

Neopragmatism and Logic: A Deflationary Proposal

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Abstract. Logical vocabulary can serve as a target for neopragmatist inquiry, and it has also posed obstacles to neopragmatist accounts of other vocabulary. This chapter argues that the obstacles can be addressed by adopting a neopragmatist perspective toward logical relations, such as logical consequence, and toward propositional content. Doing so calls into question two purported constraints on neopragmatist explanations of the functions of logical connectives. Rejecting the constraints, I sketch an account on which logical connectives express dialectical dispositions. The proposal is deflationary in two ways: it rests on an extension of deflationism from truth to logical relations, and it aims to deflate some of neopragmatists' theoretical ambitions.

1. Introduction

Pragmatism about logic takes many forms. One concerns methodology: pragmatists argue that logical principles should be defended and criticized by looking to the consequences of accepting logical theories, in the context of our other commitments. It is in this sense that Susan Haack advocates a “pragmatist conception of logic.” Opposing the view that “logical laws ... have a special status which guarantees their certainty,” she argues that “logic is a theory ... on a par, except for its extreme generality, with other, ‘scientific’ theories,” whence “choice of logic, as of other theories, is to be made on the basis of an assessment of the economy, coherence and simplicity of the overall belief set” (Haack 1974, p. 26).¹

Distinct from this *methodological* pragmatism about logical inquiry is a pragmatism concerning the *subject matter* of logic. On this view, claims made using logical vocabulary concern our practices of inference or assertion. Versions of subject-matter pragmatism in the proof-theoretic tradition hold that logical consequence is a matter of norms governing inference (e.g. Prawitz 1985) or constraining combinations of assertion and denial (e.g. Restall 2005). But subject-matter pragmatism hasn't only been applied to predicates that express *logical relations*, such as ‘*x* is a logical consequence of *y*’. It's also been applied to *logical connectives*, such as ‘if’ and ‘not’. On Robert Brandom's view, conditionals let us state claims whose truth, when they are true, is “implicit in” *features of our discursive practices*—specifically, in the relations of “material” consequence and incompatibility relations these practices institute. Such explicitation typically requires using conditionals with embedded negations or conjunctions (Brandom 1994,

¹ Pragmatism about logic in this sense, which traces to W. V. Quine, has become known as “anti-exceptionalism” (Hjortland 2017).

pp. xix, 114–15; 2010, p. 354).

Here I'll defend a third form of pragmatism about logical discourse. This form is naturally accompanied by methodological pragmatism. Moreover, it agrees with Brandom in characterizing the role of logical vocabulary in terms of our practice of making and challenging assertions. However, it rejects subject-matter pragmatism about logical vocabulary. That is a consequence of the general program it exemplifies, one pursued by Huw Price under the labels “global pragmatism” (Price 1991) and “global expressivism” (Price 2004). Following Michael Williams (2010; 2013) and Joshua Gert (2018; 2021), who endorse Price's program, I'll call it “neopragmatism.” Neopragmatists shift the target of philosophical explanation from the *objects* we think and talk about to the *functions of expressions and concepts* in our cognitive economy. In that sense, they count as “metaphysical quietists” (Macarthur and Price 2007). We should thus expect that when neopragmatism is applied to logic, it won't yield substantive claims about the nature of logical consequence, or about what features of our discursive practice the truth of a conditional is implicit in.²

In Section 2, I lay out and motivate neopragmatism's commitments. Section 3 explains how logical vocabulary can be a target for neopragmatist theorizing, and how it has also been thought to pose obstacles to neopragmatist accounts of other vocabulary. The rest of the chapter argues that these obstacles can be addressed by adopting a neopragmatist perspective toward logical relations, such as logical consequence and inconsistency, and toward propositional content. Section 4 argues that neopragmatists should be deflationists about logical relations. This will justify dismissing a standard constraint on functional explanations of logical complexity, namely that they must account for logical relations. Section 5 proposes functional explanations on which logical connectives are used to convey that a speaker has certain dialectical dispositions. The proposal will violate a second widely accepted constraint, according to which the function a connective serves in an assertion of a complex sentence must be explained in terms of the functions of other expressions in the sentence. In Section 6, I argue that the seeming rationale for that constraint depends on understanding the neopragmatist's functional explanations as telling us what it is in virtue of which sentences have their propositional content. But this aim, I'll argue, is in tension with a neopragmatist approach to the function of content ascriptions. In

² I thus view neopragmatism about logic as at odds with Brandom's version of pragmatism about logic, though Brandom shares many neopragmatist commitments (cf. Brandom 2013). For an interpretation and critique of Brandom on logic, see Shapiro (2018).

short, the proposal will be deflationary in a more general sense: it aims to deflate some of neopragmatists' theoretical ambitions.

2. Neopragmatism

As Lewis Carroll's Walrus observes, we can "talk of many things." These aren't exhausted by the artifacts, stuffs, organisms, and persons he itemizes. Citing his "cabbages and kings," Wilfrid Sellars adds "numbers and duties, possibilities and finger snaps, aesthetic experience and death," and later the "particles, forces and fields" of physics (1960, pp. 1, 20). According to Sellars, philosophy aims to perspicuously understand how such "radically different items" can "hang together," i.e. fit unmysteriously into an overall picture of how the world is.

In pursuit of this aim, we might attempt two kinds of *analysis*: uncovering relations of constitution among our concepts or meanings, or uncovering relations of constitution among the things talked of. One broad way to think of the pragmatist tradition inaugurated by C. S. Peirce is as recommending an alternative to either kind of analysis. This is the route of *explaining the functions* of concepts or linguistic expressions. What do we do with them that accounts for our having them?³ Here I'll take no general position on language's role in the acquisition of conceptual capacities. However, since the logical concepts at issue are plausibly ones we only acquire in learning a language, I'll focus on linguistic expressions. While an expression may have multiple functions, I'll write "the function" rather than "the function or functions."

If the pragmatist approach is to yield insight into how what we talk of hangs together, this imposes a restriction on answers to its question about linguistic functions. The explanation of an expression's function shouldn't, in general, be that it's used to *represent or describe some constituent of reality*. For on such *representationalist* accounts, insight into the heterogeneity of discourse could only be supplied by metaphysical investigation of its multifarious objects (Price 2013, p. 184). The pragmatist's contention, by contrast, is that puzzles about how these objects hang together become tractable when we turn from metaphysical analysis to functional explanation of how vocabularies hang together in our discourse.

Nevertheless, it remains open to pragmatists to advocate a representationalist account of *some* kinds of propositional discourse (e.g. "ordinary empirical discourse"), while telling a different functional story about other kinds. That would be to espouse a *local* pragmatism. In

³ Rejecting "analysis" in favor of "explanation" is central to Price (1988). Elsewhere, he speaks of giving the "functions and genealogy of particular parts of language" and "asking how they arise, and what functions they serve in the lives of the creatures who employ them" (2011, p. 12; 1993, p. 79).

the paradigmatic cases of normative and modal vocabulary, nonrepresentationalist stories have usually invoked speakers' expressing attitudes other than belief. Thus local pragmatists tend to be local expressivists.⁴ However, there are reasons to globalize pragmatism (Macarthur and Price 2007). One reason is that functional investigation of our talk of "reference" and "truth conditions" can support a *semantic deflationism* according to which such representational vocabulary is nowhere suited for explanatory work.⁵ At the same time, semantic deflationism vindicates the univocal applicability of reference and truth talk to all uses of language that display the syntactic and pragmatic hallmarks of propositional discourse. I'll use "neopragmatism" for any approach that meets two conditions: it's globally pragmatist, in the above-characterized sense, and it embraces deflationism about truth and reference.⁶ As I use the label, neopragmatism doesn't require that the functions of all expressions be explained in terms of the expression of attitudes.⁷

A key aim of neopragmatists has been to argue that an adequate explanation of the functions of our talk about (e.g.) numbers, duties, and possibilities undercuts the demand for a metaphysical story about what the truth of claims about them consists in. That would be a story that reduces facts about them to other facts. Such a demand is often motivated by a naturalism that insists that all facts be reducible to ones that can be stated using vocabulary of the natural sciences. Against this, Price advertises that his "functional standpoint" should

undercut the *motivation* for reductionism: once we have an adequate explanation for the fact that the folk *talk of* Xs and Ys and Zs, an explanation which distinguishes these activities from what the folk are doing when they do physics, why should we try to reduce the Xs and Ys and Zs to what is talked about in physics? (1993, pp. 76–78)

For example, the explanation of why we speak of *morally wrong actions* (perhaps to encourage condemnation), *probable outcomes* (perhaps to coordinate degrees of confidence), and *truths* (perhaps to facilitate generalization) may prove fundamentally different from the explanation of

⁴ Local pragmatism is influentially elaborated by Blackburn (1993) and Gibbard (2003).

⁵ Price (2013) argues that other representational notions may be so suited; an example would be the notion of "mapping rule" from Millikan (1984). Shapiro (2020, pp. 22–25) argues that *correct mapping* and *reference* needn't even be coextensive: we can expect cases where our predicate 'F' *is supposed to map onto* something other than the F things.

⁶ By embracing deflationism about truth, neopragmatists avoid what Sellars views as a failing of classical pragmatists: "I would argue that Pragmatism, with its stress on language (or the conceptual) as an instrument, has hold of a most important insight—an insight, however, which the pragmatist has tended to misconceive as an *analysis* of 'means' and 'is true'" (Sellars 1954, p. 213).

⁷ Here I differ from Gert (2021). Price recognizes that his use of "global expressivism" could be misconstrued as endorsing the requirement (2013, p. 176).

why we talk of *molecules*. In this way, functional explanations can undermine the view that naturalistic reductions must in principle be possible on pain of eliminativism or fictionalism.

But the point isn't just that neopragmatism undercuts the demand for *naturalistic* reductionism. The promised "blocking of reductionist moves" (O'Leary-Hawthorne and Price 1996, pp. 123–26) is more general, casting doubt on projects of reducing facts statable in a given vocabulary to facts statable in a vocabulary with a fundamentally heterogeneous function. Later, I'll argue that neopragmatists who stress this point as it applies to (e.g.) normative and modal discourse haven't drawn the proper consequences of applying it to discourse about propositional content.

3. Logic as target and obstacle

How might neopragmatism be relevant to the philosophy of logic? For one thing, logical discourse is as traditional a source of philosophical perplexity as any. Consider the claim that instances of disjunctive syllogism are valid. Or the claim that either there are gods or there aren't gods. Or, most venerably, the claim that Theaetetus is not flying. What, if any, domains or aspects of reality are limned by these claims? How does the subject matter of each hang together with the rest of what we talk of, and what are the implications for our ability to attain knowledge? Logical discourse appears a prime candidate for pragmatist exploration.

If we stick with Price's formulation, according to which pragmatists examine how the "folk talk of Xs and Ys and Zs," obvious targets would include talk of logically valid arguments and of logically inconsistent sets of sentences. (Here, the relevant "folk" consist almost entirely of those engaged in philosophy or mathematics.) Standard approaches to such *logical relations* have taken the form of reductive analyses, e.g. in model-theoretic or proof-theoretic terms. In Section 4, I'll summarize a neopragmatist approach according to which when we talk about what sentences are logical consequences of what others, we're doing something very different from talking about either model-theoretic or proof-theoretic properties.⁸

Logical discourse isn't exhausted by talk of logical relations, however. That talk has features of linguistic expressions as its overt subject matter. By contrast, when using the disjunction 'Either it's raining or it's snowing' one no more talks about sentences than when using the constituent 'It's raining'. What, then, can be said about the subject matter that the use of *logical*

⁸ Unlike model- and proof-theoretic accounts, the expressivism ("projectivism") about consequence of Field (2015) is congenial to the neopragmatist strategy.

connectives contributes to our discourse? On one representationalist view, the answer is that rather than let us talk of any Xs, Ys, and Zs, connectives let us talk of ontological “structure.” While such structure is part of what makes true any sentences employing logical connectives, logically true sentences are said to be true wholly in virtue of that structure. Thus, according to Penelope Maddy, “the world has very general structural features” such that the “the core of our logic reflects” these features (2002, p. 76, 83; cf. Millikan 1984, ch. 14; Sider 2011).⁹ In opposition to such a view, neopragmatists offer nonrepresentationalist accounts of the function of logical connectives and operators in the tradition of Frank Ramsey (1927; 1929) on negation and quantifiers, and Gilbert Ryle (1950) and Sellars (1953) on conditionals.

Yet discussion of logical connectives by local and global pragmatists usually occurs in a different context. Rather than invoking functional explanations of logical connectives to resolve philosophical perplexities about (e.g.) negative and disjunctive states of affairs, such discussion focuses on connectives as posing a formidable challenge to functional explanations of other vocabulary. The challenge is due to Peter Geach, who criticizes advocates of pragmatist functional explanation for having overlooked it, thereby revealing that they have held “little regard for formal logic as a philosophical instrument” (1965, pp. 461–65).¹⁰

The issue is that functional explanations typically concern assertions of logically simple sentences. An account of the function of ‘wrong’ might tell us that the function is served when (e.g.) an assertion of ‘Torture is wrong’ contributes to condemnation of torture. An account of the function of ‘urgent’ might tell us that the function is served when (e.g.) an assertion of ‘Climate action is urgent’ instigates expeditious action to address climate change. But pragmatists about wrongness or urgency must also explain what being able to assert *logically complex sentences* containing ‘wrong’ or ‘urgent’ does for us. To this end, the usual strategy has been to explain how each embedding context can serve its function in assertions where the embedded sentences contain ‘wrong’ or ‘urgent’ (e.g. Blackburn 1988; Schroeder 2008; Gert 2021; Sinclair 2021).¹¹

⁹ A complication is that Maddy rejects substantive notions of reference and truth; her “reflecting” is explained in “correlational” terms (2007, pp. 195–96, 226n3).

¹⁰ Geach criticizes “some Oxford philosophers,” and his paper cites or alludes to a handful of figures in Oxford ordinary-language philosophy. Presumably he wouldn’t have made the same remark about the “Cambridge pragmatist” and logician Ramsey (see Misak 2016)!

¹¹ Price (1993, pp. 65–66) argues that pragmatists have no problem accommodating logical complexity if they *look away* from their functional explanations and focus instead on the *propositional content* of sentences like ‘Torture is wrong’. Still, he recognizes that pragmatists also owe an explanation of the *functions of logical embeddings*, such as conditionals. Part of that task, he says, is explaining “how the general function of the

In seeking to meet Geach's challenge this way, pragmatists have presupposed two criteria of adequacy on functional explanations of logical connectives. The first is a weak compositionality constraint on functional explanation.

Compositional Dependence of Explanation. Let S be a logically complex sentence containing atomic expression E. In explaining the function S's major connective serves in an assertion of S, we must make reference to E's function.¹²

For example, suppose we seek to explain the function 'not' serves in an assertion of 'Climate action is not urgent', or the function 'if' serves in an assertion of 'If climate change is causing famines, then climate action is urgent'. According to Compositional Dependence of Explanation, adequate explanations must ultimately refer to the function of 'urgent', one it serves in logically simple assertions, e.g. of 'Climate action is urgent'. To be sure, a connective's function should be explained *in a uniform way* (cf. the "Generality Condition" of Sinclair 2021, p. 109). Thus there should be a parallel explanation of the function served by 'not' in an assertion of 'Climate action is not costly', one that appeals to the function of 'costly'. Still, notwithstanding this generic pattern of explanation, the specific function of 'urgent' must play a role in explaining the function 'not' serves in assertions of negations containing 'urgent'. One proposal would be that 'not' serves its function in an assertion of 'Climate action is not urgent' when that assertion counters the instigating of expeditious action to address climate change.¹³

Furthermore, local and global pragmatists have assumed that their theories are subject to a second criterion of adequacy deriving from logic:

Explanation of Logical Relations. Functional explanations for the logical connectives must explain the logical relations that obtain between (sets of) sentences.

conditional serves the specific purposes of moral discourse, modal discourse, or whatever" (pp. 75–76). Here he endorses the similar view of Blackburn (1988, pp. 185–86; Price 1993, p. 65n6).

¹² Following Millikan (1984), I am construing an expression's function as something whose performance accounts for the expression's continued use. This presents a problem for attributing functions to sentences, since these aren't generally kept in use by prior utterances. Still, if an expression is understood as having a "relational" function, one specified in relation to a context including the other constituents in a sentence (p. 80), we can say that it has an "adapted" function as a part of a particular sentence. Of course, like all functions, this one won't be *served* in every assertion of the sentence.

¹³ Lest Compositional Dependence of Explanation be construed as a stronger condition than it is, it may help to see how Gert (2021) satisfies it. According to Gert, an assertion of 'Climate action is urgent' expresses an attitude of "being for" some attitude u toward climate action. Then 'not' serves its function in an assertion of 'Climate action is not urgent' by making it the case that the assertion expresses being for the attitude $\neg u$ that's "paired" with u . This is another attitude toward climate action, a contrary of u , such that learning to use 'urgent' involves learning to associate the word with the pair $\langle u, \neg u \rangle$. Since $\neg u$ isn't a second-order attitude toward u , the attitude u needn't be playing any role in the mind of a *speaker* of 'Climate action is not urgent'. Still, the fact that 'urgent' contributes u plays a role for the *theorist* in explaining the function 'not' serves in an assertion of this particular sentence.

Consider the facts that ‘Climate change is not causing famines’ is a *logical consequence* of the above negation and conditional, and that ‘Climate action is not urgent’ is *logically inconsistent* with ‘Climate action is urgent’. To explain why these relations obtain without invoking truth conditions, pragmatists appeal to the functions served by ‘if’ and ‘not’. Naturally, their aim in satisfying Explanation of Logical Relations has been more general, e.g. a system of functional explanations that “explains the applicability of first-order logic” (Gert 2021). For this purpose, functional explanations for connectives will have to mesh appropriately with the kinds of explanations given for other expressions, such as atomic predicates.

Pragmatist approaches to language have struggled to meet the two constraints.¹⁴ My contention will be that proper regard for the need to accommodate logical complexity doesn’t require accepting Compositional Dependence of Explanation or Explanation of Logical Relations. Sections 4 and 6 will examine these constraints in reverse order, while Section 5 will sketch an approach to logical connectives made possible by rejecting them.

4. Deflationism about logical relations

Deflationism about logical relations is motivated and elaborated in Shapiro (2011; 2022); I can only give a summary here. My concern will be to point to its dual status as an application of neopragmatism and a view with upshots for neopragmatism.

Consider first a familiar position endorsed by neopragmatists, a version of deflationism about truth. It starts with a functional proposal concerning why we have the predicate ‘*x* is true’, namely that it allows us to generalize in ways that would otherwise require quantification into sentence position (or, in finite cases, list-like specifications). We can say “Nothing the candidate said was true” or “Some instances of excluded middle aren’t true.”¹⁵ Deflationists argue that for this function to be served, it suffices that the predicate obey an intersubstitutability schema:

(T) If *S* has the propositional content that *p*, then ‘*S* is true’ is intersubstitutable with ‘*p*’.¹⁶ Henceforth, I make the simplifying assumption that the sentences discussed lack any context-sensitivity that prevents speaking of their being true or having a propositional content.

¹⁴ For an overview of challenges facing various approaches, see Schroeder (2010, pp. 139–41). Two recent attempts at meeting them, by a local and a global pragmatist respectively, are Sinclair (2021) and Gert (2021).

¹⁵ Price (2003) argues that ‘true’ has the further function of expressing a norm that governs any assertoric practice. In such a practice, all that’s required for a predicate to serve this function is satisfying something like (T). Shapiro (2021) agrees that (T) lets ‘true’ serve a further important function, one involved in recognizing an asserter’s communicative authority, but argues that truth isn’t a kind of correctness.

¹⁶ To underwrite the claimed function, the intersubstitutability must extend to embedded contexts. However, we must exclude, at least, modal contexts that render relevant possibilities in which *S* has a different content.

From the explanatory sufficiency of (T), deflationists draw an antimetaphysical conclusion. The functional explanation based on (T), they argue, doesn't depend on 'true' expressing a substantive property, whence we have no reason to think it expresses such a property. Here I'm taking a *substantive property* to be any property regarding which there's a uniform answer to the question "In virtue of what do the bearers of the property bear it?"¹⁷ A theory on which truth is a substantive property may still count as *metaphysically quietist* about truth: a primitivist about truth will hold that the uniform answer may be "Never in virtue of anything!" But deflationism is a different kind of quietism about truth. According to deflationists, the question "In virtue of what is S true?" can have answers, but only non-uniform ones. Here's one such answer: S has the content that climate action is urgent, and climate action is urgent.¹⁸

Deflationism about logical consequence can be presented in parallel fashion. It too starts with a functional proposal, this time concerning why we have the predicate 'x has y as a logical consequence'. The proposal is that using this predicate lets us generalize in ways that would otherwise involve quantification into sentence position, specifically over sentences whose main connective is a *logical conditional* (also called an *entailment connective*). These are sentences such as 'If it's snowing then logically either it's raining or it's snowing.' Using a consequence predicate, we can say things like "Every sentence has as a logical consequence any disjunction with that sentence as a disjunct" and "She denied a logical consequence of something he asserted." The deflationist now argues that for this generalizing function to be served, it suffices that the consequence predicate obey an intersubstitutability schema:

(C) If S has the propositional content that *p* and S' the propositional content that *q*, then 'S has S' as a logical consequence' is intersubstitutable with 'If *p* then logically *q*'.

Like (T), this is a principle of linguistic ascent/descent: the consequence ascription is about *sentences*, while the logical conditional sentence isn't. Here I've limited myself to single-premise consequence. The extension to multipremise consequence, where the convenience of generalizing using consequence talk is most pronounced, is supplied in Shapiro (2022). The

¹⁷ Shapiro (2022, p. 16n28) compares this conception with a similar one in Edwards (2013).

¹⁸ According to Shapiro (2022, p. 17), the deflationist concludes that when a true sentence S has the content that *p*, what S is true in virtue of (besides having that content) is just *whatever (if anything) it is in virtue of which p*. This won't yet imply the additional claim that such a sentence is true (in part) in virtue of *its being the case that p*. It's not clear that the most parsimonious explanation of (T) involves this additional claim (I'm indebted to Susanna Melkonian-Altshuler for alerting me to the issue through her work in progress). But for present purposes, all that matters is that when accounting for S's being true, a deflationist needn't point to any fact about S other than its having the content it does.

general deflationary schema specified there is also applicable to the relation of logical inconsistency—in place of a logical conditional, we would use a preclusion connective ‘That p logically precludes that q .’

As in the case of truth, deflationists now draw an antimetaphysical conclusion. The functional explanation based on (C), they argue, doesn’t depend on the predicate ‘has as a logical consequence’ expressing any substantive relation, whence we have no reason to think that it expresses such a relation. If it doesn’t, the question “In virtue of what does S have S' as a logical consequence?” can have only *non-uniform* answers. Here’s one such answer:

- (a) S has the content that climate action is urgent,
- (b) S' has the content that it’s not the case that climate action is not urgent, and
- (c) if climate action is urgent then logically it’s not the case that climate action is not urgent.¹⁹

Deflationism about logical consequence thus contrasts with substantive accounts of the nature of that relation, be these model-theoretic or proof-theoretic.

We’re now ready to see why a deflationist about logical consequence should reject Explanation of Logical Relations as a constraint on functional explanations. Suppose someone demands to know *why facts (a) and (b) settle that S and S' stand in the relation of logical consequence*. If they’re a substantivist about consequence, they won’t regard the *non-metalinguistic* claim (c) as an adequate answer. For they’ll want to understand the connection between facts (a) and (b) about the sentences and whatever *further fact about the sentences it consists in*, according to their theory of the consequence relation, for them to stand in that relation. And if their substantivist theory of logical consequence is part of a pragmatist approach, it will be natural to seek such an understanding in an account of the function of a negation connective. After all, the relation between S and S' is characterized by (a) in (b) entirely in terms of the involvement of such a connective.²⁰

According to deflationism about logical consequence, by contrast, this explanatory demand

¹⁹ Why isn’t the following uniform answer available: “ S' expresses a proposition that’s a logical consequence of the proposition expressed by S ”? This just transfers the question about sentential consequence to propositional consequence, and logical deflationists will hold that the latter relation isn’t substantive either. Crucially, according to logical deflationism, (c) doesn’t state a *relation between propositions*, any more than ‘Climate action is not urgent’ states a *property of a proposition*.

²⁰ I’ve assumed the substantivist isn’t a primitivist. But even a primitivist about consequence, e.g. an advocate of Field’s expressivism (2015), may wish to understand, in terms of *features of the negation connective*, why every sentence bears the consequence relation to its double negation. Compare: moral expressivism doesn’t entitle those who condemn torture to dismiss a demand that they point to some *feature of torture* relevant to its being wrong.

would be illegitimate. It should help to compare deflationism about truth, where the analogous point is made by Paul Horwich (1995, pp. 361–65). Suppose I ask why fact (a) is relevant to the fact that S is *true*. Deflationists who agree that climate action is urgent will be content to answer that this is because climate action is urgent. It's only substantivists about truth who will further want to understand the connection between fact (a) and whatever, according to their theory of the truth property, it consists in for the sentence to have the property of truth. My argument is that an analogous point applies to deflationism about logical consequence.²¹

Admittedly, neopragmatists who are deflationists about consequence might seek to defend Explanation of Logical Relations in a very different way. They could claim that understanding the functions of the connectives must suffice to tell us whether, e.g., *if it's not the case that torture isn't wrong, then logically torture is wrong*. But this would be a marked departure from what neopragmatists say about other vocabulary. A neopragmatist explanation of the function of 'wrong' isn't expected, even together with non-ethical facts about torture, to tell us whether torture is wrong. We should no more expect a neopragmatist approach to logical connectives to settle logical questions stated using them than we'd expect a neopragmatist approach to ethical predicates to settle ethical questions stated using them.

In short, if I'm right that neopragmatists should be deflationists about logical relations, they have no reason to accept Explanation of Logical Relations. According to that constraint, neopragmatists must show that their functional explanations for logical connectives succeed in "accounting for the logical relations that hold among logically complex sentences" (Gert 2021, §1), such as the fact that S' is a logical consequence of S. But neopragmatists need no more show this than they need to show that their functional explanations for non-logical expressions help account for the *truth or falsity* of sentences containing those expressions.

The above exposition of deflationism about logical relations has incurred two debts. First, I haven't said what's meant in (C) by "intersubstitutable." The worry arises that in explaining the function of logical-consequence talk, I'm using the notion of logical consequence.²² If "intersubstitutable" in (C) meant *logically equivalent*, talk of logical consequence would be performing explanatory work it might not be suited for by deflationary lights. Second,

²¹ Båve (2013, p. 638) voices skepticism about Explanation of Logical Relations, citing Horwich. Here I've explained how deflationism about logical relations lets Horwich's argument be extended from *truth* to *logical relations*. Shapiro (2004, pp. 150–53) defends the extension to "material" consequence.

²² Or, at least, that I'm using a closely related notion—if consequence *in virtue of the behavior of the consequence predicate and logical conditional* doesn't count as *logical*.

deflationism about consequence explains the function of the consequence predicate in terms of generalizations over sentences containing a connective ‘if p then logically q .’ What can neopragmatists say about that connective’s function? Can they avoid explanatory appeal to a logical relation obtaining between two entities, the proposition that p and the proposition that q ? I’ll only make a partial payment on the second debt, while suggesting where to look for the remaining funds. The next section outlines a program for explaining the functions of sentential connectives, of which the logical conditional is an admittedly tricky example. In the course of this, the first debt will also be repaid.

5. Dialectical disposition expressivism about logical connectives

What does being able to form logically complex sentences do for us? Here I’ll limit myself to types of complexity that are usefully regimented using connectives of propositional logic. No doubt even such forms of complexity serve multiple functions, as the English words ‘and’, ‘or’, and ‘not’ certainly do. My purpose is to identify plausible core functions so as to illustrate the potential of a kind of non-representationalist functional explanation.

The proposal will be a dialectical one, in that respect following Price’s discussions of negation (1990; 1993; 2009).²³ More specifically, it’s couched in terms of Brandom’s view of propositional discourse as a “game of giving and asking for reasons” that centrally involves making assertions. In asserting, a speaker assumes responsibility to defend their assertion when challenged (or withdraw it), and licenses hearers to assert the same proposition. The speaker does the latter by making available to the hearer a way to meet her own responsibility when challenged: namely, to defer to the speaker’s assertion (Brandom 1994, pp. 171–72).

These are the only elements of Brandom’s account I’ll draw on. No use will be made of his notion of being *committed* to a proposition—including in virtue of having asserted other propositions that bear an inferential relation to it. I also depart from Brandom on what count as appropriate challenges and adequate responses. On his view, one way to challenge an assertion is to assert an incompatible claim (1994, p 178). I make no explanatory use of any inferential or

²³ There’s also contact with Gibbard’s identification of “disagreement as the key” to logic (2003, p. 65) and Lance’s interpretation of incompatibility using a “pragmatic relation of challenge” (2001, p. 443). Dutilh Novaes (2021) likewise discusses and develops a tradition that looks to dialogue to explain the functioning of logical vocabulary. Much of that tradition, though, has different aims. For example, the dialectical rules for connectives in Lorenzen (1960) are meant to underwrite intuitionistic logic. Dutilh Novaes’s approach also has a non-deflationary flavor. She defends general principles connecting logical consequence to norms governing interactions between Prover and Skeptic (pp. 76–77). When C is a consequence of A and B , “Skeptic ought to see to it that, if he has granted A and B and Prover puts forward C , then he will grant C .” The present proposal yields no such principles.

incompatibility relations (whether “material” or “formal”), since I believe neopragmatists should espouse deflationism about such relations. Instead, I’ll talk only of a speaker’s treating a performance as a challenge to their assertion, and treating another performance as a way to meet the challenge. But speakers also recognize challenges that *don’t* involve asserting propositions. One way to challenge the assertion of a proposition can be to *reject* one or more other propositions. For present purposes, it should suffice to think of the act of *rejecting* the proposition that *p* as involving one’s expressing that one is prepared to challenge assertions that *p*. One can also commit oneself not to challenge assertions that *p*; that is *conceding* that *p* (Walton and Krabbe 1995, p. 186).

Using these ingredients, we can explain the intersubstitutability claimed in schema (C). Suppose one understands *S* as having the content that *p* and *S'* as having the content that *q*, and that one’s language has a logical conditional. Then one will be disposed in a certain way toward substitutions, in one’s own speech or that of an interlocutor, of one of the following for the other:

a sentence with the content that *S* has *S'* as its logical consequence

a sentence with the content that *if p then logically q*.

Specifically, one will be disposed to treat such substitutions as making no difference to the game of giving and asking for reasons—to what one takes as a challenge to an assertion, or to what one takes to be a way to meet such a challenge.

Turning at last to connectives, let’s start with conjunction. My suggestion is that the expression regimented by ‘and’ in logician’s English enables one to make an assertion by which one conveys that one has a certain dialectical disposition with regard to *that very assertion*.

Conjunction. In asserting ‘*p* and *q*’, a speaker expresses her being disposed thus:

- (i) She’s prepared to acknowledge an interlocutor’s rejection of the claim that *p* as a challenge to her assertion, and to acknowledge an interlocutor’s rejection of the claim that *q* as a challenge to her assertion.
- (ii) When an interlocutor has challenged her assertion, she’s prepared to adduce, as a way to meet the challenge, any pair of available assertions that *p* and that *q*.

Here available assertions include any the speaker makes in the context of the challenge, but can also include assertions by others. An assertion by someone else counts as available to the speaker provided she would be prepared to assert the same claim and defer to that speaker’s assertion in meeting a challenge. Notice that the clauses don’t say that the speaker expresses a disposition *not* to acknowledge other kinds of challenge to her assertion of ‘*p* and *q*’, or *not* to

meet a challenge in other ways.

Why might it be useful to have a way to express this dialectical disposition? Suppose one defends the claim that r against an interlocutor's challenge by adducing dual assertions that p and that q . (Example: "Mine is the better plan for mitigating climate change. Here's why. First, it's more effective. Second, it's less costly.") One will then acknowledge an interlocutor's rejection of either claim as a challenge. But the conjunction connective facilitates dialectical engagement by allowing a further way for the interlocutor to challenge one's defense of the claim that r . For they may wish to challenge one's dual assertions that p and that q even if they're neither prepared to reject the claim that p nor prepared to reject the claim that q .²⁴ Conjunction allows the dialogue to take the form of one's assertion, and their subsequent rejection, of the proposition that p and q . ("It's more effective *and* less costly? Come on!")

Admittedly, we could obtain the same benefit if the game of giving and asking for reasons had as a distinct move the act of *rejecting a pair of propositions taken conjunctively* (i.e. expressing a disposition to challenge their joint assertion). But the story wouldn't end there. As we'll soon see, there would be a corresponding benefit to including an act of asserting a pair of propositions *taken disjunctively*. And now there would be pressure to recognize as a further primitive act the *disjunctive* asserting of one proposition together with a *pair of others taken conjunctively*. (And so on.) Having 'and' in our language allows us to stick instead with disjunctively asserting one proposition together with a second proposition that's a conjunction. Of course, provided we can also state disjunctive propositions, we can do without acts of asserting disjunctively *or* rejecting conjunctively.²⁵

Unsurprisingly, a parallel functional story can be told about disjunction. Having a device regimented in logician's English as 'or' likewise enables the expressing of a dialectical disposition with regard to the very assertion that expresses the disposition.

Disjunction. In asserting ' p or q ', a speaker expresses her being disposed thus:

- (i) She's prepared to acknowledge an interlocutor's pair of rejections of the claims that p and that q as a challenge to her assertion.
- (ii) When an interlocutor has challenged her assertion, she's prepared to adduce, as a way to

²⁴ Though rejection needn't take the form of an assertion for which one assumes justificatory responsibility, one will still aim to avoid gratuitously rejecting propositions.

²⁵ Thus "bilateralist" treatments of connectives (Rumfitt 2000), which invoke assertion and rejection, don't *additionally* invoke asserting disjunctively or rejecting conjunctively. (For related discussion, see Humberstone 2000: 367–70.) However, Lance (2001, p. 444) employs as primitive notions *asserting a sentence* and *challenging a totality of assertions*.

meet the challenge, any available assertion that *p*, and likewise any available assertion that *q*.

Again, the clauses don't say that the speaker expresses a disposition *not* to acknowledge other kinds of challenge, or *not* to meet them in other ways.

As before, we can ask why it's useful to have a way to express this dialectical disposition. Suppose one's assertion that *r* has been challenged, and the situation is such that if one were prepared to adduce an assertion that *p*, or alternatively an assertion that *q*, one would be prepared to meet the challenge that way. (Example: I assert that some speaker's climate change skepticism needn't be taken seriously. I might defend this claim by asserting that they are ignorant, or by asserting that they are corrupt.) One may not be prepared to adduce an assertion of either proposition.²⁶ Nonetheless, one may be prepared to meet the challenge to one's assertion that *r* by sticking one's neck out and making oneself liable to a challenge by any interlocutor who rejects *both* the claim that *p* and the claim that *q*. The disjunction connective allows this dialectical move to take the form of asserting the proposition that *p or q*. ("Either they are ignorant or they are corrupt.")

Concerning the function of negation, my proposal is as follows.

Negation. In asserting 'not *p*', a speaker expresses her being disposed thus:

- (i) She's prepared to challenge any assertion that *p*.
- (ii) When an interlocutor has challenged her assertion, she's prepared to adduce, as a way to meet the challenge, any available assertion she would acknowledge as a way to reject the proposition that *p*.

Negation thus provides a standardized means of rejecting a proposition by asserting another proposition (Price 1990; 1993, pp. 70ff). As before, a key benefit is that such propositions can be deployed in assertions in which they are logically embedded. Without negative propositions, we'd again need to proliferate types of moves in the game of giving and asking for reasons, such as the disjunctive assertion of one proposition with a second *taken negatively*. With 'not', we can instead assert that *either p or not q*.

Clarifying this account of negation requires addressing an objection. Suppose a speaker asserts that *not p*, and is challenged by her interlocutor. According to (ii), it might seem, the disposition the speaker expresses includes being prepared to respond by adducing an assertion

²⁶ This may be because one lacks warrant. Alternatively, one might know that one's interlocutor is unlikely to concede that *p*, and therefore be unwilling to adduce an assertion that *p* in defense of one's assertion of *r*.

that *possibly not p*. After all, wouldn't she acknowledge that assertion as a way to challenge assertions that *p*? (See Incurvati and Schlöder 2017). Yet surely a speaker can't meet a challenge to her claim that *not p* by adducing the claim that *possibly not p*. What this objection reveals is that, on the current view, asserting that *possibly not p* isn't a way of challenging assertions that *p*. To be sure, it's a way of expressing that one isn't prepared to concede that *p*. But asserting that *possibly not p* falls short of challenging in the sense used here. In particular, it doesn't impose a burden on the asserter that *p* to defend their assertion on pain of having to withdraw it. On the present account, then, rejection (as expression of a disposition to challenge) is stronger than the "weak rejection" of Incurvati and Schlöder.²⁷

I conclude my exposition of dialectical disposition expressivism by noting two issues that can't be pursued here. One is how to give functional explanations for additional connectives and operators—including the logical conditional used by logical deflationism to explain the function of the logical consequence predicate.²⁸ Another issue is whether the same functional explanations could be exploited in *substantivist* analyses of logical relations. Suffice it to say I see no direct way to use the above expressive clauses for the connectives to generate a relation plausibly coinciding with even a weak notion of logical consequence.²⁹ In this respect the clauses differ from the "bilateral" *inference rules* of Rumfitt (2000), to some of which they bear a non-coincidental resemblance.

6. Neopragmatist metasemantics?

The last two sections offered functional explanations for two kinds of logical vocabulary: the predicate 'is a logical consequence of' and the connectives 'and', 'or', and 'not'. The approach taken diverges from most pragmatist approaches to logic in rejecting Explanation of Logical Relations. I argued that neopragmatism motivates a deflationism according to which logical relations needn't be accounted for by the functions of connectives.

²⁷ Still, there remains a sense in which rejection is weak. There's no incoherence in rejecting the proposition that *p* without being prepared to assert, or even concede, that *not p*. (One might take this line with Liar propositions.)

²⁸ Shapiro (2018, pp. 185–86) sketches an application to indicative conditionals, on which asserting 'If *p* then *q*' expresses a dialectical disposition with regard to the pair of propositions that *p* and that *q*. An assertion of 'If *p* then logically *q*' might then express that disposition with regard to all pairs sharing a logical form.

²⁹ The clauses do yield that in certain cases there's a pragmatic tension in asserting a proposition while rejecting one of its consequences, e.g. asserting that *p and q* while rejecting that *p*. They also suggest that an idealized agent (who exhibits the dialectical dispositions they express and knows which dispositions they *would* express by an assertion) will take (e.g.) an interlocutor's assertions that *not p* and that *not q* as a challenge to their assertion that *p or (q and r)*. But there's no clear route to extending such pragmatic considerations to capture all cases of logical consequence or inconsistency. (Contrast the aim to "explain inconsistency as frustration of constitutive function" in Sinclair 2021, p. 268.)

I turn now to a second divergence from other pragmatist approaches. This concerns Compositional Dependence of Explanation. According to this constraint, an adequate explanation of the function ‘not’ serves in an assertion of a given negation must draw on the functions of that sentence’s non-logical expressions. Yet the above clauses for ‘not *p*’ make no reference to the *functions* of any vocabulary contained in the substituent for ‘*p*’, instead taking into account only that it has the *content* that *p*. To assess whether that’s a problem, let’s ask why Compositional Dependence of Explanation might seem reasonable. One line of thought starts with an assumption about how two kinds of description are related: ascriptions of content and specifications of function.

Explanation of Propositional Content. Pragmatists seek to explain what it consists in for a sentence to possess its propositional content by providing functional explanations for the sentence’s constituent expressions.

As Amie Thomasson puts it, the pragmatist’s “functional analysis” will “provide the basis for giving a meaning analysis” (2020, p. 79).³⁰

According to Explanation of Propositional Content, a pragmatist about urgency should wish to explain what it consists in for a sentence to have (say) the content *that climate action is not urgent*. And that’s indeed a common ambition of local and global pragmatists. Sometimes it’s formulated in terms of what constitutes the state of mind of someone who “accepts” the sentence. Expressivists thus wish to explain what *meaning* that climate action is not urgent consists in by explaining what it consists in to *think* that climate action is not urgent, which (they say) is what someone thinks when they accept a sentence with this meaning. Thus Mark Schroeder writes: “For each sentence [of *our* language—LS], ‘P’, an expressivist theory says what ‘P’ means by saying what it is to think that P” (2010, pp. 74, 137). Once coupled with global nonrepresentationalism, the project of Schroeder’s expressivist becomes the project Gert (2021) calls giving a “neopragmatist semantics.” Many would instead call it a project in *metasemantics*, if “metasemantics” is understood as concerning what it is in virtue of which expressions possess their content (e.g. Chrisman 2016 and Sinclair 2021).

Suppose that we accept Explanation of Propositional Content, and that our task as pragmatists is to explain why ‘Climate action is not urgent’ has the content it does. Presumably, we’ll wish to explain this in terms of the function that ‘not’ serves in assertions of the sentence.

³⁰ She clarifies, following Williams (e.g. 2010, p. 325; 2013, p. 138), that this may require specifying not just an expression’s function, but aspects of its use that enable it to serve its function. I’ll ignore this complication.

For that to succeed, it won't suffice to specify this function in a way that takes for granted that 'Climate action is urgent' has the *content* that climate action is urgent. Rather, we'll ultimately need to make reference to the *functions* of that sentence's constituent expressions. On the other hand, if Explanation of Propositional Content is rejected, this allows for the functional explanations given for logical connectives in Section 5, which invoked only the *content* of sentences in a connective's scope.

Why, then, have neopragmatists typically viewed their task as offering explanations of what it consists in for a sentence to have its propositional content? One cause, I think, has been a misunderstanding of how neopragmatists should employ the strategy, which they share with local expressivists, of turning attention to language or thought. Instead of explaining what it consists in for something to be morally wrong or possible, expressivists seek to explain the role 'morally wrong' or 'might' plays in our linguistic-cognitive economy. Consider how Seth Yalcin explains the strategy of "psychological ascent."

It says: don't start with questions like this: What is the world like when 'It might be raining' is true? ... But instead with questions like this: What is it to think it might be raining? (2022, pp. 326–28)

Similarly, Yalcin says, expressivists reject the task of explaining what the wrongness of breaking promises consists in, while instead providing "substantive" truth conditions for 'A thinks it's wrong to break promises'.

But this would be the wrong way for *neopragmatists* to understand the strategy of ascent. To see why, recall how that strategy figures in an early neopragmatist position, that attributed to Wittgenstein by Kripke (1982).³¹ Take the sentence '2+3=5'. Instead of seeking a non-trivial explanation of what the world has to be like for this arithmetic sentence to be true, Kripke's Wittgenstein asks "What is the role, and utility, in our lives of our practice of asserting (or denying) the form of words?" (Kripke 1982, p. 73). It's tempting to assume that answering this question amounts to saying what it consists in for the sentence '2+3=5' to *have the meaning it does*, viz. that two plus three is five. But that isn't how Kripke conceives of functional explanations. After all, to answer the question "What does it consist in for a sentence to mean that two plus three is five?" would be to give a "straight" rather than "sceptical solution" to the very puzzle about meaning that is Kripke's topic. Rather than answer this question, Kripke

³¹ Miller (2020, p. 17n) draws the connection to Price's global pragmatism.

dismisses it by applying the same strategy of linguistic ascent to the role in our lives of meaning talk. Hence his envisaged functional explanations for ‘+’ and ‘means’ aren’t intended as explanations of what it consists in for a symbol to mean *plus* or to mean *means*.

One would expect neopragmatists to be heirs to Kripke’s Wittgenstein. As global pragmatists, they should apply to *propositional content* the same strategy of linguistic ascent they apply to *moral wrongness*. Surprisingly, neopragmatists seldom draw this analogy. Price is an exception (another is Warren 2018):

There’s an important difference between an approach which *analyzes* content, or meaning, in terms of use—which says what it is for an expression to have a particular content, in terms of how it is used—and an account which simply tells us how expressions are used, without thereby claiming to offer an account of *content*. For an account of the latter kind, ascriptions of content may figure as part of the explanandum. Part of the task of such a theory may be to explain the use, and function, of terms such as “content” and “meaning” in ordinary contexts. But ... explaining the use of the term “content” is different from explaining what content *is*. A thoroughgoing non-representationalist view just tells us about use. It doesn’t explain content by analyzing it in terms of use. (Price 2004, p. 219; also 2009).

We can press the point farther than Price does. Not only does the neopragmatist strategy not *amount* to explaining content as consisting in linguistic function; it should *undercut* such explanation. Like truth talk, content talk appears to exhibit a distinctive kind of function, very different from that of linguistic-function talk. Specifically, Brandom argues that content ascription serves to enable dialectical engagement: we report what someone asserted in order to defer to their testimony when challenged to defend our claims, or in order to clarify agreements and disagreements (“She said that climate change is a myth, but that’s not true”).³² The functional distinctiveness of content talk should then result in “blocking reductionist moves” in the same general way that the functional distinctiveness of moral talk was supposed to block reductionist moves concerning moral properties. Price’s guiding question is pertinent here: if our explanation of what the folk are doing when they talk of content distinguishes this from what we’re doing when we explain linguistic functions, why should we try to reduce content to what

³² Brandom (1994, ch. 8). Kripke hints at a related account of the function of ‘means’: in attributing meaning to someone’s utterances, the community is “enabling him to engage in certain types of interactions with them that depend on their reliance on his responses” (1982, pp. 109, 94–95). Lance and O’Leary-Hawthorne (1997, p. 64) argue that ‘means’ has a distinctive function in “mak[ing] communication, discussion, and argumentation possible.”

we talk of when explaining linguistic functions?

Neopragmatism thus motivates rejecting Explanation of Propositional Content and the resulting demand for a function-based metasemantics. If that's right, we've found no reason why functional explanations for logical connectives should invoke the *functions* of expressions in their scope. In explaining the function 'not' serves in an assertion of 'Climate action is not urgent', neopragmatists needn't take into account anything about the constituent 'Climate action is urgent' other than that it has the content that climate action is urgent. Again, disallowing a role for content in functional explanations would make sense if those explanations were intended to yield metasemantic dividends. But neopragmatists should deny that they're so intended.

7. Conclusion

There are three ways in which this chapter brought a neopragmatist perspective to bear on logic. Section 5 proposed explanations of the functions served in assertoric practice by the connectives 'and', 'or', and 'not'. The rest of the chapter supported that proposal by applying neopragmatism in two additional ways.

The first additional application was to a different kind of logical vocabulary, namely predicates used to talk about *logical relations* such as logical consequence and incompatibility. By giving a deflationary explanation of the function of such talk, Section 4 sought to undermine a widely held constraint on pragmatist explanations of the functions of connectives. This is that they must contribute (as Gert says) to "accounting for the logical relations that hold between logically complex sentences." But deflationists about *logical consequence* should no more require functional explanations of the connectives to explain what it takes for sentences to stand in the consequence relation than deflationists about *truth* require functional explanations of ethical vocabulary to explain what it takes for ethical sentences to be true.

The second additional application, in Section 6, was indirect. I argued that when neopragmatists apply their methodology to ascriptions of *propositional content*, this should lead them to reject the task of giving constitutive explanations of what possessing a given content consists in. And I suggested that neopragmatists' acceptance of this task has been responsible for their embracing a second constraint. That constraint holds that a full explanation of the function a connective serves in an assertion of a given logically complex sentence must invoke functions of the sentence's atomic expressions.

I have aimed to show how neopragmatism yields reasons to dismiss both constraints, and that

doing so makes room for new nonrepresentationalist approaches to logic.³³

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³³ I’m grateful to Joshua Gert, Özcan Karabağ, and Julian Schlöder for comments and suggestions, and to a UConn Logic Group audience for discussion.

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