Bo believes that snow is white; Hilary hopes that the plane will land safely; Frankie fears that winter has come too soon. Such sentences attribute thoughts to thinkers. The content of the thoughts attributed are specified by the relevant ‘that’-clauses: that snow is white; that the plane will land safely; that winter has come too soon. The central question with which Juhani Yli-Vakkuri and John Hawthorne are concerned in their recent book *Narrow Content* is whether the contents of a subject’s thoughts are fully determined by properties ‘internal’ to her, or whether they depend in part on ‘what is going on in the outside world’ (p. 3). According to the former, internalist option, content is narrow; according to the latter, externalist option, content is broad. *Narrow Content* provides a sustained argument against narrow content, and hence in favour of externalism. Yli-Vakkuri and Hawthorne do not argue that there are no narrow content assignments to thoughts (there are, they say, an infinite number of them); they argue that there are no *theoretically significant* narrow content assignments. If true, this would undermine the rationale for advocating narrow content of any kind.

The Introduction to the book outlines the framework within which the central question is to be addressed. Yli-Vakkuri and Hawthorne take thought-tokens (thoughts) as the primary bearers of content, and, in line with what they take to be ‘fairly standard terminology’ (p. 2), they take the contents of thoughts to be truth-evaluable propositions. The question of whether the extension of a thought or thought-constituent is narrow is taken to be a different question from the question of whether the content of a thought is narrow. With regard to extensions, the authors take it as ‘already completely obvious that which object a thought is about is not fully determined by what goes on inside the agent of the thought’ (p. 3, original emphasis). Demonstratives and proper names provide familiar examples. Thus when Sally utters the sentence ‘That marble belongs to Marv’ she may express a thought about Marble 1 and Marv, or, in different circumstances, a thought about Marble 2 and Twin Marv, consistent with no difference in Sally’s inner goings-on. Putnam’s example of Twin Earth and his hypothesis of the division of linguistic labour demonstrate that the extension of thought-constituents corresponding to general terms such as ‘water’ and ‘sirloin’ (the authors’ example) also depend,
at least in part, on goings-on outside the agent. (Putnam, 1975). Further, since Sally’s thought that there’s a dog in front of her will be true when the object in front of her is a dog, but false when it’s a cleverly-disguised cat ‘the extension (truth value) of an entire thought can vary across possible situations even while the insides of the thinker remain the same’ (p. 5).

The claim that content can vary across possible situations while inner goings-on remain the same is the pivotal claim. To illustrate the claim, Yli-Vakkuri and Hawthorne appeal to what they call ‘Burge’s test’ for difference of content: ‘if the content of one thought can be specified by a particular ‘that’-clause but the content of another thought cannot be specified by the same ‘that’-clause, then the contents are distinct’ (p. 9). This test, they maintain, is recognised by Burge to show first, that thought constituents corresponding to names and demonstratives will not be fixed by inner goings-on, and second, that thought constituents corresponding to general terms such as ‘arthritis’ and ‘sofa’ will not be fixed by inner goings-on. They say ‘[i]t is worth some emphasis that Burge’s test for content difference does not detect any difference between indexical and non-indexical expressions (as Burge himself recognized)” (p. 11) and go on to conclude ‘[a]s far as mental content is concerned, then, there is no reason at all to posit a difference between thoughts expressed using indexical words and others’ (p. 12). The fact that Yli-Vakkuri and Hawthorne treat the contents of indexical and non-indexical thoughts in the same way is of central importance to how they frame their arguments against narrow content. It grounds the foundational (and apparently innocuous) claim that the contents of thoughts are truth-evaluable propositions; and it licenses the central role that names and demonstratives play in their arguments throughout the book.

The application of Burge’s test to general terms is familiar. Given the hypothesised differences surrounding the use of the term ‘arthritis’ in the relevant communities, Alf’s belief can be ascribed using the clause ‘that he has arthritis in his thigh’, whereas Twin Alf’s belief cannot. (Burge, 1979). The contents of their thoughts are therefore, according to Burge’s test, distinct. Here is Yli-Vakkuri and Hawthorne’s application of Burge’s test to indexical terms. Bert and Twin Bert each sincerely asserts ‘I am human’. Yli-Vakkuri and Hawthorne write: ‘The thoughts they express by that sentence could be correctly ascribed using the clause “that he is human”. However, Bert’s thought could also be correctly ascribed (if somewhat redundantly) using “that Bert is human”, while Twin Bert’s thought could not. By Burge’s test, then, we must conclude that the thoughts differ in content.’ (p. 11). But the application of Burge’s test to indexical thoughts does not fit exegetically with what Burge says. Throughout his writing, Burge clearly distinguishes the indexical from the non-indexical case at the level of content by distinguishing content that is true or false simpliciter from content that is ‘true of
or false of objects to which the subject bears a non-conceptual, quasi-indexical relation’ (Burge, 1980 p. 54, original emphasis; see also, for example, Burge 1977, 1982). This, Burge maintains, is what underpins the de re / de dicto distinction. Content that is true of or false of objects, according to Burge, is akin to a predicational fragment; it is not fully propositional and hence non-truth-evaluable. It is this kind of content that Burge takes sentences containing indexicals (including demonstratives and singular uses of proper names) to express. This means that according to Burge, Bert’s and Twin Bert’s thoughts do not differ in content at all. Similarly, according to Burge the content of the thought Sally expresses when she utters ‘That marble belongs to Marv’ will remain the same whether it is thought of Marble 1 and Marv or thought of Marble 2 and Twin Marv. The upshot is that Burge’s test cannot show that indexical thought contents can vary across possible situations in which the internal goings-on of the agent remain the same without assuming a notion of indexical thought content that Burge explicitly rejects.

Setting aside issues of Burge exegesis, Yli-Vakkuri and Hawthorne are, of course, free to provide an account of content (specifically indexical thought content) that differs from Burge’s, and hence free to treat the contents of indexical and non-indexical thoughts as of a kind. What they must not do, however, is assume an extensional understanding of indexical content which begs the question against the narrow content theorist. But treating Bert’s and Twin Bert’s thoughts as differing in content, as Yli-Vakkuri and Hawthorne advocate, looks dangerously close to doing just that. A similar issue arises from treating Bert’s thought that he is human and Bert’s thought that Bert is human as having the same content. Further, even if Burge’s distinction between content that is true or false simpliciter and content that is true of or false of objects is not ultimately accepted, its plausibility renders controversial the (allegedly innocuous) foundational claim that the contents of thoughts are truth-evaluable propositions; it also brings into question the heavy and indiscriminate reliance on proper names and demonstratives in the primary examples throughout the book.

Chapter 1, ‘What is narrow content?’ aims to ‘clarify and make precise’ (p. 17) the key notions of content and narrowness. Taking the ordinary notion of content first, Yli-Vakkuri and Hawthorne maintain that propositional attitude attributions, the superficial form of which is given in (1), have ‘something like (2) as their underlying logical form’ (p. 19):

\[
(1) \ x \ V \ s \ that \ p
\]
\[
(2) \ \exists e (AGENT (e, x) \land CONTENT (e, that \ p) \land V (e))
\]
(2) involves explicit quantification over events (thinkings) and makes explicit mention of a relation (written as ‘CONTENT’) that, say Yli-Vakkuri and Hawthorne, necessarily relates each thought to exactly one content. Yli-Vakkuri and Hawthorne call this relation the ur-content assignment and call the value of the ur-content assignment for a particular thought its ur-content. ‘Thus the ur-content of your belief that there are no green baboons is (the proposition) that there are no green baboons’ (p. 19). Ur-content, then, is content as ordinarily understood.

The overarching approach to content they adopt is, as they say, ‘very much in line with standard formal semantics for natural languages’ (p. 24) in the tradition of, for example, Kaplan (1989) and Lewis (1980). On this approach, ‘contents, whatever else they may do, determine truth values, at least relative to indices’, which is to say that ‘each content has a unique truth value at each index’ (p. 24). Taking ‘i’, ‘i’, ‘i”’, ..., as variables for indices and using ‘I’ to designate the set of all indices, each content C determines a function f from indices to truth values such that, for each i ∈ I, f(i) = T if C is true at i and F otherwise. This function is said to be the intension of C, although the question of which alethic parameters (for example, worlds, times, agents) feature in the indices is left open as a substantive question about the metaphysics of content (pp. 24-5).

Narrowness, taken as a property of content assignments, is defined as follows: ‘a content assignment [.] is narrow just in case the value of [.] for a thought is determined (in the sense of strong local supervenience) by the maximal way in which the thought relates to the way the agent of the thought is in intrinsic, qualitative respects’ and ‘the maximal way in which a thought so relates to its agent’ is called its ‘Qualitative Agential Profile (QAP)’ (p. 30). More precisely, ‘a content assignment [.] is narrow just in case it satisfies the following condition:

\[ \forall \alpha \forall Q \forall C (\text{QAP}(\alpha) = Q \land [\alpha] = C) \rightarrow \forall \beta (\text{QAP}(\beta) = Q \rightarrow [\beta] = C) \]

e.g., necessarily, if a thought with a certain QAP, Q, has a certain [.]-content, C, then, necessarily, any thought whose QAP is Q has C as its [.]-content’ (p. 34).

Yli-Vakkuri and Hawthorne argue, convincingly, that there are ‘infinitely many narrow content assignments that are of no theoretical interest’ (p. 39). The important question, then, is whether there is a narrow content assignment that satisfies some further, non-trivial condition or set of conditions that renders it of theoretical significance. Advocates of narrow content clearly maintain that there is, although different theorists emphasise different conditions as the
theoretically significant ones. Yli-Vakkuri and Hawthorne helpfully categorise such conditions into two broad families: structural conditions and explanatory conditions. Structural conditions include truth-conditionality and truth-functional compositionality. Explanatory conditions include accounting for ur-content (as defined previously), providing a supervenience base for rationality, accounting for privileged access, explaining action and explaining phenomenal intentionality. Each condition imposes a constraint on admissible narrow content assignments. Throughout the course of the book, Yli-Vakkuri and Hawthorne articulate the conditions and aim to demonstrate just how demanding each condition is. They go on to argue that there is no unique narrow content assignment that meets all of, or even a significant number of, the structural and explanatory conditions cited. As a result, the conclusion of the book is that there is no theoretically significant narrow content assignment, and hence no theoretical reason to advocate narrow content.

Chapter 2, ‘Truth-conditionality’, looks in detail at the first of the structural constraints. Truth-conditionality, as Yli-Vakkuri and Hawthorne understand it, requires more than that a content assignment necessarily assigns to each thought a content that has a truth condition. ‘After all’, they say ‘every content assignment, whether narrow or broad, satisfies this condition’ (p. 64). What truth-conditionality understood as a genuine constraint on a theoretically significant content assignment requires is that, necessarily, the content assigned to a thought determines the genuine truth value of the thought at the index of the thought. That is, the assignment must match with our intuitive judgements about the truth value of each relevant thought. This connects with the foundational claim that the contents of thoughts are truth-evaluable propositions, and with the clearly-stated assumption that the ur-content assignment is truth-conditional: ‘the ur-content assignment necessarily assigns to each thought a content that determines, at the index of the thought, the truth value of the thought’ (p. 27).

The problem, according to Yli-Vakkuri and Hawthorne, is that ‘the claim that there is a truth-conditional narrow content assignment, by logic alone, forces its adherents to accept one of two positions. Either they must deny the metaphysical possibility of certain kinds of symmetry that are prima facie metaphysically possible [i.e. close variants of Putnam’s (1975) Twin Earth scenario], or they must embrace ... some form of relativism that no one in the literature on relativist semantics has yet seriously considered’ (p. 64).

The claim, then, is that the narrow content theorist faces a dilemma. Either narrow content assignments deliver the wrong truth conditions to thought contents by denying Putnam and Burge’s conclusion that ‘Doppelgänger-related’ thoughts in Twin Earth scenarios have different truth conditions, or narrow content assignments are subject to an unacceptable
‘parameter proliferation’ (p. 71), being true or false only relative to an ever-increasing number of alethic parameters. The dilemma is an interesting one that structures the chapter, with Yli-Vakkuri and Hawthorne arguing against the claim that a narrow content assignment can meet the truth-conditionality constraint by appeal to a series of ever more convoluted examples involving characters such as Loop Lady, Mirror Man, and Mirror Angel. In each scenario we are offered a reason to think that the relevant Doppelgänger-related thoughts have different truth conditions unless relativized to yet another alethic parameter: world, agent, time, personal time, location… finally forcing a choice between ‘thought relativism’, according to which ‘the thought itself is included in its index’ (p. 80) or ‘extension assignment relativism’, according to which ‘the extension determined by a narrow content varies with assignments of extensions to some but not all of the semantically simple constituents of thoughts … the special constituents’ (p. 81, original emphasis).

Yli-Vakkuri and Hawthorne argue convincingly that the options to which the second horn of the dilemma lead are problematic. The only plausible way to avoid such problematic options, it would seem, is to grasp the first horn of the dilemma, and embrace the claim that Doppelgänger-related thoughts in Twin Earth scenarios have the same truth conditions. Note that grasping the first horn of the dilemma does not involve denying the metaphysical possibility of Twin-Earth-style scenarios; it requires rejecting a particular interpretation of the Twin-Earth-style scenarios that, following Putnam and Burge, it has become standard to accept. But the standard interpretation is not universally accepted. For example, it is challenged by Segal (2000), who advocates a kind of narrow content. According to Segal, Oscar on Earth and Twin Oscar on Twin Earth have the same belief despite the different molecular constitutions of the watery stuff in their respective environments, and Alf and Twin Alf have the same belief—the belief that they have arthritis in the thigh—despite the different linguistic practices of their respective communities. Segal, then, is an example of a narrow content theorist who embraces the first horn of Yli-Vakkuri and Hawthorne’s dilemma at least with respect to thoughts expressed by sentences containing general, non-indexical terms. Unfortunately, since the examples used by Yli-Vakkuri and Hawthorne feature names and demonstratives rather than general terms, and since Segal, like Burge but unlike Yli-Vakkuri and Hawthorne, distinguishes the content of indexical thoughts from the content of non-indexical thoughts, Segal’s position, which is perhaps the most plausible internalist position, appears to be unaffected by Yli-Vakkuri and Hawthorne’s arguments. (See Sawyer 2018).

Chapter 3, ‘Narrow content and ur-content,’ distinguishes between what Yli-Vakkuri and Hawthorne call ‘sectarian internalism’, according to which the ur-content assignment is
narrow, and ‘ecumenical internalism’, according to which the ur-content assignment is broad but ‘there is some other content assignment that is both narrow and occupies some interesting theoretical role’ (p. 97). Effectively, sectarian internalism is the kind of thorough-going internalism advocated by Segal, characterised by the rejection of the standard interpretation of difference in truth conditions across Twin-Earth-style scenarios, and ecumenical internalism is the kind of 2-factor (or more) theory of narrow content that accepts the standard interpretation of difference in truth conditions but acknowledges a further kind of content that is narrow nonetheless. Yli-Vakkuri and Hawthorne offer arguments against each form of internalism in turn, making reference to various of the structural and explanatory conditions along the way, and in the end ‘remain sceptical that ur-content is to be explained, even in part, in terms of some narrow content assignment’ (p. 120).

Chapter 4, ‘Rationality and narrow content’, is concerned with a family of properties and relations relating to a prioricity. Yli-Vakkuri and Hawthorne consider a wide range of such properties including a priori entailment, conditional probability, a priori justification and a prioricity itself, arguing with some plausibility that these are not narrow relations and hence do not supervene on narrow content assignments. The conclusion is that narrow content cannot explain any of the basic properties and relations that are standardly connected with rationality.

Throughout chapters 1-4, narrowness is defined in terms of supervenience on the purely qualitative aspects of the inner lives of agents. This fits with the standard way in which internalists think of narrow content ‘as being fixed by the qualitative structure of our inner lives, disregarding the particular individual objects in the qualitative nexus’ (p. 17). By contrast, chapter 5, ‘Quasi-internalism’, rejects the standard approach to narrow content and develops a notion of ‘quasi-narrowness’, defined as strong local supervenience not on Qualitative Agential Profile (QAP) but simply on Agential Profile (AP) per se. Quasi-internalism thus appeals to both qualitative and non-qualitative intrinsic properties to ground narrow content assignments. However, according to Yli-Vakkuri and Hawthorne, not only is such a view not motivated by standard Twin Earth thought experiments—since although Oscar and Twin Oscar are QAP-duplicates, they are not AP-duplicates—the view faces, the ‘threat of pointlessness’ (p. 155) since, they say, ‘all content assignments are quasi-narrow’ (p. 156) or, at least ‘quasi-narrow content assignments are troublingly plentiful’ (p. 157). There is thus, they say, no significant independent role for quasi-narrow content assignments to play.

Chapter 6, ‘Relational narrowness’, explores an even more radical departure from standard internalism by developing a notion of ‘relational-narrowness’, defined as strong local supervenience on Relational Qualitative Agential Profile (RQAP). The RQAP ($\alpha_1, \ldots, \alpha_n$) of
a sequence of thoughts \(<\alpha_1, \ldots, \alpha_n>\) having the same agent is defined as ‘the conjunction of all qualitative \(n\)-place relations \(R\) such that, for some \((n+1)\)-place relation \(Q\),

(i) \(R = \lambda x_1 \ldots \lambda x_n \exists y Q(x_1, \ldots, x_n, y)\)

(ii) \(Q(\alpha_1, \ldots, \alpha_n, \lambda(\alpha_1))\), and

(iii) \(Q(y_1, \ldots, y_n, x)\) is intrinsic and qualitative’ (p. 167).

And an \(n\)-place relation \(R\) on thoughts is said to be relationally narrow ‘just in case \(R\) supervenes on RQAP in the sense that, for all worlds, \(w, v\), for all thoughts \(\alpha_1, \ldots, \alpha_n\), occurring in \(w\) and all thoughts \(\beta_1, \ldots, \beta_n\), occurring in \(v\), if RQAP \((w, \alpha_1, \ldots, \alpha_n) = \text{RQAP} (w, \beta_1, \ldots, \beta_n)\) then \(R(w, \alpha_1, \ldots, \alpha_n) \text{ iff } R(v, \beta_1, \ldots, \beta_n)\)’ (p. 168). Although Yli-Vakkuri and Hawthorne say at the beginning of the chapter that the idea of supervenience on RQAP ‘may yet turn out to be a passable substitute for narrowness’, and that ‘narrow semantic relations that supervene on RQAP may be capable of doing some of the theoretical work that narrow content assignments were meant to do’ (p. 167, original emphasis), in the end, this ‘most promising view…in the spirit of internalism’ (p. 167) is also found to be fundamentally problematic.

*Narrow Content* provides an in-depth examination of one of the key debates of the last half-century. It is bold in its ambition, broad in its scope and formal in its approach. Indeed, Yli-Vakkuri and Hawthorne claim that, ‘[b]y comparison with most of the literature’, the book makes ‘substantial use of the tools of formal logic’ (p. 17). The authors have nonetheless given, they say, ‘informal glosses of all the main claims … so that it is possible to read the book without dwelling on the formalized claims’ (p. 17). This means that it remains accessible to those less well versed in the formal aspects of analytic philosophy. Although I have raised a concern about the framing of the issues, and suggested that there is a kind of narrow content that survives the arguments, I have no doubt that the book will be widely read and will be of interest to anyone working in the field.

**References**


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