

*Action and Immunity to Error through Misidentification*¹

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1. Introduction

In this paper I want to examine a claim made about the kind of immunity through misidentification relative to the first person (IEM) that attaches to action self-ascriptions. In particular, I want to consider whether we have reason to think a stronger kind of immunity attaches to action self-ascriptions, than attaches to self-ascriptions of bodily movement. I assume we have an awareness of our actions – agent's awareness – and that agent's awareness is not a form of perceptual bodily awareness.² The issue here is whether *agents' awareness* grounds a kind of immunity to error that *bodily awareness* does not. However, perhaps more importantly, I want to argue that we only get a *secure* difference in immunity claims if we have already decided whether a source of information is essentially first personal or not and made certain, not obviously warranted assumptions, about the transparency of content and about knowledge. If we hold that a subject's knowledge of her actions is essentially first personal, in a way that a subject's knowledge of her body through bodily awareness may not be, then we are better off arguing for that claim directly. Or so I will suggest.

In O'Brien 2007 (Chapter 11) I claimed that we have a non-perceptual agents' awareness that stands as a candidate for a source of self-knowledge in a way that bodily awareness does not. I argued that self-ascriptions made on the basis of agents' awareness were IEM in a stronger sense than self-ascriptions made on the basis of bodily awareness. I claimed that judgments made on the basis of agents' awareness are *transparently* immune to error in a way that those made on the basis of bodily awareness are not. Further, I took such stronger, transparent, immunity to be a marker for its suitability as a source of *self-knowledge*. I claimed that, on a weaker, non-transparent understanding of IEM, both bodily awareness and agents' awareness are IEM. However, IEM, on that weaker understanding, was not a suitable marker for a source of self-knowledge.

¹ Acknowledgements: thanks to Simon Prosser for his patience and for Rory Madden for crucial last minute talks on this issue.

² There is good empirical evidence that our awareness of acting is not due to feedback from proprioception, or kinaesthesia. See Marcel 2003, Haggard 2003.

Roughly the distinction between non-transparent and transparent immunity was supposed to lie in a distinction between (i) its being impossible to have existential knowledge, via a given source, that some property is satisfied, without it also being *true* that I have that property and (ii) its being impossible to have existential knowledge, via a given source, that some property is satisfied, without my *knowing* that that I have that property. I argued that a self-ascription made on the basis of bodily awareness may be IEM, in the first sense: a self-ascription made on that basis could not be *false* due to its having come from someone other than the subject, and to that extent provides a justification for the self-ascription. However I argued that, in contrast to agents' awareness, there were abnormal circumstances in which bodily awareness could put me in a position to know that someone was F, without thereby enabling me to know that I was F. But this was not because bodily awareness was thought to be able to give one information about someone else's body, or indeed that bodily awareness does not constitute in itself *grounds* for a self-ascription, but because there could be circumstances in which it was opaque to one that it was *bodily awareness*, rather than a salient and phenomenologically similar informational source, that was the source of one's information.

Less roughly, the position was this. According to the sole object view of bodily awareness, necessarily bodily awareness is awareness of one's own body. (See Martin 1995.) However, this can be taken to mean two things:

- (I) that one's body is necessarily that which bodily awareness gives us awareness of.
- (II) that bodily awareness is necessarily awareness *as of* one's own body.

Let us assume that (I) is true. It does not follow that (II) is. As things are, bodily awareness seems both to give us knowledge of our own bodies *and* to give us awareness *as of our own* bodies. However, cases of known cross wiring – cases where a subject knowingly, directly and regularly receives information about another's bodily movement, position and orientation, from another, in a way that is phenomenologically indistinguishable from the way she receives information about her own body via bodily awareness – suggest that (II) may be too strong. We can envisage the possibility that in such cases the information from bodily awareness could slowly *cease* to be first personal

in content – could cease to be awareness *as of* one’s own body. It was be analogous to the claim that the contents of our visual perceptions could cease to be first personal and become merely perspectival, if we knew we were regularly being plugged into a system relaying images, from a distant place that were indiscriminable from those received from our egocentric environment. Let us call this the ‘*not necessarily first personal*’ claim.

However, even with that claim, if *bodily awareness* proper, and not some alternative artificial perceptual resource were *in fact* in play, a subject’s self-ascriptions made on the basis of bodily awareness, could not be false because of a misidentification – being bodily awareness it could not come from a body other than the subject’s own. But it is not clear that the subject herself is entitled only to make a *self-ascription*, when she is entitled to take the property as satisfied by someone. She would be entitled only to a self-ascription were no other source of information in play. But given that it is, and she knows it is, she can rationally wonder whether she is being presented with *her* body via bodily awareness or someone else’s via quasi-bodily awareness.

The possibility of known cross-wiring cases suggest that we should weaken (II) so we only have a *de facto* claim about the *first person content* of bodily awareness, and not a necessary one. These considerations mean that there is scope to acknowledge different strengths of immunity claim with respect to bodily awareness. I identified four possibilities:

- (A) That one’s body is *de facto* that which bodily awareness gives us awareness of and bodily awareness is *de facto* awareness *as of* one’s own body.
- (B) That one’s body is *necessarily* that which bodily awareness gives us awareness of and bodily awareness is *de facto* awareness *as of* one’s own body.
- (C) That one’s body is *de facto* that which bodily awareness gives us awareness of and bodily awareness is *necessarily* awareness *as of* one’s own body.
- (D) That one’s body is *necessarily* that which bodily awareness gives us awareness of and bodily awareness is *necessarily* awareness *as of* one’s own body. (O’Brien 2007)

Given that we have assumed (I), (A) and (C) are out of consideration. However, (B) and (D) are both still options, and if the consideration of known cross wiring cases is right

then we have reason to favour (B) over (D). (B) acknowledges that self-ascriptions made on the basis of bodily awareness may be immune from falsity – self-ascriptions made on that basis will always be true – but leaves it open whether the subject is entitled to make it, even given their existential knowledge and given the source of their information.

These considerations suggested that we might state our tests for IEM in terms of the following conditionals:

(I-1) If I know, in normal circumstances, on grounds *w*, that ‘Someone (or this body) is F’, then, necessarily, I am F.

(I-2) If I know, in normal circumstances, on grounds *w*, that ‘Someone (or this body) is F’ then I will *know* that I am F.

(I-3) If I know, in normal circumstances, on grounds *w*, that ‘Someone (or this body) is F’, then, in normal circumstances, I am F.

(I-4) If I know, in all circumstances, on grounds *w*, that ‘Someone (or this body) is F’ then I will know that I am F.³

If ‘knowing on grounds *w*’ is knowing via bodily awareness, then given the sole object view of bodily awareness, we can go for something stronger than (I-3). We can also claim (I-1) – the sole object view is the view that one’s body is necessarily that which bodily awareness gives us awareness of. We can also probably accept (I-2) – in normal circumstances, knowing in way *w* that someone is F, when way *w* is via bodily awareness, will mean I *know* I am F.⁴ However, my suggestion was that (I-4) is an immunity too far for bodily awareness: the cross wiring cases show that there are possible circumstances in which I would know via bodily awareness that ‘Someone (or this body) is F’ without knowing that I was F.⁵

³ See O’Brien 2007, p. 211.

⁴ It is not obvious to me that (I-2) is not in fact strong enough to secure a source of knowledge as a source of *self-knowledge – knowledge as subject*: its content *is* first personal and it can deliver information only about the self. Such a claim would leave room for a distinction between resilient and non-resilient sources of self-knowledge *as subject* – between those that would case to be sources as subject in certain circumstances and those that would not.

⁵ Note that the transparent non-transparent distinction cuts across Pryor’s distinction between de re misidentification and wh-identification.

I further argued that we did not have a similar reason for taking (I-4) to be false in the case of agents' awareness. The argument rested on contrasting the following cross wiring case to that involved in testing the immunity in the case of bodily awareness: Imagine I am linked to someone else's body so I receive information from her body that is phenomenologically indistinguishable from information I receive from bodily awareness. Knowing this, imagine I have an experience of moving my hand when I decide to move my hand. Suppose I then worry about whether I actually succeeded in moving my hand, or whether what I experienced was a result of the other person's hand moving. Maybe, I think, I tried to move my hand but failed, and did not get evidence of my failure because of the information received from another's body. As result it seemed to me that I moved my hand.

Suppose that in such a case the subject were to judge that '*Someone moved her hand*, but I am unsure whether it was me'. I claimed that the antecedent clause is not a candidate for knowledge given the sources the subject takes to be available to her. She may be able to know, given her sources and her understanding of them, that someone's hand moved and still be unsure whether that someone was hers. However, to know that someone's *hand moved* is not to know that someone *moved her hand*. It seems that in such a situation, if the subject comes to doubt that she moved her hand, despite her seeming awareness of moving it, then she thereby loses her grounds for thinking that someone moved her hand. She might know the disjunction that 'Either I moved my hand, or I failed to move it and someone else's hand moved' but such knowledge is not sufficient to undermine the claim that our knowledge of our actions satisfies the test for IEM (I-4). It is not sufficient to undermine such immunity, because this immunity is compatible with my failing to know in certain cases that the antecedent is satisfied, that is, with my failing to know that someone is moving her hand. Cross wiring cases cannot provide the subject which sufficient grounds (although she may have some evidence) for knowledge that *someone moved her hand*, while leaving it open who did. Whereas in the bodily awareness (and other perceptual) case(s) they need not of necessity, if I am sufficiently informed and familiar with the possibility of such cross wiring, undermine the existential judgements, but only my known attribution of them to myself.

The core difference was supposed to rest on the claim that it is in virtue of functioning as a *producer* of an action that I know it through agent's awareness and that I cannot know another's action as a producer. In contrast, the thought was that I could in unusual cases get information from another's action as a receiver of information: as when I get feedback from another's action through a means phenomenologically similar to bodily awareness. The claim was that if a source of information from another's body is capable of giving me information about that body it will in fact be *neutral* between passive and active bodily movements. If it is neutral between passive and active bodily movements it may ground existential knowledge claims about *bodily movements*, but will not ground existential knowledge claims about *action*. The suggestion was that any source of information I might confuse with agents' awareness could not in itself ground a knowledgeable existential judgement about *action* – at most it would ground a judgement about *bodily movement*.

2. *Action sensitive bodily awareness*

I now have at least two worries about the above argument and use of the cross wiring case involved.

My first problem is that the argument for transparent immunity to error through misidentification (TIEM) for action self-ascriptions, seems to rest on the assumption that information from bodily awareness is neutral between action and bodily movement. The feedback from bodily awareness was supposed to be insufficient for the subject to determine whether someone moved her body, or whether her body moved. Because of this, in cross wiring cases a subject could not *know*, merely on the basis of input from bodily awareness, that someone moved her hand, but wonder whether it was her. She could not know because the information received would be the same whether the subject from whom she received information was acting or merely having her body moved. The most she could know was that someone's hand moved, not that someone acted.

It was standard in discussions of other minds to make a similar sort of claim. We can observe other people moving their bodies – but the nature of our observation is such that it is neutral between the observation of someone moving her body – someone acting – and someone's body moving. So given the relevant possibility that someone may be an

automaton having her body moved we could not know by observation that someone was acting.

Experimental results have suggested that things are a bit more complicated than that. In fact our observations of other *normal subjects* are highly sensitive to the movements a body makes when it carries out a deliberative action, and to the movements it makes when it is moved by an external cause. There seem to be two classes of movements to which we are differentially sensitive in observation: movements which we can call ‘action-type’ and movements which we can call ‘movement of the body type’.⁶ So, there seems to be room, in contrast to the traditional suggestion that perception of bodily movement gives us no direct perceptual evidence for action over bodily movement, to hold that we do generally have perceptual evidence that someone acted as opposed to had their body moved. And given the possibility of seeing oneself act, either by watching ones limbs directly or by seeing oneself in the mirror we might, of course, be able to know via observation that ‘Someone has raised her arm’, but wonder whether it was me.

If visual access to the actions of others enables us to distinguish actions from non-active movements of the body, what of bodily awareness? Is it not possible, indeed likely, that bodily awareness is also sensitive to differences in active vs passive movements? If that possibility is real, it seems that we *could* have reason, in the kind of cross wiring cases involving quasi-bodily awareness, that I took to determine whether our knowledge of our actions were transparently or non-transparently immune, to know that ‘Someone is raising her arm, but is it me’ and not just ‘Someone’s arm is rising, but is it mine?’. Rather, I could know that my situation is either that I am aware of my action through agent’s awareness, or that I am being presented through bodily awareness with an action-type movement of the body. On the assumption that being presented with an action-type movement of the body is sufficient to justify the belief that it is an action, then whichever basis is in play – and that is by assumption opaque to me – will ground the belief ‘Someone is raising her arm’. However, even if my belief that ‘Someone is raising her arm’ is based on agent’s awareness, I may, in not knowing what basis was in play, doubt that it was me that was acting. Thus, if bodily awareness is sensitive to active *vs* passive movement, then it looks as though bodily awareness, and indeed vision, could on

⁶ This data (drawn from Johansson 1977, and Bertenthal 1993, Premak 1009, and Gibson et al. 1978) is discussed in Proust 2003.

own could ground knowledgeable action self-ascriptions. In which case the argument for the kind of immunity that attaches to action awareness may not go through.

The second problem is about whether cross wiring cases involving *bodily awareness* can be the right kind of cases to appeal to in assessing whether judgments based on action awareness have a special kind of immunity in contrast to bodily awareness. There seems to be an implausibility about the phenomenological identity claim made in setting up the case. The case rested on the idea that it could be for the subject as if she were acting, were she to receive information via quasi-bodily awareness from another having decided to act. The role of bodily awareness in our awareness of our own actions is complicated, and there is some solid evidence to believe that our knowledge of our actions is not grounded in bodily awareness, but that at most the lack of bodily awareness constitutes reason for us to withdraw a belief that I acted. The cross wiring case at hand would constitute a problem for the claim that action ascriptions based on agent's awareness are TIEM *only* if the subject were justified in holding 'Someone raised her arm' even though she could not tell whether her grounds for this belief were that an arm was presented via quasi-bodily awareness as an action-type movement of the body, or whether the source of her knowledge was agent's awareness, independent of bodily awareness or quasi-bodily awareness. And it may be said that it is not plausible that she would not be able to tell.

Note that if the second problem is well founded, and the use of the puzzle case discussed is illegitimate, then the first problem becomes irrelevant. We would then have no reason to be concerned that such a case might cause a problem for the claim that action self-ascriptions are TIEM. Putting together the two concerns, however, enables us to see that judgements of transparent immunity turn on us being able to come, by imagining the cases, to know what confusions are plausible and what confusions are not. If it is plausible, we face a counterexample; and if it is not plausible, we do not. But is this the sort of thing we can know just by imagining? Suppose we were to come by experimental evidence that that subjects do, *predictably and reliably*, confuse agent's awareness for bodily awareness in certain circumstances, despite excellent evidence for their being the significant differences between the two sources. There would then be scope for a subject to know that someone is acting but not know whether it is *them*, if they know they are in

circumstances in which they may be subject to such a predictable confusion.⁷ If this is right, then there is a question about using the idea of using transparent immunity, never mind non-transparent immunity, to mark out our knowledge of ourselves ‘as subjects’. The claim that TIEM was significant was based on the supposition that the following was true:

A way of knowing, W , is a source of knowledge of ourselves *as subjects* iff it is TIEM.

What seems to emerge is that TIEM is too strong a condition. In order for a source of knowledge to be TIEM two theses seem to need to hold:

(T1) The source of knowledge necessarily gives knowledge only of the subject.

(T2) The source of knowledge is necessarily discriminable by the subject from a source that gives direct knowledge of the same properties of another subject, if she knows ‘Someone is acting’.

It is only if we hold (T2) that we will not be able to construct problem cases which allow the subject to know ‘Someone is F’ but not know ‘I am F’. However, it is not clear that for a source of knowledge to be a source *as subject* anything as strong as (T2) is required. (T1), which is secured by non-transparent IEM is certainly too weak for a source to be a source of knowledge as subject: it can be secured by any dedicated, sole-object, source of knowledge of the subject. But why do we think that in order for a source of knowledge to be not only essentially knowledge of the subject, but also essentially first personal, we need it to be impossible for the subject to confuse that source with another that gives information about another?

The crucial thesis for a source of knowledge being a source of knowledge as subject seems to be the following:

(T3) The source of knowledge is necessarily first personal in content.

⁷This seems no more unlikely than that subject in particular circumstances might confuse a feeling of pain and a feeling of cold.

If there were an implication between (T3) and (T2) – if a source of knowledge could only be necessarily first personal if there was no possibility of confusing it with a source that gives direct knowledge of the same properties of another subject - then TIEM would plausibly be a condition on knowledge of ourselves as subjects. There are two moves we could make that would secure such an implication between (T3) and (T2), and so secure the result that a failure of TIEM by a source of knowledge is a failure of candidacy for a source of knowledge *as subject*.

The first move we could make is to adopt a strong transparency of content assumption: it is not possible that a subject could be a situation in which she was confused about whether she is in a state with first personal content or not.

Note that this *strong transparency* assumption is needed to secure the move from (T3) to (T2). It should not be confused with a *weak* transparency assumption to the effect that a subject may be in circumstances in which, if she is in a state with a given first person content, she will know she is in such a state and would not confuse it with another. We might think that the weaker assumption is true of a subject who is not in a world with cross wiring devices, or of a subject in a world with cross wiring devices but who was not selected as a candidate wearer. Whether you think sensitivity or safety is required for knowledge it might be true of such subjects that *they* are able to know what state they are in just by being in it, even if the subject selected for cross wiring is not. Thus, for those subjects it would follow, that the state they are in could not ground the existential claim without also grounding the self-ascription. Suppose safety and sensitivity are:

Sensitivity: S knows that P implies that if P were not true, S would not believe P.

Safety: S knows that P implies that if S would believe P, P would be true.

The subject who is selected as a wearer of a cross wiring device – if she subject to predictable confusion – could be in a first personal state with the content “I am raising my arm” without being able to know she was. Assume she believes she is in the state: if it were not true, she would still believe she was. Assume she believes she is in the state: if she would believe P, P would not be true – the machine might be on. The possibility of such a subject is inconsistent with transparent immunity. However, in other circumstances being in the state with the content “I am raising my arm” will immediately justify a self-ascription. If the subject weren’t in the given first personal state, she would not believe she was, and if she would believe she was in the state, she would be in it state. A *weak* transparency assumption seems to hold of such subjects.

The second move we can make to secure the implication between (T3) and (T2) is to adopt an epistemological assumption to the effect that knowledge that “Someone is acting” could not arise from a subject’s ignorance of which of two disjunctive ways of knowing were in play. The claim would be that a subject could not know that someone is acting, if she knows that she might be confused about what state she is in, even if she knows that her current state presents her either with her own action, or with someone else’s. It is hard to see what would justify the principle: if I know either I am aware of my action or aware of X’s action why can’t I know that I am aware of someone’s action? Presumably the argument for the assumption would be grounded in something like the thought that knowledge cannot come out of confusion or ignorance. I do not intend to evaluate the principle. Suffice to say if one were to deny on such grounds that a subject could know someone was acting when she was confused about which source of information was in play then the supposed counterexample to the claim that action awareness is a source of transparent immunity falls away.

I think it will help clarify what is at stake in the above discussion if we abstract a little:

Suppose that there are two ways of gaining direct knowledge of a state or event E: W1 and W2. Suppose that W1 provides an awareness which is first personal in content and IEM: the subject’s awareness of the event or state is as *hers*, and W1 only provides information about the subject. Suppose that W2 is not first personal in content and not IEM: the subject’s awareness of the event or state is not as hers, and W2 can provide information about others. For W1 to be a source that is TIEM it would either (i) have to be impossible for S to be in a situation in which she could not tell whether her state is result of W1 or W2, or (ii) it would have to be impossible for S to count as knowing that someone is undergoing E, when she is in such a state – when she knows only that W1 or W2 is in play and not which.

What would we have to hold about W1 and W2 in order to hold (i) that it is be impossible for S to be in a situation in which she could not tell whether her state is result of W1 or W2? Suppose we held the following:

Transparency of method claim: The *method* used to ground the existential claim ‘Someone is undergoing E’ must be transparent to the subject: the subject must be able to detect what method is being used.

That would block the possibility that S could not tell whether her awareness is as a result of W1 or W2. However, to hold such a claim would be to rule out certain kinds of cross wiring cases by hypothesis – cross wiring cases often involve phenomenologically similar, but distinct modes of knowing: bodily awareness and quasi-bodily awareness, memory and quasi-memory etc. The point of them often rests on exploring the possibility that there may be distinct sources of knowledge that the subject cannot tell apart. Of course, there may still be room to run cross wiring cases if one holds that bodily awareness and quasi-bodily awareness, memory and quasi-memory are not distinct ways of knowing. If, for example, one individuated methods via a subject’s capacities to distinguish them then cross wiring cases would not be ruled out and transparency of method would be secure. However, the issue would then turn on how to individuate methods and the use of cross wiring cases to help settle questions of knowledge as subject would be in doubt.

However, it may be that we do not need to appeal to transparency of *method*, but something like transparency of *content* with respect to the first person:

Transparency of content with respect to the first person claim: The content used to ground existential claims (like ‘Someone is undergoing E’) must be transparent to the subject with respect to whether it is first personal: the subject could not confuse first personal content with non-first personal content.

Now given the claim that W1 is necessarily first personal in content, across all circumstances, but that in the envisaged cross wiring case W2 has perspectival but not first personal content, then the transparency of content claim will rule out the kind of cross wiring case at issue. The case rests on the subject having two possible sources – one that gives her knowledge about herself, and one which gives her knowledge of another - which may be grounding her knowledge that ‘Someone is undergoing E’. Given the assumption that W1 has first person content, transparency of content will block the challenge to TIEM. Appealing to the necessity of first person content of W1, in contrast to the lack of first personal content from W2, would, given a transparency of

content assumption, enable us to block the kind of cross wiring counterexample to the claim that action ascriptions based on agent's awareness are TIEM.

But suppose one rejects strong transparency. Suppose I hold that my way of knowing, W1, that I am undergoing E, is necessarily first personal in content, and hold that usually to undergo E is sufficient for me to know I am undergoing E. However, I also allow that it is possible that in very peculiar circumstances the set up might be such that I become predictably discombobulated, so that despite W1 being in play, I would not have the usual access to the first personal content of my awareness and so would not know I am undergoing E. Assume I also held that in such a case, although I do not what the content of the state I am undergoing is, I do know that it is either one thing or another, and whichever it is, I know someone is undergoing E. Then I would be committed to denying that W1 is TIEM – there is a possible circumstance in which I know, on grounds W1, that ‘Someone is undergoing E’ but do not know it is me. However, it would odd to think I am thereby committed to denying that W1 is not a appropriate source of knowledge as a subject: it is a source of knowledge that is *necessarily* about me, it is *necessarily* first personal in content, and in current circumstances if I am aware of E via W1, then I know that I am undergoing E. W1 is ruled out only on the grounds that in peculiar circumstances I may not recognize it, and the awareness it gives me, for what it is.

However, two things now become clear. The first is that, if one accepts strong transparency to block the counter example, what is doing all the work in determining whether a source of knowledge is TIEM or not is the claim that W1 is necessarily first personal and in some circumstances W2 may not be. Now, we might have thought that the reason we had for appealing to cross wiring cases and asking whether they delivered knowledge that was immune to error through misidentification was precisely in order to use such case to help us try to settle whether a source of knowledge was necessarily first personal or not. The second is that, if we deny strong transparency, and allow that the subject who predictably does not know the content of the state she is in, can have existential knowledge that someone is in such a state, then we do not have a reason to take TIEM to be a marker for a source of knowledge as subject.

Suppose W1 is agents' awareness and W2 is bodily awareness, we can now see that determining whether there is a contrast between them with respect to TIEM depends on determining whether either, both or neither are necessarily first personal in content, as well as on defending some further assumptions about transparency of content and possibility of knowledge in the face of ignorance. If that is the cost of using TIEM as a test for a source of knowledge as a subject we are surely better off heading straight there and asking directly: which if any sources of knowledge are necessarily first personal?

The thought the condition set by TIEM is too strong, and that we should look instead at argument directly for the necessity of first personal content, is underlined by the fact that it is not clear that introspection based knowledge of our judgements are TIEM. Suppose I introspect the judgement P, and conclude "I am judging P".

Suppose I am told that psychological experiments have revealed that a subject who has a very low volume asserted whisper feed into in her ear at a certain frequencies becomes very unreliable about discriminating between cases in which there is whisper and when there is not. The hypothesis is that subject's own judgments come to seem as whispers and the whispers come to seem as judgments.

Suppose, also, that we hold the not implausible thesis whereby asserted whispers presents us de re with the judgments of others. So, we have in play two very different sources of knowledge, both of which deliver direct knowledge of a judgement: introspection and hearing. Suppose I am told I may be subject to incoming whispers. Suppose, further that if I know I am in such a circumstances, I might know on the basis of introspection that 'Someone judged that P' – would I thereby know it was me? Not obviously.

We might try to block the case in two ways. First, we might say that the hearing causes me to judge P and the explanation of the data is that I am judging P, and knowing by introspection that I am in both cases. Second, we might claim is just not plausible that there could be such date and I could not tell which source of information is in play.

The first attempt to block the argument is not obviously successful. Perhaps hearing P makes me think P, but does it make me judge P? Is it plausible that hearing P is sufficient to make me judge P? Maybe what is going on is a case of accepting what I hear asserted

– but it might be more like mimicry if it is anything. It seems possible that what is going on is that I am confusing hearing at a very low volume another – and taking it to be me judging.

The second attempt is to claim that it is just not plausible that we would get confused in this way. Well maybe not – but it is hard to tell in advance. What if we did? Would we thereby be forced to concede the introspection wasn't an 'as subject' source of self-knowledge in the way we thought it was?

I will, at the end of the paper, say something very briefly in favour the claim that agents' awareness – the awareness that immediately grounds our knowledgeable action ascriptions – must be necessarily first personal in content in a way that bodily awareness is not. Before I do that I want briefly to consider whether there is not a further, and more direct counterexample to the claim that agents' awareness is TIEM.

3. A better cross-wiring case?

I now want to consider whether we have the resources to construct better cross wiring case to test whether agents' awareness TIEM than those that appeal to bodily awareness. Are there instead cases that appeal to agent's awareness and artificially induced agent's awareness only? We then may not have to get involved in the question as to whether or not it is plausible that a subject could fail to know whether agents' awareness or bodily awareness is involved.

Recent work from Michel Desmurget, a neuropsychologist at the University of Lyon, France gives us reason to think there may be such cases.⁸ Desmurget and his colleagues have developed an experiment in which they probe the neural circuits involved in volition in the brains of fully conscious people. The experiments are carried out during necessary 'awake' brain surgery. They involve stimulating different parts of the brain to artificially generate a conscious experience of 'intending, or wanting, to carry out an action'. The team stimulated both the inferior right parietal region, reporting that it produced a strong intention or urge to move 'the contra-lateral hand, arm or foot'. They also stimulated the inferior left parietal region which produced 'the intention to move the lips and talk'. Further, according to the paper:

When stimulation intensity was increased in parietal areas, participants believed

⁸ Related results were reported by Fried et al (1991).

they had really performed these movements, although no electromyographic activity was detected. (Desmurget et al. , 2009)

Further, the team found that stimulating a different part of the brain – the pre-motor cortex – triggered physical movement in contra-lateral mouth and limb. However, in that case the subjects denied that they had moved their body.

The experiments bring out two notable features. First, such intervention caused the subjects to report an urge to move and a belief that they had acted, without any feedback from a movement of the body from bodily awareness – there was no movement of the body to feedback information about. Second, the feeling of having acted, and the triggers for movement can come apart.

The possibilities described in the Desmurget experiments suggest that there might be available better cross wiring cases to test claims about the immunity that attaches to action awareness, in contrast to those involving bodily awareness.

Suppose we have a subject, who like the patients in Desmurget's experiments, has her parietal lobe stimulated to a sufficient intensity that she feels she is moving her arm, and comes to believe she has moved her arm, when in fact she has not. Suppose further that the subject knows her situation. We might think that she is thereby in a position to know, when she feels as if she is moving her arm, and is inclined to believe that she is, that *either* she is indeed moving her arm *or* that some neuroscientist is moving their arm – in stimulating the relevant part of her brain. So, on the basis of how she feels she is able to know “Someone is moving their arm” but still rationally ask “But is it me?”

That, however, this cannot be the kind of case we want. For a start, given that the brain could just as well be stimulated, in just the way it was, automatically by some mechanism, rather than by some action of a person, it looks as though the subject could only have warrant for the belief that someone was moving her arm if she was independently justified in holding a linking belief to the effect ‘the feeling as of an arm moving, if not actually of an arm moving, will be caused by the artificial stimulation of my brain by someone moving their arm’. The feeling of moving my arm caused by the stimulation of the parietal cortex is, therefore, not in the imagined case a *direct* source of information about another's arm movement – it is only a source of information about another's arm movement given the linking belief and capacity to draw the inference. In the cross wiring cases that we took to show that bodily awareness does not provide self-ascriptions that are transparently IEM, we relied on the fact that there were two, phenomenologically indistinguishable, sources of *direct* information about a movement of a body so that a subject could fail to know which body she was direct perceiving, or quasi-perceiving. The

subject was, via artificial means, presented with the movement of another's body.

So, in order to have a problem case of the relevant kind we need the possibility of two direct sources of knowledge of action, which could be phenomenologically indistinguishable, and which both, relative to certain background knowledge of one's circumstances, give immediate non-inferential grounds to hold that somebody acted. The relevant kind of problem case we used to determine and show the limits of the immunity that attaches to bodily awareness involved a subject who had background knowledge that she was in receipt of indistinguishable, but distinct kinds and sources of information about the body: bodily awareness on the one hand, and 'quasi-bodily awareness' on the other. It also involved a subject for whom the content of bodily awareness was no longer first-personal but was merely perspectival. A subject, with normal background knowledge and content, would not be in a position know about another's body, if she were to receive information via quasi-bodily awareness. Such a subject would have no reason to take herself to have knowledge of another's body, and would not reasonably believe for example, that "Someone's leg is bent" if she wondered whether the leg she was aware of was hers. She would rather be subject to an illusion about her own body. However, knowledge of the abnormal circumstances, content shift, and the possibility, or likelihood, of dual information sources, the subject may reasonably, come to believe and know "Someone's leg is bent" while wondering whether it is hers.

So, let's try again. Suppose we have two people, A and B. Suppose that B acts, and that B's action is realised by, among other things, neural activity in her inferior parietal cortex, pre-motor cortex and primary motor cortex. Suppose, further, that B's knowledge of her action is based upon agent's awareness, and also that agent's awareness is caused or realised by neural activity in the inferior parietal cortex (of the kind artificially brought about by the intervention of Desmurget and his colleagues). Now suppose that there is a reliable link wired between A and B so the neural activity in the inferior parietal cortex of acting B, brings about the same pattern and type of neural activity in the parietal cortex of A. So, an action of B stimulates A much as Desmurget and his colleagues do their patients. B acts, and as a direct result, A has an experience *just like* one she would have were she to be acting. Suppose further that A knows about the set up, knows that she regularly has an experience as a result of B acting that she cannot distinguish from the experience she has when she is acting.

As described such a case will not do the work required to show that A might have knowledge that someone raised her arm, when her belief is based on agent's awareness caused by the stimulation of the inferior parietal cortex, without knowing it is *her* that moved it. As we have seen in the discussion above, *everything* turns on whether the

content the source of knowledge that *may* be in play alongside action awareness is first personal or not. The artificially induced awareness as of acting – quasi-agent’s awareness – could directly ground the knowledge claim that “Someone moved her arm” only if the content of the awareness is not first personal, but merely perspectival. If it were necessarily first personal the subject could only be subject to the illusion that she moved her arm. She might be able to infer – if she knows such illusions are correlated with another’s actions – that someone moved her arm, and wonder if she did. However, the source of her knowledge would not be the quasi-action awareness, but the inference from a known correlation between her experience and someone’s action, and the inference.

So, for such a case to be a counterexample to TIEM for action awareness we would need to establish a *‘not-necessarily first personal’* claim with respect to the content of the kind of quasi-action awareness involved in case given. And if we can do that we may be able to claim that such quasi-action awareness could ground direct, non-inferential knowledge that someone acted. And if we cannot, we will not have a counterexample.

How plausible is the *‘not necessarily first-personal’* claim with respect to action self-ascriptions in known cross wiring cases? To establish anything like it we need to make palatable the claim that in the possible world where such a known cross wiring exists the first person content of an action self-ascription made on the basis of agent’s awareness, or quasi-agent’s awareness, could slowly fall away. To do so would be to make sense of it seeming to the subject, that she has an *agential awareness* of an action going on, without it necessarily seeming to her that it is *she* is acting. Without the *‘not necessarily first-personal’* claim all cross wiring cases can show us is the possibility of suffering an illusion that ‘I am moving my arm’ that is systematically caused by someone else moving their arm.

In order to try to make out the *‘not-necessarily first personal’* claim about bodily awareness I appealed to the IBM: the Internal Baby Monitor. The IBM was an imagined artificial perceptual device designed to pick up information about the movements of another’s body and deliver it in such a way that it seemed to the subject receiving the information just as it did when she received information from her own body. The claim was that with knowledge of the set-up and regular use of the IBM, after a period a subject could come to form well grounded beliefs about the movements and position of another’s body. In general the thought was that in so far as bodily awareness was a *perceptual source* dependent upon informational input from a given space, then although I experience that space as *my* body, there is conceptual room – given peculiar alternative circumstances and regular cross wiring – for there to be a content shift so the subject comes to access *her* body, as *this* body, acknowledging that another’s body could be at the

input end of the perceptual, or quasi-perceptual, state she was in.

Note, however, in keeping with the line of thought above, talk of the IBM could not *establish* the 'not-necessarily first personal' nature of bodily awareness against a direct argument for the necessity of bodily awareness having first person content. It can only suggest that given that bodily awareness depends on perceptual input from, and about, an independently identified body space, and that given certain views about the plasticity of the content of perception, there is scope for another body space to be accessible, and for that accessibility to condition the content of bodily awareness.⁹

Thus, whether we can use the Desmurget case to construct a case that shows that agent's awareness is not TIEM depends upon answering the question as to whether we could make sense of such a content shift in the case of our agent's awareness. However, as the above discussion has indicated, to do that is ask whether agent's awareness is necessarily first personal.

4. Direct arguments for the necessity of first personal content to agents awareness.

Properly to answer the question of what direct arguments there are for or against the necessity of first personal contents to agents' awareness is the job of another paper. However, let me conclude by making a brief suggestion about where we might look for them.

There are two parallel thoughts we might draw on. One concerns the identity conditions of actions, and the other concerns what is involved in being agent aware of an action.

First, consider the identity conditions of an action. Like the identity conditions of a thought, or a judgement, the identity conditions of an action seems not to be independent of the identification of the subject whose actions they are. And which subject's actions they are, depends upon *whose* reasons, desires and so on are the direct determinants of the action. Thus, it is a constitutive impossibility for an action to be an *action* of A's but to be directly determined by B's reasons. For B to determine an action of A's, as opposed to a movement of A's body, he will always have to go through A herself: he will have to engage A's own reasons. This means that if a subject is entitled to hold that she has direct knowledge of her reasons, desires and so on, she is entitled to hold that *she is not acting intentionally*, even if an action-type is directly presented to her, if it is not consonant with her reasons, desires and so on.

⁹ I think in fact that given the interdependence between bodily awareness and action, the IBM may only be able to bring about a content shift in a subject who cannot act.

This leads us to the second thought. This is the thought that the character of agent's awareness is sensitive to the fact that an action counts as mine in virtue of being a determination of my mind. A helpful way to get at the character of agent's awareness may be to consider a case in which it is missing. Consider cases of Anarchic Hand Syndrome. This is the Dr Strangelove syndrome, which causes sufferers to carry out actions they disavow. A sufferer acknowledges that her body is moving in a purposeful way, but does not experience the action as its agent or author. The character of the experience is as of an intervention, discordant with the plans, reason and desires of the sufferer. The sufferer is, as a result, forced to act externally on her own actions, in order to try to control them and bring them in line with their avowed purposes. She acts on actions she acknowledges ownership of, but not agency.

In contrast to the Anarchic Hand Sufferer, when we experience an action as its agent we experience it as under our control, as flowing immediately from our reasoning, our desires, our decisions and so on. An action is experienced as the spontaneous conclusion of the workings of our minds. We do not, usually, and cannot always, have to act on ourselves to act.

Putting these thoughts together, we can wonder what it could be to experience an action *as its agent*, but for such an experience to be merely perspectival and me to remain neutral about whether it was *my* action. If my experience of my action as agent is to experience the action as the direct conclusion of the process by means of which I determine how to act, there seems to be no place at which the possibility that it was someone else action determined in that way could get a grip. To leave it open whether it was in fact my action I was experiencing would be to leave it open whether it was *my mind* that was experiencing as the direct determinant of the action.

What I think leaves room for the possibility of bodily, and vision, and other perceptual sources, to cease to be first personal is that there is an argument place in the structure of the experience which is normally reflexive and fused to the experiencing subject, but which could, in peculiar circumstances, be left open by the subject. So, suppose we have a case of bodily awareness that is an experience of an arm being raised. Given the sole-object view of bodily awareness it will ground action ascriptions if it has the structure:

(a) Ex (x is bodily aware of x raising x's arm)

However, in cross wiring cases we have the following possibility:

(b) ExEy (x is quasi-bodily aware of y raising y's arm)

For subject for whom both (a) and (b) are regularly and indistinguishably true it is

possible for it to be opaque whether they are in a necessarily reflexive state or not. However, action awareness does not have that three variable structure it only has a two variable structure:

(c) Ex (x is aware of raising x's arm)

If I were to come to doubt that the reflexivity were guaranteed, and were to worry that instead:

(d) ExEy (x is agent aware of raising y's arm)

we do not open up the possibility of the subject being aware of another's action – but rather of the possibility of the subject being aware of acting with another's arm. Suppose it were suggested that the structure of agent's awareness must in fact be:

(b) Ex (x is agent aware of x raising x's arm)

I think that we could complain that we have been left without the natural means to distinguish the structure of the experience I have when I am aware of raising my arm, and the experience the sufferer of Anarchic hand syndrome has when she is aware of herself raising her arm, by picking it up with her other.

This shows a critical difference between bodily awareness and agents awareness. In bodily awareness we take our bodies as objects, even if necessarily as the objects we are, and ascribe properties to them. In acting, and in knowing our actions, I do not think we take our bodies as objects at all.

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