
Are there Counterexamples to the Immunity Principle? Some Restrictions and Clarifications

A Commentary on Caleb Liang

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Our commentary focuses on the sense of experiential ownership and its implications for the Immunity Principle. In general we think that Liang elaborates the self-as-object and the self-as-subject in an interesting and refreshing way. Nevertheless, there are some problems that we want to address. (1) First, we argue that the sense of experiential ownership cannot misrepresent the fact of experiential ownership. (2) Second, we argue that neither the sense of experiential ownership in particular nor phenomenal states in general are eligible for identity judgments. (3) Then we claim that the two alleged counterexamples actually do not provide any valid argument against IEM. (4) We close by evaluating whether it makes sense to talk about the Immunity Principle as a non-trivial property, or whether the relevant properties are just mispredication or misguided reference.

Keywords

Body-ownership | Body-swap illusion | *De re* misidentification | Fact of experiential ownership | Identification-freedom | Immunity to error through misidentification | Immunity to misguided reference | Judgments | Mispredication | Self-as-object | Self-as-subject | Sense of experiential ownership | Somatoparaphrenia | Which-object misidentification

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1 Introduction: Preliminaries and conceptual clarification

Liang investigates some interesting issues concerning self-consciousness and its relation to conscious phenomenology and bodily self-con-

sciousness. His argumentation, which has the aim of being interdisciplinary fruitful, is closely tied to some conceptual distinctions that are

also very important for our commentary. First, he refines the initial point of the Wittgensteinian distinction between self-as-object and self-as-subject (Wittgenstein 1958). An important distinction concerning the former is the sense of body ownership and the sense of self as physical body, which describes the self-as-object in a more fine-grained manner. The self as subject is also sub-classified in terms of the fact of experiential ownership and the sense of experiential ownership. The sense of experiential ownership describes mental states that refine proprietarily aspects of *who* is having the experience in question. Liang claims that the sense of experiential ownership is not privileged in the sense that it gives rise to the well-known property *immunity to error through misidentification* (IEM). In the second part of his investigation he is concerned with theoretical and empirical investigations made by Damasio, Panksepp and Northoff, which do not provide substantial evidence in their measurements for the sense of self as experiential subject. They rather concern the self-as-object and therefore disregard substantial aspects of self-consciousness. Our commentary will focus on the sense of experiential ownership with regard to IEM. According to Liang, there are several counterexamples to IEM, mainly to be found in misrepresentations (like in the body-swap illusion) due to a sense of experiential ownership. In this commentary, we ask ourselves the following questions: is the sense of experiential ownership a plausible candidate for exemplifying the property of IEM, and could there be serious counterexamples to that principle? We defend the following four theses:

- (1) The sense of experiential ownership cannot misrepresent the fact of experiential ownership (cf. section 3).
- (2) Phenomenal states like the sense of self as experiential subject are ineligible to serve as *bearers* of IEM as a property (cf. section 3).
- (3) Liang's counterexamples do not provide real counterexamples to IEM, be-

cause they do not aim at the target phenomenon (cf. section 4).

- (4) IEM is either a very trivial property of judgments or beliefs or could be explained in terms of immunity to misguided reference (cf. section 5).

In order to defend these four theses we introduce two conceptual distinctions by which we hope to describe the target phenomenon in greater detail. Some philosophers, such as Evans (1982) and Shoemaker (1968) consider IEM to be a property of *judgments*, whereas others, such as Coliva (2002) and Bermúdez (1998), talk about some phenomenal aspects. Let us summarise these two accounts of IEM as follows:

First-person pronoun immunity (IEM-FP): A speaker who uses the singular indexical expression “I” knows a thing to be φ and conducts a predication “a is φ ”. This judgment is based on the rule of *identification-freedom*, so that it is clear that “I am φ ” is a judgment that does not depend on any further identification component.¹

Phenomenological immunity (IEM-P): Immunity to error through misidentification is a property of phenomenal states that characterises the constituents of first-person judgments. These identification-free constituents manifest themselves in phenomenological experiences about oneself.²

1 In other words, a judgment is identification-free if to judge that “a is φ ” *eo ipso* is to judge that “I am φ ”. Shoemaker's argument for identification-freedom (subject-use) can be summarized as follows. (1) The utterance “a is φ ” gives rise to an error through misidentification, if a speaker knows a thing to be φ and mistakenly thinks that ‘a’ refers to φ (cf. Shoemaker 1968). (2) Not every subject-use, which can give rise to knowledge about oneself, depends on identification, because this would lead to an infinite regress (cf. *ibid.*). (3) Since there is no identification of an object with a thinker in subjective first-person judgments, they are clearly incorrigible (relative to the first-person pronoun (e.g., some proprioceptive judgments or “I feel pain”); Shoemaker 1968). (4) Since the use-as-subject does not depend on identification, an error through misidentification is impossible.

2 This is a highly controversial metaphysical generalization of IEM, because it assumes that *there are* phenomenal constituents of IEM that serve for IEM as a property of judgments. Lane (2012), for instance, denies that there are any unique constituents that could explain *mineness* or mental ownership. Nonetheless, we suspect that the authors who defend theories of phenomenological immunity, like Liang, have to accept this generalization in one or another way. François Recanati (2012) seems to defend a similar position. A sub-

There is a strong inclination that the above philosophers who describe IEM as a property of judgments claim IEM to be something like a conceptual truth. But this would be overhasty, because of the fact that it is not yet clearly elaborated what a judgment with regard to the property in question actually is. We turn to this problem later. Liang seems to be a proponent of IEM-P, which holds that IEM is a property of phenomenal states:

My target is a form of mental immunity that I call experiential immunity. Experiential immunity concerns phenomenal experiences. It is a form of relative immunity—that is, it is relative to first-personal access to phenomenal states, such as introspection, somatosensation, proprioception, etc. (Liang [this collection](#), p. 8)

What distinguishes Liang’s account from others is that he emphasises that IEM does not hold necessarily. In an older paper he and Lane state that the philosophical orthodoxy of IEM has never been empirically challenged. That is because the majority of philosophers hold IEM as a conceptual truth, which has nothing to do with the empirically-tractable structure of reality (cf. Lane & Liang 2011). Our commentary is structured as follows. First, we summarize Liang’s most interesting claims and distinctions (cf. section 2). In section 3 we claim that it is impossible that the sense of experiential ownership can misrepresent the fact of experiential ownership, and that phenomenal states are not eligible bearers of IEM as a property. In section 4 our main claim is that Liang’s interpretation

subject experiences a state, for instance, through a proprioceptive mode, whereas the subject is not explicitly represented. He calls this *implicit de se* immunity to error through misidentification (IEM). This mode of experience is immune to error through misidentification because it is identification-free. Then the subject reflects upon this mode of experience, which means that she represents explicitly *who* the subject is. This is the *explicit de se*. The explicit involvement of a subject is constituted by the implicit involvement of the subject, which is identification-free. Since the former, the constituent, is IEM, it is also the latter. Recanati’s argumentation was the inspiration for summarizing proponents of phenomenal (or perceptual) immunity, as we did with IEM-P. The question arises whether some systems without any instantiated phenomenal properties could have beliefs that have the property of IEM. Since we are skeptical about IEM-P as a constituent of IEM-FP, as will be argued, nothing excludes this possibility according to our account.

of some empirical studies does not provide counterexamples to IEM. Section 5 develops the consequences of this claim and concludes with some aspects concerning the way in which we could talk about IEM in a more deflationary and less mysterious manner, such as in terms of immunity to misguided reference (IMR) or mispredication. In section 6 we conclude with some proposals for future research.

2 The sense of body ownership vs. the sense of experiential ownership

Before we discuss the self-as-subject in a more detailed manner, we focus on Liang’s conceptual refinements of the self-as-object. Liang proposes three important distinctions that are very helpful for the debate on bodily self-consciousness. The first marks out the fact of body ownership and the sense of body ownership. The fact of body ownership has nothing to do with phenomenal experiences of one’s own body. It just describes “[...] a biological fact about the anatomical structures of one’s body” (Liang [this collection](#), p. 2). In contrast, the sense of body ownership describes the experiences of the factual aspect of body ownership. Hence, to experience something as belonging to one’s own body is to experience a biological fact. Then Liang distinguishes between *the first-personal sense* and *the third-personal sense of body ownership*. We think that this is a very explanatorily fruitful distinction. The first-personal sense of body ownership describes some pre-reflective states such as walking or proprioceptive states. But these states could be third-personal or reflective as well if there are experienced from the outside, for instance through mirror recognition of one’s own body parts.

The last distinction concerning the self-as-object is between *the sense of body ownership* and *the sense of self as physical body*. The sense of body ownership is the experience of various body parts belonging to one’s own body, while the sense of self as a physical body concerns more ontological questions of the self. Here Liang introduces the sense of self as physical body as the sense of being a person of flesh and blood.

Let us concentrate on the distinction between *the first-personal sense* and the *third-personal sense of body ownership*. For us it is a rich conceptual tool that can help us refine the classic Wittgensteinian distinction between self-as-object and self-as-subject. We suggest that the notions of the first-personal sense of body ownership and the sense of experiential ownership are often used interchangeably. There are closely related but of course distinct from each other. Imagine a person who recognises that her legs are crossed through the first-personal sense of body ownership. She experiences her legs to be her own crossed legs. But here the Wittgenstein question makes perfect sense. Is it really she who is experiencing that very state? This open question marks out the sense of experiential ownership. We share Liang's criticism that the lack of a distinction between a sense of bodily ownership and a sense of experiential ownership could result in overinterpretation of some empirical data. If this distinction makes sense—as we think it does—then Liang's claim that Damasio, Panksepp, and Northoff's conceptions of the core self do not target the sense of self as experiential ownership sufficiently is plausible. The claims fit rather with *the first-personal sense of body ownership*.

In order to target the sense of experiential ownership, the Wittgenstein question could be asked to the participants of some experiments. Then we could, according to Liang, measure and elaborate on not only *what* is experienced but also on *who* is experiencing. Liang convinces us that there is more to explain than just senses of body ownership. If the sense of experiential ownership marks out a specific phenomenal target property, then much has to be done in philosophical and interdisciplinary empirical research. If Liang is right—which we think he is—and the target phenomenon of the sense of experiential ownership is empirically tractable, some further research would be very interesting and illuminating.

3 IEM-P—A conceptual matter?

In order to discuss this appropriately we first have to recall some of Liang's conceptual refine-

ments. One important distinction we want to discuss is the distinction between the fact of experiential ownership and the sense of experiential ownership, which mark out the factual and the subjective aspect of experiential ownership. The third-personal sense of experiential ownership describes the factual aspect, which can be observed from the outside via fMRI. Liang calls it a biological fact that, when a subject undergoes an experience, there is an objective fact of experiential ownership that is constitutive of the sense of experiential ownership. The first-personal sense is a phenomenal property of mental states, which means that it does not require further informational states to ensure that the one *who* is experiencing it *from the inside* sense herself experiencing it, which would be the “for-me” aspect. This is the property which concerns the aspect in which we and Liang are interested in: the self-as-subject. In order to evaluate the arguments of IEM, Liang uses the conceptual refinement offered by Pryor (1999), namely the *de re* and *which-object misidentification*. The former has been challenged through cases of somatoparaphrenia, the latter by the so-called body-swap illusion, both of which provide cases of misrepresentation. What happens in cases of misrepresentation? For Liang the sense of experiential ownership misrepresents the fact of experiential ownership. We argue that there are some aspects of the fact of experiential ownership and the sense of experiential ownership that are not that clear. Our thesis is that the fact of experiential ownership has nothing to do with IEM-P in the first place, but is rather what some philosophers describe as the conceptual truth of a subject having an experience. If you are describing the specific phenomenological richness of an instantiated experience, it is obviously true that it is an experience of a subject.³ Since subjects are the bearers of experiences (as opposed to objects) it is quite obvious that there is a *fact* that somebody

³ It is important to mention that a subject can experience a state “from the inside”, which she does not experience as her own. Experienced “from the inside”, it could belong to someone else or to nobody (Lane 2012). But this fact, which we take to be an analytic truth, is something ascribed “from the outside”. To say that somebody has an experience, is just to say that the experience is instantiated in a subject, regardless of which experience the subject undergoes exactly.

has this experience. This can be illustrated in Liang’s own words: “[w]hen a subject experiences a phenomenal state, there exists a fact that he is the subject of that state” (Liang [this collection](#), p. 6). But this is just analytically true, since experiences are not free-floating occurrences—because they, as a matter of principle, have a subject of experience. This is about using the words “somebody’s experience” correctly and is rather a description from the outside. It tells us nothing substantial about IEM-P. Perry (1998, pp. 96–97) talks about a similar phenomenon while recapitulating Locke’s idea of personal identity. He claims that “[a]n instance of being aware of an experience, and the experience of which one is aware is known, necessarily belong to the same person [...]”. To say something substantial it would be important for the content of the phenomenal experience of a specific state to *concern* the subject itself. But the content, experienced “from the inside”, is of course different from an analytical truth, because phenomenal states have nothing to do with the right usage of words. The content of the phenomenal experience is what Liang calls the sense of experiential ownership, experienced *from the inside*. Granted that these two conceptualizations are correct, it is impossible that a phenomenal state like the experiential ownership represented from the inside can misrepresent something that is rather a conceptual ascription or description from the outside. They are completely different categories. To understand this we can think of a patient suffering from dissociative identity disorder (DID), who has many different personalities. What would be the fact of experiential ownership here? To answer this question a very specific and rigorous conception of personal identity is needed, which cannot be discussed here.

Let us summarise the argument:

Sense of experiential ownership cannot misrepresent fact of experiential ownership

(1) The fact of experiential ownership is to describe (as we see it), as a matter of logical necessity, that an experience is instantiated in a subject, that is (according to Liang), if a sub-

ject undergoes an experience in the actual world, a matter of fact.

(2) The sense of experiential ownership concerns the content of a phenomenal experience, which can either be experienced as owned by a subject or by nobody.

(3) Phenomenal experiences do not represent facts or states of affairs and even less analytic truths.

(4) The sense of experiential ownership cannot represent the fact of experiential ownership.

(5) A representation necessarily goes together with the possibility of a misrepresentation.

(C) The sense of experiential ownership cannot *misrepresent* the fact of experiential ownership.

Does it generally make sense to talk about IEM-P as a property of phenomenal states? The remaining story about IEM-P could be that it serves as the basis for judgments that usher in beliefs (see section 4). The immunity would then hold just through the structure of experience itself. But does it?

We claim that there no error through misidentification is possible, because of the lack of judgments and cognitive elaboration at the phenomenal level. An identity judgment requires identifying two conceptually-represented ingredients. Phenomenal states can be accompanied by conceptual ingredients, but they are not basic properties of phenomenal states themselves.⁴ Thus, they are distinct from one another. Hence we could say that phenomenal states are neither *eligible* for such a kind of error in general nor for a *de re* or which-object misidentification in particular. The intelligibility of IEM-P is very doubtful. Let us again summarise the argument:

Ineligibility of IEM-P

(1) To talk about identification is to talk about judgments and inferences that can be identified with one another, which means that they are *judged* to be identical.

⁴ Proponents of *Cognitive Phenomenology* would probably deny this claim. We stick with Carruthers & Veillet (2011), who says that cognitive thoughts could causally initiate some phenomenal experiences. The stronger claim, that thoughts constitute phenomenal experiences, lacks substantial argument. Hence we stick to the position that phenomenal states and thought contents could occur in isolation from each other.

(2) To talk about misidentification is to talk about some defective judgments.

(3) Phenomenal states have nothing to do with judgments and inferences in the first place.

(C) Phenomenal states lack the basic properties to be defective.

The ineligibility of phenomenal states of course satisfies the rule of identification-freedom. But since phenomenal states are always identification-free, the claim that they are immune to error through misidentification is misleading. Why is that? Remember that the content of phenomenal experience could occur without being owned by somebody (Lane 2012). Nevertheless, an experience is instantiated in a subject, which is just a matter of principle or the factual aspect. If the content of a phenomenal experience just occurs, without an experience of *mineness*, then the rule of identification-freedom tells us nothing substantial, because of the lack of any committed judgment. An interesting question, of course, is whether there are any judgments that are identification-free.

We would recommend talking about IEM as a property of judgments or beliefs (IEM-FP) instead of talking about phenomenal states. Nevertheless, there are also some problems with IEM-FP that we will present and discuss in section 4. Let us now have a closer look at the two alleged counterexamples that Liang proposes.

4 Two counterexamples to IEM-FP?

IEM is generally considered to be a property of judgments concerning the first-person perspective and respectively involving the first-person pronoun. A major problem in the current discussion about IEM is that no solid account of what judgments are is given. In contrast to philosophers that are concerned with beliefs, who usually give a brief declaration of what they take beliefs to be (e.g., relations, sentence operations etc.), philosophers involved in the IEM discussion seem to take judgments to be already widely understood. Since the initial paper written by Shoemaker (1968) focuses on the identification-freedom of judgments, we think that what philosophers

usually talk about using the term “judgment” is inference or reasoning.⁵

So we take judgments to consist of propositional reasoning. Let us have a look at some examples:

Judgment A:

(1) John is a fish. (Fa)

(2) Fish can swim. ($\forall x$)(Fx \rightarrow Gx)

(C) John can swim. (Ga)

Judgment B:

(1) John is a fish. (Fa)

(2) John is Jim’s best friend. (a=b)

(C) Jim’s best friend is a fish. (Fb)

Though usually the conclusion of these inferences is what is referred to using the term “judgment”, we do not think that philosophers generally tend to take judgments as being adequately analysed as propositional attitudes (as relations between persons and propositions like

⁵ The reason for this is the following: if you talk about “identification-components”, there must be something that is composed of at least one identification-component, and probably of something else as well. The identification component (as described by current philosophers— $a=b$) is either a sentence or a proposition, either expressing an identification or representing it. (This distinction is just made to satisfy Platonists and nominalists.) What is it that is composed of identification- and other components? We think, according to the usual use of language of philosophers debating IEM (She sees a bleeding hand in the mirror and thus judges “I am bleeding”), that the most probable answer is that they are part of an inference. Whenever you say that one “judges” p , you want to express not only that she believes p , but also that she has come to this belief through inference. We take this to be an adequate interpretation of the term “judgment” as used in Shoemaker, Pryor, Barz, and probably Liang as well. It is probably inadequate for every instance of “judgment” in philosophy, because our interpretation suggests that there are (hidden or opaque) processes that are important for calling something a judgment. Even though proponents of accounts that are Rylean (Ryle 2009), for example, would strongly disagree (because they wouldn’t accept that there are hidden processes that we want to talk about using the term “judgment”), we think that there is in fact an ontological or categorical difference between judgment and beliefs: either judgments *are* processes and beliefs *are* states, or judgments are a subclass of beliefs, but a subclass of beliefs that one has come to through a process of inference (which is not necessarily the case with beliefs—just imagine someone manipulating your brain such that you gain new beliefs). So, unlike Ryle, we would say that as long as we are talking about human beings, judgments are certainly something that happen in the hidden depths of the human brain. And we can represent them—for our purposes—as structured like logical inferences. Please note that this is just an additional remark concerning our positive account of judgments that a lot of papers seem to lack. Our central argumentation does not rely on this specific ontological reading of “judgment” and “belief”.

“Jim believes that it is raining”). We take the whole inference to be what is referred to with the term “judgment”, and the conclusion to be what is referred to using the term “belief”.⁶ Judgments A and B are analogous in the following sense: they are both judgments involving two premises and their logically necessary conclusions. But they differ in a particular aspect that is of the highest importance concerning IEM: only judgment B involves an identification, whereas judgment A is identification-free. So the first thing we can say is that IEM following from identification-freedom is not an exclusive property of judgments involving the first-person pronoun—there are numerous judgments that do not contain any identification-components. This is our first reason for thinking that IEM may hold, but is not a remarkable or significant property exclusively reserved for judgments involving the first-person pronoun.

What Shoemaker wants to make clear is that there are certain judgments that cannot take the logical form of judgment B and that these judgments involve the first-person pronoun, in the sense of Wittgenstein’s “subject-use”. Let us take a look at what Shoemaker means by giving examples for the object-use and the subject-use:

Object-use:

- (1) The person in the mirror is looking tired. (Fa)
 (2) I am the person in the mirror. (a=b)
 (C) I am looking tired. (Fb)

As you can see, there are judgments involving the first-person pronoun that also involve an identification-component—at least that is what Shoemaker (1968) thinks. But when he claims that there are judgments that are immune to error through misidentification, he does not claim that they are immune to *any* error, and nor does he claim that the identity relation holds with metaphysical necessity—he just

claims that whenever one judges and this judgment involves certain kind of predicates (or properties) it is automatically identification-free. One of those predicates (or properties) is being in pain. Let’s have a look at how the judgment would work with this special predicate that we may call P*.

Subject-use:

- (1) There is something that is in pain. ($\exists x$) (P*x)
 (2) P* is always a property of the person recognizing it. (P*gen)
 (C) I am in pain (P*a)

In fact this formal representation of such a judgment is even weaker than what Shoemaker may have had in mind, thus the strong reading of his idea of judgments that are IEM because of their identification freedom would be:

- (1) There is something that is in pain. ($\exists x$) (P*x)
 (C) I am in pain. (P*a)

This reading gets closer to Shoemaker’s idea, because he would not agree that judgments explicitly involve a generalization such as (2). We undertook this brief exercise first of all to put pressure on the following point: although philosophers of different generations have been talking about IEM for decades, they usually fail to give an *explicit account* of what judgments are and how they work.⁷ This exercise was meant to fill this theoretical gap for the purpose of the current discussion. So whenever someone utters “John is a fisherman”, we take this sentence to express a propositional attitude—a belief. But when we believe that he *judges* “John is a fisherman”, we also take that person to have made an inference, simply because that is what we want to say when we ascribe a judgment to him. Shoemaker’s claim that judgments like “I am in pain” are immune to error through misidentification does not mean that there are hidden structures, neither of the sentence ex-

⁶ Note that we in fact think that beliefs are brain states and judgments (if they are inferences) are cognitive processes—but they do not need to be brain states and cognitive processes. Depending on which understanding of propositions you prefer (e.g., the meaning of sentences or informational packs), any machine that is capable of some kind of reasoning can judge and have beliefs.

⁷ This means that there are no papers about IEM that give a positive account of judgments, e.g., Shoemaker (1968), Evans (1982), Barz (2010).

pressing the judgment nor of the propositional attitude expressed by the sentence “I am in pain”; it means that no identification-component was involved in the inference that has been made.

The second reason for undertaking this exercise is that we want to have a look at whether Liang’s counterexamples (especially the somatoparaphrenia example) are real counterexamples. We do not think that the two examples Liang gives are in any way counterexamples to IEM—though they are philosophically very interesting, especially concerning theories of self-consciousness. Liang claims that the two counterexamples falsify the Immunity Principle, but we claim that they do not meet the conditions that have to be met to falsify this theory. So we must first see what Liang takes to falsify the IEM theory and then settle on a criterion for how the IEM theory could be falsified.

Liang thinks that the following would suffice for IEM to hold:

- (1) for every phenomenal state there must be a subject who experiences it; (2) every phenomenal state is in principle available to first-personal access (Shoemaker 1996); (3) every phenomenal state is experienced by the one who has first-personal access to that state. The crucial point is that (1)–(3) do not imply that (4) every phenomenal state is, from the first-person point of view, represented as experienced by the one who has first-personal access to that state. (Liang this collection, p. 8)

Liang also considers his two counterexamples (the somatoparaphrenia patient and the body-swap illusion) to be counterexamples to (4), so the IEM-principle does not hold. In fact we agree with Liang that at least one of these examples is a counterexample to (4) but we do not agree that (4) is necessary for IEM to hold. So let us first have a look at how a falsification of the IEM-theory would have to look. The IEM-theory comes in the form of a material conditional: *if* a person judges “I am φ ”, *then* she cannot be wrong because of a misidentification. The truth conditions for a material condi-

tional are clear: the conditional is wrong if and only if the antecedent is true and the consequent is wrong. This brings us to the definition of a theoretical falsification of IEM:

Falsification of IEM =_{Df} : **1.** The IEM-theory would be falsified if and only if a person judges “I am φ ” and is wrong in her judgment because of a misidentification. Or, more precisely: **2.** The IEM-theory would be falsified if and only if there is an example of a person that believes “I am φ ” and comes to this belief through inference (the judgment) that involves an identification component and this identification is wrong.

Thus, speaking more formally, a judgment of the following two forms must be present (cf. Pryor 1999):

wh-judgment⁸

- (1) $(\exists x)(Fx)$ (predication to a variable)
 - (2) I am x (identification, $x=a$)
-
- (C) I am F (predication to a constant, depending on the identification), (Fa)

or

de re judgment⁹

- (1) A particular thing (*de re*) is F (Fa)
 - (2) I am that particular thing ($a=b$)
-
- (C) I am F (Fb)

We pick these two different structures to emphasise that Shoemaker did not exclusively talk about *de re* “attitudes” but also about “existential quantification”, though he did not do so explicitly. Note that besides the presence of belief states such as (c) it is necessary for the falsification of IEM-theory that this conclusion is only wrong because (2) is wrong.

⁸ A *wh*-judgment involving an identification starts with existential quantification over a variable. You know that there is *something* that has a particular property and then you identify that something with, e.g., yourself.

⁹ A *de re* judgment involving an identification starts with a predication to a particular thing—a constant. So you know a *particular* thing to have a particular property and then you find that thing to be identical with, e.g., yourself.

The crucial question concerning Liang's counterexamples is: do they meet this condition? Consider the first example. It is—as Liang sees it according to Pryor—an example of a *de re* misidentification. *De re* misidentifications occur, for example, when there are two objects equally eligible for exemplifying the property in question. To show that Liang's first example is a counterexample to IEM one would have to prove, first, that the structure of a *de re* judgment as stated above holds, and second that the judgment is only wrong because the second premise is not true. Recall the first experiment: a patient suffering from somatoparaphrenia, FB, is touched on her hand and asked whether she feels her hand being touched. She answers “No”. When she is asked whether she feels her niece's hand being touched, she gives a positive answer (FB believes that her hand is in fact her niece's hand, and has been placed on her body). But since she does not judge “I am being touched on my hand”, the necessary conditions for falsifying the IEM-theory are not met. The material conditional could only be proved wrong if the antecedent (a person judging that she has a certain property) is true, but in this case it is not true. The conditions would have been met if she had answered “I feel being touched on my hand”, even though she was not, and even though the only reason why she was wrong was because she misidentified her own sensations with someone else's. But she does not commit the error of judging “I am being touched” in the first place, so the IEM-theory is not falsified. It is crucial here to understand that falsification of IEM does not depend on what exactly she said, but whether she judged that she had a certain property. Unfortunately wrongly judging that one is not touched, though one is touched, does not get close to a falsification of IEM, by definition of the truth conditions of material conditionals.

Now let us have a look at Liang's second counterexample: the body-swap illusion. This, according to Liang and Pryor, is an example of a *wh*-misidentification that happens when someone simply knows a property to be there (e.g., a smell) and falsely ascribes this property to a particular object. In this setup, the parti-

cipants judge that they are shaking hands with themselves. This example gets much closer to the claim of IEM, because they in fact judge, and judge falsely, that they experience something, and there *is* another person who really seems to have that experience. So it seems that one of the following inferences is made:

- (1) A particular person is shaking hands with myself. (Fa)
 (2) I am that person. (a=b)
 —————
 (C) I am shaking hands with myself. (Fb)

or

- (1) There is something that is shaking hands with myself. ($\exists x$)(Fx)
 (2) I am that something. (x=a)
 —————
 (C) I am shaking hands with myself. (Fa)

If these judgments occurred it is obvious that they are false because the second premise is false—thus an error through misidentification was made. But did the participants really commit such an error? Recall that the IEM thesis would be falsified if a person believed a certain proposition but was mistaken because and only because she misidentified herself with someone else. Did the participants really believe that they were shaking hands with themselves? We assume that they most certainly did not. Of course they remarked that they were shaking hands with themselves, but we take them to speak merely metaphorically and not literally. If one wanted to be sure, the same experiment would have to be made, asking the participants whether they believed that they were shaking hand with themselves (not if it felt as if they were). Even if they believed that they were shaking hands with themselves, the judgment would probably not have the form stated above, because they did not have the experience of the other participant—only if they had an experience that that very (exactly the same) experience depended upon another person, and only if they accidentally identified themselves with that person—only in that case would the IEM-theory be falsified. But the participants did not have the experience of the other person wearing the

camera. They were having their very own experience—caused by the informational flow starting with the display (monitoring not the perspective of the person wearing the camera, but the camera’s perspective) and their own lenses, their own retina, and so on. The experience they ascribed to themselves was not the experience of another person or agent, it was their own experience. They were only wrong in judging that they were shaking hands with themselves because they in fact did not shake hands with themselves. This is not a misidentification but simply a mispredication. This problem will be elaborated in section 5.

So why does Liang think that these examples are counterexamples to IEM? Because he takes (4) to be crucial for IEM to hold. The differences between what Shoemaker and Evans take to be the theory of IEM and what Liang takes it to be are the following:

Shoemaker/Evans: If a person believes that she has certain properties, she cannot be mistaken in having them by misidentifying herself (or her phenomenal states) with someone else or someone else’s states. In this conditional, the antecedent implies a person to believe something about herself or, speaking in Liang’s terms, a person to represent herself as having a so-and-so experience. But Liang’s conditional looks quite different:

Liang: “(4) every phenomenal state is, from the first-person point of view, *represented as* experienced by the one who has first-personal access to that state.” (Liang [this collection](#), p. 8)

So what used to be the antecedent in the original theory becomes the consequent in Liang’s theory—thus Liang is right that (4) does not hold and that the somatoparaphrenia patient and her reports are counterexamples to (4), but he is not right in taking this fact to falsify the IEM-theory.

5 Why does IEM-FP hold?

There seems to be an immunity relative to the first-person pronoun, which at least guarantees that you cannot have a belief like “I believe that I am in pain” and accidentally take

someone else to have that belief. It probably also guarantees that in this case you cannot be wrong about who is in pain. We think that there are a few good theoretical candidates for explaining this kind of immunity. These candidates are:

1. Irrelevance of misidentification
2. Immunity to misguided reference
3. Reference magnetism

Since reference magnetism¹⁰ is a highly controversial, metaphysical notion and it would take too much time to elaborate this view correctly (which would certainly include a refreshment of Lewis’ philosophy of reference), we will focus on the first two for the sake of this commentary.

1. Irrelevance of misidentification:

If you take judgments about yourself to be a) always starting with *de re* beliefs and b) single-predicative in form, it seems impossible to construe misidentification as being relevant to the truth-value of a sentence or proposition. This point has been made by Barz (2010). Barz takes the current discussion to assume that there are two fundamentally different kinds of errors that can occur: an error through misidentification and an error through mispredication. It should be clear what an error through mispredication is supposed to be: an error through mispredication occurs when a person’s judgment is wrong and is only wrong because the predicate she thinks applies to a particular object in fact does not apply to that object. Barz’ definition of an error through misidentification (in general) is the following:

General error through misidentification (EM-G): A person S (i) believes (*de re*) of a certain thing that it is *F*, (ii) believes that

¹⁰ A short explanation: reference magnetism is a theory that claims that there are metaphysically distinguished objects of reference in the world (no matter whether they are abstract or concrete) that function as magnets for certain expressions. This could, for example, hold for natural kinds and existential quantification. In the case of existential quantification, some philosophers, like Theodore Sider (2009), claim that there is no possibility of talking about *existence* without talking about the very same thing that everybody talks about—as long as there is no explicit or implicit quantifier restriction. Reference Magnetism plays an important role in the debate about quantifier variance and verbal debates.

thing to be identical with a , and (iii) thus judges that a is F . But (iv) a is not identical with the thing S believes to be F .

According to Barz this kind of error cannot happen at all, so the proponents of the IEM-theory are right—but in fact IEM is not an exclusive property of judgments concerning the first-person or involving the first-person pronoun, and is instead a property of any judgment. His argumentation can be summarised in one sentence: since there are examples of judgments involving misidentification that are nevertheless true, and since there cannot be judgments involving mispredication that are true, there are no errors through misidentification. A judgment is right or wrong solely depending on whether the predicate applies to the object.

Imagine the following situation that is usually used to distinguish between notional and referential use of singular terms: Peter is a detective, investigating the case of Smith's murder. Participating in the judicial proceedings, a man, accused of having murdered Smith, behaves so strangely that Peter, the detective, judges: Smith's murderer is a maniac. He is using the term "Smith's murderer" to refer to the person that is accused of having murdered Smith, and according to most theories of reference he does in fact refer to that person with that term. But what if that person is not the one who murdered Smith, but is nevertheless still a maniac? Thus a misidentification has occurred, but no error. On the other hand, if the person were Smith's murderer but not a maniac (maybe his weird behaviour was the result of pharmaceutical treatment)—Peter's judgment would be wrong.

The same goes for the traditional wrestler example. Imagine that wrestler A and wrestler B are in a close wrestling fight and wrestler A does not misidentify her arm with the arm of wrestler B but still, for some strange reason—maybe there are blood smears caused by a bleeding bird that flew over the two wrestlers—comes to judge "My arm is bleeding" (although wrestler B's arm is actually bleeding). She would be wrong, but her error would not be one of misidentification but of mispredication. Thus, as Barz believes, there are no errors through misidentification, because the

only thing that necessarily suffices for the falsity of a judgment is mispredication.

As one can guess, Barz' theory does not completely fit with our theory of judgments. While we take judgments to be processes of inference, thus involving several propositions, Barz seems to take judgments to be relations to single, structured propositions. We can agree with Barz if he can explain how the identification component in the judgment—which would, in our terms, be one of the premises used during the inference—is in fact a kind of predication.

2. Immunity to misguided reference:

Howell (2007) wants to distinguish between two kinds of immunity: immunity to error through misidentification and immunity to misguided reference:

IEM is often confused with what I call Immunity to Misguided Reference (IMR). A judgment that x is F has IMR if it is impossible for someone to make that judgment while being mistaken about the reference of x . All I-judgments have IMR, while not all I-judgments are IEM. (Howell 2007, p. 584)

To say that there is something like immunity to misguided reference (IMR) does not mean that one can never be wrong about the reference of any term one uses. It just means that whenever you want to refer to yourself using the term "I" you cannot fail to do so.

We think that a majority of the proponents of IEM are in fact proponents of IMR. And because IEM is thought to be an immunity relative to the first-person pronoun (what we have termed IEM-FP), it makes sense to say that this immunity is in fact an immunity of referring acts in general and not of judgments exclusively. Talking about IMR can be helpful in two ways: first, it can be helpful in stressing the fact that IEM is not a theory about the self or about subjectivity but simply a theory about linguistic rules and reference. Thus IEM-FP is a trivial property that can be explained by the semantic rules of usage of the word "I".

Second, it can be helpful for explaining our intuitions in complicated cases of self-refer-

ence and by determining the objects of beliefs. Think of the two wrestlers again. When one of the wrestlers states “I am bleeding” or “My arm is bleeding”, she is wrong, but it seems as if she is not necessarily wrong because of a misidentification. Let’s have a look:

(1) Wrestler A correctly describes her belief, intending to refer to herself using the first-person pronoun.

(2) One cannot fail to refer to oneself when using the first-person pronoun. (IMR-rule)

(3) Wrestler A has a belief about herself (granted by accepting 1 and 2).

So far the argument is trivial—stating that Wrestler A has a belief about herself just means that she has *any* kind of belief. It does not show that Wrestler A has a *de re* belief about herself. This comes from the second part of the argument:

(4) A *de re* belief is a belief that holds if the believer is in a non-conceptual, contextual relation to the object the belief is about.¹¹

(5) One is always in a non-conceptual, contextual relation to oneself.¹²

(C) Wrestler A has a *de re* belief about herself (granted by accepting 3, 4 and 5).

Opponents of the IEM-theory would have to state that wrestler A has no *de re* belief about herself, because the object her belief is really about is not herself, but wrestler B, misidentified with herself (thus creating a *de dicto* belief about herself and a *de re* belief about wrestler B). But by accepting IMR and certain accounts of *de re* attitudes we can see that wrestler A’s attitude is a possible candidate for a *de re* belief about herself. Thus the only reason why she would be wrong is—as we have seen above—mispredication.

6 Concluding remarks

The question with which we began was how the sense of experiential ownership is related to the well-known property of IEM, and whether, if it

¹¹ This is to accept a *de re/de dicto* distinction that is compatible with non-propositional attitudes.

¹² This does not mean that one is always only and exclusively in a non-conceptual relation to oneself. Of course one can have *de dicto* beliefs about oneself.

is, the proposed counterexamples are cogent. First of all we argued that it is impossible to talk about the sense of experiential ownership misrepresenting the fact of experiential ownership, since the latter is a conceptual ascription from the outside that has nothing to do with phenomenal states that are experienced from the inside (cf. thesis 1). Second, IEM-P is an incoherent notion, because phenomenal states lack the basic properties that are possessed by judgments and inferences, namely to be defective—which suffices for a misidentification. Since they lack these properties, the claim that phenomenal states are immune to error through misidentification is misleading (cf. thesis 2). Third, we argued that the alleged counterexamples to IEM are just counterexamples of Liang’s fourth premise. But premise four is not necessary for IEM to hold. In any case, the counterexamples do not seriously challenge IEM, because the necessary conditions for a falsification are not met (cf. thesis 3). The last section addressed some aspects concerning how to talk about IEM convincingly in future philosophical research. Our suggestion is somehow deflationary, since it is not necessary, but very likely that the more interesting properties for talking about are mispredication and IMR (cf. thesis 4).

We are looking forward to the time when philosophical as well as empirical interdisciplinary research concerning the mind focuses on Liang’s commitments on self-consciousness, most interestingly the sense of experiential ownership. We think that this *explanandum* has not yet been enriched with empirical data. Here Liang perhaps provides a good starting point for future research. In order to provide fruitful data, we think that to ask the Wittgenstein question, as Liang proposes, is a promising idea. But nonetheless the question has to be subdivided in order to provide a fruitful questionnaire. Here are some proposals that are, of course, provisory, which could be more fine-grained, depending on the experiment:

On a scale from 1 to 10, how much do you feel the experience as being owned by you? Have you felt parts of your body as detached from yourself? If yes, how much were you able to control the belongingness of this body-experi-

ence? Have you felt some experiences belonging to another subject, not being owned by yourself?

Here are some further theoretical questions: How is the sense of experiential ownership connected to beliefs? Could it serve to justify some beliefs? How is the sense of experiential ownership generally related to self-knowledge? We are looking forward to a fruitful discussion in philosophy of mind and in cognitive sciences with regard to the elaborated topics.

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