC §§96-99***.*** [↑](#footnote-ref-21)
22. Coliva 2014: 709. [↑](#footnote-ref-22)
23. Frege 1893: XVI. [↑](#footnote-ref-23)
24. Coliva 2014: 709. [↑](#footnote-ref-24)
25. Wittgenstein 1978, I, §19; henceforth referred to as RFM. [↑](#footnote-ref-25)
26. RFM I,§34). [↑](#footnote-ref-26)
27. E.g. Wittgenstein (2009: §481), henceforth referred to as PI. [↑](#footnote-ref-27)
28. RFM I, §§116, 156. [↑](#footnote-ref-28)
29. RFM I, §116. [↑](#footnote-ref-29)
30. RFM I, §51. [↑](#footnote-ref-30)
31. The quotations above show that thinking, for Wittgenstein, essentially involved compliance with logic. That we cannot think illogically is an old thesis (see *Tractatus Logico-Philosophicus*, 3.03) that Wittgenstein never gave up. [↑](#footnote-ref-31)
32. RFM I, §131. [↑](#footnote-ref-32)
33. RFM I, §133). Hacker (2013: 214-15) suggests that these remarks show that Wittgenstein saw "a grain of truth" in psychologism about logic. If this is taken to mean that he regarded Fregean antipsychologism as one-sided and (therefore) inadequate, I agree. [↑](#footnote-ref-33)
34. RFM I, §61; see also §66. [↑](#footnote-ref-34)
35. RFM I,§19 [↑](#footnote-ref-35)
36. E.g. RFM I, §§10-12. [↑](#footnote-ref-36)
37. See, however, OC §142. [↑](#footnote-ref-37)
38. OC §342, right after having compared such "things" to hinges, §341. [↑](#footnote-ref-38)
39. OC §83. [↑](#footnote-ref-39)
40. OC §95. [↑](#footnote-ref-40)
41. 41 OC §401. [↑](#footnote-ref-41)
42. OC §415. [↑](#footnote-ref-42)
43. RFM I, §156. [↑](#footnote-ref-43)
44. RFM I, §156. [↑](#footnote-ref-44)
45. See RFM I, §§51, 113, 116, PI §219, OC §§392, 668-69. [↑](#footnote-ref-45)
46. OC §495. [↑](#footnote-ref-46)
47. Coliva (2014: 711). [↑](#footnote-ref-47)
48. Ib. [↑](#footnote-ref-48)
49. As characterised by Marconi (1987: 122, 128-43). [↑](#footnote-ref-49)
50. Coliva (2010: 201-2). [↑](#footnote-ref-50)
51. PI §217. [↑](#footnote-ref-51)
52. RFM I, §35 [↑](#footnote-ref-52)
53. RFM I, §131. However, we should keep in mind that "the line between what we include in 'thinking' and what we no longer include in 'thinking' is no more a hard and fast one than the line between what is still and what is no longer called "regularity" (RFM I, §116). [↑](#footnote-ref-53)
54. Coliva (2010: 166-70). [↑](#footnote-ref-54)
55. OC §612. [↑](#footnote-ref-55)
56. OC §298. [↑](#footnote-ref-56)
57. OC §262. [↑](#footnote-ref-57)
58. OC §314, my it. [↑](#footnote-ref-58)
59. OC §§310-316. [↑](#footnote-ref-59)
60. OC §263. Thanks to Annalisa Coliva for helpful criticism. [↑](#footnote-ref-60)