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A Contrastivist Response to Gerken's Arguments for False Positives

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Abstract
In this paper, I defend epistemological contrastivism—the view that propositional knowledge is a three-place, contrastive relation between an agent, a proposition (or fact) and a contrast term—against two a priori arguments recently offered by Mikkel Gerken for the conclusion that intuitive judgements exhibiting a contrast effect on knowledge ascriptions are false positives. I show that the epistemic argument for false positives begs the question against contrastivism by assuming the independently implausible claim that knowledge of a contrastive proposition always presupposes knowledge of a related ordinary proposition. This claim is apparently also presupposed by the doxastic argument for false positives, the conclusion of which, I argue, is not only perfectly compatible with epistemological contrastivism but also heavily dependent on a (questionable) *de dicto* construal of the relevant knowledge ascriptions.

Keywords Epistemological Contrastivism · False Positives · Mikkel Gerken · Jonathan Schaffer

1 Introduction

My purpose in this paper is to defend epistemological contrastivism against a line of criticism developed by Mikkel Gerken in some recent papers and especially in his book *On Folk Epistemology* (Gerken 2012, 2013, 2017). In Sect. 2, I rehearse the contrastivist view that propositional knowledge is a three-place relation between an agent, a proposition (or fact) and a contrast. In Sect. 3, I introduce Schaffer and Knobe's (2012) DETECTIVE case—the case in terms of which Gerken mounts his challenge to contrastivism—and clarify the scope of my response. In Sects. 4 and 5, I offer a detailed criticism of the epistemic and

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doxastic arguments he gives for the conclusion that intuitive judgements exhibiting a contrast effect on knowledge attributions are 'false positives'. And in Sect. 6, I sum up the main points of my criticism.

2 Epistemological Contrastivism

Epistemological contrastivism is the view that knowledge (that is to say, *propositional* knowledge: henceforth, I will often omit the qualifier) is not the two-place relation between an agent and a proposition (or fact) that it is usually assumed to be, but a three-place, contrastive relation between an agent, a proposition (or fact),[1] and a contrast (or set of contrasts). The view was first suggested by Fred Dretske in his 'Epistemic Operators':

> To know that x is A is to know that x is A within a frame-work of relevant alternatives … This set of contrasts, together with the fact that x is A, serve to define what it is that is known when one knows that x is A. (Dretske 1970, 1022)

In recent years, epistemological contrastivism has been taken up and developed by a number of philosophers, including most notably Jonathan Schaffer, who sums it up as the claim that '[k]nowledge is a ternary, contrastive relation: s knows that p rather than q' (Schaffer 2005, 235; see also Schaffer 2004, 2005, 2007, 2008).

There are of course different versions of the view. For instance, contrastivists part ways when it comes to detailing the nature of the terms of the knowledge relation. They offer different and possibly conflicting reasons for accepting the view. And they disagree on whether contrastivism should be understood as a descriptive or a revisionary stance. For our purposes, these differences can be safely ignored: the arguments that concern us are insensitive to them. But there is a difference that should detain us for a moment. While Schaffer and other contrastivists (Karjalainen and Morton 2003; Sinnott-Armstrong 2008) maintain that all propositional knowledge involves a contrast, some philosophers (Morton 2013) only subscribe to the more modest claim that much (interesting) propositional knowledge does. For present purposes, this difference cannot be simply set aside, because the official target of Gerken's attack is not the modest claim that many interesting cases of knowledge have a ternary structure, but the more ambitious claim that all cases of knowledge do (Gerken 2017, 50–51), and the success of his strategy partly depends on the generality of the target. However, it should be noted that Gerken's arguments, if successful, would prove fatal not only for the wholly general claim that all cases of knowledge have a ternary structure but also for more specific contrastivist claims concerning all cases of knowledge of some given kind, in particular for the claim that all cases of empirical knowledge exhibit such a structure. So Gerken's attack must be taken seriously by contrastivists of many stripes, and attempts to reject it had better not depend on unnecessary restrictions of its target. The counterarguments I present in this paper do not depend on any such restrictions.

[1] I defend the view that the second term of the knowledge relation is a fact rather than a proposition in Volpe (2018). The view is endorsed also by Morton (2013, 101–102).

3 Schaffer and Knobe's DETECTIVE Case

Gerken's arguments are formulated in terms of a case originally devised by Jonathan Schaffer and Joshua Knobe for the purpose of collecting empirical data concerning the existence of a 'contrast effect' on knowledge attributions (Schaffer and Knobe 2012). The vignette that was submitted to the participants in the study goes as follows:

> Last night, Peter robbed the jewelry store. He smashed the window, forced open the locked safe, and stole the rubies inside. But Peter forgot to wear gloves. He also forgot about the security camera. Today, Mary the detective has been called to the scene to investigate. So far she has the following evidence. She has been told that there was a theft, she has found and identified Peter's fingerprints on the safe, and she has seen and recognized Peter on the security video, filmed in the act of forcing open the safe. She has no further information. (Schaffer and Knobe 2012, 689)

Participants in the study were divided into groups and asked to state to what extent they agreed with knowledge ascriptions involving different contrast terms (they all passed comprehension questions). Participants in one condition were given the *thief contrast* rather-than knowledge ascription:

K1: Mary now knows that Peter rather than anyone else stole the rubies.

The mean rating on a seven-point Likert scale ranging from 'Disagree' to 'Agree' was 4.6. Participants in another condition were given the *jewel contrast* rather-than knowledge ascription:

K2: Mary now knows that Peter stole the rubies rather than anything else.

Here the mean rating on a seven-point Likert scale was 3.1.

The difference between the answers given in the two conditions is statistically significant, providing evidence of a 'contrast effect' on knowledge ascriptions. The existence of the effect is actually borne out by further data gathered by testing reactions to the members of other couples of contrastive knowledge ascriptions—respectively of the knowledge-wh and knowledge-that type (Schaffer and Knobe 2012). For present purposes, however, we need not go into the details of the experimental results, because Gerken's arguments do not question the data or the existence of a contrast effect on knowledge ascriptions, but only the evidential significance of the data *vis-à-vis* the contrastivist claim that knowledge is a three-place relation.

It is rather natural to think that the data support epistemological contrastivism. After all, 'the most direct explanation of why knowledge ascriptions are contrast-sensitive is that the knowledge relation has a contrast slot' (Schaffer 2008, 237), and Gerken himself describes the contrast effect on knowledge ascriptions as 'robust' (Gerken 2013, 45). However, he also contends that its robustness provides no conclusive evidence that epistemological contrastivism is true, because his own pet epistemological theory, 'strict purist invariantism', can offer an alternative, principled account of

the data—the 'epistemic focal bias account'—and should be preferred to contrastivism on other grounds (Gerken 2017, 241–251). So he offers two a priori arguments for the conclusion that intuitive judgements exhibiting the contrast effect are in fact *false positives*: the effect—he maintains—is real, but its explanation cannot possibly be that epistemological contrastivism is true. To be sure, Gerken acknowledges that the *epistemic argument for false positives* and the *doxastic argument for false positives* (as he calls them) are not conclusive, in so far as they do not provide a positive account of the contrast effect, but he maintains that they can successfully be used to 'make the case that *if* a principled and plausible account of the contrast effect may be given, then we have a reason to prefer the strict purist invariantist standpoint' (Gerken 2017, 80).

It must be emphasized, then, that the a priori arguments for false positives are just one part of Gerken's overall attack on contrastivism. He also appeals to additional experimental data (Gerken and Beebe 2016) that he claims allow to dissociate his own epistemic focal bias account of the contrast effect from the rival contrastivist account by favouring the former over the latter (Gerken 2017, 246–251). So a thorough assessment of Gerken's case against epistemological contrastivism would require careful consideration of the whole positive story that he offers as a complement to the negative a priori arguments (and as a possible explanation of why these tend to be overlooked by the folk as well as by philosophers). In the limits of this paper, however, I can only address the a priori arguments, leaving for another occasion discussion of the bigger picture with its attendant claim that the epistemic focal bias account offers the overall best explanation of experimental data.

Another *caveat* before I begin. For simplicity, I will focus only on the main versions of Gerken's arguments, omitting discussion of the further versions he proposes to pre-empt some possible objections (Gerken 2017, 77, 79). However, my criticism will be completely independent of the objections that such further versions of the arguments are meant to forestall, so this omission will not affect the cogency of my arguments.

4 Gerken's Epistemic Argument for False Positives

So here is Gerken's *epistemic* argument for false positives (Gerken 2017, 74 f.):

4.1 Argument M

M0: In every case, Mary knows that Peter rather than anyone else stole the rubies only if Mary knows that Peter stole the rubies.
M1: In every case, Mary knows that Peter stole the rubies only if Mary is in a position to know that the rubies were stolen.
M2: In the present case, Mary is not in a position to know that the rubies were stolen.
M3: In the present case, Mary does not know that Peter stole the rubies.
M4: In the present case, Mary does not know that Peter rather than anyone else stole the rubies.

This argument is valid: M3 follows from M1 and M2, and M4 follows from M0 and M3, by universal instantiation and modus tollens. But is argument M also sound?

Premises M1 and M2 are not above suspicion.[2] Here, however, I will not pause to discuss them, because trouble starts already with the first step of the argument, and M0 will be the only target of my criticism here.[3]

On the face of it, assuming M0 begs the question against (non-sceptical)[4] contrastivism by assuming either (i) that Mary cannot have contrastive knowledge that Peter rather than anyone else stole the rubies without having non-contrastive knowledge that Peter stole the rubies or (ii) that Mary cannot have contrastive knowledge that Peter rather than anyone else stole the rubies without having contrastive knowledge that Peter stole the rubies rather than anything else—or that Peter stole the rubies rather than doing anything else with them. For M0 lends itself to two different interpretations, depending on whether the knowledge that Mary must possess in order to meet the condition specified by its consequent is taken to be traditional, non-contrastive knowledge or (implicitly) contrastive knowledge. Gerken clearly understands it in non-contrastive terms, since he paraphrases M0 as saying that 'knowing the contrastive "rather than" proposition requires knowledge of the ordinary proposition' (Gerken 2017, 75). But when M0 is given its intended reading, it seems clear that assuming it begs the question against contrastivism by presupposing that there is such a thing as non-contrastive knowledge in the first place (and moreover by intimating that Mary must possess a particular specimen of it if she is to possess contrastive knowledge that Peter, rather than anyone else, stole the rubies).[5]

On the other hand, when M0 is given the unintended reading according to which the knowledge that Mary must possess in order to meet the condition specified by its consequent is (implicitly) contrastive knowledge, assuming it begs the question against contrastivism by presupposing that one cannot know that something is the case relative to some contrast without knowing that it is the case relative to some (or perhaps any) other contrast—here, that Mary cannot know that Peter rather than anyone else stole the rubies without knowing that he stole the rubies rather than anything else or that he stole them rather than, say, borrowed or displaced them. In a footnote, Gerken (2017, 75, n. 8) observes that it would be 'both dialectically and substantially problematic [for the contrastivist] to require that the consequent of M0 be contrasted throughout'. Quite so. But the point is that imposing such a requirement on the consequent of M0 would be actually *inconsistent* with the contrastivist view that an agent can know that things are in a certain way relative to a contrast without knowing that they are in that way relative

[2] If the relevant knowledge ascriptions are taken to be ascriptions of non-contrastive knowledge (or position to know), as they are evidently meant to be, M1 and M2 appear unquestionably true. But if they are taken to be ascriptions of contrastivist knowledge (or position to know), M1 and M2 may be either true or false, depending on which contrasts are supposed to saturate them.

[3] M0 is omitted in the original version of the argument (Gerken 2013), but Gerken now acknowledges that it is both essential to derive M4 and controversial enough to require being made explicit (Gerken 2017, 75).

[4] I say 'non-sceptical' contrastivism to acknowledge the fact that assuming M0 may not beg the question against an epistemological contrastivist who conjoined the view that knowledge is a three-place relation with the sceptical claim that it is never instantiated (in that case, M0 would be vacuously true). But of course, the intended target of Gerken's argument is the non-sceptical contrastivist who maintains that the knowledge-relation is often instantiated.

[5] Recall that the official target of Gerken's argument is not the modest claim that many interesting cases of knowledge have a ternary structure, but the wholly general claim that all cases of knowledge do. However, assuming M0 on its intended reading begs the question against any version of epistemological contrastivism according to which there is no such thing as knowing that Peter stole the rubies *simpliciter*.

to any other contrast. So there is actually no reason for the contrastivist to require that the consequent of M0 be contrasted throughout: the contrastivist just has to reject *any* version of M0.[6]

Going back to M0 as construed by Gerken, it should be noted that he does have something to say on its behalf, namely, that '[i]f anything, knowledge of the ordinary proposition will be less demanding than knowledge of the contrastive proposition' (Gerken 2017, 75). Putting the matter in terms of 'contrastive' versus 'ordinary' propositions is actually far from innocuous, and I will return to the issue below, but let us set aside this question for now. Assuming for the sake of argument that it makes sense to oppose someone's (non-contrastive) knowledge of the ordinary proposition *that p* to their (contrastive) knowledge of the contrastive proposition *that p rather than q*, let us just ask: is it really the case that knowing the ordinary proposition *that Peter stole the rubies* is less demanding than knowing the contrastive proposition *that Peter rather than anyone else stole the rubies*? The natural answer is, No. For in general, whoever knows the proposition *that p* is thereby in a position to know the proposition *that p rather than q* (knowing that *p* gives an agent whatever they need to be in a position to know that *p* rather than *q*). To see that this is indeed the case, we just need to take a closer look at the logical form of contrastive propositions.

There are two main views of the logical form of contrastive propositions in the literature. The first takes the logical form of the propositions expressed by appropriate substitution instances of 'that *p* rather than *q'* to be <*p* and not-*q*> (Ruben 1987). If this view is correct, whoever knows the proposition *that p* is thereby in a position to know the proposition *that p rather than q* simply because, the proposition *that not-q* supposedly providing a contrast to the proposition *that p*, the proposition *that p* necessarily entails the proposition *that not-q* and hence the proposition *that p and not-q*. So, by closure, whoever knows the proposition that *p* is thereby in a position to know the proposition *that p rather than q*.

The second view takes the logical form of the propositions expressed by appropriate substitution instances of 'that *p* rather than *q'* to be <if *p* or *q*, then *p*> (van Woudenberg 2008). Again, since by closure whoever knows the consequent of a conditional is thereby in a position to know the whole conditional (any conditional being entailed by its consequent), it immediately follows that whoever knows the proposition that *p* is thereby in a position to know the proposition *that p rather than q*.[7]

[6] In correspondence, Gerken has acknowledged that a contrastivist might object to a formulation of M0 with a non-contrastive knowledge ascription in the consequent but has suggested that considering the argument in relation to the focal bias account might render the dialectics a bit more complex, especially if M0 sounds felicitous to everyone except the contrastivist. This may well be true but does not affect the point that argument M, as it stands, appears to beg the question against the contrastivist.

[7] Gerken (2017, 75–76) takes pains to show that the rationale for M1 does not appeal to any objectionable closure principles (that is to say, to principles of the sort that have famously been criticized by Dretske), taking neutrality on matters of closure to be a virtue of his argument. Does my criticism of M0 rest on any objectionable closure principles? One may well get the impression that it does, for I have just maintained that whoever knows the proposition *that p* is thereby in a position to know the proposition *that p rather than q*. But in fact it does not, for in the present discussion, this principle is not applied unrestrictedly to any 'contrastive consequence' of the relevant ordinary propositions, but only to those that the agent is obviously in a position to know because they are built out of a contrast that the agent's evidence is supposed to tell against in the first place. In any case, it is worth noting that if M1 could be motivated only by denying (any form of) epistemic closure, it would be impossible to claim that argument M is neutral on the topic (Gerken, in correspondence).

To this it might be objected that, even if knowing the proposition *that p* places one in a position to know the contrastive proposition *that p rather than q*, knowing the former proposition will still be less demanding than knowing the latter. For of course, getting from being in a position to know the contrastive proposition *that p rather than q* to actually *knowing* it requires an extra step. In order to form a well-founded belief that *p* rather than *q*, one needs to *recognize* that the proposition *that p* entails the proposition *that not-q* (on the first view of the logical form of contrastive propositions), or that it entails the proposition *that p or q* (on the second view), and this will require some further, if perhaps limited, cognitive effort.[8] There is some merit to this objection: an agent may indeed fail, out of logical negligence or ignorance, to come to know a proposition that they are in a position to know. However, the objection is not conclusive. Note that *being in a position to know* should here be understood in the usual way as *only needing a belief-based-on-competent-deduction-while-retaining-knowledge-of-the-premise in order to know*, that is to say, as 'satisfying the evidential component of knowledge' (Schaffer 2007, 235, 249 n. 5); so whatever cognitive effort may be involved in taking the extra step, it will not require gathering new, or re-evaluating old, evidence, but only exercising one's ordinary logical competence. In other terms, coming to know the contrastive proposition *that p rather than q* will not be *evidentially* more demanding than knowing *that p*. This is especially relevant as Gerken's proffered rationale for accepting M0 turns entirely, as it should, on the evidential component of knowledge: he explicitly acknowledges, in discussing a possible worry about M0, 'that one can know the contrastive proposition without believing, and, hence, knowing the ordinary one',[9] and goes on to suggest that argument M be revised by substituting *being in a position to know* for *knowing* both in the consequent of M0 and in the antecedent of M1 (Gerken 2017, 75). The 'extra step' objection is thus answered by observing that, since the only rationale for accepting M0 that has any prima facie plausibility turns entirely on the evidential component of knowledge, showing that coming to know the contrastive proposition *that p rather than q* is *not* evidentially more demanding than knowing *that p* suffices to undermine it.

It seems safe to say, then, that on the two main views of the logical form of contrastive propositions, knowing an ordinary proposition cannot be *less demanding*—in the relevant, evidential sense—than knowing a related contrastive proposition. To be sure, a third view of the logical form of contrastive propositions has been discussed by Schaffer (2008, 240–241) under the name of the 'adjunctions' strategy. The suggestion is, in a nutshell, that the contrast be analysed away as a mere adjunct of the proposition known. Adopting the view of the logical form of contrastive propositions suggested by the adjunctions strategy might be a good way to uphold Gerken's claim that knowing the ordinary proposition *that p* is less demanding than knowing the contrastive proposition *that p rather than q*. But the adjunctions strategy has its own problems (Schaffer 2008, 241–242), and in any case, it is now time to address the question of the (in)correctness of Gerken's construal of epistemological contrastivism as the claim that (propositional) knowledge is always knowledge of 'contrastive propositions'.

[8] I am grateful to an anonymous reviewer for *Acta Analytica* for pressing me on this point.
[9] More on this later.

The point is that epistemological contrastivism is not the claim that (propositional) knowledge is a binary relation between an agent and a 'contrastive proposition', but the claim that it is a ternary relation between an agent, a proposition (or fact) and a contrast term. This is perhaps brought out most clearly by Sinnott-Armstrong (2008, 257–258), but the view is endorsed by all current self-described epistemological contrastivists (see, for instance, Blaauw 2008, 227; Schaffer 2004, 77; Schaffer 2005, 239; Schaffer 2007, 233). And it is important to stress that the two ways of construing the central claim of contrastivism are far from equivalent. For epistemological contrastivists are not in the business of denying the possibility of acquiring knowledge of a whole class of propositions (or facts), namely, the non-contrastive ones; their point is rather that propositions (or facts) of any logical form can be known only relative to some contrast term. From a genuinely contrastivist point of view, there is then no such thing as knowing the proposition *that p simpliciter*: the closest thing to knowing the proposition *that p simpliciter* is just standing in the knowledge relation to the proposition (or fact) *that p* and *the contrast term that not-p*—that is to say, standing in the knowledge relation to the proposition (or fact) *that p relative to its contradictory*. But then, it seems clear that whenever the proposition *that q* entails but is not entailed by the proposition that *not-p*, knowing that *p* rather than *not-p* will be *more* (and not less) demanding than knowing that *p* rather than *q*, since a larger portion of the logical space will have to be eliminated by the agent's evidence for them to be in possession of the relevant knowledge (Fig. 1).

M0's apparent plausibility thus seems to derive from misconstruing contrastive knowledge as knowledge of a contrastive proposition—and from hastily assuming that knowing an 'ordinary proposition' is less demanding than knowing an associate contrastive proposition. When epistemological contrastivism is rightly construed as a thesis about the adicity of the knowledge relation rather than as a claim about the logical form of the known proposition, it is immediately clear that Gerken's discussion does not provide any non-question begging argument for accepting M0. This of course does not mean that no such argument can be produced, but it seems fair to say that, unless it *is* produced, assuming M0 begs the question against the contrastivist.

5 Gerken's Doxastic Argument for False Positives

There is another source from which M0 might be thought to inherit whatever plausibility it appears to have, namely, the conditional that Mary can know that Peter rather than anyone else stole the rubies only if she *believes*, or *presupposes*, that Peter stole

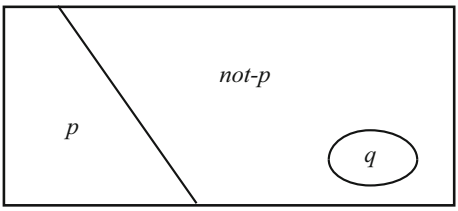

Fig. 1 If <q> entails (but is not entailed by) <not-p>, eliminating <not-p> will be more demanding than eliminating <q>

the rubies (and that the rubies were stolen). The entailment from knowledge to belief is of course not entirely uncontroversial, so there might be some ground for doubting the truth of the conditional. Here, however, I do not wish to deny that knowledge entails belief. For in any case, it seems indisputable that Mary may believe or presuppose the relevant propositions without having adequate evidence to believe, and therefore without knowing, that it was the rubies, rather than anything else, that were stolen (by Peter). So M0 cannot be justified by invoking the claim that knowledge entails belief.

However, it may be objected that the vignette says that Mary 'has no further information' over and above the fact 'that there was a theft, [that] she has found and identified Peter's fingerprints on the safe, and [that] she has seen and recognized Peter on the security video, filmed in the act of forcing open the safe'. That Mary, of all people, ignores the nature of the stolen goods sounds rather strange, and perhaps, the phrase 'no further information' can be interpreted in a way that is consistent with her knowing their nature; so some participants in the study may well have assumed that she is informed that it is the rubies that were stolen (Gerken 2017, 78; cf. DeRose 2011, 99–100; Pinillos 2011, 684–685). However, what the vignette literally says does entail that she has no inkling of the object of the theft, which means that she is highly unlikely to *believe* or *presuppose* that it was the rubies that were stolen. And this leads us to Gerken's *doxastic* argument for false positives (Gerken 2017, 78–80):

5.1 Argument D

D1: Mary does not have any theft-related beliefs about rubies.
D2: If Mary does not have any theft-related beliefs about rubies, Mary does not believe that Peter stole the rubies.
D3: If Mary does not believe that Peter stole the rubies, Mary does not know that Peter stole the rubies.
D4: Mary does not know that Peter stole the rubies.

Oddly enough, the upshot of this argument is merely that Mary does not know that Peter stole the rubies, which falls short of the anti-contrastivist conclusion that Mary does not know that Peter *rather than anyone else* stole the rubies. The obvious way to make argument D reach the desired conclusion is by adding two further steps:

D5: In every case, Mary knows that Peter rather than anyone else stole the rubies only if Mary knows that Peter stole the rubies.
D6: In the present case, Mary does not know that Peter rather than anyone else stole the rubies.

The resulting argument is clearly valid. However, D5 is nothing but M0, and we have seen how ill-founded M0 actually is. If its addition is necessary for argument D to have the intended anti-contrastivist bite, Gerken's doxastic argument for false positives cannot be any more compelling than its epistemic counterpart.

This is not, however, the only complaint that can be raised against argument D. The next thing to notice is that it is actually part and parcel of (standard) epistemological contrastivism that knowing that *p* (rather than *q*) entails believing that *p* (see, for instance, Schaffer 2005, 255–256; Morton 2013, 107). Accordingly, it is part and parcel of (standard) epistemological contrastivism that, if Mary does not believe that Peter stole the rubies, she cannot know that Peter (rather than anyone else) stole the rubies. So there is no relevant sense in which the conclusion of argument D, be it D4 or D6, contradicts contrastivism.

Perhaps we should leave it at that. However, one might acknowledge that the upshot of argument D is wholly compatible with a contrastivist account of Mary's epistemic situation and yet insist that it supports the conclusion that the contrastive judgements elicited by (a careful reading of) DETECTIVE are false positives—which seems at least to put in an unfavourable light the experimental evidence marshalled in support of epistemological contrastivism. Such a reaction will be greeted with a shrug by philosophers who conceive of epistemological contrastivism as a distinctively revisionary view (Sinnott-Armstrong 2008, 268), as well as by those who regard philosophical analysis as a purely 'armchair' inquiry (as most practitioners of traditional epistemology do). But it is a reaction that anyone interested in defending epistemological contrastivism (also) on the basis of the results of empirical studies should pause to consider.[10]

Here then is what a contrastivist could say against the contention that the contrastive judgements elicited by a careful reading of DETECTIVE are false positives. Consider D1, the claim that Mary has no theft-related beliefs about rubies. Is this really true? Well, D1 is clearly true if it is construed *de dicto*: Mary does not believe that *it is the rubies* that Peter stole from the safe. But D1 is clearly false if it is construed *de re*, for Mary can be plausibly ascribed some appropriate *de re* theft-related beliefs about rubies: it is indisputably *of the rubies* (which perhaps she represents to herself merely as *the stolen jewels*, or *the stolen goods*) that she believes that Peter (rather than anyone else) stole them. And of course, it is only such a *de re* belief that is required to ascribe Mary *de re* contrastive knowledge that Peter (rather than anyone else) stole the rubies. So to establish the conclusion that the contrastive judgements elicited by a careful reading of DETECTIVE are false positives, one must rule out the possibility that it is just such *de re* knowledge that is ascribed to Mary by readers of the vignette.

My bet is that ruling out that possibility is not going to be an easy task. For a core function of knowledge ascriptions is to flag reliable sources of information. And if the contrastive judgements of careful readers of the vignette fulfil such a function (if what they are intended to convey is that Mary is a reliable source of information on the identity of the person who committed the act that *we* know as the theft of the rubies), it is reasonable to take their focus to be on Mary's *de re* knowledge of the incident. Admittedly, the hypothesis that it is specifically *de re* contrastive knowledge that participants in the study are inclined to ascribe to Mary when taking into due account the vignette's 'no further information' clause is just a suggestion that would require

[10] Argument M, if successful, would show that Mary cannot have (contrastive) knowledge that Peter rather than anyone else stole the rubies. On the other hand, argument D, if successful, would only show that the contrastive judgements elicited by a careful reading of DETECTIVE cannot be *explained* by the claim that Mary has (contrastive) knowledge that Peter rather than anyone else stole the rubies—a claim that contrastivists would in any case be unwilling to make, on the assumption that Mary has no theft-related beliefs about rubies.

further empirical exploration. However, it seems safe to conclude that Gerken's doxastic argument for false positives, as it stands, does not establish the claim that judgements exhibiting a contrast effect on knowledge ascriptions are false positives any more successfully than its epistemic sibling.

6 Conclusion

In this paper, I have defended epistemological contrastivism against Gerken's epistemic and doxastic arguments for false positives. I have argued that argument M begs the question against contrastivism by assuming M0, the independently implausible claim that Mary knows that Peter rather than anyone else stole the rubies only if she knows that Peter stole the rubies. As for argument D, I have pointed out that its anti-contrastivist bite also depends on assuming M0; I have shown that its conclusion is in fact perfectly compatible with epistemological contrastivism, and I have argued that its challenge to the epistemological significance of the empirical evidence of a contrast effect on knowledge attributions rests on a questionable construal of premise D1. My conclusion is then that Gerken has failed to offer compelling a priori reasons for rejecting epistemological contrastivism. Whether the a posteriori arguments I mentioned in Sect. 3 are sufficient to upset this conclusion is a matter that I must leave for another occasion.

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Compliance with Ethical Standards

Conflict of Interest The author declares that there is no conflict of interest.

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