REVIEW ARTICLE

# Primer, proposal, and paradigm: A review essay of Mendelovici's *The Phenomenal Basis of Intentionality*

**The Phenomenal Basis of Intentionality**, Angela Mendelovici, New York, Oxford University Press, 2018, 296 p, $74.00(hardback), ISBN:0190863803

## 1

In case you haven't received the news, the phenomenal intentionality research program is under way. It was both recognized and catalyzed as such by Uriah Kriegel in his introduction to the (2013) edited volume *Phenomenal Intentionality*. Before that, it had been coalescing for over a decade – even longer if the work of John Searle (1992) and Galen Strawson (1994) in the early 1990s counts. Charles Siewert's (1998) book *The Significance of Consciousness* helped make respectable the idea, long out of favor, that consciousness and intentionality are bound up with one another. It would be hard to overstate the influence of Horgan and Tienson's (2002) paper "The Intentionality of Phenomenology and the Phenomenology of Intentionality." (A fellow phenomenal-intentionality sympathizer who heard the paper when it was first presented told me that her reaction was one of dizzy elation. She thought, "Really? We get to say things like that?") Brian Loar, David Pitt, and David Chalmers also contributed seminal papers right around the same time.[1]

These early contributions paved the way for a flurry of work in the past ten years, comprising two volumes of new essays,[2] themed journal issues in *The Monist* (2008) and *Phenomenology and Mind* (2016), numerous journal articles, and – so far – three monographs.[3] The most recent is *The Phenomenal Basis of Intentionality* by Angela Mendelovici.[4]

Thomas Kuhn wrote in *The Structure of Scientific Revolutions* that the early development of a scientific research program (a 'paradigm,' in his jargon) is marked by the publication of books written for a broadly educated readership, whereas a more mature research program proceeds by the working out of puzzles in journal articles directed at other specialists. *The Phenomenal Basis of Intentionality* is an excellent example of the sort of paradigm-establishing monograph that Kuhn had in mind. Up until now, most work on phenomenal intentionality has sought to establish either the existence or the scope of phenomenally-based intentionality. Mendelovici contributes to these discussions, but she proceeds much further, providing a positive theory of the metaphysics of all intentionality in terms of consciousness. Mendelovici makes it clear when she is making claims that are accepted by all or most members of the phenomenal-intentionality crowd and when her claims are more parochial. This allows the book to serve both as a primer and as a cutting-edge proposal. It is and shall be essential reading for those interested in the phenomenal-intentionality paradigm. Certainly, it raises many puzzles, some of which I discuss below. But these are the sorts of puzzles that galvanize rather than paralyze. Would-be puzzle-solvers within the paradigm can now get to work: The research program has been thoroughly launched.

## 2

The central thrust of The Phenomenal Basis of Intentionality can be summarized as follows: extant theories of intentionality that do not appeal to consciousness are both empirically and metaphysically inadequate, and a coherent, consciousness-based alternative can adequately explain (or explain away) all alleged cases of intentionality. In the present section, I will summarize some of the majors moves Mendelovici makes as she develops these claims. In the following section, I will comment on aspects of her positive proposal that I find less than fully satisfying and that I would like to see taken up in future work by phenomenal-intentional researchers.

What is intentionality? Mendelovici proposes an ostensive definition: intentionality is "the feature that in paradigm cases we sometimes both (i) notice introspectively in ourselves and (ii) are tempted to describe using representational terms such as 'about,' 'of,' 'represent,' 'present,' or 'saying something'" (p. 6). This method of fixing reference on intentionality charts a middle way between alternatives that don't say enough about what intentionality is – for example, those that invoke metaphors of 'aboutness' or 'directedness' – and alternatives that say too much – for example, those that invoke folk-psychological roles, posits in cognitive science, behavioral success, or truth and reference.

Mendelovici distinguishes between the "superficial characters" of intentional states and contents on the one hand and the "deep natures" of intentional states and contents on the other. My conscious thought that some grass is green has a superficial character: it seems to be a state that represents the content <some grass is green> (this is Mendelovici's content-notation). The deep nature of a thing is "what it really is, metaphysically speaking." Theories of the deep nature of intentional states include tracking relations, sets of functional roles, and, of course, phenomenology. While there is no direct, conceptual connection between superficial character and deep nature, rival theories of deep nature make different predictions about what kinds of superficial characters our intentional states have, and these predictions can be tested against two theory-independent methods: first, we can introspect our intentional states; and second, we can inquire after the psychological role of our intentional states.

These methods show that the theories of intentionality dominant today – tracking-theories and functional role theories – are empirically inadequate. According to tracking theories, all actual, original (i.e. non-derived) intentional states arise from tracking, where tracking is understood as "carrying information about, or having the function to carry information about, or otherwise appropriately corresponding to items in the environment" (pp. 33–34). These theories predict that visual states which include color-representations will have as their contents whatever such representations track, namely, the light-reflectance profiles of surfaces, or something closely related metaphysically. However, when we introspect our visual states, and when we consider their psychological role, we find that their contents include primitive colors – *sui generis*, non-dispositional, non-relational, non-mental color-properties[5] – and do not include surface-reflectance profiles. Mendelovici calls this the "mismatch problem" for tracking theories. Other contents such as nonvisual sensory qualities, moral properties, and substantial selves are probably also represented but not tracked by our mental states, for the simple reason that one cannot track what does not objectively exist.

Functional role theories fare no better. According to functional role theories, all actual, original intentional states arise from the functional roles of mental representations. Pure versions of these theories appeal only to functional roles within the cognitive system. Such theories are empirically inadequate because they fail to predict that our

intentional states have determinate content. Mendelovici and Bourget (forthcoming) have recently provided proof of this long-standing suspicion). Impure functional role theories address this problem by "tacking on" tracking-relations, but then they run up against the mismatch problem.

However, empirical inadequacy is just a symptom of a deeper problem with tracking and functional role theories. The "Real Problem" with such theories is that causal relations, on their own, are simply not capable of bestowing intentionality on their relata. All of this is consistent with there being a type of (non-intentional) representation that is grounded in causal relations. (Mendelovici later dubs this phenomenon a "TR-representation.") However, representational states of this type won't fall into the extension of 'intentionality,' as Mendelovici has (ostensively) defined the term.

Mendelovici's alternative theory of the deep nature of intentional states is the Phenomenal Intentionality Theory (PIT), according to which all actual, original intentional states arise from phenomenal consciousness. Her preferred version of PIT is "Strong Identity PIT." "Strong PIT" is the view that only phenomenal states can give rise to intentional states and that original intentionality is the only kind of intentionality that exists. "Identity PIT" is the view that the arising relation is a relation of identity rather than a weaker relation such as that of constitution or realization. On her preferred theory, then, all intentional states are phenomenal states because they are identical to them.

Mendelovici develops PIT by discussing psychological states sometimes invoked as counterexamples to the theory. She first discusses conscious thoughts. There are at least two types of "alleged contents" that thoughts can have – contents of the sort that we intuitively attribute to one another – that are *prima facie* problematic for PIT: complex contents (e.g. the supervenience-relation, as a constituent of a passing philosophical thought) and objectual contents (e.g. my pet frog, Alexis).[6] Here is how Mendelovici accounts for such contents. In addition to alleged contents, our concepts have "immediate contents," which are the contents we are consciously aware of when we're using our concepts to think. Immediate contents are schematic "mental tags" which "stand for" richer, more complex contents. Which contents in particular they stand for is a matter of our self-ascriptive dispositions. In particular, an immediate content $C$ "cashes out" as an alleged content $C+$ if a subject is disposed, upon sufficient reflection, to judge that $C$ cashes out into $C+$.[7] The same proposal applies to alleged perceptual contents that seem to outstrip the phenomenal character of the states that include them, for example, perceptually recognizing a pine tree as such. Thus, there is a sense in which alleged contents are what we "really mean" when we think our conscious thoughts, despite the fact that these contents rarely or, in some cases, never reach our consciousness. However, to say that we really mean them is not to say that we intentionally represent them. Whenever an alleged content is richer than its corresponding immediate content, the former is only derivatively what is meant, and strong PIT forbids us from treating derivative representations as being of the same metaphysical kind as intentionality (though weaker forms of PIT may permit as much).

The contents of nonconscious states pose an even clearer difficulty for PIT than the contents of conscious thoughts. Mendelovici makes two distinctions among such states: the distinction between standing and occurrent states, on the one hand, and the distinction between personal and subpersonal states, on the other. This leaves her with four categories of states, the intentional character of which she either needs to explain or explain away.

(A) *Personal standing-states*: strictly speaking, there are none or, at any rate, none that are intentional. Nevertheless, people believe things and desire things. My believing that the Acropolis is in Athens, for example, is a matter of my having a certain self-ascriptive disposition, namely, my being "disposed to accept that I represent that the Acropolis is in Athens."[8]

(B) *Subpersonal standing-states*: this category includes such states as "assumptions of the visual system" and representations of the rules of grammar. We do not self-ascribe these contents, so such states are not even derivatively representational, let alone genuinely intentional – though they may be representational in the weaker sense of TR-representation.

(C) *Subpersonal (nonconscious) occurrent states*: like states in category (B), sub-personal standing states – such as information-processing states in the visual system – are TR-representational at best; thus, they are not genuinely intentional.

(D) *Personal (nonconscious) occurrent states*: this category includes the perceptual states of an absent-minded driver who gets to his destination "on autopilot" and the blindsighted patient who succeeds at perceptual discriminatory tasks. Here, Mendelovici inflates rather than eliminates: these states most likely have a phenomenology and are unconscious only in the sense that the subject isn't aware of them.

Even if PIT can handle all of these difficult cases, there is a more general reason to worry that it doesn't get the metaphysics of intentionality right. Most advocates of PIT, Mendelovici included, reject the *relation view* of intentionality in favor of the *aspect view*. On the relation view, intentional states are relations that hold between a subject or representation, on the one hand, and a content *C* that exists independently from the representing of *C*, on the other. On the aspect view, by contrast, intentional states do not consist in the bearing of relations to anything. Rather, according to this view, to intentionally represent the content *C* is to have a state with a particular aspect, where aspects are tokens or types of first-order or second-order properties of intentional states and where this aspect is identical to *C*.

Some readers will balk, Mendelovici expects. Isn't it obvious that intentionality is a relational phenomenon? Mendelovici argues that it is not obvious; alleged explanatory advantages of the relation view over the aspect view disappear under scrutiny. For example, the relation view is reputed to better explain how contents can exhibit semantic structure, such as predicative structure, but it does not. The only cases where the relation view has much to say about the structure of contents are when contents are facts, that is, when they are states of affairs that obtain (such as the Arctic Sea being north of the Equator). In those cases, the relationist can explain semantic structure in terms of the metaphysical structure of states of the world. However, propositional contents need not be true, so the relationist will have to identify some such contents with Platonic abstracta. Not much light has been shed on how such abstracta come to exhibit semantic structure. The so-called "unity-of-the-proposition" problem has not been solved by anybody, at least not without appealing to a primitive content-unifier of some sort. Maybe advocates of the aspect view will come up with illuminating things to say about semantic structure, and maybe they won't (Mendelovici offers a few partial proposals, to which I will return below). Either way, the relation view enjoys no advantage here.

The relation view is also reputed to better explain truth and reference, which look for all the world to be relational properties. The relation view turns out to enjoy no advantage here over the aspect view, however. Suppose, for example, that we combine the relation view with an identity theory of truth and reference (according to which contents are identical to truth-makers or referents). According to the resulting picture, an intentional state is true when it is a relation to a fact, and it refers when it relates to an existent. This is an elegant theory of truth and reference indeed, except that some contents fail to have truth-makers and some fail to refer. Hence, the relation view has an advantage with respect to explaining truth and reference only at the cost of positing a disjunctive theory of contents: true or referring contents are worldly items, whereas false or non-referring contents are something else (e.g. Platonic abstracta).

A relationist might instead try a correspondence theory of truth and reference. According to the resulting picture, all contents are abstracta. Correspondence is a matter of instantiation – the relation that grounds reference – and obtaining – the relation that grounds truth.[9] This proposal improves on the identity theory by being non-disjunctive. However, the aspect view lends itself to a more elegant version of the correspondence theory.[10] Correspondence, Mendelovici proposes, is a matter of the "matching" of a content with a referent or truth-maker in the world.[11] She further speculates that the matching theory is true because we make it true: we can intentionally represent the propositions that make up the theory, and we are disposed to endorse them when we do. If this is right, "we arrive at a truly internalist conception of the mind, one on which any phenomenal contents, derived contents, or criteria of truth and reference that we have are fully determined by the non-relational, intrinsic, and accessible aspects of our own minds" (p. 239).

## 3

Mendelovici's book raises interesting questions at every turn. Many philosophers, especially those suspicious of the phenomenal intentionality research program, will wish to study the early chapters of the book, in an endeavor to defend the reputation of TR-representation as a genuine species of intentionality. My focus, however, will be on the issues that emerge as Mendelovici develops her positive view. I will focus on four questions: (1) How are phenomenal properties and intentional properties explanatorily related to one another? (2) How are phenomenal-intentional states explanatorily related to representational states outside of consciousness? (3) How can monadic intentional states exhibit semantic structure? (4) How are monadic intentional states possible?

### 3.1. How are phenomenal and intentional properties explanatorily related to one another?

Mendelovici advocates for *Strong Identity PIT. Strong Non-Identity PIT, Weak Identity PIT*, and *Weak Non-Identity PIT* are also options. How should one choose among them? In this sub-section, I will discuss what I understand to be at stake in the choice between the Identity and the Non-Identity versions of PIT. Next, I will turn my attention to the Weak versus Strong versions.

Mendelovici states that phenomenal states give rise to intentional states because phenomenal characters simply are intentional contents. This is in contrast to looser

ways of understanding the explanatory relationship, such as constitution or realization.[12] In fact, Identity PIT can be understood in two ways. On the first way, some phenomenal characters are identical to intentional contents. On the second, all phenomenal characters are identical to intentional contents – which is a version of representationalism. In defending Identity PIT, Mendelovici intends to remain neutral with regard to the two readings, but her sympathies lie with the latter. I think her arguments for Identity PIT are best understood as arguments for a certain sort of representationalism. My comments in the present section will thus focus on the representationalist version of Identity PIT.[13]

Mendelovici gives two reasons to think that the explanatory relation that holds between phenomenal states and intentional states is one of identity rather than something looser. The first reason has to do with explanatory adequacy: Identity PIT helps us to see how PIT could be true, whereas the alternatives are obscure. The second reason has to do with introspective adequacy. Consider your conscious visual state of a white page. How should we categorize the whiteness that is presented to you – as your state's phenomenal character or as its intentional content? If phenomenal character and intentional content come apart, then we would either have to choose arbitrarily or hold that there are two presentations of whiteness occurring in the very same state. That would be wrong. Only if we identify phenomenal character and intentional content can we say, "there is only one whiteness-related mental quality, and it may be correctly described as both a represented feature of the represented page and a phenomenal character" (p. 95).

As a version of representationalism, Identity PIT is much more palatable than familiar, naturalistic versions. Standard forms of representationalism have tended to be motivated by two considerations. The first motivation is the so-called "transparency" of conscious experience: when one tries to introspect a phenomenal quality (for example, a color-quality that is part of a visual experience), one winds up focusing attention on a quality which is attributed to some representatum. The second motivation is the reputed success of tracking theories as fully reductive theories of intentionality. The thought is the following: if we reduce consciousness to representation, and if we can naturalize representation in terms of tracking-relations, then we have naturalized consciousness. On reflection, these motivations actually pull against one another because the properties tracked by our perceptual states – for example, surface-reflectance profiles, in the case of color-perception – are precisely not the qualities we "see through" when we try to introspect. Mendelovici's version of representationalism avoids this problem: the representational contents she identifies with phenomenal qualities are the familiar, primitive sensory qualities. It is indeed much more plausible that my visual experiences wholly consist in the attribution of primitive colors to represented objects than that they consist in the attribution of surface-reflectance profiles to represented objects.

However, Mendelovici's representationalism is plausible only to the extent that her error-theory of color and other sensory qualities is plausible. How plausible is it to say that redness is only ever represented, never instantiated? Perhaps it is not overwhelming implausible. Harder to swallow is the claim that nonsensory phenomenal qualities, such as moods and emotions, are only ever represented, never instantiated. On Mendelovici's view, mood-states are states that represent un-instantiated affective properties.[14] This strikes me as a highly revisionary picture of human experience: it implies that the phenomenal character of grief, for example, is nothing but the (non-veridical) representation of a quality that has never been instantiated by anyone or anything.

Perhaps some readers will be willing to embrace this surprising consequence, in exchange for the theoretical tidiness of Identity PIT. However, I want to argue that it is too tidy, precisely where Mendelovici thinks introspection is on her side. Is it true that there is only one "whiteness-related quality" present in a conscious visual state of a white expanse? From where I type, I can gaze up at the corner of my office, where two white walls meet the white ceiling. Light from the window illuminates each surface slightly differently, so I am presented with many varying gradients of white. However, all three surfaces also appear to the be same color, so I am simultaneously presented with uniform whiteness. How can this be? I suggest that my perceptual state actually includes "whiteness-related qualities" in two different ways: I instantiate phenomenal whiteness and greyness of several determinate hues (which explains the variegation), and I intend phenomenal whiteness of a particular, perhaps not fully determinate, hue (which explains the uniformity). Similar things could be said about other constancy-related phenomena.

The distinction between instantiated qualities and intended qualities also helps explain the difference between perception and imagination. Instantiated qualities, I maintain, are ineliminable aspects of perceptual states because they anchor the representational content of those states in vivid, manifest, occurrent reality. If I am confronted with a red apple, I seem to see it, here and now, precisely because the redness I attribute to it is really there, as part of my sensorium. Suppose that the instance of phenomenal redness in my conscious episode were replaced with an intention for phenomenal redness. In that case, I would only imagine the apple. I'm not sure how Mendelovici could mark the difference between the two cases, given that she relegates all phenomenal qualities to the status of intentional contents.[15]

Now, Mendelovici clearly has parsimony on her side: I posit "whiteness-related" conscious qualities of two types, whereas she only posits one. If there really are two irreducibly distinct types of conscious quality, then one might wonder whether the category of the phenomenal would still form a natural kind or, for that matter, whether the category of the mental would form a natural kind. These are not easy issues.

### 3.2. How are phenomenal-intentional states explanatorily related to representational states outside of consciousness?

Strong PIT denies that there could be any mental states that include intentional properties but fail to include phenomenal properties. Against this denial, a number of PIT-advocates have wanted to preserve the possibility of dissociation by appealing to some mechanism of content-transfer from conscious states to non-conscious states. For example, John Searle has claimed that all intentional states are at least potentially conscious – it is this potentiality that confers determinate content on them – but that some such states are not actually conscious.[16] The intentionality of such states is thus metaphysically derivative but still real. Mendelovici isn't buying it. According to her, intentionality is not the sort of thing that can get "passed around" via causal connections between states, any more than it can be constituted by causal connections among states. Her "Real Problem" with TR-representation thus pushes her toward an austere view of intentionality.

Mendelovici's view turns out to be less austere than it initially appears, however. She grants that plenty of non-phenomenal states can have representational contents and that those representational contents derive from phenomenal intentionality. In that respect, Strong PIT appears to differ from Weak PIT only notationally: where Searleans

distinguish between original and derivative intentionality, Mendelovici distinguishes between intentionality and derivative representation. Both camps agree that their respective distinctions mark an important metaphysical division.[17]

Now, there is a substantive dispute lurking beneath the surface, one not captured by the Weak-PIT / Strong-PIT distinction. It is a dispute about the mechanism whereby derivatively representational states acquire their content. Mendelovici understands derivative representation in terms of the contents that subjects self-ascribe: which standing-states a subject has and which contents a subjects' occurrent thoughts are shorthand for are both determined by the contents that the subject is disposed to ascribe to herself.[18] An implication of this view is that it's not possible for a sufficiently reflective subject to inaccurately cash out the contents of her thoughts or to misattribute a belief to herself. The reason it's not possible is that the cashed-out contents of a subject's occurrent states and the contents of a subject's standings states are metaphysically determined by her self-ascriptive dispositions.[19]

Whether self-ascriptive infallibility is a welcome or unwelcome implication depends on whether there exists a tier of psychological reality to which self-ascriptions of non-conscious contents are answerable. There are pretty strong empirical reasons to think that such a tier exists. Consider the phoneme restoration effect, for example. When speech is mildly garbled, hearers subconsciously fill in missing phonemes based on what makes contextual sense. For example, when told "It was found that the *eel was on the axle," subjects reported having heard the word 'wheel,' but when told "It was found that the *eel was on the orange," they reported having heard the word 'peel.'[20] Alternatively, consider the phenomenon of "getting" a joke. The difference between "getting" a joke and not "getting" a joke often depends on subtle knowledge of the people, items, and subcultures referenced. At the same time, effective jokes trigger immediate laughter-reactions. If one has to bring to mind the relevant funny-making facts and then infer the funniness of the joke from them, then one didn't really "get" the joke.[21] These examples suggest the following: important person-level psychological phenomena such as understanding speech and "getting" jokes depend on something very much like non-conscious inferences, and the states involved in these inferences seem to have the same sorts of content as the beliefs that enter into subjects' conscious inferences. (One could consciously reason one's way to phoneme-restoration.) The natural conclusion is that one's beliefs play a subconscious psychological role in virtue of their contents, prior to any dispositions a subject has to self-attribute those contents. This means, contra Mendelovici, that it should be possible, even for a sufficiently reflective subject, to misattribute beliefs to herself.

Now, once we grant this much autonomy to non-conscious intentional states, we might be tempted to conclude that there's a problem with PIT itself, and not just with Mendelovici's self-ascriptivism. If subjects regularly engage in non-conscious inference, doesn't this mean that some intentionality is independent of consciousness? Not necessarily. Advocates of PIT need a theory of standing-states that does justice to the psychological role that they play both within consciousness (in particular, they dispose subjects to have conscious propositional attitude-states in certain circumstances), and outside of consciousness (in particular, they facilitate phoneme-restoration, joke-"getting," and other automatic processes), while still insisting that consciousness gives them their content somehow. There is no space to build such a theory here, but I can offer a sketch of one: consciousness "re-wires" or "programs" the brain, producing neural structures that (a) encode conscious contents and (b) mimic the inferential role that those contents play when consciously entertained.[22]

My focus here has been on self-ascriptivism about standing-states. Self-ascriptivism about alleged contents probably runs into similar problems because it entails the same implausible infallibility: if I'm sufficiently reflective, then I can't be wrong about what some brief, compressed thought of mine would mean if it were unpacked. This is implausible because concepts, like standing-states, seem to play non-conscious psychological roles, for example, in perceptual recognition. When I recognize someone as my friend Susanna, I am disposed to respond in ways that are appropriate to my concept of her (for instance, smiling and waving) without bringing to consciousness all the contents that fix the reference of my concept of her (being a human named 'Susanna' with whom I interacted on memorable occasions *A, B, C*, and so on). It is the fact that I have some sort of "mental file" on Susanna which contains these contents and that the opening of this file corresponds to my perceptual-recognitional state that makes it the case that Susanna is part of the alleged contents of that state – not the fact that I would self-ascribe such contents. If I self-ascribed other contents – that I had recognized her as my friend Krista, for example – my self-ascription would be inaccurate.

In other words, I think we need to treat concepts (or perhaps *conceptions*—whatever "mental file" is a metaphor for) as having thicker psychological reality than Mendelovici's view allows. Fortunately, my proposal about the conscious "programming" of the brain can be extended to sub-propositional contents as follows: we can consciously entertain multiple, distinct sub-propositional contents in a way that conceptually links them. For example, I can consciously think "Susanna = a human + named 'Susanna' + with whom I interacted on memorable occasion *A*," and so on. Now, suppose that each of these sub-propositional items can be "encoded" onto a neural structure and that these neural structures are functionally or associationally related in a way that maps onto the '+' relation which holds in consciousness.

I submit that the resulting picture is no less economical than Mendelovici's, and it avoids treating content self-ascriptions as infallible.[23] Is it empirically plausible? Does it violate the letter or spirit of PIT in some subtle way? My tentative answers to these questions are yes and no. However, much more work would need to be done to dispel any suspicion to the contrary.

### 3.3. How can monadic intentional states exhibit semantic structure?

Every theory of content faces the problem of semantic structure: some complex contents seem to be built out of more basic contents, and the mode of combination is more than mere aggregation. For example, there is a difference between thinking "I am Caesar" and merely listing off the contents 'I,' 'am,' and 'Caesar' in rapid mental succession. Because this problem remains unsolved for the relation view, Mendelovici maintains that the aspect view is, at the very least, no worse off; however, she is optimistic that she can, in fact, explain at least some types of semantic structure. She makes two tentative suggestions about how sub-propositional contents can exhibit semantic structure: first, the content <big dog> acquires its structure not "internally" – that is, by having <big> and <dog> as parts – but, rather, externally, by having properties in common with contents such as <small dog> and <big cat>. Her notion of external structure is modeled on the way that colors occupy regions in a multi-dimensional quality space: they exhibit "structure" in the sense of being locatable on hue-, saturation-, and brightness-axes, all the while being qualitatively simple. Second, the content <red square> is unified in virtue of its component content-aspects being jointly instantiated as second-order properties of the selfsame intentional state.

The first suggestion is interesting but difficult to evaluate. What could it mean to say that the content <big dog> is, or is analogous to, a point in an abstract multi-dimensional content-space? Perhaps the idea is that this particular point lies on a size-axis and that <small dog> and <medium dog> are also on this axis. Is there, then, an intersecting axis corresponding to the second item in the pair such that <big cat> is also on this axis? It is difficult to understand how there could be an axis corresponding to a category which has various instances that differ in kind rather than in magnitude. Cat-ness and dog-ness are not degrees of the same property, but they are determinates of the same property – namely, being a mammal – so perhaps the picture isn't so much a picture of a space but, rather, one of a tree or a tree–space hybrid.[24] How many branches and axes does the tree have? Are all possible complex, sub-propositional contents locatable in this tree or tree-space? Additionally, these considerations assume that <big dog> lacks internal structure. Obviously, the linguistic phrase we use to express it has internal structure. How good of a guide is linguistic structure in discern-ing the structure of intentional contents? Maybe it is quite good, in which case the whole idea is a nonstarter. In short, Mendelovici's idea needs a lot of development.

To turn to the second suggestion, I think that Mendelovici has the following picture in mind: a subject instantiates a bunch of mental properties at any given time. These first-order properties aren't clumped together in any obvious way, but if their contents were second-order properties, then these contents could clump together: first-order mental property $M1$ would instantiate contents $A$ and $B$, and first-order property $M2$ would instantiate contents $C$ and $D$.

This suggestion is less promising than the first. To begin with, it presupposes that there is a metaphysically serious way to carve up mental states into their constituent properties. Maybe there is an ontology of mental properties on which this analysis is possible, maybe not. How many fundamental mental properties am I instantiating right now? Maybe the answer is that I am instantiating only one which corresponds to my total, determinate mental state, and maybe the answer is that I am instantiating an infinite amount because there is no privileged analysis. Alternatively, maybe the fact that there is no privileged analysis means that the answer is indeterminate. Mendelovici needs there to be a determinate, finite answer, and I'm not sure how one could tell if there is one.

More problematically, it's simply not clear what the clumping of second-order mental properties has to do with semantic structure. Saying that one of my mental properties instantiates the contents <red> and <square> does not yet explain what links those contents together into a semantic whole rather than a mere content-aggregate. Thus, we are back where we started, and we haven't even attempted to make progress on the problem of predicational structure (the structure exhibited by <big dogs are cuddly>), as Mendelovici herself admits.

The lesson here, I fear, is that advocates of PIT are going to have to be primitivist about semantic structure. Mendelovici thinks that taking this position would still leave the Aspect View at a dialectical advantage since the relation view has to posit abstracta. The dialectic is more complicated than this though. The aspect view has at least one other disadvantage: our theory of aspects (what property-instances are, what it is for a substance to have them, the relations between first- and second-order property instances, and so forth) is much better developed than our theory of abstracta. It is hard to understand how either aspects or abstracta could exhibit semantic structure. However, our picture of abstracta is less filled-in than our picture of aspects, so there is more latitude to say of abstracta that primitive structure-engendering relations fit into the picture.

Whether or not relationists can say anything substantive about semantic structure, advocates of the aspect view should make it their business to do so – even if this involves positing primitive structure-imposing phenomenal elements. Until they have done this work, doubts will remain about whether the notion of semantically-structured mental aspects is coherent.

### 3.4. How are monadic intentional states possible?

Mendelovici proposes that reference and truth are a matter of the matching of a representation and what it represents, where matching is a type of similarity.[25] This raises a puzzle for the aspect view. If contents are aspects of monadic mental states, then contents can only "match" their referents or truth-makers if mental states share the right sorts of properties with that which they intentionally represent. Either worldly items have mental properties in common with the mental states that refer to them, or mental states have worldly properties in common with the worldly items to which they refer. Neither is plausible: big dogs, red squares, and other such worldly referents are not mental entities, and minds are not square or canine.[26]

Mendelovici is aware of the puzzle, but she doesn't think that it applies to her version of the aspect view. She is careful to stress that "a content matches another item when the item has all the features of the content's superficial character" (p. 225). Intentional contents, when considered in their deep natures, are mental aspects, but when we characterize their superficial characters, we use non-mental language: we talk about big dogs, red squares, and so forth. Mendelovici explains:

> It is arguably our contents' superficial characters, and not their deep natures, that form the referent of 'that' when we think that in order for our intentional states to be true the world would have to be like that. This is why we don't think that the world must be mental when we think it must be like that, even if contents are in fact mental items. (p. 226)

I worry that Mendelovici has avoided one puzzle only by introducing another. In order for her theory to work, mental aspects must somehow ground superficial content-characters. For instance, in virtue of some aspect of my mental state, I find myself intentionally representing the content <red square>. How is this supposed to work? The answer is not that redness and squareness are literally aspects of my mental state. What, however, is the alternative?

Historians of philosophy will recall that a very similar problem confronts medieval theories of intentionality. When framed using the old-fashioned vocabulary, such views are likely to sound quaint: a cognition of X occurs when an intellectual substance takes on, in an intellectual mode rather than in a material mode, the substantial form of X. However, underlying the old vocabulary is the same idea that is at the heart of Mendelovici's proposal – the idea that reference occurs only when features present in the mind of a thinker suitably match features in the world. This medieval theory fell out of favor in the early modern period for a number of reasons, some contingently historical.[27] However, there always existed a worry about its intelligibility. If an intellectual substance "takes on" the form of X, then it would seem to follow that the intellectual substance is an X, and that's absurd. One does not become a tree when one thinks about trees! In what sense, then, does an intellectual substance "take on" a form, if not such that it becomes a thing of that kind?

In the course of developing her own version of the aspect view, Mendelovici periodically compares it to a similar view developed by Laurence Bonjour (1998). As far as I am aware, Bonjour is the only contemporary analytic philosopher who tries explicitly to rehabilitate the medieval view.[28] He writes the following:

> The central idea of the [medieval] view – namely that thinking of something as having a particular form or property involves the literal occurrence of that form or property in the mind, but not in the same way in which it occurs in its ordinary instances – seems to me very much in the right direction ... The obvious, albeit highly schematic, suggestion to make at this point is that the universal instantiated by thoughts of triangular things is a more complex universal having the universal triangularity as one of its components, with other components pertaining to other aspects of the content, to the kind of thought in question (belief, desire, intention, contemplation, etc.), and perhaps to further matters as well. Such a complex universal would have to be so structured that a mental act could be an instance of the complex universal without it thereby being literally an instance of triangularity, indeed without anything being such an instance. (pp. 183–184)

Bonjour's view is pretty clearly a version of the aspect view, yet he rejects one of the claims that Mendelovici treats as constitutive of the aspect view, namely, that contents are aspects – tokens or types of first-order or second-order properties of intentional states. Bonjour wants to say that triangularity-thoughts are monadic mental states, but he doesn't want to say that triangularity is a property of such states, either first- or second-order. Bonjour will say that intentional properties are mental aspects, but contents are not. They are components of intentional states in some sense, but they are not aspects.

If contents are components of, but not properties of, monadic mental states, then what sorts of components are they? Above, I mentioned a distinction between two ways that a feature can be present in consciousness: instantiation and intention. I understand the latter mode of presence to involve an intentional object being primitively given to the mind. If this proposal makes sense, then we can identify contents with these primitively-given items, which turn out to be non-aspectual components of intentional states. In saying all of that, have I said more than Bonjour? I'm not sure. At any rate, I don't think that locating triangularity in the "superficial character" of contents clarifies things. For it to do so, we would need a theory of the relationship between deep-content-natures and superficial-content-characters, and even if we could develop such a theory, we still wouldn't have a clear sense of how triangularity could be a component of intentional states.

## 4

I have raised four concerns with Mendelovici's version of PIT. The concerns involve (1) the explanatory relation that holds between intentional and phenomenal properties (identity, on her view); (2) the mechanism that generates derivatively representational states (content self-ascription, on her view); (3) the source of semantic structure within phenomenal-intentional states (external structureand/or second-order co-instantiation, on her view); and (4) the mode of presence of contents within phenomenal-intentional states (being part of a superficial characterization, on her view). Mendelovici has not said the last word on these matters, I contend, but that she has said so much, at such a high level of creativity and sophistication, about so many of the issues confronting

PIT-advocates is quite an achievement. Those wishing to contribute to the phenomenal intentionality research program could open *The Phenomenal Basis of Intentionality* practically at random and find sufficient inspiration to keep them employed for another decade.

## Notes

1. Loar (2003); Pitt (2004); Chalmers (2004).
2. Bayne and Montague (2011); Kriegel (2013).
3. Kriegel (2011) and Chudnoff (2015) were the first two.
4. Plenty of other work not directly on the topic of phenomenal intentionality has nevertheless made invaluable contributions to the research program, such as Campbell (2002), Farkas (2008), and Siegel (2010).
5. Chalmers (2006) calls these properties "edenic colors."
6. The first example is Mendelovici's; the second is mine (she makes the point in terms of the natural kind $H_2O$ rather than the concrete particular Alexis, but the lesson is the same).
7. More precisely, "subject $S$ takes a representation's immediate content $C$ to mean $C+$ if $S$ has a set of dispositions to have cashing out thoughts that together specify that $C$ cashes out into $C+$ (upon sufficient reflection)" (p. 143). The content $C+$ is either such that $S$ can phenomenally represent it, or it is such that it is denoted by some content which $S$ can phenomenally represent (this is how I get to think about Alexis).
8. More precisely, "subject $S$ derivatively represents $C+$ (for $S$) if $S$ takes herself to have a state with content $C+$," and she "takes herself to have a state with content $C+$ if (1) $S$ is disposed to accept that she has a state with content $C$ (upon sufficient reflection), and (2) either $C$ is identical to $C+$ or $S$ takes $C$ to mean $C+$" (p. 178).
9. Mendelovici also countenances the possibility of mixed theories, that is, a correspondence theory of truth and an identity theory of reference, or vice versa.
10. Mendelovici notes that the identity theory is probably off the table for the Aspect View: if contents are aspects of mental states, then referents and truth-makers won't be contents, except in the unusual cases of thinking about one's own mental states (unless we accept some version of idealism).
11. Mendelovici points out that the matching theory is consistent with the Relation View: a relationist could accept matching, in lieu of instantiation or obtaining, as the correspondence-relation. However, such a view would still require abstracta to play the role of content, an extravagance which the Aspect View can avoid.
12. Farkas (2013) defends constitution and Woodward (2018) defends realization.
13. Thanks to Mendelovici for providing helpful clarification here.
14. She develops this view in Mendelovici (2013).
15. I develop these points in more detail in Woodward (2016).
16. Searle (1992).
17. Agreeing on that much leaves room for plenty of disagreement about the nature and degree of the metaphysical divide. Mendelovici thinks that the differences are extensive enough that it would be a mistake to treat intentionality and derivative representation as two versions of the same phenomenon. Searleans could respond either by down-playing the differences or by denying that Mendelovici's ontological taxonomy is the best way to account for those differences. It is because these two issues seem to be separable that I treat the Weak PIT versus Strong PIT dispute as non-substantive.

18. There is an important disanalogy between the cases: unlike the case of conscious thoughts, it is not just the propositional content of standing-states but also the attitude-type of such states that is determined by a subject's self-ascriptive dispositions. Part 4 includes an interesting discussion of the phenomenal basis of propositional attitudes, about which I will say nothing further, except that it is well worth studying.

19. At least, I think that that is Mendelovici's view. She officially frames her view in terms of mere sufficient conditions. For example, "subject S derivatively represents C+ (for S) if S takes herself to have a state with content C+" (p. 178). Such a formulation leaves open the possibility that self-ascription doesn't ever make it the case that a subject derivatively represents a content; however, what *does* make it the case *also* disposes her to self-ascribe in such a way. I take it that Mendelovici wants to rule out this possibility.

20. Warren (1970).

21. Terry Horgan has explored the significance of joke-"getting" for theories of content in several works, for example, in Horgan and Potrč (2010).

22. Am I here marking an ontological distinction between consciousness and the brain, implying that PIT entails interactionist dualism? I don't intend to, no. Maybe conscious states are brain-states of a particular type, a type that plays an architectonic function within the brain.

23. In correspondence, Mendelovici has told me that she doesn't see my account of derivative content as a competitor to her own. Now, the two accounts are *apparent* competitors. After all, I say that a sufficiently reflective subject can be *wrong* in her self-attributions of content, whereas Mendelovici denies this. The way to render the competition as *merely* apparent is to say that these are just two different kinds of derivative mental representation. That's fine, but I want to say – as I believe Mendelovici does not – that some kinds of derived representation have greater psychological reality than others.

24. Kriegel (2011) sketches a view of the structure of contents that appeals explicitly to determinate or determinable relations. His view, like Mendelovici's, is thus a way of understanding phenomenal-intentional structure as *external*.

25. I am doubtful that matching can give us reference all on its own, at least not reference to concrete particulars. We'll need indexicals or demonstratives and non-deviant causal chains in the picture too. Mendelovici might very well be happy to grant this, stressing that matching is also, or usually, a necessary condition for reference.

26. This isn't to say that mental states fail to have *any* properties in common with the worldly items they represent. Plausibly, entities of both sorts could have the same temporal properties, logical properties, structural properties, and so on. However, none of these are paradigmatic intentional contents, such as sensible qualities or natural kinds.

27. One reason that 17th century philosophers rejected it is that it seemed committed to the objective reality of sensory qualities such as color and warmth. Of course, Mendelovici emphatically denies the objective reality of sensory qualities. If her view is consistent, then this was a bad reason to reject the theory.

28. Montague (2013) and Ott (2016) both develop views which are similar to Mendelovici's matching view. Neither draw explicit connections to our medieval philosophical heritage, however.

## Acknowledgments

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