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USE AND MENTION CONFLATION: SOMETIMES AVOIDABLE, SOMETIMES CRUCIAL

ABSTRACT: Jody Azzouni (2025) provides a generalization of use and mention errors by noting that they involve cases in which properties of a notation are conflated with properties of the objects the notation is about. He then argues that such use/mention conflations have resulted in significant errors, especially in epistemology. But are such conflations always problematic? Can they be avoided in some cases by the resources available to a given practice? And can they be crucial for some other practices, and not to be avoided at all? In this paper, I examine these issues and consider cases in which use/mention conflation can always be avoided, by invoking features of a given practice. This is the case of mathematical activity. I also scrutinize cases in which the conflation *cannot*, and should *not*, be prevented—on pain of disfiguring the practice in the first place. This is the case of the experience of watching films and its accompanying phenomenology. After discussing these cases, I conclude with a tentative suggestion about what may be a source of the problem that led epistemology astray. I submit that metaphysical reification may be a culprit.

1. INTRODUCTION

Jody Azzouni has provocatively argued that epistemological theorizing is fraught with what he characterizes as use and mention errors (Azzouni

2025). On his view, those who take propositional attitudes, such as *know*, as being attitudes toward propositions end up thinking that knowledge and evidence are propositional, that is, "that evidence is true propositions and that knowledge is knowledge of true propositions" (Azzouni 2025, 1). This is clearly a mistake.

The evidence that a crime was committed is not a true proposition to the effect that bloody clothes are in the corner of the room, but rather the evidence is the bunch of clothes in the hotel room. Rather than being propositional, evidence is worldly—objects and relations in the world rather than pieces of language. As Azzouni points out:

> A bunch of bloody clothes in the corner of a hotel room is evidence. "A bunch of bloody clothes is in the corner of the hotel room" isn't evidence; it's a statement *about* evidence.
> (Azzouni 2025, 5)

The same goes for knowledge. Your knowledge that you are reading these words now is not a true proposition to the effect that you are reading these words at this moment—this is a statement about your knowledge—but rather your knowledge is your reading of the words right now.

Azzouni calls conflations of intentional items, such as propositions or ideas, with what they are about (or are of) "use and mention errors". He readily acknowledges that he is using the familiar philosophical terminology, introduced by Quine (1951), in a broader way than it is usually employed (Azzouni 2025, 2), and argues that significant accounts of knowledge, such as Timothy Williamson's (2000) identification of knowledge and evidence, are defective because of such errors.

What are use/mention errors in question? As Azzouni notes:

> the errors I'm speaking of are a family of simple ones: confounding propositions, ideas, hypotheses and beliefs with what those propositions or hypotheses are about (and describe) and what those beliefs and ideas are of.
> (Azzouni 2025, 2)

The conflation raises a significant problem since it takes one away from the relevant worldly items—suitable objects and relations—which are the proper evidence and knowledge items rather than what is said about them.

Azzouni extends the familiar use/mention errors by identifying them with the slide from *any* items that have *intentional* properties to the objects that have such properties and relations. This applies not only to words, but also to ideas, beliefs, propositions, hypotheses, and *any* other items with *intentional* properties, since all of them are about, or are of, something to which properties and relations are attributed. As he emphasizes:

> The essential point is that propositions, beliefs, hypotheses, ideas, and the like have *intentional properties*: that is, they're *about* or *of* the objects that they specifically *attribute* properties and relations to. The objects in turn that propositions, ideas, beliefs and hypotheses are about usually *don't* have intentional properties—pebbles and tables are paradigmatic examples—unless we *endow* them with intentional properties (make various arrangements of pebbles on a table into a symbol system) or unless we're explicitly talking about what has such properties, i.e., if we're talking explicitly about propositions, beliefs, and so on. (Azzouni 2025, 2)

The extension is significant since it embeds use/mention errors into a much broader constellation of phenomena. In fact, as Azzouni acknowledges:

> I'm describing use/mention errors more broadly than they're often described—and more broadly than how Quine originally described them. Included are usual cases where we slide from speaking of words to what the words refer to (and vice versa) but also included are cases where we slide from speaking of our idea of something to the something that idea is of. As I said, what I'm describing as a use/mention slide (in either direction) is one from something$_a$ with intentional properties to the something$_b$ that those intentional properties of something$_a$ are directed towards. For example: the idea of Pegasus versus what the idea of Pegasus is of or the word "knowledge" and what that word is supposed to refer to. (Azzouni 2025, 2)

Has the extension Azzouni operates gone too far? To address this issue, two cases will be considered in what follows. The first concerns the

use/mention conflation in mathematics, which Azzouni briefly discusses (Azzouni 2025, 8–10). I argue that mathematical practice has resources, internal to its activity, that allows it to always avoid use/mention conflations in a principled manner. These resources, I argue, have been identified—as part of mathematical practice—by the inferential conception of the application of mathematics (Bueno & Colyvan 2011 and Bueno & French 2018), and can be put here to good use.

The other case illustrates the opposite side of the issue, in which a practice *cannot* be properly implemented as intended without conflating use and mention. To examine this possibility, I consider the merging of use and mention in the experience of film and its corresponding phenomenology. As will become clear, without such conflation, films could not be experienced as intended. Film viewing practice would be disfigured without it.

The examination of the two cases should hopefully probe into the scope of the suggested generalization of the use/mention conflation, indicating where it can be resisted in a principled manner and where it cannot—and should not—be avoided. But the investigation of the cases should also allow us to learn something significant from Azzouni's proposed extension. There is an aspect of philosophical theorizing, I suggest, that made epistemology, and philosophy more generally, especially prone to use/mention errors—the practice of identifying some form of discourse and adding a layer of metaphysical interpretation to it. I call this practice *metaphysical reification*. It ends up providing a fertile ground to encourage use/mention conflation, I suggest, and may have played an important role in the resulting errors. I conclude by indicating a way forward.

2. USE AND MENTION CONFLATION IN MATHEMATICS: HOW THE PRACTICE AVOIDS IT

Azzouni thinks that mathematicians productively exploit the use and mention conflation, without falling into confusion. Speaking of the tendency in mathematical practice to conflate features of mathematical notation with the properties the notation designates, he notes:

> This [...] is common in mathematics; it occurs harmlessly everywhere because many properties of mathematical ob-

> jects are reflected in the properties of the notation designating them, and vice versa. Many beautiful examples occur in abstract algebra where notational concerns, with indices, are treated simultaneously as concerns with the properties of certain algebraic structures that are designated by the relevant notation. (Azzouni 2025, 10)

Consider an abelian group (see, e.g., Mac Lane & Birkhoff 1991, 50) composed by a set A and a two-place operation $\bullet$ defined on A and with values on A (that is, given two members a and b of A, it yields another member of A, $a \bullet b$). The operation satisfies four familiar conditions:

Associativity:

$(a \bullet b) \bullet c = a \bullet (b \bullet c)$, for all a, b, and c in A.

Commutativity:

$a \bullet b = b \bullet a$, for all a, b in A.

Identity element:

There is an e in A such that for all a in A, $a \bullet e = a$ (e is the identity element).

Inverse element:

For each a in A, there is a b in A such that $a \bullet b = e$ (where e is the identity element).

Note that all four conditions have clearly identifiable notational saliences. For instance, associativity expresses the fact that the grouping of repeated applications of an operation does not matter since the same results emerge—applying an operation first to members a and b of a group and then applying the result to c yields the same value as applying the operation first to b and c and only then applying the result to a. Clearly, these are applications of the operation to worldly items, namely, the relevant group members—not features of the notation used to express the relevant relations. Very suggestively, however, if one focus on the notation used to express associativity, one could simply point out that the condition allows one to shift the parentheses to the right.

This is a feature of the notation. Evidently, the feature of the notation expresses a corresponding feature in the relevant objects—the members of the group and the operation that is applied to them, in the way just indicated.

Similarly, commutativity expresses the fact that changing the order of the operands does not change the result of the operation. Again, this is a matter of applying the operation to the relevant members of the group. From a notational perspective, nonetheless, this fact can be expressed by noting that a and b can be swapped without altering the outcome. Entirely analogous remarks apply to the remaining two conditions.

Does this mean that mathematicians confuse the operations on the objects with the notation that is used to express the relevant operations? On the surface, one may think that they do. Consider the following passage from Lev Landau and Evgenii Lifshitz's mechanics textbook that Azzouni (2025, 9) quotes:

> We can now draw some immediate inferences concerning the form of the Lagrangian of a particle, moving freely, in an inertial frame of reference. The homogeneity of space and time implies that the Lagrangian cannot contain explicitly either the radius vector $\mathbf{r}$ of the particle or the time t, i.e. $\boldsymbol{L}$ must be a function of the velocity $\mathbf{v}$ only. Since space is isotropic, the Lagrangian must also be independent of the direction of $\mathbf{v}$, and is therefore a function only of its magnitude, i.e. of $\mathbf{v}^2 = v^2$:
>
> $$\boldsymbol{L} = \boldsymbol{L}(v^2).$$
>
> Since the Lagrangian is independent of $\mathbf{r}$, we have $\partial \mathbf{L}/\partial \mathbf{r} = 0$, and so Lagrange's equation is
>
> $$\frac{d}{dt}\left(\frac{\partial \mathbf{L}}{\partial \mathbf{v}}\right) = 0,$$
>
> whence $\partial \mathbf{L}/\partial \mathbf{v} =$ constant. Since $\partial \mathbf{L}/\partial \mathbf{v}$ is a function of the velocity only, it follows that
>
> $$\mathbf{v} = \text{constant}.$$

> Thus we conclude that, in an inertial frame, any free motion takes place with a velocity which is constant in both magnitude and direction. This is the *law of inertia* (Landau & Lifshitz 1976, 5; a footnote was omitted as well as the numbering of two equations).

One may think that the conflation between features of notation with properties of the relevant objects the notation designates is unavoidable. In fact, Azzouni's initial comment on the passage just quoted is quite telling in suggesting that this is indeed the case:

> It's impossible to tease out in Landau and Lifshitz's discussion wherein the concern is a piece of notation—or instead wherein it concerns a mathematical object with certain properties that the Lagrangian notation designates. (Azzouni 2025, 9–10)

But instead of charging mathematicians and physicists with use/mention errors, Azzouni proposes to acknowledge that, rather than a mistake, this is simply an indispensable part of their practice. As he notes:

> We may want to charge physicists and mathematicians with "confusions" of use and mention, or we may want to simply regard it as part of the practice that practitioners seamlessly switch back and forth without notice between considerations of notation and considerations of the properties of the objects the notation designates. (I recommend, of course, the latter position.) (Azzouni 2025, 10)

In the end, the proper way forward, it seems to me, invokes no confusion, mistake or error at all. A far more insightful description of mathematical practice acknowledges that mathematical notation neatly captures and expresses the relevant relations among the mathematical objects under study. In fact, considering why mathematicians smoothly alternate between focusing on properties of mathematical notation and on properties of the objects the notation stands for, Azzouni offers a compelling picture:

> [M]athematical notation encodes methods of manipulation that correspond to properties/relations of the mathematical objects described by this notation. (Azzouni 2025, 10)

I will call this the *encoding picture* of mathematical notation. But in contrast with Azzouni, I add, there is no use/mention conflation at all in the encoding picture. For properties of the notation and properties of the objects described by the notation are always clearly separated—the former involves the mathematical notation alone, the latter the proper interpretation of the notation, that is, the properties of the corresponding objects. And the two are always neatly distinguished. (More on this below.)

Interestingly, this proposal of how to address the use/mention conflation and the associated encoding picture can be adopted both by platonists about mathematics (such as Hale (1987)) and by those who embrace agnosticism about the existence of mathematical objects (e.g., Bueno (2020)). Nominalists, however, who deny the existence of mathematical objects *and* who also insist that nonexistent objects have no properties cannot embrace the proposal and the encoding picture. As it turns out, this is precisely the form of nominalism Azzouni adopts (see Azzouni 2004 and 2010). Let me elaborate on why this is this the case.

Platonists about mathematics—who claim that mathematical objects exist and have properties independently of what anyone take these objects and properties to be (see, e.g., Hale (1987))—can take both the proposal of how to address the alleged use/mention conflation and the encoding picture literally. They can deny that there is any use/mention conflation in mathematics since mathematicians are always able to distinguish properties of the notation from properties of the objects the notation is about. Mathematical notation, they point out, is a human-made invention, introduced for the explicit purpose of allowing mathematicians to refer to the relevant properties of mathematical objects. In contrast, on their view, the properties of mathematical entities that the notation is about are not human-made creations—they exist independently of any notation or any contribution from the mathematicians themselves.

Moreover, platonists can also use the encoding picture to explain why mathematical notation has the features that it has and is used so successfully in mathematical practice. After all, the notation was introduced precisely to allow mathematicians to refer to the relevant properties of the mathematical objects (that the notation is about). In fact, platonists insist, mathematical notation could not encode methods

of manipulation that "correspond to properties/relations of the mathematical objects described by this notation" (Azzouni 2025, 10) *unless* the objects in question did have the properties and did enter the relations under consideration. And this is precisely the purpose for which the notation was introduced in the first place, according to platonists. (Those who are less sympathetic to platonism will, no doubt, challenge whether platonists can succeed in securing reference to independently existing mathematical objects. But here is not the place to consider these arguments.)

Similarly, those who are *agnostic* about the existence of mathematical entities and their properties (Bueno 2020), but who also insist that even if mathematical objects did not exist, they would still have some properties and lack others, can also take literally both the proposed way of addressing the alleged use/mention conflation and the associated encoding picture. With agnosticism about mathematics, one can note that there is no use/mention conflation since properties of mathematical notation are significantly different from properties of the objects the notation is about, despite the fact that there is a very close connection between them—a connection that accounts for the success of the notation. Mathematical notation is introduced as a device to express features of mathematical objects. These objects are introduced as being the items that satisfy the conditions specified by the notation. There is no other way of talking about mathematical objects and their properties since we cannot empirically access the relevant objects. As a result, properties of the notation are clearly distinct from properties of the objects the notation is about. The former specify the conditions the objects satisfy; the latter provide the satisfaction of the conditions. These are clearly distinct features—quite independently of the existence or not of the relevant objects, which figures nowhere in mathematical practice, and about which the agnostic suspends judgment (Bueno 2020).

Furthermore, those who embrace mathematical agnosticism can also adopt the encoding picture. Mathematical notation does encode ways of manipulation that correspond to the properties and relations that the notation describes. In fact, it was indicated above how the commutativity of an abelian group encodes properties of the members of the group and how the notation encodes such properties—the existence of the objects and properties in question is not required for that. The satisfaction of

the conditions introduced for an abelian group suffices, but this does not require the existence of mathematical objects—that is, independently existing abstract entities. This only requires a proof to the effect that the conditions are not trivial, that is, not everything follows from them. The issue of the *existence* of mathematical objects is entirely separate from which properties the relevant objects have or lack. This is just as it should be—the agnostic will point out.

Yet, it is crucial that mathematical objects—whether they exist or not—*have* the appropriate properties. The identity element of an abelian group needs to leave invariant the output of the application of the group operation: any member of the group to which the operation is applied together with the identity element needs to be left unchanged—otherwise, the identity element would not be involved at all in the application of the operation. This is a property that the identity element has and that the notation encodes. In contrast, the identity element need not have the property *being nonzero*. After all, $(\mathbb{Z}, +)$, the integers under addition, is an abelian group with 0 as its identity element. Although the issue of whether such group and its members exist is left completely open by mathematical practice, it is crucial that the group and its members do have some properties and lack others. These are precisely the properties encoded by the notation, highlights the mathematical agnostic.

However, a *nominalist* about mathematics who insists that both mathematical objects do not exist and that objects that do not exist cannot have properties—views that Azzouni holds (see Azzouni 2010, pp. 16–18, 82, 185; see also Azzouni 2004, pp. 4–5)—is not in a position to invoke the encoding picture. Whatever goes on with mathematical notation, for such a nominalist, there are *no* corresponding mathematical objects with properties and relations that this notation describes. After all, the objects do not exist and given their nonexistence, they cannot have properties. A salient feature of mathematical practice seems unreachable to such nominalist.

The nominalist will, no doubt, complain and insist that mathematical notation functions as empty singular terms, grammatically behaving in ways that are similar to names, but without referring to anything at all. In fact, reference^{e} is introduced precisely to accommodate such empty singular terms. Although mathematical notation plays the grammatical and semantic role of terms that seem to be referential, no objects stand

in such relations (see Azzouni 2010, Chapter 1).

The problem is that this move simply stipulates that mathematical language functions this way, and what is needed is an account of how the appearance of referentiality without actual reference can take place at all. Note that just invoking mathematical practice here is not enough, as the practice is silent about both the existence of the abstract objects and the special kind of referential function that the nominalist introduces about mathematical discourse.

The nominalist may insist that there are objects—concrete objects—that induce the relevant truth values for mathematical statements. These are *truth-value inducers*. As Azzouni points out:

> The truth-value inducers are the objects in the world of which the truth values of the sentence are in virtue. In the specific case where *all* the terms in a sentence refer to objects that exist, the truth-value inducers of a sentence can be identified with the objects to which terms in that sentence refer (or with those objects and how they are, etc.) (Azzouni 2010, 18)

Of course, in the case mathematical discourse, not all the terms in a mathematical sentence refer to existent objects, at least according to the nominalist. In this case:

> On the nominalist view, the truth-value inducers for "$2+2=4$" aren't the numbers and their relationships because there are no such numbers. Rather, the truth-value inducers are a blend of (relevant) objects that exist—us, our language, and our epistemic practices included—and that jointly yield the indispensability of the truth of "$2+2=4$", to our assertoric practices in ordinary life and our sciences. Included among the truth-value inducers are physical objects, but nothing corresponding to the terms "2" or "4" are among these truth-value inducers. (Azzouni 2010, 18)

The problem, however, remains. Simply listing concrete objects—such as us, our language and our practices—that exist and that contribute to the truth of mathematical statements does not account for how mathematical statements have the truth-values that they have. Nonetheless,

this is the account that the nominalist needs to provide. It is unclear, though, that it can be provided. After all, it is the properties that mathematical objects have that account for why the notation encodes them as having these properties. But this is precisely what the nominalist denies, namely, that nonexistent objects have properties. As Azzouni emphasizes: "things that don't exist have no properties" (2004, 88). As a result, the nominalist is unable to account for the very aspect of mathematical notation that is needed to explain the phenomenon at hand.

Perhaps a better response is to simply *deny* that mathematicians are confusing mathematical notation with what the notation designates—as, I argued, both platonists and mathematical agnostics can do. At each step of the argument, mathematicians very clearly indicate whether the properties in question are features of the notation or express properties of the relevant mathematical objects. As it turns out, the inferential conception, which emerges from features of mathematical practice, provides an additional way of clearly tracking these differences, especially in the context of applied mathematics (see Bueno & Colyvan 2011 and Bueno & French 2018).

On this conception, the use of mathematics, including in applied situations, involves three steps: immersion, inference, and interpretation. It is acknowledged—a salient feature of mathematical practice—that mathematical objects, whether they exist or not, are abstract: they are causally inert and are not spatiotemporally located. As a result, except perhaps for cardinality considerations, these objects provide no constraints about what goes on in the physical world.

Given an empirical setup, certain aspects of the relevant phenomena are selected for so that they are immersed into a suitable mathematical model (this is the immersion step). Within the model, the relevant mathematical relations are then used to infer certain conclusions, which is arguably the central point of invoking mathematics in the first place (this is the inference step). Finally, since the relations within the model are purely mathematical, they do not state anything about the physical world. To provide any information about the empirical setup, the relations need to be interpreted in physically salient ways (this is the interpretation step).

A significant feature of the inferential conception is that it offers a

setting that emphasizes the importance of tracking which physical assumptions from the empirical setup are imported into the mathematical model (immersion step); which parts of mathematics are being used for derivation purposes (inference step), and how the results are then physically interpreted (interpretation step) (for details, see Bueno & French 2018). This avoids confusing mathematical and physical assumptions, and, by extension, it prevents any confusion between properties of mathematical notation with properties the notation is meant to describe.

Consider the passage from Landau and Lifshitz's (1976, 5) mechanics textbook that was quoted above. The authors are exceedingly clear about which portions of their description concern properties of the relevant physical setup and which portions are about the relevant mathematics. They start by specifying a significant aspect of the empirical setup: "a particle, moving freely, in an inertial frame of reference", and they have a Lagrangian as the relevant mathematical setting (the mathematical model in question). In the *immersion* step, Landau and Lifshitz invoke the "homogeneity of space and time"—a physical assumption about the world—to identify a property of the Lagrangian, namely, that it "cannot contain explicitly either the radius vector $\mathbf{r}$ of the particle or the time t". In other words, "$\boldsymbol{L}$ must be a function of the velocity $\mathbf{v}$ only". A second aspect of the Lagrangian that emerges in the immersion step comes from another physical assumption regarding the empirical set up, namely, that space is isotropic. As a result, "the Lagrangian must also be independent of the direction of $\mathbf{v}$, and is therefore a function only of its magnitude" (Landau & Lifshitz 1976, 5).

Having in this way specified the appropriate Lagrangian for the empirical set up, Landau and Lifshitz proceed to the *inference* step, in which they obtain relevant derivations from features of the mathematical model itself. As they note: "Since the Lagrangian is independent of $\mathbf{r}$, we have $\partial \mathbf{L}/\partial \mathbf{r} = 0$, and so Lagrange's equation is $d/dt\ (\partial \mathbf{L}/\partial \mathbf{v}) = 0$, whence $\partial \mathbf{L}/\partial \mathbf{v} =$ constant. Since $\partial \mathbf{L}/\partial \mathbf{v}$ is a function of the velocity only, it follows that $\mathbf{v} =$ constant" (Landau & Lifshitz 1976, 5). Note that these derivations are carried out entirely within the mathematical model, and do not concern physical objects at all.

With this result secured within the model, Landau and Lifshitz eventually proceed to the final *interpretation* step and offer a physical interpretation for the mathematical result just established, giving physical

significance to the purely mathematical conclusion. As they emphasize: "we conclude that, in an inertial frame, any free motion takes place with a velocity which is constant in both magnitude and direction. This is the *law of inertia*" (Landau & Lifshitz 1976, 5).

At no point is there any doubt about which portions of mathematical notation were being considered and which properties of the relevant objects the notation describes. There is simply no confusion at all between use and mention. I take this example to be entirely typical. Mathematicians and physicists need not make use/mention errors. As indicated, the inferential conception provides a clear framework to accommodate the fact that mathematicians and physicists, in clearly distinguishing immersion, inference, and interpretation, never really confuse properties of mathematical objects with properties of the notation that is used to refer to these objects. Mathematical practice clearly avoids any use/mention conflation.

3. USE AND MENTION CONFLATION IN THE PHENOMENOLOGY OF FILM: CRUCIAL TO THE PRACTICE

Although in mathematics and physics, use/mention conflation, in Azzouni's extended sense, can be avoided in a principled way—by carefully distinguishing the mathematical formalism and its physical interpretation in the way the inferential conception highlights—there are some areas in which the conflation cannot be eliminated, on pain of dissolving crucial aspects of the practice. Rather than something to be avoided, the conflation is decisive to properly convey the relevant content the practice aims to articulate. The experience of watching motion pictures provides a clear illustration of this situation and as will become clear, making sense of the corresponding phenomenology becomes crucial.

Central to Azzouni's generalization of the use/mention conflation, as noted above, is the fact that we are dealing with objects that have intentional properties: propositions, beliefs, hypotheses are, we saw, "*about* or *of* the objects that they specifically attribute properties and relations to" (Azzouni 2025, 2). But the suggested generalization encompasses items well beyond these quasi-linguistic ones. Consider motion pictures and focus on works that do not include computer-generated content. The images that partially constitute motion pictures—including celluloid

based ones, such as films (I will not distinguish between them)—clearly have *intentional properties*. Cinematic images are produced as the result of the interaction of the camera and the scenes that were in front of it during the shooting of the film. The resulting images are, in fact, counterfactually dependent on the relevant scenes (for discussion, see Currie 1995, Carroll 2008, and Bueno 2018a), that is:

> (C_1) Had the scene before the camera been different (within the sensitivity range of the camera), the resulting images would have been correspondingly different.
>
> (C_2) Had the scene before the camera been the same (within the sensitivity range of the camera), the resulting images would have been correspondingly the same.

(C_2) is needed, in addition to (C_1), since counterfactuals do not generally satisfy contraposition. Moreover, there is no need to invoke possible worlds in assessing the counterfactuals: the variations in question are changes in the actual world.

It is because the images in a motion picture satisfy both counterfactual conditions that they bear a significant intentional relation to the scenes from which the images arise. The images are produced as a recording of the scenes. They result from the physical interaction between the scenes and the camera during the shooting of the film: the light that reflects from the scene is absorbed by the camera and imprints on the film the scene's visually salient features. As a result, the images are about the scenes. And visually salient features portrayed on the images are about the corresponding objects that were on the scene when the film was shot and whose visually salient features, having been imprinted on the camera's film, eventually become part of the motion picture.

Clearly, the same point applies to photography, provided that it does not include computer-generated imaging. Such digital renderings need not satisfy the counterfactual dependence relations above. After all, items that were *not* part of the scene when the film was shot can later have their visually salient features digitally added to the relevant images and items that *were* on the scene, and whose visual features thereby were on the film, can have these features digitally removed from the images in question. In this way, computer-generated imaging is not a

form of photography, but rather a kind of painting with pixels.

Suppose one is watching Christopher Nolan's *The Odyssey* (which was released in 2026). On the screen there is an image of Matt Damon, tied to the mast of a ship, since when the film was shot, the actor was indeed on the set, tied to a ship's mast. The actor also wore at the time a long grey beard. Clearly, the image has intentional properties: it is an image of Matt Damon, long bearded and tied to a mast. But for the film to work, the viewer cannot distinguish the properties of the image from the properties of the object this image is about—in this case, the person, who was the source of the image. It is because the intentional properties of the image display a long-bearded, tied–to–a–mast Matt Damon that the viewer sees the corresponding person—a long-bearded and tied Damon.

However crucial, this conflation is not enough. In order for the film to work, an additional step is still required. For despite seeing an image of Matt Damon, the viewer needs to see something else altogether: a fictional character, Odysseus. After all, it is Odysseus who wanted to hear the sirens' song without running the risk of, enchanted by the singing, throwing himself into the water and eventually dying. And so, he asked to be tied to the ship's mast.

Yet, fictional characters do not exist, and it is not possible to see nonexistent objects. For seeing is ultimately the result of an interaction between the scene before one's eyes and one's perceptual system. It generates its own counterfactual dependence relations (see Lewis 1980 and Bueno 2025):

> $(C_1)'$ Had the scene before one's eyes been different (within the eyes' sensitivity range), the resulting perceptual experiences would have been correspondingly different.
>
> $(C_2)'$ Had the scene before one's eyes been the same (within the eyes' sensitivity range), the resulting perceptual experiences would have been correspondingly the same.

(This approach can be extended to provide an account of perception mediated by certain scientific instruments suitable for an empiricist stance; for details, see Bueno 2011, 2018b, 2025.)

Given the impossibility of seeing the nonexistent, and since Odysseus lacks existence, he cannot be seen. Nonetheless, seeing him—or, rather,

something close to seeing him—seems to be required for the film to work. Although not capable of being seen, Odysseus can be *imagined*, for imagination need not meet the counterfactual dependence relations required for seeing. Readers of *The Odyssey* imaginatively access Odysseus by following his deeds as described in Homer's poem. There is no need to see anything (other than the words on the page) but simply to imagine the events described in the work. (Those who read Braille do not even need to see the words.)

However, to watch the adaptation of the work to film—in fact, to properly watch any film—something else is required: a special kind of imagination, *perceptual imagination*. This is a form of imagining that is constrained by the perceptual content of what is being seen (Scruton 1979 and Currie 1995). In the case of Nolan's *The Odyssey*, viewers see an image of Matt Damon on the screen and *imagine* that they are seeing Odysseus and that Odysseus has precisely the intentional properties that are displayed on the screen as being of Matt Damon: having a long grey beard and being tied to a mast.

In other words, as opposed to what goes on in mathematics and physics, central to the phenomenology of film is the capacity to move back and forth between images that have intentional properties and the corresponding properties of the objects these images are about with the additional constraint that the visually salient properties are then imagined as being the properties displayed by a fictional character. In this way, this character, despite not being seen, is imagined as having precisely the relevant properties, namely, those that are visually displayed by the image. In the end, what we have in film—in order for the phenomenology of motion pictures to work at all—is the perfect, deliberate, crucial conflation of use and mention, Azzouni style!

In fact, a double use/mention conflation is involved: when a moving image is seen, (a) the conflation of the intentional properties of the image with the corresponding properties of the object the image is about—required for the interpretation of the image—is invoked, and, by relying on perceptual imagining, (b) the conflation of the intentional properties of the image with those of the fictional character the image is imaginatively taken to be about is similarly in place. Without the first conflation (a), viewers would not be able to interpret what they see, failing to take the visually salient features of the image as properties of

the object that generated it. Without the second conflation (b), rather than watching a film about Odysseus, viewers would see, at best, a documentary about what happened to Matt Damon while the motion picture was being shot. They may think: "Oh, that's Matt Damon. How odd, with that beard he looks like Santa Claus". The result is that the film will then fail to achieve what it was intended to accomplish, namely, to convey with images the story of Odysseus. The double conflation is, thereby, required.

In this way, use and mention conflation is integral to the phenomenology of film. Rather than an error, it is ultimately required for films to function in the way they are expected to.

4. CONCLUSION: A WAY FORWARD

Different practices are articulated in distinctive ways. In some of them, use and mention conflation is easily avoided and there are principled ways of achieving that—the case of mathematics, given the inferential conception, clearly illustrates this situation. In other cases, the conflation is integral to the practice and would undermine its success if it were blocked—the case of the phenomenology of film exemplifies this scenario with the double use/mention conflation.

To avoid the conflation, mathematical practice ends up distinguishing the mathematical formalism from its physical interpretation. In the case of the phenomenology of film, the conflation is as rampant as crucial; otherwise, films will fail to work as intended.

More worrisome are cases in which the conflation is made and there are no built-in resources to prevent it as it leads to error and confusion. This is the case of epistemology, as Azzouni argues. This raises the question of what it is about epistemology—and probably philosophy more generally—that leads to this outcome.

Let me close by offering a speculative coda. Philosophy, including epistemology, tends to focus on features of language—propositions, content—and in the attempt to capture the generality of what is described, it often disconnects this language from the practice that generates it. This tends to create a parallel discourse to the real practice and reifies features of the discourse that are never reified in practice (see Bueno 2013). Note how mathematical practice does not reify the

mathematical formalism but uses it for inferential purposes and, when needed, clearly interprets it in physically significant ways. Note also how the phenomenology of film does not reify cinematic images but uses these images for imaginative access to the story that then unfolds to viewers. If in epistemology, as Azzouni (2025) compellingly argues, use/mention conflation has led to errors, one should perhaps avoid the resulting reification by being far more careful, as mathematicians and physicists have been, in not conflating properties of the notation with properties of the objects the notation is about. The practice of reification and the corresponding construction of parallel discourses—familiar in metaphysics and equally problematic there—are better avoided altogether (Bueno 2025). This, it seems to me, is another significant lesson that can be learned from the use/mention conflation that Azzouni so aptly identified.

Finally, if the situation with the phenomenology of film is at all typical, use/mention conflation is integral to circumstances in which the content of what is experienced crucially involves perceptual imagination. Such imagination is completely absent in mathematics and, interestingly, also in epistemology, where Azzouni has exposed the serious risks that conflating use and mention can, and do, bring. A key lesson then emerges: when perceptual imagination is not at issue, one should take particular care to avoid this conflation.

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