Friederike Moltmann describes her target paper, entitled “Truthmaker semantics of natural language” [TSNL], as developing an object-based truthmaker semantics for what she calls modal and attitudinal objects, where the former are entities like obligations, permissions, and needs, and the latter are entities like claims, judgments, beliefs, requests, promises, desires, intentions, and hopes. It’s not clear to me that she is in fact developing a truthmaker semantics for these objects so much as she is advocating the use of truthmaker semantics over both possible-world and structured-proposition semantics for the ‘that S’ complements (that-clauses, for short) that figure in both the nominal phrases that she takes to designate attitudinal objects (e.g., ‘the claim that S’) and the transitive verb attitude predicates that she takes to advert to such objects (e.g., ‘claims that S’). What she offers by way of a semantic analysis of these phrases and predicates is rather a Davidsonian event semantics, one in which she is particularly concerned, correctly in my view, to treat that-clauses not, as relationalists would have it, as singular terms designating propositions, but rather as predicates of attitudinal objects (e.g., claims, judgments, beliefs).

In my brief comments, I would like to focus on two issues, first on Moltmann’s proposed Davidsonian event semantics analysis of transitive verb attitude predicates, and second on the import of what she calls the ‘underspecification of content’ for the proper semantic interpretation of that-clauses. With respect to the first of these issues, I want to focus on her proposed event semantics analysis of transitive verb attitude predicates (e.g., ‘believes that S’). Specifically, I want to ask about the syntactic motivation for this analysis. With respect to the second issue, I want to question whether the that-clauses that figure in these transitive verb predicates do what she claims they do, namely provide the truth or satisfaction conditions for attitudinal objects. I don’t think they do, for reasons having to do with the function of that-clauses in these predicates.
1 The semantics of attitude predicates

Moltmann focuses on sentences such as (1a), offering the Davidsonian event semantics analysis given by (1b), her (25a) and (25b) respectively:

(1) a. John claimed that $S$.
   b. $\exists e (\text{claim}(e, \text{john}) \& \text{[that } S\text{]}(\text{att-obj}(e)))$

where att-obj is said to be a function that maps $e$ into its ‘associated’ attitudinal object, one that has the that-clause ‘that $S$’ predicated of it, where the attitudinal object in question is presumably the one also designated by (2):

(2) John’s claim that $S$

This proposed analysis of (1a) raises a question that, so far as I can see, Moltmann doesn’t address: What is the rationale for introducing ‘[that $S$](att-obj(e))’ into (1b), a rationale that would not only justify introducing ‘att-obj(e)’ into (1b), but also explain why ‘that $S$’ is predicated of att-obj(e), given that in transitive verb attitude predicates such as ‘claims that $S$’ the that-clause seems to be (but arguably isn’t) a clausal complement of the verb ‘claim’. Moltmann (TSNL, p.180–1) does say this regarding (1b), her (25b):

I will assume, certainly simplifying, that there is a unique attitudinal object att-obj(e) associated with a Davidsonian event argument e of an attitude verb. The clausal complement of the attitude verb will then be predicated of the attitudinal object associated with the event argument.

But the question remains: What’s the rationale for (1b), specifically for assuming there is a unique attitudinal object att-obj(e) ‘associated’ with e, whatever exactly ‘associated’ means here? After all, on its face (1a) contains no constituent that might be taken to designate any such object, so surely we need a rationale for a semantic analysis that introduces such an object.¹ One place to look for a rationale might be a syntactic analysis of (1a).

Two proposed syntactic analyses of propositional attitude reports such as (1a), one by Arsenijević (2009) and the other by me (Matthews, forthcoming), relate these sentences to their light verb alternations such as (3), where a nominal phrase of the sort that Moltmann takes to designate an attitudinal object appears explicitly:

(3) John made the claim that $S$.

¹ A similar question might also be raised about the rationale for adopting a Davidsonian event semantics for attitude predicates.
On our proposed analyses, both (1a) and (3) have a single underlying syntactic form given by (4), one that can receive either (1a) or (3) as its surface spell-out:

(4) John [VPMAKE [NPCLAIM [CP that S]]]²

The details aren’t important here, but on the syntactic analysis I favor, following Harves and Kayne (2010), the transitive surface verb ‘claim’ is formed by a morphosyntactic process that raises CLAIM and incorporates it into the light verb MAKE, resulting in the verb MAKE-CLAIM, whose surface spell-out is the verb ‘claim’,³ which inherits its tense, aspect, and accusative-case-licensing properties from the light verb MAKE. The raising of CLAIM leaves behind a trace t₁ which is the head of the trace nominal phrase [NP t₁ [CP that S]], where the that-clause modifies the trace, and thus indirectly the moved CLAIM.

If my proposed syntactic analysis (or Arsenijević’s) is correct, it enables us to see why Moltmann might introduce an attitudinal object att-obj(e), of which ‘that S’ is predicated, into (1b): it enables her to capture the effect of the trace-relation in my syntactic analysis, namely, having ‘that S’ modify the raised noun designating John’s claim, rather than the verb ‘claim’. Presumably part of what drives the introduction of att-obj(e) is Moltmann’s desire to treat the surface verb ‘claim’ as a primitive designating an action (of which John’s claim that S is said to be the product), which on my account (and similarly for Arsenijević’s account) it is not, all of which raises the question of just how (1b) is to be construed. What, specifically, is the relation of (1b) to (1a): Is it giving us the syntactic LF of (1a)? If not, what are the adequacy conditions on a Davidsonian event semantic analysis such as (1b)? This strikes me as an important question, given that (1b) is offered as a semantic analysis of (1a), and yet (1a) contains no term that refers to a unique attitudinal object ‘associated’ with the event argument e of the attitude verb ‘claim’.

An obvious advantage of tying one’s semantic analysis of a sentence quite closely to the syntax of that sentence is that it will enable one to explain inferences that are sensitive to particularities of syntax. Thus, to take an example dear to Moltmann’s heart, relationalists are forever seeing the inference from (5a) to (5b) as evidence that the clausal complement clause in (5a) functions as a singular term:

(5) a. John believes that S
b. John believes something.

² I use majusculed terms to designate underlying lexical items (e.g., HAVE) that may or may not have corresponding surface spell-outs. (The subscripted ‘NP’, ‘VP’, and ‘CP’ have their usual linguistics meanings of noun phrase, verb phrase, and complement phrase, respectively.)

³ For a discussion of the surface spell-outs of underlying light verb complexes and nominal phrases, see my Matthews, forthcoming.
Only a semantic analysis that is sensitive to the syntax of (5a), one for example that takes the accusative object of the verb ‘believes’ to be something other than a bare that-clause, perhaps as I suggest a trace nominal phrase,\(^4\) would undercut the relationalist assumption that the that-clauses in transitive verb attitude predicates are singular terms.

2 Underspecification of ‘content’

Moltmann says, ‘[complement] clauses act as predicates of modal or attitudinal objects, giving their truthmaking or satisfaction conditions’ (TSNL, p. 172). Later she says, ‘the clausal complement must give the full truth-conditions of the reported belief’ (TSNL, fn. 21). In this she follows relationalists of all stripes who have wanted to treat the complement clauses of transitive attitude verbs as specifying what someone believes (desires, regrets, etc), when someone is correctly reported as ‘believing (desiring, regretting, etc.) that S’, but with two important qualifications: (i) she takes that-clauses to be predicates, not singular terms, and (ii) she acknowledges that that-clauses sometimes underspecify (i.e., only partially specify) the ‘content’ of the modal or attitudinal objects of which they are predicated. The sort of underspecification cases Moltmann has in mind are such as (6), from Graff Fara (2013), where what Fiona wants is not simply to catch a fish, but to catch a fish to eat for dinner:

(6) Fiona wants to catch a fish.

But arguably this second qualification doesn’t go far enough. For as Bach (1997) shows, that-clauses do not sometimes merely underspecify what someone believes (desires, regrets, etc.), they sometimes fail altogether to specify it. Bach is concerned with construals of that-clauses as singular terms designating propositions, but his arguments can be generalized to construals that take that-clauses to be predicates that specify what someone believes, specifically, the truth conditions of the belief. Consider Bach’s parade example (7):

(7) The Joker believes that Bruce Wayne is a wimp.

This belief report is surely true, occasional table-pounding to the contrary notwithstanding, but the that-clause does not fully specify what the Joker believes, at least not under a Millian construal of proper names, because Bruce Wayne is Batman, and the Joker clearly doesn’t believe that Batman is a wimp! Other examples include Kripke’s (1979) Pierre and Paderewski examples, where true

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\(^4\) Kratzer (2016) proposes a similar view, one according to which the accusative object of the attitude verb is a nominal phrase with a silent head thing: [\([\text{NP} \ [\text{thing}] \ [\text{CP} \ \text{that} \ S]\)]\).
belief reports to the effect that Pierre believes that London is ugly or Peter believes that Paderewski the politician has no musical talent do not fully specify their respective beliefs about London and Paderewski.

The point of Bach’s example is that if we are going to take the transitive verb attitude predicate’s that-clause to specify what the Joker believes, specifically, to specify the truth conditions on his belief, why not take the that-clause ‘that Batman is a wimp’ to also to specify what the Joker believes, which clearly it does not. After all, Bruce Wayne is Batman, and the truth conditions on the sentences embedded in the two that-clauses are surely the same. This is a question that arises regardless of what semantics one adopts for that-clauses, so long as one takes proper names to be singular terms. And if one doesn’t take proper names to be singular terms, other examples can be found.

There are any number of ways to get around the sort of examples Bach presents, many of which have been exhaustively explored. But each of these ways eventually leads back to questions about the function of that-clauses in attitude predicates, and more fundamentally, as I explain below, to one’s underlying assumptions about the nature of the attitudes themselves. For his part, Bach concludes from these and similar examples that that-clauses are mere ‘descriptors’ of what a person believes: they describe beliefs without fully specifying them (or their truth conditions). In this respect the that-clause complements of transitive attitude verbs appear to behave somewhat like a restrictive relative clause, one that serves to help define or identify the attitude being attributed by describing it, specifically by type-individuating it, as an attitude of the that-S type. That transitive verb that-clause complements are a kind of relative clause is not all that far-fetched on the sort of syntactic analysis of (1a) sketched above. Arsenijević (2009) and Kayne (2008) argue for just this relative clause view, though de Cuba (2017) offers empirical evidence from a variety of languages to rebut the view.

To say that that-clauses describe rather than specify (or partially specify) the attitudes to which they are predicated is not yet to say just what sort of description they provide, but if, as seems the case, that-clauses serve to help define or identify the attitude, then presumably they predicate certain noncontingent, essential properties of the attitude. If like Moltmann and many other philosophers, notably language-of-thought representationalists, one thinks of the attitudes as objects that have certain linguistic properties essentially, most notably semantic evaluability, then it will be quite natural to assume, as Moltmann does, that that-clauses give the associated attitude’s truth or satisfaction conditions. But if we were to think of the attitudes in somewhat different terms, not as essentially linguistic objects, but as properties or states of their possessors that for various practical reasons we conceptualize in linguistic terms, perhaps
somewhat along the lines that dispositionalists and functionalists do, then we might think of the noncontingent properties that *that*-clauses predicate of attitudes as having to do with behavior, thought, and affect with which the attitudes are noncontingently linked, particular attitudes being the attitude they are in virtue of having such links. On this alternative conception of the function of *that*-clauses in transitive verb attitude predicates such as (1a) and attitude nominal phrases such as (2), we might think of belief in a more holistic fashion, perhaps along the lines of a dispositional profile for behavior, thought, and affect that individuals like the Joker possess, where particular belief reports such as (7) provide only a descriptive snapshot of one aspect of this overall profile. On this alternative conception, *that*-clauses do not, then, specify the content of attitudes (i.e., do not specify their truth and satisfaction conditions), because the attitudes do not have contents, except in the sense of being amenable to linguistic characterization by sentences that do. In this respect they might be quite a lot like relative clauses, especially certain restrictive relative clauses, that also do not give the truth or satisfaction conditions of the entities of which they are predicated, but serve to type-individuate it. The availability of this alternative conception, which of course requires much elaboration and justification, underscores the crucial role that Moltmann’s grounding assumptions play here, assumptions that quite understandably don’t get much defense in the brief space of her paper.

This brings us, finally, to the question of the upshot of the foregoing for Moltmann’s envisioned truthmaker semantics for attitudinal objects. Such a semantics might well have an advantage over a possible world semantics in terms of the fine-grainedness of the characterization that it provides for *that*-clauses, but it is unclear whether it provides any particular insight into the function of *that*-clauses in transitive verb attitude predicates or attitude nominal phrases. The action, so to speak, lies elsewhere, specifically in the Davidsonian event semantics that Moltmann offers for sentences such as (1a) and in the grounding assumptions that she makes regarding the metaphysical nature of the attitudes themselves, assumptions that cannot simply be read off the sentences by which we attribute the attitudes.  

References


5 I am grateful to Friederike for pointing out an error in an earlier draft of this commentary in my interpretation of her analysis (1b).


