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Published in: Philosophy and Phenomenological Research

DOI: 10.1111/j.1933-1592.2008.00155.x

2008

Link to publication

Citation for published version (APA): Olsson, E. J. (2008). Klein on the Unity of Cartesian and Contemporary Skepticism. Philosophy and Phenomenological Research, 76(3), 511-524. https://doi.org/10.1111/j.1933-1592.2008.00155.x

Total number of authors: 1

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KLEIN ON THE UNITY OF CARTESIAN AND CONTEMPORARY SKEPTICISM

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Olsson, E. J. (2008). Klein on the Unity of Cartesian and Contemporary Skepticism. Philosophy and Phenomenological Research, 76, 511-524. Blackwell Publishing Ltd..

In two stimulating articles Peter Klein reports the uncovering of a hitherto unnoticed connection between the two main arguments for radical skepticism (Klein 2002 and 2003). The epistemic principle on which the traditional Cartesian argument is based entails, says Klein, the epistemic principle motivating the canonical contemporary argument. If Klein is right, the two principal arguments for skepticism are more closely related than has previously been assumed to be the case. The purpose of the paper is, first of all, to bring out the structure of Klein's rather opaque reasoning. This reconstruction reveals that his central argument fails on several accounts. As a remedy, an alternative argument is presented that avoids the problems.

1. KLEIN'S ARGUMENT

Let us start with Descares' argument for skepticism. Descartes arrives at his final skeptical conclusion in a piecemeal fashion by considering skeptical challenges of increasing degree of severity. The first step is to note that our senses occasionally mislead. Beliefs that we acquire through perception sometimes turn out, on closer examination, to be false. Given that it is never prudent to trust what is sometimes deceptive, a principle to which Descartes pledges allegiance, we must conclude that we cannot acquire perceptual knowledge of the external world. Nevertheless, Descartes has some second thoughts about the strength of this argument. While it is true that our senses sometimes deceive us, this usually happens only in special circumstances. We can, he maintains, often determine in a reliable manner whether or not those circumstances obtain. Based on this determination we can neutralize doubts of the kind in question on a given occasion by pointing out that the circumstances are not of the deceptive kind. It is, for example, true that vision is sometimes unreliable. But this is so only if the lighting is bad. If the correctness of my visual observation is challenged, I may be able to counter by citing the favorable conditions under which it was actually made.¹

Descartes next move is to contemplate dreaming. It is logically possible that I am dreaming at this very moment. Does the fact that this is possible deprive me of my knowledge of the external world? Descartes' answer is, once again, in the negative. True, if I were dreaming, many of my particular beliefs would be false but this does not imply that I would lack knowledge of the external world altogether. I can still know that there are

material objects that have spatial locations, or are in motion or at rest, or can exist for a long or short period of time. These are after all general features which dreams and waking life share.

This leads Descartes finally to consider a ground for doubt which, he thinks, cannot be so easily dismissed:

In whatever way [it is supposed] that I have arrived at the state of being that I have reached — whether [it is attributed] to fate or to accident, or [made] out that it is by a continual succession of antecedents, or by some other method — since to err and deceive oneself is a defect, it is clear that the greater will be the probability of my being so imperfect as to deceive myself ever, as is the Author of my being to whom [is assigned] my origin the less powerful. (*Meditations*, 147)

Klein offers the following interpretation: "at this point in the *Meditations*, since he lacks an argument for the claim that whatever is causally responsible for his 'state of being' is capable of making his being such that to err would not be natural for it, assenting to propositions arrived at by his 'state of being' is not legitimate" (Klein 2003, section 3). The ground for doubt proposed by Descartes is represented by Klein as a proposition *U* expressing the general untrustworthiness of the subject S's epistemic equipment. Hence, Descartes has found a ground for doubt which he is, at this point in the *Meditations*, unable to reject and whose effect he cannot legitimately neutralize, i.e., which he cannot neutralize without employing the very epistemic equipment whose trustworthiness is in doubt.

If we add to this reasoning the further premise that a proposition fails to be known if there are genuine grounds for doubting it, then we can state the Cartesian argument concisely as follows:

(CS1) If S knows that p, then there are no grounds for doubt in p for S.

(CS2) U is a ground for doubt in p for S.

Hence: *S* does not know that *p*.

The argument, if sound, works for any proposition *p*. The net effect is radical skepticism.

Let us turn now to the canonical contemporary argument for skepticism. It will be seen to rely on the following so-called closure principle (CP):

(CP) For all proposition p and q, if p entails q and S is justified in believing that p, then S is justified in believing that q.

CP states, reasonably enough, that I am justified in believing all logical consequences of what I justifiably believe. It serves to motivate the first premise of the contemporary skeptical argument. Let h stand for a common sense proposition, e.g. Moore's famous "This is a hand", in which case we let *sk* stand for some skeptical alternative, such as "*S* in a switched-world in which there are no hands, but it appears just as though there were

hands".² The proposition *h* entails *not-sk*: it this is really a hand, it must be false that I am in a switched-world in which there are no hands, and so on. Hence, by (CP):

(CP1) If S is justified in believing that h, then S is justified in believing that not-sk.

CP1 says that if S is justified in believing that this is a hand, then S is justified in believing that S is not in a switched world in which there are no hands, and so on.

CP1 does not by itself yield skepticism. A further premise is needed. Suppose that S were indeed in a switched-world in which there are no hands, but it just appeared as though there were, then S's experience would be just the same as if S's common sense picture of the world were true. S would have no experiential or other means of distinguishing these two possibilities. It seems, therefore, that S is not justified in believing that the switched world possibility does not obtain:

(CP2) S is not justified in believing that not-sk.

It follows from CP1 and CP2 combined that S is not justified in believing any common sense proposition. We are not justified in believing a great many of the proposition that we usually take ourselves justifiably to believe. On the received view that knowledge implies justification, we do not know a great many of the propositions that we usually take ourselves to know.

The purpose of this paper is not to assess the force of the two skeptical arguments. Rather, I want to challenge Peter Klein's reasons for thinking that the two arguments rely on epistemic principles that are logically related, and in particular his reasons for thinking that the epistemic principle motivating the Cartesian argument entails the epistemic principle providing the rationale for the contemporary argument. Which epistemic principle Klein takes to motivate the Cartesian argument will be clear in a moment. The matter is significant because of its dialectical implication. If Klein is right, a critic can focus his efforts on rebutting the contemporary argument: "[s]ince the CP-style skeptic [i.e. the contemporary skeptic] employs the weaker epistemic principle, ... any criticisms of it are likely to redound to the stronger form" (Klein 2003, section 3). The issue is also important in its own right because it concerns our understanding of skepticism and its motivation. The focus here will be on Klein's argument as a contribution to the understanding of skepticism.

The first step in Klein's argument for the unity of the two skeptical trains of thought is an account of what it means to be a ground for doubt. The account attempts to spell out the Cartesian idea that all genuine grounds for doubt are such that they can be neither rejected nor neutralized. For that purpose, Klein offers his own analyses of what it means to be justified in rejecting a ground for doubt and to be justified in neutralizing such a ground.

<u>Definition 1</u>: S is justified in rejecting d as a ground for doubt in p if and only if S is justified in denying d (assenting to *not-d*).

<u>Definition 2</u>: *S* is justified in neutralizing *d* as a ground for doubt in *p* if and only if *S* is justified in believing some proposition *n* such that adding n&d to *S*'s beliefs fails to make it the case that *p* is no longer justified.

In the spirit of Descartes, Klein assumes that rejection and neutralization are the only ways in which a challenge can be dismissed:

<u>Definition 3</u>: S is justified in eliminating d as a ground for doubt in p if and only if S is either justified in rejecting d as a ground for doubt in p or S is justified in neutralizing d as a ground for doubt in p.³

Finally, a proposition d is a ground for genuine Cartesian doubt in another proposition p just in case d counts against p in a certain sense and, moreover, d cannot be eliminated as a ground for doubt in p. Semi-formally,

<u>Definition 4</u>: A proposition *d* is a ground for doubt in *p* for *S* if and only if:

- (i) d added to S's beliefs makes believing p no longer justified,
- (ii) *S* is not justified in eliminating *d* as a ground for doubt in *p*.

For example, sk is a ground for doubt in h. For, sk added to S's beliefs makes believing h no longer justified: if S comes to believe that she is in a switched world, then she is no longer justified in believing that what she sees is a hand. And, if the skeptic is right, S is not justified in eliminating sk as a ground for doubt in h.

As a further preliminary, Klein introduces the idea of two propositions being contraries:

<u>Definition 5</u>: Two propositions p and q are contraries just in case p entails *not-q* but *not-p* does not entail q.⁴

Examples of contraries are: 'The ball is red all over' and 'The ball is yellow all over'; 'X is an aunt' and 'X is an uncle'. More interesting in this context is the fact that h and sk are contraries; h entails *not-sk* but *not-h* does not entail sk. If this is a hand, then I am not in a switched-world where this only appears to be a hand, but if this is not a hand, it does not follow that I am in such a switched-world. In general, skeptical hypothesis are contraries to common sense beliefs.

The Closure Principle, we recall, underlies the canonical contemporary argument for skepticism, providing as it does the rationale for its first premise. On what epistemic principle does the Cartesian argument rest? Klein answer is that the following eliminateall-doubt principle "apparently informs the Cartesian-style argument" (2003, section 3):

(EAD) If d provides a ground for doubt in p for S, then if p is justified for S, then S is justified in eliminating d as a ground for doubt in p.

In what sense does EAD "inform" the Cartesian argument? Klein offers no further comments on the matter. But what he has in mind might be that EAD in conjunction

with certain other principles entails one of the Cartesian argument's premises. Indeed, as the following argument shows, EAD entails the Cartesian argument's first premise given Definition 4 and a standard justified true belief (JTB) account of knowledge:

(1) S knows that p (assumption for conditional proof).

(2) d is a ground for doubt in p for S (assumption for *reductio*).

(3) If p is justified for S, then S is justified in eliminating d as a ground for doubt in p (by (2) and EAD).

(4) S is justified in believing p (by (1) and JTB).

(5) S is justified in eliminating d as a ground for doubt in p (by (3) and (4)).

(6) If d is a ground for doubt in p for S, then S is not justified in eliminating d as a ground for doubt in p (by clause (ii) of Definition 4).

(7) d is not a ground for doubt in p for S (by (5) and (6)).

(8) Contradiction (by (2) and (7)).

(9) d is not a ground for doubt in p for S (by (2)-(8)).

(10) If S knows that p, then there are no grounds for doubt in p for S (by (1)-(9)).

The proposition on line (10) is CS1, the Cartesian argument's first premise.

Having stated the epistemic principle that motivates Cartesian skepticism, Klein can now proceed to make his central claim that this principle entails the epistemic principle underlying the contemporary argument: "EAD entails CP" (2003, p. 341). I will turn to the argument for this claim in a moment. Let me first summarize Klein's argument, which has been seen to rely on three premises:

(P1) The eliminate-all-doubt principle is the epistemic principle employed by the Cartesian argument.

(P2) The closure principle is the epistemic principle employed by the contemporary argument.

(P3) The eliminate-all-doubt principle entails the closure principle.

These three premises are offered in support of the following conclusion:

(C) The epistemic principle employed by the Cartesian argument for skepticism entails the epistemic principle employed by the contemporary argument for skepticism.

It is difficult to question the validity of this argument. But are its premises true? P1, as we have seen, is a consequence of two reasonable assumptions (JTB and clause (ii) of Definition 4). P2 is in no need of justification. Surely, the closure principle plays a crucial role in the contemporary argument. What about P3? Does the eliminate-all-doubt principle really entail the closure principle? This is the question that will occupy me in the remainder of this section.

Klein offers the following argument for the entailment thesis (P3):

To see that [the entailment thesis holds], consider any contrary, say c, of a proposition, say h. The proposition, c, would be a potential genuine ground for doubting h since if c were added to S's beliefs, h would no longer be adequately justified, because S's beliefs would then contain a proposition, c, that entailed the denial of h. Furthermore, the only way S could eliminate c as a ground for doubt would be by denying it, since nothing could neutralize it. Thus EAD has the consequence that *if* S *is justified in assenting to* [*i.e., believing*] h, then S *is justified in denying every contrary of* h. But that is just an instance of CP, since (by hypothesis) h entails *not-c* (2003, p. 341, original emphasis).⁵

This argument is, as it stands, not very transparent. Let us attempt a reconstruction.

Klein seems to be reasoning as follows where the question marks indicate obscurities to be discussed later on:

(1) *c* and *b* are contraries (assumption for conditional proof).

(2) If c is added to S's beliefs, then S's beliefs contain a proposition that entails *not-h* (by (1) and Def. 5).

The reason is that *c* itself, being a contrary to *h*, entails the denial of *h*.

(3) *c* is a potential ground for doubt in *h* for *S* (by (2)?)

(4) For all propositions *n*: if n&c is added to *S*'s beliefs, then *S*'s beliefs contain a proposition that entails *not-h* (by (1), Def. 5 and elementary logic).

The reason is that *n*&*c* itself entails the denial of *b* because c is a contrary of *b*.

(5) S is not justified in neutralizing c as a ground for doubt in h (by (4)?).

(6) If S is justified in believing h, then S is justified in eliminating c as ground for doubt in h (by (3) and EAD?).

(7) If S is justified in eliminating c as ground for doubting h, then S is justified in rejecting c as a ground for doubt in h (by (5), (6) and Def. 3).

The reason is that, by Definition 3, if S is justified in eliminating c as a ground for doubt in h, then S is justified in either rejecting or neutralizing c as a ground for doubt in h. By (5), S is not justified in neutralizing c as a ground for doubt in h, and so (7) follows.

(8) If S is justified in believing h, then S is justified in rejecting c as a ground for doubt in h (by (6), (7)).

(9) If S is justified in believing h, then S is justified in denying c, i.e. assenting to *not-c* (by (8) and Def. 1).

(10) For all propositions p and q, if p and q are contraries and S is justified in believing p, then S is justified in believing *not-q*. (by (1)-(9) using conditional proof).

(11) For all propositions p and q, if p entails q and S is justified in believing p, then S is justified in believing q (by (10)?)

The proposition on line (11) is, of course, the closure principle.

Let us try to straighten out some of the question marks.

The first problem I would like to draw attention to concerns the notion of a *potential* ground for doubt which occurs on line (3) in the proof without having been explained prior to its invocation. What has been explained is the notion of an *actual* ground for doubt (Definition 4). Presumably, this is what Klein means by a potential ground for doubt:

<u>Definition 6</u>: A proposition d is a potential ground for doubt in p for S if and only if d added to S's beliefs makes believing p no longer justified.⁶

Thus a proposition is a potential ground for doubt if it satisfies the first clause of Definition 4. Hence all (actual) grounds for doubt are also potential grounds for doubt. A potential ground need not be an actual ground, however; for it need not satisfy the second clause of Definition 4, that is to say, *S* may be justified in eliminating it.

This takes us directly to the next problem. Contrary to what Klein seems to think, the proposition that is concluded at step (6) in the proof does not in fact follow from EAD and (3). At step (3) it has merely been concluded that c is a *potential* ground for doubt in h, and we just agreed, I hope, that c being a potential ground for doubt in h does not imply c being an *actual* ground for doubt in h. But for EAD to be applicable as it stands, c would have to be an actual ground for doubt in h. For that reason alone, Klein's argument for the entailment thesis (P3) is not valid. Since that thesis plays a crucial role as a premise in his argument for the intimate relation between the two skeptical arguments (C), that conclusion is left unsubstantiated as well.

There is a second reason why Klein's argument for the entailment thesis (P3) does not go through. This problem concerns the step from line (10) to line (11). In order for the full CP principle to be proved on line (11) it would have to be shown, we recall, that, for every proposition p and q, if p entails q and S is justified in believing p, then S is justified in believing q. The proposition on line (10), however, concerns only the special case of propositions that are contraries. That proposition is indeed "an instance of CP" (2003, p. 341), but proving an instance of a statement is not necessarily proving the statement itself.

3. AN ALTERNATIVE ARGUMENT

I will now suggest a way of avoiding the problems that were identified in the previous section. We recall the original argument:

(P1) The eliminate-all-doubt principle is the epistemic principle employed by the Cartesian argument for skepticism.

(P2) The closure principle is the epistemic principle employed by the contemporary argument for skepticism.

(P3) The eliminate-all-doubt principle entails the closure principle.

Hence:

(C) The epistemic principle employed by the Cartesian argument entails the epistemic principle employed by the contemporary argument.

This argument failed because that Klein's reasoning in support of (P3) proved to be invalid, indeed invalid on at least two separate accounts.

But perhaps Klein would concede to the following slight strengthening of EAD:

(sEAD) If *d* is a *potential* ground for doubt in *p* for *S*, then, if *S* is justified in believing *p*, then *S* is justified in eliminating *d*.

The antecedent of sEAD is weaker than the antecedent of EAD. Hence sEAD is a stronger principle. If EAD is replaced by sEAD, then the conclusion reached at step (6) does indeed follow. For it follows from (3) and sEAD that, if S is justified in believing h, then S is justified in eliminating c as a ground for doubting h. Moreover, sEAD can plausibly be described as the epistemic principle employed Cartesian skepticism. It seems at least as worthy of this epithet as does the original EAD principle. For Descartes, one could argue, justification entails the elimination not only of actual but also of potential doubt.⁷

Let us return to the closure principle. Because Klein's argument, as we saw, relies on the assumption that the two propositions he considers are contraries, it cannot prove anything more than the following weaker closure principle:

(wCP) For all propositions *p* and *q*, if *p* and *q* are contraries and *S* is justified in believing *p*, then *S* is justified in believing *not-q*.

CP entails but is clearly not entailed by wCP. It is not entailed by wCP because the latter concerns the special case of contraries only. To see that CP entails wCP: Suppose that p

and q are contraries and S is justified in believing p. Then p entails *not-q*. By CP, S is justified in believing *not-q*.

The fact that wCP is all that Klein's argument can ever prove may look like a major setback, but in fact it need not be. On closer examination, wCP is sufficient to provide a basis for the contemporary argument for skepticism. For it, too, entails CP1, the contemporary argument's first premise. The reason has already been given: skeptical hypotheses are contraries to common sense beliefs. Hence, one might hold that wCP, too, qualifies as "an epistemic principle employed by the contemporary argument".

What all this adds up to is that the following argument might still be worth considering:

(P1*) The strong eliminate-all-doubt principle (sEAD) is the epistemic principle employed by the Cartesian argument for skepticism.

(P2*) The weak closure principle (wCP) is employed by the contemporary skeptical argument for skepticism.

(P3*) The strong eliminate-all-doubt principle entails the weak closure principle.

Hence:

(C) The epistemic principle employed by the Cartesian argument entails an (the) epistemic principle employed by the contemporary argument.

Reasons have already been given in support of both P1* and P2*. It remains to be shown that P3* is tenable. Here is an explicit argument:

(1) *c* and *b* are contraries (assumption for conditional proof).

(2) If c is added to S's beliefs, then S's beliefs contain a proposition that entails *not-h* (by (1)).

(3) c is a potential ground for doubt in h for S (by (2) and Def. 6)

(4) For all propositions n: if n&c is added to S's beliefs, then S's beliefs contain a proposition that entails *not-h* (by (1) and elementary logic).

(5) S is not justified in neutralizing c as a ground for doubt in h (by (4)?).

(6) If S is justified in believing h, then S is justified in eliminating c as ground for doubt in h (by (3) and sEAD).

(7) If S is justified in eliminating c as ground for doubting h, then S is justified in rejecting c as a ground for doubt in h (by (5), (6) and Def. 3).

(8) If S is justified in believing h, then S is justified in rejecting c as a ground for doubt in h (by (6) and (7)).

(9) If S is justified in believing h, then S is justified in believing *not-c* (by (8) and Def. 1).

(10) For all propositions p and q, if p and q are contraries and S is justified in believing p, then S is justified in believing *not-q* (by (1) and (8))

The proposition on line (10) is wCP, the proposition that we wanted to prove.

The reader may have noticed that a question-mark remains on line (5). In going from (4) to (5), we would be relying implicitly on the following additional principle:

(N) If, for all *n*, *S*'s beliefs with *n*&*c* added contain a proposition that entails *not-h*, then *S* is not justified in neutralizing *c* as a ground for doubt in *h*.

As a consequence of this principle, a proposition that entails the denial of another proposition can never be eliminated as a ground for doubt *by means of being neutralized*. The only way to eliminate it as a ground for doubt would be through outright rejection. I will not question this principle here. I just note that it seems to be in line with Cartesian thought on the matter.

4. CONCLUSION

We have found, I believe, compelling grounds to question the soundness of Peter Klein's argument for his thesis that the epistemic principle employed by the Cartesian skeptical argument entails the epistemic principle employed by the contemporary skeptical argument. His argument fails, on several accounts, to substantiate the claim that the eliminate-all-doubt thesis (EAD) entails the closure principle (CP). However, a valid argument can be given for the thesis that a stronger version of the eliminate-all-doubt thesis (sEAD) entails a weaker version of the closure principle (wCP). Moreover, sEAD is no less worthy of the label "epistemic principle employed by the Cartesian argument" than is EAD itself. And wCP, just like CP, entails the first premise of the contemporary argument, and so it could well claim the right to be considered as "an epistemic principle employed by the contemporary argument". Yet, wCP could hardly be called an ultimate epistemic principle, deriving whatever justification it has from the stronger CP.⁸ If the challenge is to show that the *ultimate* epistemic principle employed by the Cartesian argument entails the *ultimate* epistemic principle employed by the contemporary argument, the alternative piece of reasoning presented here is as inconclusive as Klein's original. Still, this much seems true: (i) if we accept Klein's conceptions of rejection, neutralization, ground for doubt, and so on, then we have reasons to accept also his claim that the two main brands of skepticism – the Cartesian and the contemporary – are more deeply related than has previously been assumed to be the case; and (ii) while we do have such reasons, they are not quite as strong as Klein may have liked them to be.

LITERATURE

Descartes, R. (1931), *Meditations on First Philosophy*, in E. Haldane and G. Ross (eds.), Philosophical Works of Descartes, Volume 1, Dover Publications.

Klein, P. (2002), "Skepticism", pp. 336-361 in Paul K. Moser (ed.), *The Oxford Handbook of Epistemology*, Oxford University Press.

Klein, Peter, "Skepticism", *The Stanford Encyclopedia of Philosophy* (Fall 2003 Edition), Edward N. Zalta (ed.), <u>http://plato.stanford.edu/archives/fall2003/entries/skepticism/</u>. Lehrer, K. (2000), *Theory of Knowledge*, Boulder: Westview Press.

⁴ See Klein (2002), footnote 10. As the reader can easily verify, if p and q are contraries, then so are q and p, that is to say, "being contrary to" is a symmetric notion.

¹ I am greatly endebted to Peter Klein for commenting on an earlier version and for encouraging me to try to publish it.

² The example is taken from Klein (2002), p. 339.

³ For a similar theory, see Lehrer (2000). I have extracted definitions 1, 2 and 3 from the following passage in Klein's 2002 article (pp. 340-41): "In addition, recall that, according to the Cartesian, to be adequately justified in eliminating d as a ground for doubt for x, either S is adequately justified in denying d (assenting to [not-]d) or S is adequately justified in assenting to some neutralizing proposition, n, such that adding (n&d) to S's beliefs fails to make it the case that x is no longer adequately justified." For reasons of economy, I use 'justified' for 'adequately justified' throughout. I also use 'ground for doubt' as short for Klein's expression 'genuine ground for doubt'. Finally, instead of saying that a person is justified in *assenting* to a proposition, I prefer to say, more traditionally, that the person is justified in *believing* it.

⁵ Exactly the same alleged proof is offered in section 3 of Klein (2003).

⁶ Klein has confirmed that this is what he means by a potential ground for doubt (personal communication).

⁷ Klein has said that he thinks sEAD is probably the right way to formulate the eliminate-all-doubt principle (personal communication).

⁸ A logical consequence of an ultimate principle need not itself be an ultimate principle. The law of excluded middle is a good candidate for being an ultimate logical principle. It has (q&r) or not-(q&r) as a special case, a proposition which one would be hard-pressed to call an ultimate logical principle. The same seems to be true *mutatis mutandis* of CP and wCP.