Philosophy and Phenomenological Research

Vol. XCIV No. 2, March 2017 doi: 10.1111/phpr.12380

© 2017 Philosophy and Phenomenological Research, LLC

# The Elusive Case for Relationalism about the Attitudes: Reply to Rattan

ROBERT J. MATTHEWS Rutgers University

## 1. Some Background on the Measurement-Theoretic Challenge to Relationalism

Relationalists about propositional attitudes hold that propositional attitudes are relations that their possessors bear to abstract entities that express the contents of these attitudes. There continues to be much debate among relationalists as to the nature of both the entities themselves and also the relation that possessors are said to bear to them: Are these entities propositions of some sort, as the expression 'propositional attitudes' would suggest, or are they instead entities of an even more exotic sort such as interpreted logical forms, or maybe, as some would now have it, cognitive events or acts? This continuing uncertainty reflects just how difficult it is to find a plausible candidate capable of filling the semantic, pragmatic, and explanatory roles that these entities are presumed to play. Similar uncertainty surrounds the relations that possessors bear to these entities, though it has become fashionable of late to stress their 'cognitive' nature, though without ever saying much about what standing in a 'cognitive' relation to a proposition (or some other abstract entity) could possibly amount to. And yet, despite this uncertainty about the nature of both entity and relation, relationalists remain convinced that propositional attitudes are relations, because they believe they have good arguments for their view that do not turn on the resolution of any such uncertainties. Traditionally, their arguments have turned on what I call the 'reading-off assumption', viz., that the relational character of propositional attitudes can simply be read off the relational, more specifically dyadic, logical form of the predicates by which we canonically attribute them (e.g., x believes y). In his paper, Gurpreet Rattan (2017) attempts a different sort of argument, one that doesn't obviously rest on the usual reading-off assumption. His arguments focus on properties of propositional attitudes themselves that, he says, require a cognitive relational construal. He describes his paper as arguing that 'if propositional attitudes are conceived of in a robust way that emphasizes their normative and perspectival aspects, then [any viable theory of the attitudes] must incorporate, rather than dismiss, the notion of a cognition relation to a proposition' (p. 433)<sup>1</sup>. The question I address here is whether there is anything about what Rattan describes as the normative and perspectival aspects of

Unless otherwise noted, parenthesized numbers refer to pages in Rattan 2017, pp. 433-452.

propositional attitudes that demands a relational account of the attitudes, specifically anything that cannot equally well be explained on measurement-theoretic accounts of the sort that I (and others) have defended, which do not incorporate or presume a cognitive relation to a proposition. I argue that there is not. It is not possible in this short reply to lay out in any detail the measurement-theoretic account that Rattan criticizes or respond to all of his criticisms, but before turning to his arguments, I do want to emphasize certain features of this account that will figure in my reply.

## 2. Proposed Measurement-Theoretic Accounts of Propositional Attitudes

Measurement-theoretic accounts of the attitudes are in the first instance proposed construals of the *predicates* by which we canonically attribute propositional attitudes. Simplifying a great deal, the basic idea of measurement-theoretic accounts is that sentences, e.g., of the form x believes that S do not, as relationalists would have it, assert that x stands in a certain substantive relation, viz., believing, to an entity, perhaps a proposition, that is the referent of the sentence's complement clause. Rather, such sentences assert that x has, or is in, a belief state of which the complement clause (e.g., that S) is its measurement-theoretic representative,<sup>3</sup> in much the way that to say that x has a mass of 10 kilos is not to say that x stands in a substantive relation to the number 10, but is rather to say that x has a mass whose measurement-theoretic representative on the kilogram scale is the real number 10. In effect, measurement-theoretic accounts treat propositional attitude predicates as a kind of measure predicate, one which employs a particular representation scheme, viz., a natural language that the attributor understands, to identify the propositional attitude (of the type specified by the attitude verb) being attributed, in the same sort of way that numerical measure predicates employ a representational scheme defined on a real number scale that the attributor understands.

Strictly speaking, measurement-theoretic accounts of propositional attitude predicates don't traffic in propositions or any of the other abstract entities that relationalists have proposed as the 'objects' of the attitudes: complement clauses, which are the measurement-theoretic representatives of the attributed propositional attitudes, aren't referring expressions, and a fortiori don't name or designate propositions, or any other abstract entities for that matter, though one can think of such entities as formal proposals regarding the relevant linguistic features of complement clauses that are exploited for the purpose of specifying the propositional attitude for which the complement clause is the representative. So conceived, such entities might be thought of as specific proposals regarding the formally characterized representatives of propositional attitudes that will figure within a formal measurement-theoretic account of attitude predicates.

<sup>&</sup>lt;sup>2</sup> See especially Matthews 2007, 2011.

More precisely, the representative is the complement clause as uttered/articulated by the attributor and interpreted in the context of attribution, but this subtlety can be neglected for present purposes.

One can see this if one considers nominal constructions (e.g., *the belief that S*), which are often paired with light verbs to form propositional attitude predicates (e.g., *has the belief that S*). There is presumably little inclination to construe the complement clause here as referring to or naming an entity of some sort.

Rattan seems mistaken on just these points. Propositions, as traditionally understood, are not suitable even as a formal characterization of the measurement-theoretically relevant properties of these complement clause representatives, for basically the sorts of reasons adduced by many relationalists (see my 2007: 161–4). These representatives are better characterized formally in linguistic terms along the lines of what I call 'interpreted utterance forms' (see below and my 2007: 165–9).

Proponents of non-relational construals of propositional attitudes find measurement-theoretic accounts of propositional attitude predicates attractive because they allow for the possibility that while these predicates are by most accounts relational in logical form, propositional attitudes themselves need not be. But it is important to emphasize that, contrary to what Rattan assumes,<sup>6</sup> construing propositional attitude predicates as measure predicates is *fully* compatible with the empirical possibility of a relational construal of propositional attitudes, specifically one that takes propositional attitudes to be cognitively real relations to abstract entities of some sort (assuming we can make sense of such a relation). But the point that a measurement-theoretic account would emphasize is that if propositional attitude predicates are a kind of measure predicate, where the predicate's complement clause functions as the measurement-theoretic representative of the attributed attitude, then one cannot simply 'read off' the relational character of that attitude from the relational character of the predicate by which we attribute it; moreover, if propositional attitudes are in fact relations of some sort, these measure predicates provide little information as to the metaphysical character of either relation or relatum.

Obviously, and this point will figure importantly later on in my reply to Rattan, on the assumption that propositional attitude predicates are a kind of measure predicate, if we are to understand and competently use these predicates, then we have to understand the particular representation scheme that the measurement-theoretic representatives in these predicates employ, just as we have to understand the real number scales employed by numerical measure predicates if we are to understand and competently use them. Specifically, in the case of propositional attitude predicates we have to understand not simply the language in which the representatives (the complement clauses) are couched, but also our practice of talking about our inner mental lives by reference to the world around us. This is an understanding and competence that we acquire gradually in the course of learning to use these predicates.

It is important not to be misled, as Rattan seems to be, by talk of 'measurement' (cf. p. 444). Such talk is simply a reflection of the historical fact that contemporary measurement theory emerged out of a reflection on the formal conditions that make possible our practice of representing in numerical terms quantities of physical magnitudes. Contemporary measurement theory might better be called simply 'representation theory', or maybe better 'surrogative representation theory', in order to remind ourselves that many of the domains to which measurement theory is now applied (analytical geometry, computational implementation, decision theory, and, if I'm right, propositional attitude attribution) have nothing in particular to do with measurement, understood as the practice of measuring, much less with numerical measurement of physical magnitudes.<sup>7</sup> Measurement theory has instead to do with schemes for *representing* the formal structure of a chosen 'empirical' (i.e., represented) domain by the formal structure of another (representing) domain, usually with the aim of enabling us to use the latter to conceptualize and reason surrogatively<sup>8</sup> about the former. That we cannot make sense of the expression

Having described measurement-theoretic accounts as holding that propositional attitude reports 'relate thin-kers to propositions [sic] in a kind of logical specification of psychological properties' (p. 435), Rattan mistakenly concludes that such accounts are committed to the view that the psychological properties so specified 'in no way consist in standing in a substantive psychological or cognitive relation to a proposition' (ibid.).

<sup>7</sup> See Narens 1985

For a discussion of surrogativity, see Matthews 2007: 134–6, 175–6.

'measurements of measurements' (p. 445), at least as the term 'measurement' is used in common parlance, is hardly an indictment of representational measurement theory in general and measure-theoretic accounts of propositional attitudes in particular. Nor is there any philosophical hay to be made by pointing out that propositional attitudes are not like physical magnitudes, or that the former are not like the latter in finding their representation in the real numbers. The question here is whether there is anything about measurement theory that would preclude an account of what Rattan describes as the normative and perspective aspects of propositional attitudes, aspects that he claims require construing propositional attitudes as 'real', 'genuine' cognitive relations to propositions.

Rattan repeatedly disparages measurement-theoretic accounts as 'instrumentalist', 'deflationary', and not 'robustly realist' about propositional attitudes, but there is nothing about such accounts that would warrant these descriptions, unless he means simply that such accounts don't endorse his favored cognitive relationalist view. Measurement-theoretic accounts are, I suppose, in some sense metaphysically instrumentalist or deflationary about the role that they attribute to the entities that serve as formal characterizations of the complement clause representatives of propositional attitudes, since on these accounts these entities are not constituents of the attitudes themselves. But this is not enough to make measurement-theoretic accounts of propositional attitude predicates deflationary, instrumentalist, or not robustly realist about the attitudes themselves, any more than measurement-theoretic accounts of numerical measure predicates are deflationary, instrumentalist, or not robustly realist about quantities of physical magnitudes. The crucial philosophical point is that measurement-theoretic accounts of attitude predicates challenge the reading-off assumption that relationalists typically fall back upon when defending their view, placing on them the burden of making a case for their view that doesn't turn on the relational nature of the predicates by which we attribute and talk about propositional attitudes. To his credit, Rattan attempts to shoulder this burden by means of his arguments from the normative and perspectival aspects of propositional attitudes. Let me consider these two arguments in turn. I shall focus primarily on his argument from normativity, since his argument from perspectivity shares its crucial premises with that argument.

### 3. Rattan's Argument from the Normativity of the Attitudes

Rattan's argument from the normativity of the attitudes is basically an argument to the effect that the normativity in question requires the existence of a certain kind of second-order propositional attitude, and their existence in turn requires that the embedded first-order propositional attitude be construed as a cognitively real relation to a proposition. Rattan concedes that what he calls 'Measure Theory' may be able to handle purely first-order propositional attitudes, maybe even some second-order ones, but he argues that it can't handle certain second-order propositional attitudes without incorporating a cognitively real relation to a proposition: The sticking point for 'Measure Theory', he says, is reference to propositions within propositions, specifically to a 'particular kind of reference to propositions within propositions' (p. 441). The problem, as Rattan sees it, is that certain second-order propositional attitudes involve a particular kind of metarepresentation, and that, he says, requires a 'robustly real' cognitive relational construal of the represented first-order propositional attitude, viz., one that is committed to the distinct existence of both the cognitive relation specified by the propositional attitude verb and

the proposition, purportedly specified by the complement clause, that is its object. But why is this, and why suppose, as Rattan does, that 'Measure Theory' is unable to provide a plausible account of such second-order propositional attitudes? Let me address these two questions in turn.

Rattan's argument from normativity, he says, 'hinges on a conception of mind as a *self-consciously normative domain*' (p. 441), by which he means that we are able to self-consciously evaluate our own mental states in the sense of being aware that we have these states, that we stand in various epistemic relations to them, and so on. And this normative self-evaluation, Rattan thinks, involves 'a kind of *metarepresentation*, of mind to itself, in reporting one's own attitudes to oneself in the way that they are reported in normative self-evaluation' (p. 442). The specific kind of metarepresentation involved Rattan calls 'preservative metarepresentation', inasmuch as it, quoting Tyler Burge, 'preserves the mode and content of the evaluated psychological elements' (ibid.). Such preservative metarepresentation, Rattan claims, 'requires grasp or understanding of the proposition being represented or made reference to in the attitude attribution' (ibid.), by which he means that the self-evaluator must not only grasp which proposition in the terms that the self-evaluator herself would conceptualize and express this proposition.

Normative self-evaluation, as Rattan calls it, is clearly an aspect of our mental lives: we do have occasion to self-evaluate our propositional attitudes as to whether we have certain propositional attitudes, whether the ones we have are rational, reasonable, evidentially supported, and so on, and such self-evaluation clearly requires understanding the propositional attitude that is the object of evaluation in the terms that the self-evaluator, herself, would conceptualize and express that propositional attitude. Thus, for example, if I were to consider whether I believe that pigs fly (as opposed to believing, e.g., that members of the species *sus scrofa domesticus* fly), I would have to understand both what it would be for pigs to fly and what it would be to believe such a thing. But none of this provides any support for cognitive relationalism, unless when Rattan speaks of metarepresentation as requiring 'a grasp or understanding of the proposition being represented or made reference to' (ibid.), he assumes that in such grasping or understanding there must necessarily be a distinct entity grasped or understood, viz., the proposition that pigs fly. But what is the argument for this assumption, which of course is precisely what is at issue in the debate over relationalism about the attitudes?

Consider Rattan's explicit schema for his argument from normativity (pp. 442–443). For present purposes, I am prepared to concede the normativity of the mental (P1). I am also prepared to concede that self-conscious normativity requires something like (P2), understood, as Rattan puts it, that one's representation of one's mental states have to be true in both mode and content (e.g., I *believe*, and don't suspect, know, hope, or some such that pigs fly, and what I believe is *that pigs fly*, under that very description, and not

The normativity with which Rattan is here concerned is altogether different from that which Davidson attributes to propositional attitude attribution, namely, that our interpretation of a person's thoughts and words jointly satisfy a normative principle of charity or rationality. Contrary to what Rattan claims (p. 441, fn14), Davidsonian normativity can be straightforwardly accommodated within a measurement-theoretic account of propositional attitudes predicates, if one is so inclined (which I am not), even a normativity that respects principles of normative self-evaluation: one can, as Davidson recognized, build normative principles into the empirical axioms that a measurement-theoretic natural language representation scheme for propositional attitudes must satisfy.

under some other description, e.g., that members of *sus scrofa domesticus* fly). This bring us to (P3), repeated below:

(P3) Preservative metarepresentation is representation of a proposition that is partially constituted by *understanding the proposition* that is being represented. (p. 443)

(P3) is unobjectionable if it means simply that so-called 'preservative metarepresentation' requires that we understand the propositional attitude that is the target of self-evaluation in the particular way in which we, the possessors of that attitude, conceptualize and express its content. Thus, in evaluating my belief that I would self-describe as 'believing that pigs fly', I must understand the content of my belief, namely the proposition that pigs fly, as I would express it, in those my very words; less pretentiously, without resorting to talk of propositions, I must understand my belief as I would express it, in those my very words. So far so good, but how does Rattan get from here to (P4), where he asserts that 'understanding the proposition' must in these normative self-evaluative contexts be construed as 'a cognitively real relation to a proposition' (ibid.). So far as I can see, there is no argument whatever for this claim in (P4), unless Rattan's reasoning here goes something like this: (i) there are only two possible construals of propositional attitudes, either the measurement-theoretic construal, or the cognitive realist construal; but (ii) in the case of normative self-evaluation, which involves preservative metarepresentation, the measurement-theoretic construal is a non-starter; hence (iii) at least in these cases, (P4): 'Understanding a proposition' is a cognitively real relation to a proposition' (ibid.).

Even accepting for the purposes of argument premise (i), what is Rattan's argument for (ii): why are measurement-theoretic accounts supposedly a non-starter in cases of normative self-evaluation? This brings me to my second question, namely, whether as Rattan claims, 'Measure Theory' is unable to provide an account of such cases without buying into the idea that second-order propositional attitudes in these cases are 'partially constituted' by cognitive relations to propositions. To answer this question, it is crucial to keep clearly in mind the distinction between propositional attitudes predicates, on the one hand, and propositional attitudes, on the other. When we attend to this distinction, we see that there are actually two questions here: (1) whether measurement-theoretic accounts can provide an account of second-order propositional attitude predicates, including those involved in what Rattan calls 'normative self-evaluation', and (2) whether non-relational accounts of the sort that a measurement theorist might embrace can accommodate second-order propositional attitudes themselves, again including those involved in normative self-evaluation. The answer to both questions, so far as I can see, is 'yes'.

As regards the first question, suppose we report Smith as 'doubting (considering, etc.) that she, Smith, believes that pigs fly'. On the measurement-theoretic construal of this report, Smith is reported to be in a certain mental state of the doubting type, namely, one

Rattan conflates just this distinction in these second-order cases: he thinks of the attributor's grasp or understanding of the proposition that is the content of the attributed propositional attitude as part of the *specification* of that attitude: 'the logical specification of a mental state in an attitude report is itself a matter of being in a mental state' (p. 445), 'logical specifications of mental states themselves involve mental states' (ibid.).

whose measurement-theoretic representative is the complement clause 'that she believes that pigs fly', where in the context 'she' refers to Smith. There is nothing at all outré about such a measurement-theoretic representative, which contains a propositional attitude predicate and not, as Rattan would have it, a propositional attitude itself. What we have here is just a mundane case of recursion within the complement clause, with no apparent metaphysical import. Of course, to understand and be competent in using this representative to pick out the particular state of doubt that Smith is in, one must already understand and be competent in the use of another propositional attitude predicate, namely believes that pigs fly, and understanding this latter predicate clearly requires understanding both the complement clause that pigs fly as well as what it is to have a belief whose representative is that complement clause. Put another way, in order to conceptualize and reason about our mental states in terms of propositional attitude predicates, we have to know our way around the representational scheme that the measurement-theoretic representatives in these predicates employ in specifying these states. Knowing our way around this representational scheme will obviously require understanding and being competent in using the language in question to talk about the external world, specifically, to talk about states of the world in which pigs fly. But crucially it will also require mastery of the linguistic practice, famously described in Sellars' myth of Jones (Sellars 1956:307-20), of using talk about our external world to conceptualize and talk about our inner mental lives, specifically our propositional attitudes. Just what one takes this latter mastery to come to will depend on just how one proposes to construe propositional attitudes themselves, though any proposed construal is going to be severely constrained by empirical psychological and sociological facts about how we as individuals come to acquire such mastery. If, e.g., one is a dispositionalist about the attitudes, then mastery of this technique will involve grasping the relevance of dispositions to attitude attributions. What it is to have a belief whose measurement-theoretic representative is the complement clause that pigs fly will be cashed out in terms of certain behavioral, cognitive, and affective dispositions, e.g., being disposed to assent to the assertion 'pigs fly', being surprised to discover that denizens of the local pig farm have never been seen flying, and so on. What it is to have a doubt whose representative is the complement clause that she, Smith, believes that pigs fly will be to have a different set of behavioral, cognitive, and affective dispositions, e.g., confidently asserting that she, Smith, won't assent to the assertion 'pigs fly', being confident that she, Smith, would be surprised to see pigs flying, and so on.

So far there seems to be nothing special about second-order propositional attitude predicates that should trouble the proponent of a measurement-theoretic account of these predicates, and nothing special about second-order propositional attitudes themselves that should trouble the proponent of a non-relationalist, perhaps a dispositionalist, account of the attitudes. But maybe there is something special about second-order propositional attitudes and the predicates by which we attribute them in the context of normative self-evaluation, something that argues for cognitive relationalism. Rattan clearly thinks there is, and it has to do with what he calls 'preservative metarepresentation'. Measurement-theoretic accounts, he believes, cannot satisfy the preservative requirement on the contents of the propositional attitudes under evaluation, because, he thinks, such accounts take the measurement-theoretic representatives of these attitudes to be *propositions*, and propositions notoriously do not preserve the very way in which the self-evaluator conceptualizes and would express content of this propositional attitude. But this is a simple misunder-standing of measurement-theoretic accounts of propositional attitude predicates.

Measurement-theoretic accounts need not take propositions either as the measurementtheoretic representatives of propositional attitudes or as the proper formal characterization of the complement clauses that are those representatives. Indeed, as I noted above (my p. 454, fn5), propositions are untenable on both counts. Rattan overlooks the fact that my own account explicitly rejects propositions as unsuitable in both respects. 11 My reasons are basically those that have led many relationalists to reject propositions as a plausible candidate for the abstract entities to which possessors of propositional attitudes are related, reasons that focus precisely on the fact that propositions do not preserve features of the complement clause that are often essential to the ways we conceptualize and individuate propositional attitudes (see my 2007:161-4). My account instead takes the complement clauses themselves, specifically as uttered/articulated by the attributor and interpreted in the context of attribution (see p. 454, fn3 above), as the measurement-theoretic representatives of attributed propositional attitudes, linguistic objects that, I argue, can be characterized for formal measurement-theoretic purposes as what I call 'interpreted utterance forms (IUFs)' (again, see my 2007:164-73). Once we abandon propositions in favor of something like IUFs, there is, so far as I can see, no reason to suppose that a measurement-theoretic account can't handle the second-order propositional attitude attributions associated with normative self-evaluation, and hence no reason on those grounds to favor a cognitive relationalist construal of the propositional attitude under evaluation. But even if it turned out that 'Measure Theory' couldn't handle these self-evaluative second-order propositional attitude attributions, how would this fact provide any argument for Rattan's claim that understanding the proposition that expresses the content of the propositional attitude under evaluation is a matter of standing in a cognitive relation, viz., understanding or grasping, to an entity that is that proposition? I don't see that the failure of 'Measure Theory' would provide any support whatever.

Rattan's relationalist account of the second-order propositional attitudes involved in normative self-evaluation would appear to have its own difficulties: Committed as he is to propositions as the 'objects' of propositional attitudes, and realizing that propositions are not suitably fine-grained to capture our practice of conceptualizing and individuating propositional attitudes in terms of the complement clauses of attitude predicates, Rattan proposes to attribute the fine-grainedness of this practice to the particular manner in which propositions are grasped or understood by their attributors. An obvious difficulty with Rattan's proposal, one that generalizes far beyond the domain of normative self-evaluation, is this: the particular way in which a self-evaluator conceptualizes and would express the content of the propositional attitude under evaluation depends crucially on the particular content in question. If one locates this particularity of conceptualization and expression in the cognitive relation, rather than in the 'object' that expresses the specific content of that specific attitude, then it is not at all clear that the terms 'understanding' or 'grasping' will pick out a single kind of cognitive relation. There may have to be as many different cognitive relations of understanding or grasping as there are ways of conceptualizing and expressing the contents of particular propositional attitudes, which

Late in his paper Rattan does acknowledge that a 'Measure Theory' might hold that the *that*-clauses that figure in attitude reports 'need not be understood as proper names of the propositions that are the representatives of mental states' (p. 450). But as I said earlier, complement clauses (e.g., *that*-clauses) are *not* the names of anything, much less propositions, and the representatives of propositional attitudes are *not* propositions. Propositions are not even the appropriate formal characterizations of the complement clauses that are the representatives of propositional attitudes.

is why relationalists sensitive to the problem of preservative representation have invariably opted for entities more fine-grained in their linguistic properties than propositions.

# 4. Rattan's Argument from the Perspectival Character of Psychological Explanations

Rattan's second argument for cognitive relationalism rests on the claim that, as he puts it, 'in attributing a propositional attitude, one relates a thinker not to a proposition specified in just any way, as though the proposition were any old object, but in a way that draws on the understanding of the attributor of the very proposition to which the thinker is being related' (p. 446, his emphasis). Or again, 'the real point, in a slogan, is that understanding others is relating them to something that oneself understands' (ibid., his emphasis). There is nothing in all this that a measurement theorist should object to, provided that we don't surreptitiously smuggle a relational construal of the attitudes into this talk of propositions as 'objects' of understanding. A less freighted way of putting Rattan's point would be to say that in attributing a propositional attitude to someone, the attributor specifies the attributed attitude by a complement clause that the attributor, herself, understands. Indeed, in the case of psychological explanation, the attributor generally also specifies the attributed attitude by a complement clause that conceptualizes and expresses the attitude in the way its possessor would. But how do these uncontroversial points provide any support whatever for cognitive relationalism? Premise (P4) of Rattan's explicit argument schema (p. 447), viz., 'understanding a proposition is a cognitively real relation to a proposition', is intended to turn the trick, but what's the argument for this bold assertion? Rattan's reasoning, as best I can make out, is that attributing propositional attitudes to others is, as he puts it, 'an expression of one's higherorder attitude'. By this I take it he means that when I attribute a propositional attitude to someone, I am myself expressing a propositional attitude to that individual's attitude (e.g., when I say, 'Smith believes that p', I am expressing my knowledge, belief, or some such that Smith believes that p), and this, Rattan reasons, is enough to make the case for cognitive relationalism, and for just the reasons that he gave in his argument from normativity. As Rattan puts it, 'Because we insert ourselves into intentional explanation, and understand others by relating them to something that we understand, a thinker must stand in the special relation of understanding the proposition that she is referring to in an attitude report to another' (p. 448). But, here again, the argument fails, and for precisely the same reason as his argument from normativity: measurement-theoretic accounts, at least tenable ones, do not take propositions to be either the representatives of propositional attitudes or a plausible formal characterization of those representatives, which are the complement clauses of attitude predicates. If there seems to be an argument here for cognitive relationalism, it is only because again Rattan assumes that (i) there are only two possible construals of propositional attitudes, either the measurement-theoretic construal, or the cognitive realist construal, and (ii) in the case of preservative metarepresentation, the measurement-theoretic construal is a non-starter. Whatever the plausibility of (i), Rattan has offered no argument for (ii), based as it is on a crucial misunderstanding of measurement-theoretic accounts such as the one I offer.

#### 5. Concluding Remarks

Rattan's arguments from normativity and perspecitivity are ultimately unsuccessful, depending as they do on crucial misunderstandings of measurement-theoretic account of propositional attitude predicates that I have proposed. There may be difficulties with that

account which will not surface until the account is worked out in greater detail. But possible difficulties aside, one takeaway that one might draw from the failure of Rattan's arguments is how difficult it is going to be develop an argument against measurement-theoretic accounts and in favor of cognitive relationalist accounts that doesn't depend the usual relationalist reading-off assumption, viz., that one can read off the metaphysical character of the attitudes from the predicates by which we attribute them. The reason is that measurement-theoretic accounts have all the same resources for characterizing and individuating propositional attitudes as cognitive relationalist accounts (they lack only the metaphysical commitment to propositions as constituents of the attitudes themselves), leaving relationalists with the difficult task of making a case for their view that doesn't depend on some version of the reading-off assumption. Their task is made doubly difficult by the lack of a plausible account of what it would be for the possessors of propositional attitudes to stand in a cognitive relation to propositions or some other abstract entity.<sup>12</sup>

#### References

- Matthews, R. (2007) *The Measure of Mind: Propositional Attitudes and Their Attribution* (Oxford: Oxford University Press).
- —— (2011) Measurement-Theoretic Accounts of Propositional Attitudes, *Philosophy Compass* 8/11: 828–41.
- Narens, L. (1985) Abstract Measurement Theory (Cambridge, MA: MIT Press).
- Rattan, G. (2017) Are Propositions Mere Measures of Mind? *Philosophy and Phenomenological Research*, 94 (2): 433–452.
- Sellars, W. (1956) Empiricism and the Philosophy of Mind, in H. Feigl and M. Scriven (eds.), *Minnesota Studies in the Philosophy of Science 1* (Minneapolis: University of Minnesota Press).

My reply has benefited from generous comments that Frances Egan and Gurpreet Rattan offered on an earlier draft.