

*Comments on Scott Sturgeon, "Confidence and coarse-grained attitudes"*<sup>1</sup>

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Sturgeon's starting point is the following question: How do belief, disbelief and suspended judgement relate to levels of confidence?

He criticises the answer of simple Probabilism and presents the outline of an alternative based on the notion of thick confidence. To have a thick confidence means to have a confidence that does not equal a single value, but is "spread out" on a true interval. On his account a minimal sufficient condition for belief is thick confidence running from the belief-making threshold to 1. I understand this condition as saying that it is a minimal sufficient condition for belief to have a confidence spread out on a true interval that is a subset of the interval  $[t, 1]$ . Fully suspended judgement is understood as thick confidence running from 0 to 1. Sturgeon does not explicitly say how we have to understand disbelief, therefore I will not start guessing.

In the following, I will firstly criticise Sturgeon's theory of the relation of coarse- and fine-grained attitudes, and secondly, his view of the role thick confidence has to play in the process of updating. In connection with the latter, I will also discuss his solution to White's case.

Sturgeon's theory of the relation of coarse- and fine-grained attitudes is structurally similar to the one of simple Probabilism. Therefore, it is not surprising that Sturgeon's theory inherits problems from the latter. Particularly, Sturgeon's conditions for belief do not guarantee that belief is closed under conjunction. But I do not want to criticise Sturgeon's theory for not solving every problem. I want to concentrate on the problems specific to Sturgeon's theory.

Let me briefly point out some potential problem cases for Sturgeon's account of the relation between coarse- and fine-grained attitudes.

Sandra's confidence in  $p$  runs from a value that is only a tiny bit smaller than the belief-making threshold to certainty. Does Sandra believe that  $p$ ? Sturgeon might say so although Sandra's confidence does not run from the threshold to 1, because this condition was only meant to be minimally sufficient. But if Sandra's attitude qualifies as belief, Sturgeon really has to say something more about the conditions for belief.

Here's another worry: Sandra's credence in the proposition that heads lands up when the coin she knows to be fair is tossed is 0,5. Does Sandra believe that head lands up at the next toss?

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Sturgeon cannot say that she suspends judgement for he does not want to say so when the epistemic subject has a definite credence. Does Sandra believe that the coin lands up heads? Does she disbelieve it? Both options seem misleading.

By the way, it is not always clear how to describe the thick confidence of an agent. For consider Sandra has to grab a ball out of a box of which she knows that it contains either 20-to-30% or 70-to-80% of red balls. How confident should Sandra be that she grabs a red ball? The union set of the two intervals? Does Sandra believe or disbelieve that she grabs a red ball? I think that Sturgeon's theory does not yield a convincing model of the relation of coarse- and fine-grained attitudes. As yet there are too many open questions.

Now, I want to discuss the second point: Sturgeon's theory of the role thick confidence has in the process of updating. Let's have a look at Sturgeon's "key". Here is a simplified version:

*You want to update  $h$  on the evidence  $p$ . The level of pre-theoretic plausibility which attaches to the idea that your new view of  $h$  should inherit its character from  $p$  is itself inversely proportional to the level of thickness of your initial confidence in  $p$ .*

To make it short: I think that Sturgeon's key leads to intuitive results concerning cases with fully suspended judgement in  $p$  and cases with an exact credence in  $p$ . In both cases it seems that your new confidence in  $h$  should be an exact credence. But it is important to see that so far we tested our intuitions only on very special cases: the extreme case of fully thick confidence and the extreme case of an exact credence. What about our intuitions concerning the other amounts of thickness?

What about an old confidence in  $p$  of  $[0,48; 0,52]$ ? The key demands that Sandra should not stick to her old confidence in  $h$  of 0,5, but dilate it a bit. I think that this really contradicts our intuitions. I also do not find it more plausible to say that Sandra's new confidence in  $h$  should match her confidence in  $p$  in character, when she has a tiny amount of thick confidence in  $p$ , than when she has a big amount of thick confidence in  $p$ . But Sturgeon's key demands exactly this.

Note that we can share Sturgeon's intuitions about the special cases of fully dilated confidence and exact credence without supporting his key.

Sturgeon introduces and defends his *key* by appealing to our intuitions. There is nothing wrong with this in principle. But concerning his *key* I do not share Sturgeon's intuitions and it becomes difficult to bring forward any argument.

Now, let's have a look at the key put to work and consider Sturgeon's treatment of White's case. White's case was introduced as a potential problem case for the notion of thick confidence. In contrast to the orthodox theory of updating with thick confidence and in accordance with his *key*, Sturgeon argues that intuition demands that the new confidence in  $h$  should not dilate even though the confidence in  $p$  is a thick one of  $[0, 1]$ , but remain 0,5. I agree. In White's case we are faced with an extreme case, i.e. the case of fully thick confidence. As I remarked earlier, I think that Sturgeon's *key* is in accordance with our intuitions concerning the extreme cases.

Back to White's case: If one does not want to abandon thick confidence at all, one is now threatened by White's case to say that the confidence in  $p$  sharpens to 0,5. Sturgeon does not explicitly discuss this consequence. Hence, *we* have to do this. Firstly, we have to ask, whether it generally conflicts with our intuitions to update  $p$  in a White-like case?

Consider the following case:  $p$  and  $non-p$  are written on the sides of a dice you know to be fair. The false proposition is written on one side, while the true one is written on the other five sides. You have no clue about  $p$ .  $p$  lands up. Now, it seems obvious that your confidence in  $p$  should increase.

*Prima facie* there is nothing dubious about updating  $p$ . But does it conflict with our intuitions to sharpen the confidence in  $p$  in White's actual case? Sandra's old confidence in  $h$  is 0,5. Thus, according to Sandra's beliefs, that  $p$  lands up makes  $p$  neither more plausible nor less plausible. This is a difference to the dice-case above. Note that if we want to say that Sandra's confidence conditional on  $p$  up sharpens to 0,5 we also have to say that her confidence conditional on  $non-p$  up sharpens to 0,5. But how can we state that the toss of the coin has any influence in her confidence when it does not matter to her confidence which side of the coin will land up? Sandra fully suspends judgement on  $p$ . Now, somebody writes " $p$ " on the head's side of a coin she knows to be fair if  $p$  is true and  $non-p$  otherwise. Does Sandra no longer suspend judgement on  $p$ ?

According to the interpretation of thick confidence as suspended judgement, by sharpening her confidence Sandra somehow does no longer suspend judgement on  $p$ , but forms an opinion about it.

I want to put forward that this is the wrong way to think about what is happening when Sandra sharpens her confidence. Sandra does not learn anything about  $p$ . Before and after the toss she is totally ignorant of whether  $p$  or  $non-p$ . She fully suspends judgement in the proposition  $p$ . Of course, she has different attitudes in the proposition  $x\%$  that  $p$ , but this is a different question. Anyway, I only want to point out that the sharpening of the confidence in  $p$ ,

which is required by Sturgeon's stance to White's case, conflicts with our intuition when we understand thick confidence as (locally) suspended judgement.

To summarize:

The interpretation of thick confidence as (local) suspended judgement (i) does not yield a convincing model of the relation of coarse- and fine-grained attitudes and (ii) does not explain our intuitions about the updating on thick confidence. If thick confidence is not interpreted as suspended judgement the problem cases put forward at the beginning of my comment might dissolve, too.