

Signs of Salvation

A Festschrift for Peter Ochs

EDITED BY

Mark Randall James

AND

Randi Rashkover



CASCADE *Books* • Eugene, Oregon

Ochs on Vagueness and Inquiry

—MARK RANDALL JAMES, Independent Scholar

RANDI RASHKOVER HAS SAID that “Peter Ochs’ work offers the single most creative and generous recovery of the Jewish wisdom tradition for our time.”¹ So it is a great privilege to be able to write about Peter Ochs from the perspective of one of his students, one of so many who have learned wisdom at his feet. My aim in this essay is to explicate a central but often misunderstood aspect of his work: his claim that scriptural pragmatism operates according to a logic of vagueness displayed in the classical sources of the Abrahamic religions. I do so by developing the suggestive link between Ochsian pragmatism and the Biblical wisdom tradition. In the introduction to his *Peirce, Pragmatism and the Logic of Scripture*, Ochs identifies an affinity between Peirce’s writings and the wisdom literature in that both are characteristically *vague*, “deferring the activity of completing their definitions to some other occasion.”² Although the Western tradition has often viewed vagueness as an intellectual vice, Ochs’ work shows that by retaining openness to novelty and change, vagueness is the most appropriate mode for certain kinds of discourse, particularly that of one engaged in a process of inquiry. By displaying this connection between vagueness and inquiry, I also show how Ochs’ logic of vagueness avoids the sort of relativism with which he and other postliberal theologians are often charged.

1. Rashkover, “Introducing the Work,” 439. Similarly, for David Ford, Ochs exemplifies a post-Holocaust wisdom able to critically reimagine Jewish life in the face of devastating catastrophes, one element of which is the sort of “inter-faith wisdom” practiced in Scriptural Reasoning (*Christian Wisdom*, 145–48; 302–3).

2. Ochs, *PPLS*, 9.

Peirce on Vagueness

Peter Ochs argues that modern thinking characteristically neglects the logical function of vagueness by confusing it either with determinate individuality or with generality. Determinacy refers to the character of concrete individuals and context-specific actions. According to Charles Peirce, a subject is *determinate*, “in respect to any character which inheres in it or is . . . predicated of it, as well as in respect to the negative of such character.”³ Peirce then distinguishes vagueness from generality as two distinct species of indeterminacy, offering several related definitions of these terms. In what has been identified as his game-theoretic approach to logic,⁴ he defines them in terms of the freedom each affords a person interpreting the meaning of a sign. A sign is *general* “in so far as it extends to the interpreter the privilege of carrying its determination further.” He tends to use universally quantified propositions as examples: “Man is mortal,” i.e. *all* men are mortal. He comments, “To the question, What man? the reply is that the proposition explicitly leaves it to you to apply its assertion to what man or men you will.” By contrast, a sign is *vague* “in so far as it reserves further determination to be made in some other conceivable sign, or at least does not appoint the interpreter as its deputy in this office.” He tends to use existentially quantified propositions as examples: “A man whom I could mention seems to be a little conceited,” i.e. *some* man is conceited. He comments: “The *suggestion* here is that the man in view is the person addressed; but the utterer does not authorize such an interpretation or *any* other application of what she says. She can still say, if she likes, that she does *not* mean the person addressed.”⁵ In short, while a general sign affords its interpreter an arbitrary freedom in some domain, a vague sign limits the interpreter’s freedom.

These game-theoretic definitions build upon Peirce’s pragmatic maxim, his method of eliminating vagueness by determining the practical consequences of a concept. In a later work, he formulates the maxim in this way:

To ascertain the meaning of an intellectual conception one should consider what practical consequences might result from the truth of that conception—and the sum of these consequences constitute the entire meaning of the conception.⁶

3. *CP* 5.447.

4. Cf. Brock, “Peirce’s Anticipation.”

5. *CP* 5.447. Presumably singular propositions involving deixis, such as “this is mortal,” would exemplify a determinate judgment.

6. *CP* 5.9.

In terms of the pragmatic maxim, a general sign affords the interpreter an arbitrary freedom to further determine its meaning by making clear that some facts and consequences are irrelevant with respect to action, supposing the sign is true. If “man is mortal” is true, then each individual person will die, irrespective of her other characteristics. The truth of this sign leaves its interpreter free to apply the predicate “mortal” to any arbitrary human being. By contrast, a vague sign restricts the interpreter’s freedom because even if it is true, a vague sign does not determine the consequences of its truth sufficiently for action in particular circumstances. “A man whom I could mention is conceited”—without further information, one cannot know *which* man the speaker has in view, and so one cannot fully adjust one’s actions to the consequences of his being conceited. At most, one might cultivate a certain inquiring openness to the possibility of meeting this conceited man among the speaker’s acquaintances, a vague habit of action appropriate to the sign’s vagueness.

In the same passage, Peirce offers alternative definitions of generality and vagueness in terms of how their use relates to Aristotle’s logical laws of the Excluded Middle (LEM) and of Non-Contradiction (LNC). Modern formal logicians often interpret these as laws governing relations between propositions, and hence as expressible in terms of a first-order propositional logic. On this view, LEM would state that a proposition p or its negation must be true ($p \vee \neg p$), and hence that both cannot be false. Similarly, LNC would state that a proposition p and its negation cannot both be true ($\neg(p \wedge \neg p)$). Peirce, by contrast, interprets these laws as governing the relation between predicates and subjects, and hence as requiring a second-order logic of predicates to express. On this view, LEM states that a predicate and its negation cannot both be false of the same subject (in the same respect). Likewise, LNC states that a predicate and its negation cannot both be true of the same subject (in the same respect).

Peirce argues that these laws are not universal logical laws, but rather define the grammar of determinacy. For a subject to be a determinate individual is to have its predicates clearly defined, and so signs identifying a determinate individual are those whose use is subject to both these laws. For example, LEM holds of an individual like *this* camel, since it must be either brown or not brown (in some respect). Similarly, LNC holds of *this* camel, since it cannot both be brown and not brown (in the same respect).

Because general and vague signs do not fully determine their object, however, their use is not fully governed by these laws. General signs are those that do not obey LEM, for a general predicate and its negation may both be *false* of the same subject. While LEM holds with respect to a determinate individual like *this camel*, it does not hold with respect to a

general subject like “camel,” that is, camels *in general* or *all camels*. After all, it may be false both that all camels are brown and that all camels are not brown, since it is possible that some camels are brown and some are not brown. By contrast, vague signs are those that do not obey LNC, for a predicate and its negation may both be *true* of the same subject. While LNC holds with respect to a determinate individual like *this* camel, it does not hold with respect to a vague subject like *some* camels. After all, it may be true both that *some* camel is brown and that *some* camel is not brown. For this reason, the truth of a vague sign does not in itself preclude contradictory clarifications of its meaning. Vague beliefs, Ochs says, “allow for contradictory propositions among their interpretants, until such time as the beliefs have been made fully determinate.”⁷

Vagueness and Wisdom

To make these formal definitions intuitive and to diffuse some of the apparent oddity in denying the universality of LEM and LNC, let us follow up Ochs’ suggestion that vagueness operates within the literature of the wisdom tradition, focusing on that prototypical wisdom genre: the proverb. A proverb is a short verbal formulation that expresses some piece of wisdom or counsel in a pithy form. By virtue of its brevity and a certain poetic crafting, a proverb facilitates memorization and ongoing use within the oral discourse of a community whose wisdom it encapsulates. These formal features also remind users that the wording of a proverb alone does not fully determine the wisdom it expresses: proverbs are characteristically *vague*. “A watched pot never boils”—but of course some do. Learning a proverb thus requires developing the wisdom to apply it in appropriate circumstances, circumstances which are not explicitly determined by the vague wording of the proverb.

In an illuminating passage, the biblical book of Proverbs juxtaposes a striking pair of proverbs:

Do not answer a fool according to his folly,
Or you will become like him.
Answer a fool according to his folly,
Or he will be wise in his own eyes. (Prov 26:4–5)

7. Ochs, *PPLS*, 181.

These proverbs violate LNC by giving contradictory advice—answer, and do not answer, a fool according to his folly.⁸ Indeed, their juxtaposition in writing makes it all but impossible for a reader to ignore this contradiction, which would have been less overt if or when these proverbs circulated orally.⁹ By juxtaposing them, the text not only invites readers to learn a few pieces of wisdom about dealing with fools but also provokes readers to learn about the *way* proverbs operate by coming to understand how both can be true despite their contradictory form. In this way, these proverbs teach a lesson in the logic of vagueness.

We can understand the logic governing their use in relation to two other features of these proverbs. First, since the application of proverbs depends on context-specific factors, the rules of action that they commend are not universal. Instead, they must be logically particular. This means that we may roughly explicate their logical force by adding an existential quantifier. The first proverb means that *some* fools should not be answered according to their folly. The other means that *some* fools should be so answered. Second, the wording of these proverbs does not give us enough information to reliably determine in advance which fools are which. Further wisdom is required to use these proverbs, namely, a wise capacity to make context-specific judgments about particular fools and the consequences of speaking to them.

To see this, consider the alternative: that these proverbs function as general signs determining a universal rule of action in advance. On this reading, we could explicate them by adding a universal quantifier: “answer *every* fool according to his folly.” The truth of this sentence would grant the interpreter an arbitrary freedom to answer according to his folly whatever fool she encountered. This requires that the meaning of the predicate “fool” be sufficiently clear for an interpreter to reliably identify these instances. Moreover, on this reading LNC certainly would apply, since one cannot answer every fool according to his folly *and* not answer every fool according to his folly. Interpreted as general signs, these proverbs harden into an irreconcilable opposition, requiring one to choose one or the other. Surely the text juxtaposes these contradictory proverbs to foreclose just this interpretation.

Since Plato and Aristotle, Western philosophers—impressed by the form of geometrical reasoning—have often made the generality and clarity of a deductive system the ideal of scientific discourse. Descartes is an influential prototype of this tendency, attempting to ground all knowledge in truths that

8. The (vague) subject is “a fool” and the contradictory predicates characterize the action appropriate in relation to a fool: “is-to-be-answered-according-to-his-folly” or “is-not-to-be-answered-according-to-his-folly.”

9. For a longer treatment of these issues, see the last chapter in my book, *Learning the Language of Scripture*.

appear clear and distinct to the thinking subject. One lure of foundationalist systems is that if only one's foundational premises could be established with certainty, it seems that one could construct a whole system of knowledge on this basis that likewise obtains universally and with certainty. Yet as skeptics ancient and modern have insisted, foundationalist systems over-promise. Their universal premises are never as certain as they claim to be, however rigorously and elegantly constructed the systems erected upon them might otherwise be. Indeed, the clarity and distinctness of foundationalist systems tends to mask the arbitrariness of their initial premises.

Vague propositions and beliefs offer a different sort of imperviousness to doubt. Precisely because a vague proposition withholds judgment about the results of further inquiry, it is far more difficult to doubt than corresponding singular or general propositions. Peirce called this "inductive certainty," giving as an example, "the sort of certainty we have that a perfect coin, pitched up often enough, will *sometime* turn up heads."¹⁰ Notice the vagueness of this existentially quantified sentence: while he affirms that a coin will *sometime* turn up heads, he leaves indeterminate the particular occasions with respect to which this truth applies. Peirce's sentence is vague because its truth does not entail of an individual coin on an individual occasion that *this* time *this* coin will turn up heads. Rather, making that judgment depends on factors specific to the context of interpretation, in this case, the results of an actual coin flip. Yet one can be far more certain that *some* coin will turn up heads than one can be that *this* coin will turn heads (let alone that *every* coin will turn up heads).

Now suppose again that a proverb like "answer a fool according to his folly" were interpreted as a universal judgment: "every fool should be answered according to his folly." Because this judgment is universal, it is also fragile, overturned by a single case. For this universal judgment entails the truth of *every* possible singular judgment of the same form—"this fool should be answered according to his folly," and this fool, and so on. Assuming it expresses a general rule, one would need only to find a single fool who should not be answered according to his folly to falsify the proverb. (This vulnerability of universal rules to empirical falsification is why those who make universal judgments tend consciously or unconsciously to do so on *a priori* grounds.)

By contrast, if the proverb is interpreted as a vague (particular) judgment—"(*at least*) some fool should be answered according to his folly"—it commits one to very little, merely that "this fool should be answered according to his folly" will prove true on at least one occasion (or at any rate,

10. CP 6.474.

on some unspecified number of occasions). Since an existential judgment is equivalent to the negation of a universal, to falsify it, one would have to demonstrate a negative universal: no individual fool should be answered according to his folly. We all know how hard it is to prove a negative. Precisely because a vague proposition commits itself to less than its corresponding general, it is far more difficult to doubt.¹¹ “All the veritably indubitable beliefs are *vague*,” said Peirce.¹² Proverbs deliver truths with just this sort of indubitability, crystalizing patterns of communal experience in a vague poetic form.

One of the deep insights of what Peirce called “critical common-sensism,” as explicated by Ochs, is that while Descartes was not wrong to resolve his doubts by seeking indubitable principles, he sought these principles in the wrong place. While he sought indubitable beliefs in clear philosophical principles, he should rather have sought them in the vague practical principles of common sense. While Descartes’ clear and distinct proposition *cogito, ergo sum* has, ironically, proved highly dubitable, a vague rule of action like, “sometimes it is best to answer a fool according to his folly, but sometimes it is not” is much harder to doubt. Yet despite its vagueness, it does have content, for its truth is incompatible with beliefs like “there is no such thing as foolishness” or “all fools should be answered in the same way.” Vague beliefs can guide philosophical inquiry, not as a foundational premise from which a system can be deduced, but by holding philosophical claims accountable to everyday beliefs that we cannot help enacting in practice.

For Peirce, the pragmatic maxim itself formulates one such common sense belief, clarified (and thus rendered more dubitable) with reference to the particular problems of modern philosophy. English proverbs like “the proof is in the pudding” formulate this belief with a good deal more vagueness. We already observed that Peirce connects the pragmatic maxim to Jesus’ saying, “by their fruits ye shall know them,” which saying, in turn, aptly summarizes the pragmatic orientation of the Biblical wisdom tradition and its continuation in rabbinic wisdom texts like *Pirkei Avot*. As a maxim of common sense, the pragmatic maxim is a preliminary teaching that guides inquiry vaguely without determining its use in particular

11. In general, this is because universal propositions entail their corresponding individual propositions, and individual propositions entail their corresponding particular (vague) propositions, but not vice versa. If all x are P , then this x is P , and if this x is P , then some x is P ; but it may be true that some x is P without it being true that this x is P , and likewise it may be true that this x is P without it being true that all x are P . Since vague sentences are true in more cases, they are less likely to be false, and hence easier to be sure about.

12. *CP* 5.505; cf. Ochs, *PPLS*, 180.

cases, and hence it requires something more to apply rightly, which the Biblical wisdom tradition calls “wisdom.”

Vagueness and Inquiry

The meaning of a vague sign like a proverb is not determined by the sign itself, but nor is it simply a function of the decision of the individual or the conventions of her community. Reducing wisdom to either amounts to assigning individual or communal interpreters the arbitrary freedom of determination characteristic of generality rather than vagueness. As vague signs, by contrast, proverbs instead bind their interpreter to something that is neither the proverb *nor* her own decision and conventions—namely, the subject matter of the proverb itself. Acting on these proverbs wisely depends on one’s ability to make empirical judgments about the likely consequences of speaking to fools in particular ways. This helps make sense of what Peter Ochs means when he says,

To say that [a belief] is *vague* is to say that it refers to something particular (thus, that it is not merely nominal and does not allow the interpreter to do with it as he or she pleases) but that it has yet to identify this particular explicitly (and, thus, that it is not determinate and does not preclude further discussion and interpretation).¹³

A proverb refers to something particular—in this case, *fools and the consequences of answering them*. But it does not identify instances of this class explicitly, leaving it instead to readers to determine them. The truth of the proverb does not preclude ongoing discussion about exactly when and how it applies because its full meaning depends on facts about the situation in which it is enacted. But this does not entail that there is no right answer to questions about its meaning. This becomes clearer when the existential stakes involved in interpreting a proverb are higher: hitting upon a wise answer to a fool may be, after all, a matter of life and death. What Ochs means by the “discussion and interpretation” of a vague sign must involve, to a significant extent, *inquiry*.

In this light, we might then say that a vague sign is one that withholds or delays judgment about the results of further inquiry. This helps explain why vagueness has often been viewed with suspicion in the Western philosophical tradition. At best, vagueness is useful as a pedagogical

13. Ochs, *PPLS*, 181.

strategy for provoking inquiry.¹⁴ At worst, vagueness is a fundamental abdication of intellectual responsibility. One thinks of the vagueness of an undergraduate essay that has not thought its idea through to the end; or the vagueness of a political slogan that sounds good only because it leaves unresolved the messy details of policy.

But vagueness is sometimes the most appropriate way of speaking because *the things about which we speak* are themselves vague. “The inherent vagueness of things is the subject matter of Peirce’s pragmatism and his semiotics,” Ochs says.¹⁵ What does it mean that things are vague? The idea, I think, is that the determinate character of real things is not given all at once, but rather emerges over time and through relational processes. This is a metaphysical claim, which means that for Ochs, it cannot be established by *a priori* reasoning, but only by extrapolating abductively about the ultimate practical results of inquiry. Peirce and Ochs are realists in the sense that they posit no thing in itself lurking behind the results of inquiry. If in the long run the best possible predictive theory in some domain involves vagueness, then the object of inquiry is *really* vague. This sort of vagueness is a feature of the probabilistic models of phenomena that contemporary scientists use in a wide range of domains. Peirce pointed to the productive randomness that drives the evolution of species and the probabilistic laws governing the behavior of gasses. To this we might add the indeterminacy of quantum particles, the behavior of chaotic systems like the weather, or the dynamics of social groups. Probabilistic models are vague because they identify a pattern of events without fully determining the outcomes of individual experiments in advance, just as a proverb encapsulates a pattern of experience without fully determining action on any particular occasion.

To the extent that vagueness is a real feature of the universe, the most adequate habit of action in the world—what the Bible calls “wisdom”—cannot take the form of fixed general rules. The clarity that such rules introduce is premature. Acting in relation to vague things according to universal rules amounts to judging precipitously events that can be anticipated only probabilistically but not known determinately in advance. The most adequate forms of knowledge therefore cannot be merely icons or diagrams, but must be dynamic habits of action that include the capacity for

14. Some ancient readers of Plato distinguished between “dogmatic” dialogues, which teach their content clearly and directly, and “zetetic” dialogues, which teach indirectly to provoke inquiry (see, e.g. Diogenes Laertius, *Lives of Eminent Philosophers*, 3.49; Albinus, *Eisagoge*, chapter 3). Peter Ochs frequently embraces zetetic pedagogical strategies, sometimes setting up whole classes as experiments.

15. Ochs, “Continuity as Vagueness,” 247.

responding and adjusting to the conditions in which action is demanded.¹⁶ Habits and practices—unlike icons and general rules—unfold in time, in which they can wait for events, be interrupted by them, and importantly, change in response. Inquiry and the capacity for correction are *internal* to the meaning of those vague habits that, Ochs argues, are the most adequate form of knowledge to which we can attain.

Relativism

That inquiry is internal to our vague concepts can also help us understand what Ochs calls the “relativity but nonrelativism” of Christian and Jewish postliberalism.¹⁷ Like other postliberals, Ochs has sometimes been interpreted as a kind of relativist. “Relativism” is itself a vague term. I use it here to refer to a family of reasoning practices implicit in phenomena as various as, say, my undergraduates’ easygoing indifference towards questions of religious truth; the common assumption that argument about truth across religious boundaries is in principle fruitless; or the academic tendency to treat arguments about religious truth as reducible to aesthetic, political, or cultural questions. I assume that these practices display a common assumption, namely, that there is no nonarbitrary way for members of different religious traditions to adjudicate questions about truth. It is this belief that, in this context, I call “relativism.”

From the outset it must be said that many features of Ochs’ work are *prima facie* incompatible with the charge of relativism. There is the central place of Charles Peirce in his work, a hard-headed scientist whose central teaching was that concepts in general should be clarified the way scientists clarify their concepts. In his Scripture, Interpretation, and Practice program at the University of Virginia, Ochs has cultivated an environment that involves students from different religious traditions who have a lot of arguments with one another across traditional boundaries. Even Scriptural Reasoning invites people from different religious traditions not so much to share their equally valid interpretations as to offer readings *subject to criticism* from members of other traditions. Ochs insists on using those stern words “logic” and “reasoning,” which imply that thinking is not arbitrary and may need to be corrected.

16. This is one reason that Ochs says things like “the ultimate interpretant of all our representations of the world [is] our habits of conduct in the world” (*PPLS* 189).

17. Ochs, *Another Reformation*, 253. See David Lamberth’s worry about Ochs’ “restriction to particularity” (“Assessing Peter Ochs,” 464–65) and Gary Slater’s question whether Ochs “can allow for mediation between different faith traditions” (*Peirce*, 128–31).

The preceding discussion of vagueness, however, helps make intelligible how Ochs avoids relativism. The relativist's belief that certain claims are arbitrary is a probable indication that, for the relativist, those claims operate within a logic of generality rather than vagueness. We saw that a general sign determines some aspect of a predicate while leaving an arbitrary freedom to the interpreter to complete its determination. Modernist universalism applies this logic to religion by determining predicates of religion in general—universal truth claims, ethical principles, experiences—while leaving each historically-specific tradition an arbitrary freedom to further determine these predicates in their own way. So long as these particulars are consistent with the general predicate “religion,” they are logically a matter of indifference. More extreme forms of relativism simply reduce to zero the universal content of religion, leaving only the particular definitions of a tradition, sub-tradition, or individual, each indifferent or “equally valid.” Relativistic arbitrariness is the logical remainder of modernist universalism.

A vague sign, by contrast, does not afford an arbitrary freedom to an interpreter or even to a community. Rather, it restricts their freedom by referring to some partially determined real individual that conditions further determination of the vague sign. In assenting to the truth of a vague sign, one delays judgment in such a way that further inquiry is necessary for determinate action. Vagueness bears upon religious difference not least because, as we have seen, vague signs do not obey LNC. In Ochs' work, Christian supersessionism—the view that the church replaces Israel—exemplifies the problem, since this view assumes that God's ongoing faithfulness to Israel contradicts his faithfulness to the church. But terms like “Israel” and “the church” are vague, and their vagueness is a function of the vagueness of their objects, real communities whose determinate identities are still unfolding in time, in relation to the potential novelty of historical events and even divine action. To deny the real vagueness of these things, to forego waiting and inquiry by attempting to determine their full identity in advance, is to judge precipitously and therefore to risk believing something false because one believes more than one has reason to believe. In the language of the wisdom tradition, we might call this a kind of foolishness.

But to place claims about Israel and the church within a logic of vagueness does not require treating the truth about them as arbitrary or as matters of indifference. Communities acting in the spirit of Ochsian pragmatism and the wisdom tradition may be relatively confident when applying their wisdom locally, while being tentative when making judgments in relation to other contexts. But this is not the same as the relativistic claim that no argument or judgment is possible beyond the bounds of one's context or tradition. Ochs' *Another Reformation* is itself a philosophical intervention

in Christian theology. Nor does it mean that all existing religious traditions will prove their fruitfulness in the long run. Indeed, running through Ochs' work is an awareness of the terrible possibility that, as he puts it in his Peirce book, some entire world of common sense might be called into question;¹⁸ or in his Cambridge lectures, that the conventions of community, its living wisdom, might *die*. In the scriptures, this possibility requires the wisdom of the sages to give way to the wisdom of prophets, who speak of a divine source of healing that can raise the wisdom of a community from the dead, as Israel was raised from the valley of dry bones (Ezek 37). Although there is some continuity—in the individuals who survive, in the wisdom and practices they retained—this kind of resurrection can involve radical and unexpected change. How different the religion of the Talmud is from ancient Israelite religion! Ochs does not teach that every religious tradition is equally valid or equally vital. Instead, Ochs recognizes that the vagueness of a community's wisdom—especially its deep common sense and, for the Abrahamic traditions, the scriptures to which they turn especially in times of crisis—is a necessary condition for a community to adapt and to be resurrected—and thus to go on living and bearing fruit.

Bibliography

- Brock, Jarrett. "Peirce's Anticipation of Game Theoretic Logic and Semantics." *Semiotics* (1980) 55–64.
- Ford, David. *Christian Wisdom: Desiring God and Learning in Love*. Cambridge: Cambridge University Press, 2007.
- Hilpinen, Risto. "On C. S. Peirce's Theory of the Proposition: Peirce as a Precursor of Game Theoretical Semantics." *The Monist* 65.2 (April 1982) 182–88.
- James, Mark Randall. *Learning the Language of Scripture: Origen, Wisdom, and Interpretation*. Brill, forthcoming.
- Lamberth, David C. "Assessing Peter Ochs through Peirce, Pragmatism and the Logic of Scripture." *Modern Theology* 24.3 (2008) 459–67.
- Ochs, Peter. *Another Reformation: Postliberal Christianity and the Jews*. Grand Rapids: Baker Academic, 2011.
- . "Continuity as Vagueness: The Mathematical Antecedents of Peirce's Semiotics." *Semiotica* 96.3/4 (1993) 231–55.
- . *Peirce, Pragmatism and the Logic of Scripture [PPLS]*. Cambridge: Cambridge University Press, 1998.
- Rashkover, Randi. "Introducing the Work of Peter Ochs." *Modern Theology* 24.3 (July 2008) 439–45.
- Slater, Gary. *C. S. Peirce and the Nested Continua Model of Religious Interpretation*. Oxford: Oxford University Press, 2015.

18. Ochs, *PPLS*, 319.