

Is Content Holism Incoherent?¹

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There is a great deal of terminological confusion in discussions of holism. While some well-known authors, such as Davidson and Quine, have used “holism” in various of their writings,² it is not clear that they have held views attributed to them under that label, views that are said to have wildly counterintuitive results.³ In Davidson’s case, it is not clear that he is describing the same doctrine in each of his uses of “holism” or “holistic.” Critics of holism show a similar license. My aim in this paper, therefore, cannot be to provide and to examine a characterization of content holism that matches every use that has been made of the term. I aim rather to give a precise form to a holistic doctrine at one end of a spectrum of views that ranges from localism or atomism about content to holism about content. This view has the wild consequences often attributed to holism. While it is dubious that anyone has ever seriously held the view I characterize,⁴ some view like it seems to be what critics often have in mind when arguing against content holism. It is therefore worthwhile to make it precise, to distinguish it from other, related views, and to examine its internal coherence. Thus, in this paper, I will, first, clarify the doctrine, or a doctrine, of content holism, and, second, argue that content holism (so characterized) is not just false (which may be readily granted) but self-contradictory.

To begin, we must distinguish between *meaning* holism and *content* holism. Let us reserve the term “meaning holism” for doctrines which are about the conditions for the possibility of linguistic expressions having meanings. Meaning holism is therefore a doctrine in the domain of the philosophy of language. “Content holism,” in contrast, we will treat as a doctrine in the philosophy of mind, about the conditions for the possibility of a thought⁵ having a content. By “a content” we mean, intuitively, what

the thought is about or represents. This is best made clear by examples. Thus, for instance, the content of my belief that the new year has begun is *that the new year has begun*. The content of my desire to mend my ways is *that I mend my ways*. The content of my fear that the global recession has not yet ended is *that the global recession has not yet ended*, and so on. It is less easy to specify completely and exactly the content of perceptual experiences, but content holism as I am thinking of it would be about the representational contents of perceptual experiences as well, even if they cannot be completely stated in words.

Both meaning and content holism are doctrines, as I have said, about the conditions for the possibility of having meanings or contents. What is holistic about meaning and content holism? In their recent book, *Holism: A Shopper's Guide*, Jerry Fodor and Ernest LePore characterize holism in terms of their technical notion, anatomism. A property is said to be anatomistic just in case if anything has it, then more than one thing has it. The property of being a letter of an alphabet, e.g., is anatomistic, for a symbol counts as a letter of an alphabet only if it is a member of a system of letters arranged in a conventional order and used in writing a language. Atomism is the negation of the doctrine that the property of having a meaning or the property of having a content is anatomistic. While atomism about meaning and content entails the negation of holism with respect to them, Fodor and LePore do not suggest that anatomism with respect to the properties of having a meaning or having a content is sufficient for holism about meaning or content. Rather, their official characterization of holism is that it is *quite a lot* of anatomism with respect to being meaningful or having a content:

Holistic properties are such that, if anything has them, then lots of other things must have them too. (*Holism*, p. 2)

What we will call *content holism* is the claim that properties like *having content* are holistic in the sense that no expression in a language can have them unless many other (nonsynonymous) expressions in that language have them too.⁶ (*Holism*, p. 6)

Let us call this robust anatomism. Robust anatomism seems to be a part of what is meant by holism, for someone who thought that, to have a meaningful expression or a contentful thought, one had to have two, would not usually be thought to be a holist. But it is still too weak to characterize accurately content or meaning holism, as even Fodor and Lepore show they recognize later in their book.⁷ Meaning or content holism is not about how many items with meanings or contents there must be if there are any, but about the interdependence of the meanings and contents of meaningful and contentful items of certain kinds of systems of such items. Robust anatomism with respect to being meaningful or having content is a necessary, but not a sufficient condition for meaning or content holism.

Let us try to state these doctrines now more precisely. Each has two elements. The first is robust anatomism with respect to the property said to be holistic, the property of having a meaning, or content, as the case may be. The second is that meaningful or contentful items come only in systems of such items, and that the meanings or contents of items in such systems are individuated in relation to the meanings and contents of other items in the system. In the case of meaning holism, the items are linguistic expressions, and the system of items we can call a language. In the case of content holism, the items are thoughts, and the system to which they belong we can call a person or thinker (I will use “person” as a stylistic variant of “thinker”).

Crucial to our understanding of holism is how we understand “are individuated in relation to meanings and contents of other items in the system” in the above characterization. There are two things which need clarification here. One is what we mean by “individuated,” and the other is what we mean by “other items.” To take the latter first, two readings offer themselves: “some other items” and “every other item.” I choose the stronger reading, “every other item,” for three reasons. First, for terminological clarity, for it is this which the term “holism” suggests. If we take the other reading, the dependence of the content of a given item is not upon the *whole* system of items of which it is a part. Second, I aim to characterize a view at one end of a spectrum of views. The characterization in terms of “some other items” will include views that fall between the two extremes, while not ruling out the extreme holist position. Thus, if we characterize holism in this weaker way, we will have left ourselves without a vocabulary to distinguish this more moderate from the more extreme view, and thus risk

rejecting a whole range of views on the basis of the rejection of the most extreme version of the view. Third, as we will see, the weaker reading cannot be what is thought to have the standardly attributed counterintuitive results of holism. It is that view I wish to characterize and examine. What, now, do we mean by “individuated”? I will say that one kind of thing is individuated in relation to another if and only if the first is *understood* to be the kind of thing it is only in relation to the second, so that it is a conceptually necessary condition for an item to be a thing of the first kind that it be related appropriately to an item of the second kind.

With this preliminary, we can define meaning holism as follows:

[MH] Meaning holism =_{df} for every meaningful expression E, there is a language L, such that E is an expression of L, and (a) L has very many expressions that are meaningful (and nonsynonymous) and (b) the meaning of every expression in L is individuated in part in terms of the meaning of every other expression in L.

Correspondingly, we can define content holism as follows:

[CH] Content holism =_{df} for every kind of thought K, for any K-thought T, there is a person P, such that T is P's thought and (a) P has very many K-thoughts (with different contents) and (b) the content of every K-thought of P's is individuated in part in terms of the content of every other K-thought of P's.

I assume that thoughts are individuated in part in terms of their contents. Note that in [CH] content interdependence is interdependence of contents of thoughts of a given kind. (a) and (b) in each of these definitions are independent. In each, (a) could be satisfied, while (b) is not; and in each (b) could be satisfied, while (a) is not. Indeed, if atomism were correct either for meaning or content, then (b) in the respective definitions would be satisfied trivially, for if a language has one expression, or a person one thought, surely that expression's meaning or that thought's content is individuated in terms of itself, if

nothing else. Importantly, that a meaning or content is individuated in terms of every other meaning or content in the system entails that the meaning or content of a particular element in the system can be what it is only if the meaning or content of every other element in the system is what it is.

Note that [MH] rules out the possibility of atomistic languages, i.e., languages with only one meaningful element. For since every meaningful expression must appear in some language with other (nonsynonymous) meaningful elements, and it has its meaning only in relation to the meanings of all the other elements of that system, that expression could not appear with that meaning in a language with only that expression in it.⁸ Thus, on this view, all languages with meaningful expressions must be languages in which there are very many meaningful expressions. The same consequence, *mutatis mutandis*, follows from [CH]. Every thinker must be a thinker who has very many thoughts of each kind he has.

It is an immediate consequence of [CH] and [MH] that two people can share a thought only if they have all the same thoughts, and that two people can communicate with one another only if every expression in the one's language has a synonym in the other's and *vice versa*.

I relativize the doctrines of meaning and content holism to languages and persons, respectively, for two reasons. First, it seems clear that the interest in meaning holism or content holism is not about whether there have to be very many languages (each of which might be atomistic), the meanings of whose expressions are interdependent, or very many persons (each with only one thought, perhaps), the contents of whose thoughts are interdependent. Second, it is difficult to make sense of the possibility of distinct languages, or persons, the meanings of whose expressions or thoughts are *necessarily* interdependent.

It is evident that we can formulate many different doctrines about language and thought which may deserve to be called "holistic" by adding restrictions to our definitions. For example, we could restrict the doctrine of meaning holism to a particular category of linguistic expression, or exclude certain categories of linguistic expression. Similarly, we could restrict the doctrine of content holism to a particular kind of thought, e.g., belief, or perhaps to a broader category, such as propositional attitudes. We could, likewise, restrict the doctrine of meaning holism to a particular kind of language,

or the doctrine of content holism to a particular kind of thinker (e.g., to rational agents). The questions I will raise will be independent of these dimensions of variation. Therefore, I will restrict my attention to the extreme versions of the doctrines I have described above.

There are a number of doctrines about content or meaning that are sometimes called holistic that, it is clear, I will not count as such. For example, sometimes any view is called holistic which holds that one can have an attitude with a given content, or speak a language in which a term has a given meaning, only if one has some attitudes or expressions with meanings from a range of others with related contents or meanings. Such a view is more properly called *content* or *meaning molecularism*. As I have urged, we must distinguish this view from views which genuinely make the content of a given item depend upon the whole of the system in which it is embedded. The content molecularist holds that contents come in groups, but not that every content of a thinker is relevant to the individuation of every other.⁹ Nor will I count as holistic the view that in choosing an interpretation theory for another speaker one must evaluate interpretation theories as wholes, so that in theory choice the full range of assignments of attitudes and meanings is relevant to a theory's evaluation. The relevance of every attitude or meaning assignment to theory choice is derived from the fact that theory choice is a matter of the best fit with the available evidence. Thus, one must examine the full range of consequences of a given theory. A consequence of this is that each assignment of an attitude or meaning is relevant to the evaluation of an interpretation theory. But this shows nothing about whether the contents assigned are logically interdependent. The relevance of the full range of claims with evidential consequences to theory evaluation is a general feature of theory choice, and not specific to interpretation. It is no more relevant to whether contents of attitudes are logically individuated relative to one another than to whether comets are.¹⁰ Finally, I do not count as holism the view that the attitudes "issue in behavior only as modified and mediated by further beliefs and desires, attitudes and attendings, without limit."¹¹ This point, that one cannot specify what someone will do without a full catalogue of his attitudes, in itself places no constraints on what attitudes an individual may have simultaneously. It is due simply to the fact that for any given set of attitudes which may issue in a certain action, one can imagine additions to it

which will result in a different action. The same point holds for any system which is not closed in the sense that it is not physically impossible for it to include additional causally relevant factors.

My main concern will be with what I am calling content holism, which I believe, despite the now apparently standard use of “meaning holism” in the literature, is the doctrine which most philosophers see as of central concern.

How we interpret meaning holism depends crucially on how we individuate languages. Let us say to begin with that a language is an abstract object consisting of a syntactical structure and an interpretation. If we place no further constraints on what counts as a language, then it seems clear that there are languages that contain only one expression, e.g., the language consisting of the ordered pair of <“dog”, *dog*> (where the italicized word is used to specify the interpretation of the expression that is the first member of the pair). In this case, [MH] is false. In order for the doctrine to be other than trivially false, we must put further constraints on what is to count as a language. We could, e.g., insist that by “language” we mean a compositional syntactic structure with a corresponding compositional semantics. This would ensure meaning anatomism for any language, and some interdependence among meanings of expressions in that language.¹² It would not by itself ensure meaning holism, for *prima facie* a compositional language need not be one in which every expression’s meaning is individuated or depends upon the meaning of every other expression in the language. Meanings of complex expressions would depend on meanings of their parts in a straightforward way, but not in any interesting sense in the other direction, and there is no reason to suppose that the meanings of primitive expressions would need to be interdependent.

As long as we treat languages as abstract objects, it is difficult to see what grounds we could have for thinking meaning holism to be true, for in thinking of languages in this way, we are supposing that expressions and their interpretations are abstract objects that are independently characterizable. What we would like to say is that a particular interpretation can attach to a linguistic expression only if that expression is a member of system of linguistic expressions which have specific other interpretations. A natural source for such constraints comes from thinking of how speakers are able to attach interpretations to linguistic expressions. We can say that by a language we mean any set of interpreted

linguistic expressions which a speaker can use in speaking. Our holistic constraint on the assignment of interpretations to systems of expressions will be spelled out in terms of which sets of interpreted expressions are such that all of their members can be simultaneously understood by a speaker, or such that the speaker can attach to each simultaneously the interpretation it has. Holism will require that for any interpreted expression, a speaker can understand it if and only if there is some set of expressions with specific other interpretations he also understands. More precisely:

[MH*]Meaning holism* =_{df} for every interpreted expression E , there is a set S of interpreted expressions with very many (nonsynonymous) members of which E is a member, such that any speaker who understands E understands all and only the members of S or all and only the members of some set S_0 such that $E \in S_0$ and for any E_0 , $E_0 \in S_0$ only if there is an $E_0 \in S$ such that E_0 is synonymous with E , and for any E_0 , $E_0 \in S$ only if there is an $E_0 \in S_0$ such that E_0 is synonymous with E .

The second disjunct is required to allow for languages that are syntactically distinct but semantically equivalent. Thus, on this view, a speaker can add a word to his language with a new interpretation only by changing the meanings of all of his old expressions, and he can change the meaning of one of his expressions only if the meaning of every one of his expressions changes. If we identify languages with sets of interpreted expressions that speakers can simultaneously understand, and assume that meanings are determined by the speakers' abilities to attach interpretations to expressions, and that the constraints on how speakers can do this are due to facts about the individuation of the items attached, then we can derive [MH] from [MH*].

What is the relation between [MH*] and [CH]? [MH*] can, apparently, be true while [CH] is not, for the following reason. When we fix what language someone speaks, that is, which expressions he uses and their interpretations, we do not yet fix all of the beliefs, and other attitudes, he has, though we fix those of his attitudes which determine the interpretations of his expressions. Thus, it is *prima facie* compatible with [MH*] that two speakers who share a language disagree in their attitudes, and that a speaker's attitudes could change over time without all of his attitudes changing. On the other

hand, since presumably any proposition a speaker could entertain is one that he could express in a sentence, given [MH*], two speakers who speak languages which are not completely intertranslatable, speak languages that are not intertranslatable at all, and so share no propositional attitudes. We see, then, that [MH*] entails a kind of holism with respect to the propositions one can entertain. If [MH*] is true, then one can entertain a given proposition p if and only if one can entertain all and only the propositions in some specific set of propositions. Suppose now that content holism is true. In this case, [MH*] would be true, for any change in the meaning of any sentence in the absence of a change in every other would mean that some of one's attitudes, the ones that fix the meaning of the sentence whose meaning has changed, have changed, while others, those that fix the meanings of the rest of one's expressions, have not.

There are two reasons why I do not take [MH*] to be my primary target. First, it clearly does not have some of the consequences that holism is standardly thought to have, as we will see below. Second, it is difficult to see what reason one could have for thinking that [MH*] was true that was not also a reason to think that content holism was true. For what reason could we have to suppose that one could not, e.g., come to entertain an entirely novel proposition, and so come to be able to change one's language by simply adding to it some new primitive expressions which allow one to express that proposition in a sentence, unless the addition of such an attitude to one's existing attitudes required the contents of all of one's attitudes to change? Thus, in the rest of this paper, I will concentrate my attention on content holism. If content holism is, as I will argue, self-contradictory, we can take it that there can be no further interest in [MH] or [MH*].¹³

Why is content holism thought to be problematic? One difficulty with content holism that has been singled out is that it appears to make a scientific psychology of the kind we should like to pursue impossible.¹⁴ Suppose that S is a person and $Q(t)$ is the set of S 's thoughts at t . I assume that thoughts are individuated by their contents.¹⁵ [CH] entails at least the following:

- [1] For all times t and t' , and for all thoughts $T \in Q(t)$ and all thoughts $T' \in Q(t')$, $T = T'$ if and only if $Q(t) = Q(t')$.

In other words, if there is any change in what thoughts a person has, every thought a person has changes. It is not possible, on this view, for example, for someone who believes that *p* to come to believe that *q* and still believe that *p*. The sort of psychology we would like to pursue, arguably, is one in which there are what we can call robust psychological laws. Robust psychological laws are laws that (a) invoke the contents of contentful states and (b) *de facto* apply to more than one time slice of one individual, and, in fact, cover large numbers of individuals from groups we are interested in studying over significant periods of time. The threat of content holism to this project is clear. If, as we believe, it is implausible that any two people have had exactly the same thoughts, then, if content holism is true, no two people have ever shared any thoughts. And if, as we believe, we are constantly acquiring new beliefs, desires, intentions, and so on, then if content holism is true, no person has retained any thoughts over time. There can be no robust laws, then, since there can be no laws that invoke contents of contentful states that *de facto* apply to more than one time slice of one individual.

It is sometimes suggested that content holism entails content irrealism because it entails that there can be no scientific psychology of content if content holism is true.¹⁶ But this is incorrect. Content irrealism is the view that there are no thoughts with contents. Content holism does not entail content irrealism because it is just a view about what contents are like if there are any, and it does not obviously characterize content in a way that makes it impossible. It entails that we cannot have a certain kind of scientific psychology that we would like to have, and which we believe that we can have. This is to say content is not what we thought it was, not that there isn't any. And it is certainly not clear that we could not still pursue a kind of scientific psychology, even if not the kind we had hoped for.

But content holism is problematic enough without its entailing content irrealism. In addition to its threat to robust psychological laws, it raises a host of difficulties for our understanding of the possibility of communication between individuals, of reasoning, of the persistence of the self, of memory — in short, of the whole fabric of our lives. It is a doctrine that is obviously false. Worse, I shall argue that it is incoherent. Its interest lies in the fact that while it rests at one end of a spectrum leading from content atomism to holism, the difficulties and puzzles it raises can be expected to shed some light on the difficulties and possibilities of occupying other points on the spectrum.

The difficulty I wish to raise for content holism is whether a content holist has the right to talk about a person having more than one attitude of any kind while also maintaining that we individuate the content of any attitude in terms of the content of every other attitude the person has. To see why there is a difficulty here let us first concentrate on belief. A content holist will hold about belief that

[BH] Every belief is some person's belief, and for any believer X , (a) X has many different beliefs and (b) for any belief B_1 of X 's and any belief B_2 of X 's, B_1 has the content that it does in part in virtue of B_2 's having the content that it does.

The difficulty for the holist can be brought out by asking under what conditions some individual X has two different beliefs rather than one. Suppose that (i) John believes that p and that (ii) John believes that q . Under what conditions would we say that the truth of (i) and (ii) entails that John has two beliefs rather than one belief? Standardly, we would say that (i) and (ii) attribute different beliefs to John if and only if it is possible¹⁷ for John to believe that p although he does not believe that q or it is possible for John to believe that q although he does not believe that p . We can state this generally as follows,¹⁸

[2] For any believer X , B_1 is a different belief of X 's than B_2 if and only if it is possible for X to have B_1 without having B_2 or it is possible for X to have B_2 without having B_1 .

The disjunctive condition allows for the possibility of necessary links between distinct beliefs. For example, it allows that it is necessary that one believes that something is a giraffe only if one believes that something is an animal, while allowing that one has two beliefs; for it is possible that one believe that something is an animal without believing that something is a giraffe.

An immediate consequence of this criterion for counting beliefs is that the holist thesis about beliefs is self-contradictory. The belief holist holds that we have many different beliefs [BH](a), but also holds that necessarily if any of one's beliefs changes, then every belief changes [BH](b). But this requires, for any believer X , both that X have more than one belief, and that for any belief B_1 and any

belief B_2 which X has it is not possible that X have B_1 without having B_2 and it is not possible for X to have B_2 without having B_1 . The second of these conditions, together with [2], entails that for every belief B_1 of X and every belief B_2 of X , B_1 is identical with B_2 . This entails that X has only one belief, which contradicts the belief holist's claim that every believer has many beliefs. Thus, the requirement that belief holism entail atomism is seen to be in conflict with the requirement that belief holism entail that the content of every belief of an individual is individuated in part in terms of the content of every other belief.

Can the holist drop the requirement that the contents of an individual's thoughts be individuated partly in terms of the contents of every other thought of the individual? In this case, holism reduces to robust atomism. But I have already argued that this is too weak a position to characterize holism adequately. It is clear that this has none of the consequences for the implausibility of shared beliefs, robust psychological laws, incommensurability of idiolects, etc., which content holism is standardly thought to have. Is it an option, then, for the holist to drop the requirement that holism entail belief atomism? No, because although this removes the contradiction, it also removes the last vestige of holism. So modified, together with our criterion for counting beliefs, the holist position would entail, not just allow, belief atomism.

Before considering what other options are open to the holist in responding to this objection, let us see how we should extend it from belief to the other attitudes. Since the distinctions among attitudes of different types, such as beliefs and desires, do not depend simply on their content, we will not get the result from our ordinary criteria for individuating attitudes that holism entails that no thinker can have more than one attitude. The same content may well be entertained in different modes by the same subject, as in the case of the man who both desires that he be handsome, and believes that he is. However, for each type of attitude, our criterion for counting that type of attitude is the same, *mutatis mutandis*, as that for counting beliefs. We can represent this criterion generally as follows,

[3] Every attitude of type A belongs to some thinker, and for all thinkers X , for all attitudes of X A_1 of type A and all attitudes of X A_2 of type A , A_1 is a different attitude of X 's than A_2 if and only if it is possible for X to have A_1 without A_2 or it is possible for X to have A_2 without A_1 .

Corresponding to [BH] we have,

[AH] For every attitude type A , for any thinker X , (a) X has many different attitudes of type A and (b) for any attitude A_1 of X 's of type A , and any attitude A_2 of X 's of type A , A_1 has the content that it does in part in virtue of A_2 having the content that it does.

[3] and [AH](b) entail that no thinker has more than one attitude of any given type, which contradicts [AH](a).

To avoid this consequence, a content holist must either reject our ordinary criterion for counting beliefs and other attitudes, or reject the characterization of content holism offered in [CH]. Let us consider a number of objections of each sort. First, we will consider objections to our ordinary criterion for counting beliefs. Second, we will consider objections to the characterization of content holism offered in [CH].

(a) One could escape the consequences of our ordinary criterion for counting beliefs only by providing a criterion for individuating beliefs independently of their content. The thesis of content holism is sometimes expressed in terms of the metaphor of nodes in a network, the content assigned to each node being determined by the content assigned to every other node in the network. It is the use of this metaphor which I think has made it seem as if one could hold both that an individual could have very many beliefs or thoughts of a given kind, and yet the content of each depend essentially on the content of every other. The metaphor presupposes that we can identify the nodes, which correspond to the attitudes, independently of the contents of the attitudes. The hope that this metaphor can be cashed out is, I think, illusory.

Let us consider two ways of cashing out the metaphor.¹⁹

The first is to say that the nodes in the network are individuated in terms of the functional roles of the attitudes that correspond to the nodes. Thus, different nodes correspond to states with different functional roles in cognition.

But what are these functional roles? They must be roles of the sort assigned to the standard psychological attitudes, on pain of changing the subject. We recognize two dimensions of variation in the functional roles assigned to psychological attitudes, that associated with its mode, and that associated with its content. For example, beliefs and desires, qua beliefs and desires, have different functional roles. These are functional roles that attach to an attitude in virtue of the mode in which a content is entertained. This difference in functional role, however, is no help in distinguishing between attitudes of a given mode. It will distinguish between the desire for a glass of water and the belief that it is raining, but not between the belief that it is raining and the belief that it is snowing. Thus, we must look to functional roles associated with differences of content within a given psychological mode. We want as many distinctions among functional roles as there are among contents. Otherwise, there would be no reason to think that the nodes we are characterizing are belief nodes. This amounts to saying that content can be exhaustively characterized functionally. This is, to say the least, dubious. But even if it could be done, it would be no help. The reason is that the project of giving a functional analysis of belief content is the project of reproducing in functional terms the distinctions which are criterial for our ordinary applications of psychological attitude concepts. This means that any successful functional analysis of content should have [3] as a consequence. In this case, we have obviously made no advance.

The second way to cash out the metaphor is to say that the differences between beliefs are syntactic differences, on analogy with differences between expressions in a language. On this account, different nodes in the network correspond to differences in the syntax of the states which correspond to the nodes.

This response deserves a fuller treatment than I will be able to give it in this paper. Here, I can, at best, merely sketch an argument. The argument has the form of a dilemma. Either differences in syntax must be explained in terms of differences in functional role, in which case this response reduces

to the first, or the notion of syntax employed is interest relative, in which case it cannot play the role of being the primary bearer of content.

The initial difficulty is that syntactical categories are not natural categories, by which I mean that they are interest relative categories.²⁰ Which physical structures and states in the world get counted as falling into one or another syntactical category depends on some intentional agent or group of agents *treating* certain states and structures as falling under the same type. This is clear from the fact that the classification of sounds or inscriptions as instantiations of one or another symbolic category is entirely arbitrary, and that we cannot ask of any physical state or structure whether it is the instantiation of a syntactical type without relativizing it to someone's or some group's interest. In this case, it clearly cannot be essential to any intentional state that it have a syntax because a state's falling into a syntactical category depends upon prior intentionality and is entirely arbitrary. Hence, while the states that instantiate different thoughts could have different syntax, what makes them different thoughts has nothing to do with any difference in syntax.

This objection depends upon taking the expression "syntax" in this response literally. If we do not take it literally, then we must find some other way to understand it. It would be fruitless to try to spell it out in terms of physical types, since these are conceptually independent of psychological types. This suggests that we spell out this notion of syntax, then, in terms of types which, while not explicitly psychological, yet are conceptually connected with psychological types. The most natural candidate (the only candidate that I can identify) is functional role. However, in this case, the appeal to syntax clearly reduces to the appeal to functional role, which, if it is to reproduce our ordinary notion of content, will reproduce the problems for the holist thesis entailed by our ordinary criterion for counting beliefs.

Stepping back from these particular suggestions, we can illustrate the difficulty for the nodes in a network metaphor by asking what the point would be of talking about nodes in a network once the holist thesis is granted. For if we grant the holist thesis, then in effect we grant that the unit of content is not the individual node after all, but the whole network. If the point of the metaphor of nodes is to distinguish different contentful items, we seem to have lost any motivation for talking about more than

one node. This can be appreciated by a consideration of the kinds of laws we could expect to have on the holist view. If any change in any assignment to a given node meant a change in assignment to every node, then the only properties relevant to psychological laws would be a properties of the whole network. Allowing for different networks for different attitude types, this is effectively equivalent to treating an individual as having at most one attitude of each type. We seem unable either to make, or to find any point in making, any finer grained distinctions, if holism is true.

(b) The second way of responding to the argument I have presented is to object to my characterization of content holism (while retaining its position at one end of a spectrum of views on content interdependence, so that it is not simply changing the subject). I will consider two responses along these lines. The first focuses on the force of the claim that content is holistic. The second urges a different conception of holism.

(i) The first response is that [CH] issues in a contradiction only if we take it to be a conceptual truth. If we take it to be metaphysically necessary, rather than conceptually or logically necessary, then it can be true, and, at the same time, we can employ our ordinary criterion for counting beliefs, since that depends not on metaphysical possibility, but on conceptual possibility.

The reply to this is twofold. First, this paper is concerned with whether content holism is a conceptual truth. This response grants that it is not, and so is not properly a response to the argument of this paper. Second, (i) makes use of a notion of metaphysical necessity that must be treated both as weaker than conceptual or logical necessity, and stronger than physical necessity.²¹ It is obscure what such a notion of necessity comes to and obscure how to verify claims about such necessities. A more detailed response would have to wait on a clearer account of the notion of necessity at work here and how claims about it are verified or falsified.

(ii) The second response is that content holism is not the view that every thinker must have many thoughts and that the contents of those thoughts are individuated in terms of one another, but that having thoughts is being related to propositions,²² which are not individuated in terms of one another, and that content holism is a view about constraints on the propositions to which one can be (for any given psychological mode) simultaneously related.²³ The idea is that the space of propositions can be

partitioned into sets according to the ones to which one can be simultaneously related by thoughts. If one is related by a thought (of type A) to any member of a set, then one is related to all and only members of that set (by thoughts of type A).

[CH*] For every type of thought A , for every proposition Q , there is a set of propositions S such that $Q \in S$ and S contains very many elements, and, for every person P , P has a thought of type A that relates P to Q if and only if for each $y \in S$ P has a thought of type A that relates P to y , and for any $z \notin S$ P does not have a thought of type A that relates P to z .

This formulation of the doctrine aims to avoid the original difficulty by individuating propositions non-holistically, and then individuating beliefs in terms of differences among their objects. Holism comes in not in the characterization of the contents of the thoughts, but in the sets of propositions to which one may be related simultaneously by thoughts.

In response, first, while this doctrine has some of the same results as [CH], e.g., on this view, no one can believe that p , come to believe that q , and still believe that p , it is not, I think, an accurate characterization of what is usually thought of as the doctrine of content holism. It is not about the *content* of any given thought depending on the *content* of any other; thus it is not a doctrine about the holism of content at all. It is a doctrine about the holism of relations to content. Second, all of the arguments for content holism that I am familiar with are (and should be) noncommittal on whether there are propositions at all, and on whether it is correct to analyze thoughts as relations to propositions, or anything else. Thus, the conclusion that such arguments aim at cannot have the commitments of [CH*].²⁴ Third, it is not clear, in any case, that we will be able to offer a criterion for individuating propositions independently of beliefs. Ordinarily, we would say that a sentence “ s ” and a sentence “ s^* ” express different propositions provided that it is possible for someone to believe that s and not to believe that s^* or *vice versa*.²⁵ Thus, we would say that the proposition that p is a different proposition from the proposition that q if and only if it is possible for someone to believe that p without believing that q or to believe that q without believing that p . This is what allows us to distinguish propositions

more finely than logical equivalence. However, clearly, if this is our criterion for individuating propositions, then, given [CH*], no set of propositions to which one could be related by a thought (of a certain type) could have more than one member. Thus, no one could have more than one thought of a given kind, which is the result we arrived at above. At the least, a content holist who took this line would owe us an account of how to individuate propositions that does not appeal to the possibility of believing one without the other.

To conclude, the basic difficulty I have raised for content holism is that our ordinary criterion for counting beliefs and other attitudes requires that any two attitudes of a certain kind with different contents be independent in the sense that it is possible to have at least one of them without the other, while content holism requires that one have many attitudes of any given kind which are not independent of each other in this sense. These two conditions cannot be simultaneously met, given our ordinary criterion for counting attitudes. Content holism is therefore self-contradictory. None of the responses to this difficulty we have explored have been successful, for our criterion for counting and individuating attitudes is more basic than our criteria for individuating any of the entities or kinds we might introduce as their objects. What underlies this difficulty for content holism is that attitudes such as beliefs are individuated by their contents. A content holist needs a way of saying non-circularly when, e.g., B_1 and B_2 are different beliefs, which, given that beliefs are individuated by their contents, comes to having a way of saying non-circularly when B_1 and B_2 have different contents. If necessarily a has B_1 if and only if a has B_2 , then there is no substance to the claim that B_1 and B_2 have different contents, for there is no task for which contents are pressed into service which could be performed by B_1 which could not be performed by B_2 , and *vice versa*.

Notes

1. I have profited from the helpful comments, criticism, and advice of Anne Bezuidenhout, Tony Dardis, John Heil, Piers Rawling, Greg Ray, and Takashi Yagisawa. I would like to thank Ernest LePore and Jerry Fodor, directors of an NEH summer seminar on holism, for providing the stimulating environment in which some of the ideas for this paper were originally worked out and for early responses, and the National Endowment for the Humanities, for the financial support necessary to attend the seminar.
2. Quine discusses confirmation holism, and it is thought, meaning holism, famously, in “Two Dogmas of Empiricism,” in *From a Logical Point of View* (New York: Harper, 1963). Davidson calls various of his views holistic throughout his corpus, e.g., in “Theories of Meaning and Learnable Languages,” p. 7, in “Truth and Meaning,” p. 22 (in which a passage occurs which looks as if it might entail [MH*] below, though I think in context it is clear this is not intended), in “Radical Interpretation,” p. 139, in “Belief and the Basis of Meaning,” p. 154, in “Reality without Reference,” p. 221, (the page citations immediately preceding are to *Inquiries into Truth and Interpretation* (Oxford: Oxford University Press, 1984)), in “Mental Events,” p. 217, 221-23, in “Psychology as Philosophy,” p. 231, in “The Material Mind,” p. 257 (the page citations immediately preceding are to *Essays on Actions and Events*, (Oxford: Oxford University Press, 1980)), and in other places as well. Many writers on holism who do not themselves endorse it seem to regard Davidson and Quine as the arch holists.
3. Much of the recent discussion has been fueled by Jerry Fodor’s discussion in chapter 3 of *Psychosemantics* (Cambridge: MIT Press, 1987), and by Fodor and LePore’s *Holism: A Shopper’s Guide* (Oxford: Basil Blackwell, 1992).
4. Perhaps an exception is Stephen Stich. Consider this passage from *From Folk Psychology to Cognitive Science: The Case Against Belief* (Cambridge: MIT Press, 1983):

The content we ascribe to a belief depends, more or less holistically, on the subject’s entire network of related beliefs. (p. 54)

This seems to suggest the dependence of belief content on every other belief a subject has. In discussing the case of Mrs. T, Stich says,

What we are inclined to say is that her belief gradually becomes less and less content-identical with mine ... (p. 85)

which suggests that perfect content identity would require sharing all the same beliefs. But even these passages do not strictly commit Stich to extreme holism.

5. I will use “thought” to cover all varieties of attitudes or mental states which have or have associated with them a representational content.

6. In this passage we see Fodor and LePore using “content holism” to denote a claim about languages. At other points they use “meaning holism” for the same purpose, and use both expressions to talk also about various doctrines about the interdependence of attitude contents. Since, as I will show below, claims about the holism of meaning and of content have different consequence, it is important to distinguish them and to use different labels for each.

7. See, for example, the discussion of the long and short scope readings of the definition of “anatomism” on pages 28-9 of *Holism*. The long scope reading is “There are other propositions such that you can’t believe P unless you believe them.” The short scope reading is “You can’t believe P unless there are other propositions that you believe.” Fodor and Lepore say there is not much interest in the short scope reading, and that this can hardly be the way holists intend to their view to be understood. They must be right, since this puts no constraints on the particular contents one must have to have a give content, and the dependence of content on other contents is surely where the holism comes in. They consequently endorse what they call the long scope reading as the intended reading of the doctrine of anatomism. It does not appear to me, however, that their original characterization of anatomism is ambiguous in the way they suggest it is, or that either of the readings they give of it are readings of it. The passage quoted in the text is about linguistic expressions, not beliefs, and mentions only the property of having content. It says: “no expression in a language can have [content] unless many other

(nonsynonymous) expressions in that language have [content] too.” So far as I can tell there is no scope ambiguity here. This is simply equivalent to “if an expression E in a language L has content, then there are many other expressions in L nonsynonymous with E that have content.” And there is nothing in this which functions as a variable that ranges over contents as entities, so there could not be the right kind of scope ambiguity in this original characterization of content holism in any case.

8. Suppose a language consists only of indicative sentences. Conjoin them all in one long sentence. Do we not have an atomistic language then? No, for the expression we have is not the only expression in the language, even though it includes as parts all of the expressions in the language. Nor could there be any language with a single expression, one sentence, which was synonymous with this long conjunction, for that would require it to have semantically significant parts, and so for that language to have more than one semantically significant expression. The suggestion for an objection along these lines I owe to John Heil.

9. Donald Davidson is an example of a content molecularist. See, e.g., “Rational Animals,” *Dialectica* 36 (1982): 317-327.

One belief demands many beliefs, and beliefs demand other basic attitudes such as intentions, desires, and if I am right, the gift of tongues. ... the intrinsically holistic character of the propositional attitudes make the distinction between having any and have none dramatic.
(“Rational Animals,” p. 318)

Although Davidson here describes the attitudes as holistic, it is clear that he does not have in mind content holism as we have characterized it, though he has apparently been accused of it (see Fodor and Lepore’s discussion of Davidson in *Holism*). Consider these passages from “Thought and Talk,” in *Inquiries into Truth and Interpretation* (Oxford: Oxford University Press, 1984):

There are good reasons for not insisting on any particular list of beliefs that are needed if a creature is to wonder whether a gun is loaded, Nevertheless, it is necessary that there be

endless interlocked beliefs. The system of such beliefs identifies a thought by locating it in a logical and epistemic space.

Having a thought requires that there be a background of beliefs ...

We may say ... that a thought is defined by a system of belief, but is itself autonomous with respect to belief. (p. 157)

There are a number of features of Davidson's view worth noting. First, it is not holistic in our sense because it is not committed to the content of every attitude of a given type being relevant to the content of every other. Second, while molecularist, it does not hold that specific other beliefs are required in order to have a given belief, but rather that some beliefs out of a range or others is required. Third, it is committed to the interdependence of the attitudes, the view that to have any attitude of any particular type one must have attitudes of certain other types. To have any attitudes at all requires that one have beliefs, to have beliefs requires that one have other basic attitudes such as intention and desire. Fourth, it is committed to the claim that the system of beliefs in which any belief or thought must be located is indefinitely large.

10. Often when Davidson talks about the holism of interpretation theory, it appears that it is this kind of holism he has in mind. See p. 159 of "Radical Interpretation," in *Inquiries into Truth and Interpretation*, for example.

11. Donald Davidson, "Mental Events," *Essays on Actions and Events*, (Oxford: Oxford University Press, 1980), p. 217.

12. By a compositional syntactic structure I mean a (non-empty) set of primitive expressions and set of operations on the primitive expressions for forming complex expressions out of them. We count as an expression of the language any expression which is a member of the set of primitives or can be formed from them by means of the operations. This ensures that a language with a compositional syntactic structure will have more than one expression in it.

13. It is easy to see why Fodor and Lepore, in *Holism: A Shopper's Guide*, while they seem clearly to have what I have called content holism primarily in mind, would not take care to distinguish these two

doctrines. Fodor's "Language of Thought" model for cognition encourages us to think of thought (to put it tendentiously) as more language-like than it is, and of the relation between a spoken language and the thoughts of a thinker as relatively transparent. Given the LOT hypothesis, it may seem that content holism reduces to meaning holism for the language of thought. There are two reasons for us not to assimilate them in this way. First, on Fodor's own account, the LOT model is an empirical hypothesis. The present investigation is a conceptual investigation that should make no empirical assumptions. Second, even given the LOT hypothesis, meaning holism for the language of thought is not equivalent to content holism, for essentially the same reasons as those given in the text for denying that meaning holism with respect to spoken languages entails content holism. We can fix the meanings of all syntactical types in the LOT without fixing the distribution of sentential tokens in the belief box, the desire box, and so on.

14. This is one of Fodor and Lepore's complaints against it, which shows that the holistic doctrine that they are concerned with is not equivalent to their sometimes official version of "quite a lot of atomism," or to meaning holism, neither of which have this consequence. See *Holism*, pp. 15 ff.; also Fodor's *Psychosemantics*, chapter 3, esp. pp. 56-57.

15. I take no stand on what contents are. It might be said that thoughts are not so individuated because a content is a proposition, and one can entertain propositions in different ways. One might say, e.g., that in the attributions *John believes that Tully is Tully* and *John believes that Cicero is Tully*, we are attributing two beliefs, but that the proposition **Tully is Tully** and **Cicero is Tully** are the same, so that we have one proposition entertained in two different ways. Consequently, it would be urged, beliefs are individuated by an ordered pair of something like a mode of presentation and a proposition. I do not endorse this picture, but I do not have to take a stand on it in this paper. If this picture were correct, we would identify the content with the ordered pair.

16. Fodor makes this suggestion, e.g., in *Psychosemantics*, in chapter 3, p. 55 ff., and claims that this view is widespread. However, he later denies that holism entails irrealism, and say only that it makes a scientific psychology of the attitudes impossible. Even this latter claim, I think, is too strong.

17. By "possible" I mean "conceptually possible" or "broadly logically possible."

18. Since this is a conceptual criterion, it is necessarily true.
19. These are the only two likely ways that have occurred to me, and are suggested by some remarks in the literature. I would be happy to consider other ways of cashing out the metaphor as well, but it is usually not cashed out at all, which is why its difficulties have not come to light.
20. In this, I follow John Searle in "Is the Brain a Digital Computer," *Proceedings and Addresses of the American Philosophical Association*, vol. 64, no. 3 (Nov. 1990): 21-37.
21. One sort of necessity is stronger than another provided that, necessarily, if a proposition is necessary in the first sense, it is necessary in the second, but not *vice versa*.
22. It is not essential for this response that we call the entities that beliefs relate us to "propositions." What is required is that the entities play the role of contents and be characterizable independently of one another. The response I am imagining takes propositions to be contents. If one reserves "proposition" for a different role, one could substitute "content" here for the same purposes, and the same argument would apply against it.
23. Jerry Fodor made this suggestion to me in conversation, but I do not know that he would commit himself to this being the right way to understand content holism.
24. It is not clear to me that any of the arguments usually offered for content holism, even granting their premises, manage to establish it.
25. This is even more obvious when we substitute "content" for "proposition."