Cognitive Linguistics and Theology

Eugene R. Schlesinger*

Sacrifice, Metaphor, and Evolution: Towards a Cognitive Linguistic Theology of Sacrifice

Abstract: This article lays the groundwork for articulating a Christian theology of sacrifice within the framework of cognitive linguistics. I demonstrate the affinity and potential for mutual enrichment between three disparate fields of discourse. Beginning with Jonathan Klawans's methodological proposals for understanding sacrifice as a meaningful phenomenon for those who engage(d) in it, I suggest that the double-scope conceptual blending described by Gilles Fauconnier and Mark Turner provides a helpful resource for Klawans to clarify his thought and answer objections to his proposals. Fauconnier and Turner's account of double-scope blends is set within an evolutionary account of human development and is the condition of possibility for language, art, science, and religion. I then put Fauconnier and Turner into dialogue with Sarah Coakley's recent attempts to locate sacrifice within the evolutionary spectrum, and suggest that they provide a more helpful theory of language than Chomsky's purely formal account.

Keywords: Sacrifice; Cognitive Linguistics; Metaphor; Evolution; Jonathan Klawans; Fauconnier and Turner; Sarah Coakley

The field of cognitive linguistics represents both a challenge to and an opportunity for theological discourse. With its rigorous emphasis upon the embodied character of human cognition, and focus upon neural pathways forged through sensorimotor experience, cognitive linguistics can fund a reductive account of human thought, which seemingly excludes such essential theological mainstays as a transcendent God or an immaterial soul.[1] Nevertheless, these challenges are not insuperable,[2] and the opportunity presented by cognitive linguistics is great. As recent forays into the field have shown, a cognitive linguistic perspective offers creative insights into the nature of theological meaning and the relation between theology and culture, has the potential to resolve recent theological controversies, holds out ecumenical promise, and provides enlightening insight into the thought of particular theologians.[3]

This essay seeks to carry these cognitive linguistic gains forward in the interest of developing a more adequate theological understanding of sacrifice. The need for such an understanding is readily apparent, given the surfeit of studies which seek to dismiss sacrifice as an outdated, primitive notion, responsible for

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1 Lakoff and Johnson, *Philosophy in the Flesh*; Lakoff, "The Embodied Mind, and How to Live with One," 47–108.

2 See, e.g., Robert Masson's immanent critique of cognitive linguistics, which reminds the cognitive linguists that statements about transcendental realities are beyond their purview. Masson, *Without Metaphor, No Saving God*, 115–26; See also Schlesinger's outflanking of Lakoff's reductivism by way of Karl Rahner's Christology: Schlesinger, "Sacramental Efficacy in Karl Rahner and Cognitive Linguistics."

3 See Masson, *Without Metaphor, No Saving God*, for the forays into fundamental theology and the controversies; Sanders, *Theology in the Flesh*, for the interaction with culture; Rinderknecht, *Mapping the Differentiated Consensus of the Joint Declaration*, for ecumenical application; Schlesinger, "Sacramental Efficacy in Karl Rahner and Cognitive Linguistics," and Masson, "Interpreting Rahner's Metaphoric Logic," for engagement with the theology of Karl Rahner.

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*Corresponding author: Eugene R. Schlesinger, Marquette University, United States of America;
E-mail: eugenerschlesinger@gmail.com

all sorts of ills, and inescapably bound up with aggressive violence.[4] Despite these criticisms of the concept, sacrifice is central to the Christian tradition because of (1) Christianity's originally Jewish provenance,[5] (2) the early Christian application of sacrificial terminology to describe Christ's crucifixion and resurrection,[6] and (3) the widespread prevalence of understanding the Christian Eucharist in sacrificial terms.[7]

Obviously, this is a rather large field of concerns. And so this article presents a bare sketch of a mere beginning of a much larger constructive project of thinking through the nature of sacrifice in the Christian tradition. While, ultimately, that project will present a theological theory of sacrifice, and will necessarily have to deal with the pervasive critiques of sacrifice in general, my agenda here is far more modest and circumscribed, and will, accordingly, leave to the side many of the more contentious aspects of theological discourse on sacrifice. Instead, I intend to draw together three fields of discourse, which (1) to my knowledge have operated more or less independently of one another, and (2) are deeply compatible and mutually enriching. By bringing these together, I lay the groundwork for this larger project, even as suggestive avenues of further exploration are opened for each of these three discourses. Along the way, some indications of the utility of cognitive linguistics for explicating sacrificial language will emerge.

In what follows, I first introduce Jonathan Klawans's proposals for understanding sacrifice in ancient Israel, focusing upon the methodological parameters he sketches. While I find Klawans's proposals salutary and persuasive, they are open to critique, particularly because he does not have a carefully worked out account of metaphor. I seek to provide such an account through an appropriation of Gilles Fauconnier and Miles Turner's account of conceptual blending, and particularly their proposal that double-scope conceptual integration is a species-defining singularity, and the condition of possibility for a nearly every human-specific capacity or behavior. This attention to the emergence of humanity provides an entry point for my third interlocutor, Sarah Coakley, who has recently sought to locate sacrifice as an evolutionary phenomenon, with significant precursors in pre-human cooperation, but nevertheless a caesura between such precursors and genuinely altruistic human behavior.

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4 Here the influence of René Girard (e.g., *Violence and the Sacred*; *Things Hidden Since the Foundation of the World*) is unmistakable. See, e.g., Finlan, *Options on Atonement in Christian Thought*; Heim, *Saved from Sacrifice*. Similarly, but with more nuance is Saarinen, *God and the Gift*. Daly, *Sacrifice Unveiled,* is particularly interesting, as Daly is clearly influenced by Girard, and yet maintains a highly sympathetic approach to sacrifice. Of particular importance are the feminist critiques of redemptive violence. E.g., Brown and Bohn, eds., *Christianity, Patriarchy, and Abuse*; Brock and Parker, *Proverbs of Ashes*. Though I find the Girardian identification of sacrifice and violence to be highly problematic and methodologically unsound, I am eminently sympathetic with feminist concerns that we not use the category of sacrifice to underwrite violence against vulnerable populations. Surveys of Girard's influence upon the discourse of sacrifice may be found in, e.g., Chilton, *The Temple of Jesus*, 15–25. See the critiques of Girard in Klawans, *Purity, Sacrifice, and the Temple*, 22–26; Chilton, *Temple of Jesus*, 15–25; Dunnill, *Sacrifice and the Body*, 144–60; Coakley, *Sacrifice Regained*, 12–15; Angenendt, *Die Revolution des geistigen Opfers*, 81–96. All this said, there is a growing body of literature that seeks to treat sacrifice far more sympathetically. E.g., Klawans, *Purity, Sacrifice, and the Temple*; Dunnill, *Sacrifice and the Body*; Daly, *Christian Sacrifice*; *Sacrifice Unveiled*; Jay, *Throughout Your Generations Forever*; Coakley, *Sacrifice Regained*; "Stories of Evolution, Stories of Sacrifice" (Henceforth "Gifford I"); Detienne and Vernant, *The Cuisine of Sacrifice Among the Greeks*.

5 It is important to recognize that Christianity was originally a movement within Second Temple Judaism. This means, of course, that the temple cult played a significant role in the religious life of Jesus and his first followers. Whatever transformations Judaism experienced during the Babylonian exile, and whatever the actual reconstruction of pre-Deuteronomistic Israel, the fact of the Temple and its cult remains significant for earliest Christianity. For treatments of Jesus and Christianity against this backdrop see, e.g., Klawans, *Purity, Sacrifice, and the Temple*; "Interpreting the Last Supper"; Chilton, *Temple of Jesus*.

6 See, e.g., the Last Supper traditions (1 Corinthians 11:17–33; Mark 14:22–25; Matthew 26:26–29; Luke 22:14–23), the Epistle to the Hebrews. The point is so well established as to be nearly axiomatic.

7 As I noted above, the Last Supper traditions carry sacrificial connotations, and may belong to the earliest strata of conceiving of Jesus's death as sacrificial. See, e.g., Chilton, *A Feast of Meanings*; Jeremias, *The Eucharistic Words of Jesus*; Léon-Dufour, *Sharing the Eucharistic Bread*. The idea that the Eucharist is a sacrifice is fairly well-worn territory as well, though one that has not been without controversy. See, e.g., the survey in Watteville, *Le Sacrifice dans les textes eucharistiques des premiers siècles*; Didache 9–10; Augustine, *City of God*, 10.6, 20; Council of Trent, Session 22, "Teaching and Canons on the Most Holy Sacrifice of the Mass." It is a fascinating phenomenon, though, to note how diverse early Christian Eucharistic practice was, and how diverse the understandings of the sacrificial nature of the Eucharist was. For instance, texts like the Didache call the Eucharist a sacrifice, but never connect that sacrifice to Christ's death. See further McGowan, *Ascetic Eucharists*; "Eucharist and Sacrifice"; "Rethinking Eucharistic Origins."

1 Jonathan Klawans's underdeveloped appeal to metaphor

Jonathan Klawans's, *Purity, Sacrifice, and the Temple* is a clarion call to abandon methodologically unsound approaches to the phenomenon of sacrifice in the Hebrew Bible and ancient Judaism.[8] Because my ultimate focus is upon the notion of sacrifice in Christian theology, Klawans's work is most germane in its formal methodological commitments than in its material particulars.[9] Nevertheless, his methodological contributions are noteworthy and persuasive. We might call his contribution meta-sacrificial insofar as he provides a methodological framework for approaching sacrifice itself. Ironically, this framework allows such an approach *because* it attends to the particulars of a specific practice or tradition, rather than imposing foreign categories or the theorists' modern presumptions upon the material.

In particular, Klawans warns against three interrelated factors. The first is a pervasive "evolutionist" perspective, which, through a diachronic analysis, purports to trace the development of sacrificial practice.[10] Such a perspective more often than not resolves itself in a supersessionist evaluation of sacrifice's evolution. Beginning with "primitive" notions such as SACRIFICE IS FOOD FOR GOD/THE GODS,[11] societies mature beyond such crude literalism and develop more metaphorical understandings of sacrifice, until finally sacrifice is supplanted by truly "enlightened" people.[12] Closely related to this evolutionist conceit is a marked anti-ritual bias, which pervades much literature on sacrifice.[13] Once more, such an aversion to cult evinces Enlightenment and post-Enlightenment sensibilities, rather than any particular insight into sacrifice as it was understood or practiced by people and societies who believed in it. This necessarily distorts the data. Finally, and, once more related to the Evolutionist framework, is an almost myopic focus upon the origins of sacrifice, rather than attention to sacrifice as an already developed reality. Once more, the origins of sacrifice may be interesting, even illuminating, but they tell us little about what it meant to actual, later practitioners of sacrifice.[14]

To avoid the distortive effects of such methodologically unsound approaches, Klawans advocates a synchronic evaluation of Israelite sacrifice, which attends to it as a coherent, meaning-laden system.[15] Here he builds upon the sort of structuralist insights Mary Douglas has brought to bear upon the Levitical purity code in *Purity and Danger*,[16] and which has been appropriated in Jacob Milgrom's Anchor Bible

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8 Klawans, *Purity, Sacrifice, and the Temple*.

9 While the data of the Hebrew Bible and the Jewish tradition of sacrifice are of obvious import for Christian theology, the very methodological principles I appropriate from Klawans prevent appropriation of his material proposals (except insofar as the Temple cult is directly concerned), for his approach eschews evolutionism and preoccupation with the origins of sacrifice, and instead attempts to appreciate the phenomenon synchronically. While diachronic insights can be helpful and are often necessary and illuminating, they must be subordinate to what sacrifice meant to thinker X (e.g., Augustine, or Aquinas, or the Council of Trent, and so on). Indeed, given my own proposal that the more explicitly cognitive linguistic understanding of metaphor be appropriated in this connection, synchronic analysis becomes all the more important. After all, whatever precedents a figure may have inherited, insofar as novel blends are proposed, there is a radical transformation of those precedents.

10 Klawans, *Purity, Sacrifice, and the Temple*, 3–4, 7–9. Klawans goes on to document this tendency in several particular theorists (17–48).

11 Here and throughout I adopt the cognitive linguistic convention of capitalizing metaphors, though Klawans does not (largely because he does not explicitly appropriate cognitive linguistic theories).

12 Note that this is not always explicitly anti-Jewish. For instance, Daly's magisterial *Christian Sacrifice*, and his subsequent *Sacrifice Unveiled*, are replete with such evolutionist accounts of sacrifice and its progressive "spiritualization." Daly would surely find any sort of overt supersessionism abhorrent. Nevertheless, there are distinctive Enlightenment-era liabilities involved in the notion of spiritualization and the move away from cultic ritual that do very much tap into supersessionist logic. See Levering, *Sacrifice and Community*, 6–28, for an exposition of a certain "eucharistic idealism," which trades upon interiority, non-cultic ideals, and supersessionism, and which runs from Luther and Calvin to Schleiermacher, Hegel, Schillebeeckx, Rahner, and others. Once more, this is not to suggest that all who operate within this trajectory are anti-Semites, just to acknowledge the history of ideas involved.

13 Klawans, *Purity, Sacrifice, and the Temple*, 7–8, 21–26, 213–45; "Interpreting the Last Supper," 8–13.

14 Klawans, *Purity, Sacrifice, and the Temple*, 7, 47–48.

15 Ibid., 47, 49–73.

16 Douglas, *Purity and Danger*.

Commentary on Leviticus,[17] but which has not yet been fully appropriated in studies of sacrifice.[18] Rather than evolving from a "literal" practice into a more sophisticated symbolic one, Klawans contends that we ought to understand sacrifice as already symbolic and communicative.[19]

In this connection, he challenges the primacy of the literal and the attendant notion that symbol and metaphor represent a secondary linguistic development. Appealing to George Lakoff's and Mark Johnson's *Metaphors We Live By*,[20] Klawans suggests that metaphor is a primary feature of thought and language.[21] Despite this appeal, though, Klawans's appropriation of metaphor remains underdeveloped. A few footnotes to Lakoff appear, but there is no real engagement with cognitive linguistics, nor any attempt to develop a theory of metaphor.[22] Indeed, in the subsequent essay, "Symbol, Function, Theology, and Morality in the Study of Priestly Ritual" appeal to metaphor is entirely absent.[23]

I wish to suggest that more explicit engagement with metaphor, particularly as conceived of by cognitive linguistics would provide Klawans with a twofold yield. First, it would allow a readier response to criticisms of his proposal. One such criticism comes from Stephen Finlan, who faults Klawans's antipathy towards accounts of the "spiritualization" of sacrifice on two fronts: the polyvalence of "spiritualization," which can refer to phenomena far more diverse than Klawans seems to allow; and "a confusion of the literal and the metaphorical."[24] Klawans argues that Paul's use of cultic metaphors to describe either his ministry or Christian ethics should not be seen as a repudiation of cult, or a replacement of it by ethics, but rather a cultic "expansion," which assumes the validity of the cult in order for it to work.[25] Finlan contests this, noting, "Effective metaphor utilizes a source domain that will receive quick recognition and carry emotional force. Cultic images were highly recognizable and suggestive of solemn emotions. Paul's use of cultic images indicates that he believes the audience will be receptive to the images, not that he believes (or disbelieves) in the *literal* efficacy of the cult."[26]

This is a common trope in criticisms of Klawans: to pit the literal against the symbolic or metaphorical, and to suggest that Klawans has mistaken metaphorical uses of sacrificial language from literal language.[27] Yet it is precisely this dichotomy between literal and symbolic that Klawans sets out to problematize. Hence, they simply fail to engage with his actual proposals. It would be one thing to disagree with Klawans's instinct that the symbolic-literal bifurcation ought to be broken down. It is quite another to suggest that he misunderstands the bifurcation, and, hence, ignore what he actually argues. Cognitive linguistics would provide a better theoretical basis from which to articulate this rebuttal than the hodge podge of sources evident in his footnotes. It is the insight of cognitive linguistics that human thought is essentially metaphorical.[28] Just about any non-trivial meaning exhibits some facet of metaphor. With this recognition, we see the futility of upbraiding Klawans for mistaking metaphorical language about sacrifice for something literal. However, by failing to develop a proper account of metaphor in his work,

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17 Milgrom, *Leviticus*.

18 Klawans, *Purity, Sacrifice, and the Temple*, 17–48.

19 Ibid., 42, 49–73; Klawans, "Symbol."

20 Lakoff and Johnson, *Metaphors We Live By*.

21 Klawans, *Purity, Sacrifice, and the Temple*, 66–68 (See n. 88, p. 269).

22 Citations of Lakoff appear in ibid., 257 n.27, 266 n.33, 269 nn.88–90, and 270 nn.95–96.

23 Klawans, "Symbol."

24 Finlan, "Spiritualization of Sacrifice in Paul and Hebrews," 83–86 on spiritualization, 89 for the critique of Klawans.

25 Klawans, *Purity, Sacrifice, and the Temple*, 220–22; "Interpreting the Last Supper," 1–17.

26 Finlan, "Spiritualization of Sacrifice in Paul and Hebrews," 90. Note the similar tendency (though neither as a criticism of Klawans nor with negative connotations about sacrifice, literally understood) in Power, "Words That Crack." Indeed, Power's essay gestures toward the sort of "tectonic" power of metaphors about which Gerhart and Russell write (see below).

27 Gilders, "Ancient Israelite Sacrifice as Symbolic Action;" Finlan, "Spiritualization of Sacrifice in Paul and Hebrews." I would also note that Finlan provides his own validation of Klawans's concern by couching his argument in self-consciously and deliberately supersessionist terms (95–96), which evince his disdain for the concept of sacrifice. This antipathy towards sacrifice is also on display other works, e.g., "Sacrificial Images in the New Testament," where Finlan suggests that sacrifice connotes an angry, bloodthirsty God, and opines that God saves humanity in spite of, rather than through the crucifixion of Christ. Surely such a reflexively negative reaction to sacrificial language has a distortive effect upon the data.

28 Lakoff and Johnson, *Philosophy in the Flesh*, 126–29; Masson, *Without Metaphor, No Saving God*, 52–54.

and then by abandoning the conceptuality of metaphor in favor of symbolism, Klawans leaves himself open to this charge.

Of course, "symbolism" has never been absent from Klawans's project.[29] *Purity, Sacrifice, and the Temple* devotes far more attention to the symbolic character of sacrifice than to the idea of metaphor.[30] So it is not as if he has abandoned one conceptuality in favor of another, less helpful one. Nevertheless, I believe that developing a more theoretical account of metaphor might be the more viable avenue. The suggestion that sacrificial rites are "symbolic" can give the impression that they are a sort of linear, didactic enterprise, an allegory of sorts: intentionally constructed to teach something.[31] Metaphor, though, particularly in its cognitive linguistic iteration, avoids this sort of instrumentalist didacticism, because metaphor is largely pre-cognitive. Indeed, cognition is founded upon metaphor. If metaphor is understood thus, then saying that sacrifice is metaphorical makes no stronger claim about its practitioners' intentionality than to say that sacrifice can be thought about and carries meaning.[32]

This brings me to another significant criticism of Klawans. William Gilders justly faults Klawans for failing to carefully define his terms.[33] When he calls something symbolic or metaphorical, what, precisely does he mean? I have suggested that Klawans's critics have not adequately understood his proposals. Terminological inconsistency exacerbates this problem, though, and makes properly understanding one's arguments a moving target. Cognitive linguistics would provide clearly demarcated terms ready to hand, and also provide an articulation of those terms that helps to answer the critiques I mentioned above.

Additionally, more explicit appeal to a theory of metaphor has the potential to provide a more fruitful way of understanding other theories of sacrifice. They represent alternative blends. These blends may be found within Ancient Judaism, or in other cultures, or in the minds of theorists seeking to explain sacrifice, but in each case the basic metaphorical form of SACRIFICE IS X can be applied to the phenomenon. So for instance, we have Klawans's proposal: SACRIFICE IS IMITATION OF GOD; or Mauss's SACRIFICE IS GIFT; or Girard's SACRIFICE IS MIMETIC VIOLENCE; or our more colloquial: SACRIFICE IS LOSS. Some blends may be more adequate to the data than others, but recognizing them as blends, understanding the sort of cognitive pathways involved, can go a long way towards understanding them.

Moreover, recognizing these blends as blends opens up the prospect of fruitful interaction between them. Human cognition is never static. Rather, it is a constantly evolving process. The intermingling of disparate blends can create surprising new meanings. Perhaps a given blend is only partially adequate, but does account for some facet of the truth. Take, for instance, the popular: SACRIFICE IS VIOLENCE. There are serious flaws in making this one's sole concept of sacrifice. It ignores the violence in our more "advanced," non-sacrificial society. It ignores the reality of non-animal sacrifices in ancient Israel, etc. Nevertheless, there is something to it. Animals really did bleed out at the temple threshold, and if the quest of a "non-violent" account of sacrifice ignores or sanitizes this reality, it is just as distortive as the vulgar Girardian view. An appropriation of conceptual blending opens up the prospect of allowing SACRIFICE IS VIOLENCE to be a component of a larger blend: neither totalizing nor marginalizing this aspect of the data.[34]

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29 Nor are they necessarily opposed, but apart from a clear theoretical elaboration of what each term means, we are left to wonder.

30 Klawans, *Purity, Sacrifice, and the Temple*. Indeed, "symbolism" forms part of the book's subtitle, and is discussed throughout, while "metaphor" appears only on pp. 21–22, 41–43, 47, 60–61, 66–68, 124, 168, 172, 216–217, 220–222, 243–244.

31 Gilders's critique hinges upon such an understanding of "symbolism." "Ancient Israelite Sacrifice as Symbolic Action," 1–22. Indeed, in "Symbol," 113–114, Klawans evinces some of these tendencies, with his focus on putative rather than actual results, and communicative rather than practical goals for Israelite ritual.

32 This leaves open the possibility that, in some cases, we might find intentionally constructed, didactically-oriented sacrificial symbolism, but it avoids establishing such instances as the baseline, so to speak.

33 Gilders, "Ancient Israelite Sacrifice as Symbolic Action," 15.

34 In my larger project on sacrifice, I shall use cognitive blending as a conceptual framework for categorizing various understandings of sacrifice, and for proposing more fruitful blends of these understanding.

2 Fauconnier and Turner's suggestive evolutionary account of metaphor

Klawans presents important methodological advances for the study of sacrifice. Nevertheless, as I have argued, he would benefit from a more explicit theory of metaphor, which would both help to address the criticisms leveled against his proposals and provide conceptual refinement to those proposals. In this section I propose the account of conceptual blending, and particularly double-scope conceptual blending proposed by Gilles Fauconnier and Mark Turner, as a particularly fruitful candidate for this theory of metaphor. According to Fauconnier and Turner, double-scope conceptual integration lies at the root of what makes humanity cognitively unique, and provides the condition of possibility for several phenomena including religion, art, and language. The primordial character of double-scope integration makes it particularly appropriate for the task of informing a cognitive linguistic theology of sacrifice.

Fauconnier and Turner propose what they call a "network model of conceptual integration." These networks consist of mental spaces and their interactions with each other. The most basic elements are "input spaces," where conceptual information is registered; "cross-space mapping," which associates elements held in common by input spaces; "generic space," which contains the common elements of the two input spaces; a "blended space," which combines the input spaces' common elements into an "emergent structure," which results solely as a result of the blend. With the emergent structure in place, one can elaborate upon or "run the blend," by operating mentally within its fictive framework.[35] This presentation takes a temporally extended form. The process, however, is more or less automatic and non-discursive, essentially invisible, and pervasive. It is, simply, "the way we think."[36]

Such is the most basic account of conceptual networks. Within these networks, various sorts of blends are possible. These blends are distinguished according to what elements are involved in the cross-space mapping and subsequent blend. These range from "simplex blends" in which the two inputs have no incompatible elements, making the blend very straightforward. Fauconnier and Turner give the example of identifying one person as another's father. There is nothing incommensurate between the frame containing the persons "Paul and Sally" and the frame containing the relations "father and daughter."[37] In "mirror networks," "all spaces—inputs, generic, and blend—share an organizing frame," such as an imagined race between two boats making the same journey years apart.[38] "Single scope networks" involve "two input spaces with different organizing frames, one which is projected to organize the blend. Its defining property is that the organizing frame of the blend is an extension of the organizing frame of one of the inputs but not the other," such as conceiving of an aggressive business negotiation within the input frame of a boxing match.[39]

Finally, and most germane to our purposes here are "double scope networks." Such a network

> has inputs with different (and often clashing) organizing frames as well as an organizing frame for the blend that includes parts of each of those frames and has an emergent structure of its own. In such networks both organizing frames make central contributions to the blend, and their sharp differences offer the possibility of rich clashes. Far from blocking the construction of the network, such clashes offer challenges to the imagination; indeed the resulting blends can be quite creative.[40]

One such network is the familiar desktop interface of computing, which combines elements from both the conceptual frameworks of office life and of computer commands into a novel construction.[41] Other

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35 Fauconnier and Turner, *The Way We*, 40–44. See also Fauconnier, *Mappings in Thought and Language*. See also discussion of the network model and the various types of blends involved in Masson, *Without Metaphor, No Saving God*, 96–106.
36 Fauconnier and Turner, *The Way We Think*, 17–74. Cf. Lakoff and Johnson's contention that most thought (ca. 95%) occurs at an unconscious level, with an incredibly complex apparatus of "thought" going on beneath the surface and in the background for even the most basic act of understanding. Lakoff and Johnson, *Philosophy in the Flesh*, 10–13.
37 Fauconnier and Turner, *The Way We Think*, 120–22.
38 Ibid., 122–126 [122]. Fauconnier and Turner elaborate the imagined boat race on 63–65.
39 Ibid., 126–131 [126].
40 Ibid., 131–135 [131].
41 Ibid., 131.

examples include the cross-pollination between computer science and biology that results from the history of conceiving of malicious code as a "virus,"[42] and, particularly relevant for theology, the identification of Jesus as the Messiah, which Robert Masson has shown involves the blending of several clashing frameworks of Second Temple Jewish expectation with the life and ministry of Jesus of Nazareth.[43]

The blend JESUS IS THE MESSIAH allows Masson to illustrate the basic compatibility between Fauconnier and Turner's double scope integrations and what Mary Gerhart and Alvin Russell call "metaphoric process" or "tectonic process."[44] Important to note is that Masson, whom I follow, does not suggest that double-scope networks and tectonic process are identical in all respects. Rather, both point towards similar sorts of cognitive events. Both cases involve transformations of knowledge, and afford the potential for great creativity. Examples of tectonic process include the Copernican shift from geocentrism to heliocentrism, or the shift from Newtonian to Einsteinian physics. In each case, a revolution occurs, which does not merely add new facts to an already extant store of information, but rather transforms the entire field of knowledge.[45] In the case of JESUS IS THE MESSIAH, such a blend has epistemological ramifications for such Second Temple frameworks as the apocalyptic Son of Man, the prophetic Suffering Servant, and the Messianic Davidic King, as well as for the historical individual Jesus of Nazareth. The blend transforms our understandings of both Jesus *and* messianism.[46]

Fauconnier and Turner locate the capacity for double-scope integration as an event along the pathway of human evolutionary development. While its emergence is a development in perfect continuity with its precursors (e.g., the capacity for simplex networks in lower mammals), it represents a quantum leap forward for human capacities.[47] Once human beings become capable of double-scope blends, language, art, religion, and science also emerge.[48] Language represents a singularity for the emergence of humanity. Like flight, it is an all or nothing affair.[49] We find no intermediate forms for language in the proverbial fossil record, because even "the simplest grammatical constructions require not only high abstraction over domains but also complex double-scope integration."[50] Without double-scope blends, language would be too unwieldy to use.[51] Once the capacity for double-scope integration arises, a full language can be and is developed. There is no evidence of human communities with "only rudimentary language," nor of "primates with rudimentary language."[52] Hence, language is binary: irreducibly complex.[53]

Double-scope integration allows for the emergence of counterfactual reasoning, which is far more essential to human being-in-the-world than we might at first think. Counterfactual scenarios allow us to abstract from our current circumstances and to pursue intentional courses of action, construct art, engage in ritual behavior, or pray to God.[54] Here it is crucial to recognize that "counterfactual" does not necessarily mean "untrue." On this accounting, even the rudimentary cause-effect connection that leads one to avoid

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42 Fauconnier, *Mappings in Thought and Language*, 18–25.

43 Masson, *Without Metaphor, No Saving God*, 67–68, 107–8.

44 Ibid., 77–94. See Gerhart and Russell, *New Maps for Old*, for their account of tectonic process.

45 Gerhart and Russell, *New Maps for Old*, 7–30. The Copernican revolution is Gerhart and Russell's example. The shift to Einstein comes from Lonergan, *Insight*, 37–69, whose account of higher perspectives, Gerhart and Russell explicitly draw upon.

46 Here one may discern a striking parallel with Henri de Lubac's account of the Christian "newness," according to which Christ's fulfillment of the Old Testament is not passive, but rather active and transformative. *Scripture in the Tradition*. See the further discussion in Flipper, *Between Apocalypse and Eschaton*, 90–150. That the last two paragraphs have raised significant points of contact between theologies as influential (and disparate) as de Lubac and Lonergan indicates the great fruitfulness of cognitive linguistics for theological reflection. See also the overlap with Rahner's theology discerned in Schlesinger, "Sacramental Efficacy in Karl Rahner and Cognitive Linguistics"; Masson, "Interpreting Rahner's Metaphoric Logic". Such instances are distinct from the sorts of case studies provided by Masson in *Without Metaphor, No Saving God*, which touch upon the resolution of difficulties, rather than illustrating the immanent logics of figures' thought.

47 Fauconnier and Turner, *The Way We Think*, 171, 177, 180–81.

48 Ibid., 171–75.

49 Ibid., 181.

50 Ibid., 179.

51 Ibid., 182.

52 Ibid., 175.

53 Here I intentionally evoke the terminology, but not the theoretical commitments of "intelligent design."

54 Fauconnier and Turner, *The Way We Think*, 171, 174–75.

falling trees or flee potential predators involves some counterfactual reasoning: the tiger is not currently eating me, but because I recognize it could, I avoid it.[55] Hence the connection between the deepening of counterfactual reasoning and the emergence of religion should not be understood as pertaining to the truth or falsity of religion. The two questions are conceptually distinct.

I believe that Klawans's proposals regarding ancient Israelite sacrifice are best conceptualized in terms of double-scope integration. The basic conception with which Klawans operates is SACRIFICE IS IMITATION OF GOD. In carrying out sacrifice, ancient Israelites were conceived of as doing what God does.[56] In this connection, the domestication of animals serves a crucial role for understanding sacrifice. "Not only do domesticated animals play a key role in ancient Israelite sacrifice but also metaphors comparing ancient Israelites to their domesticated animals play a key role in ancient Israelite theologizing."[57]

Just as the Israelites kept watch over and cared for their flocks, God shepherded them (e.g., Psalm 23; Isaiah 40:11; Ezekiel 34:15–16).[58] The sacrificial cult, with its requirements regarding animal lineage and prohibition of offering blemished or diseased animals (e.g., Leviticus 22:17–28), required meticulous attention to one's flocks, an attention God is also imagined to pay to his flock, Israel.[59] Priestly separation of animal viscera (Leviticus 3:4, 10, 15) parallels the way in which God examines the heart (e.g., Jeremiah 11:20; 12:3; 17:10; 20:12; Psalm 7:10; Proverbs 17:3; 1 Chronicles 29:17).[60] Hence, Israelite sacrifice blends the pastoral life of Israelites with what they do at the temple with what they perceive God to do with them. This sacrifice blend, then, draws from the frame of Israelite pastoral life, the frame of the slaughter and manipulation of animals in the temple, and the frame of God's care for the people of Israel, and projects these elements into a space where by killing and consuming animals, the Israelites were imitating God's care for and provision of them. The novelty of the blend is striking in that, precisely in slaughtering and dismembering their animals, the Israelites represent God's concern for their life and integrity. The meanings of all these fields are transformed through the blend.

Crucially, the complexity of the blend does not necessarily imply that it is a subsequent development built upon a more primitive practice. As we have seen, metaphor is simply basic to human thought, and its emergence is equiprimordial with religion and ritual behavior. That religion emerges simultaneously with the capacity for double-scope blending provides an interesting possibility for understanding what it means for humanity to be created in the *imago Dei*. Returning to the question of sacrifice's origin, we might say that its origins are, simply, the origins of humanity.

3 Sarah Coakley's evolutionary account of sacrifice and its emergence

With this evolutionary account of metaphoric process as our proposed backdrop for understanding the phenomenon of sacrifice, we are prepared to turn to the third and final thread I intend to pull through these considerations: Sarah Coakley's recent exploration of sacrifice as an evolutionary phenomenon.[61] Coakley's engagement with this question grows out of a collaborative effort with the mathematical biologist Martin A. Nowak and his team at Harvard University.[62] Their project involved applying game theoretical insights to the observable phenomenon of cooperation within the evolutionary spectrum as well as considerations

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55 Ibid., 75–78. See also the more extensive discussion in Fauconnier, *Mappings in Thought and Language*, 99–130.
56 Klawans, *Purity, Sacrifice, and the Temple*, 58–66.
57 Ibid., 59.
58 All cited by Klawans. Ibid., 60.
59 Ibid., 63–64.
60 Ibid., 64, 268n.77.
61 E.g., Coakley, *Sacrifice Regained*; "Evolution and Sacrifice; "Sacrifice Regained: Evolution, Cooperation and God" (Gifford Lectures); Nowak and Coakley, eds., *Evolution, Games, and God*.
62 See Coakley and Nowak, "Introduction." See also Coakley's discussion in "Cooperation, Alias Altruism" (Henceforth, "Gifford II").

of properly altruistic human behavior.[63] It is within this emergent spectrum that Coakley proposes we consider the notion of sacrifice. At this juncture I will simply note that evaluating the mathematical and biological bases of these proposals is well beyond my purview. I am content to defer to Nowak's expertise, and interested readers are referred to his work. Taking his and Coakley's proposals as a reliable basis for further reflection, my goal is simply to put them in conversation with Klawans and cognitive linguistics.

Tracing a similar trajectory of Enlightenment (and post-Enlightenment) anti-sacrificial intellectual history to Klawans's, and sharing his trenchant critique of Girard, Coakley turns to the Pauline notion of a reasonable sacrifice (Romans 12:1), to contest the presumption that sacrifice is some dark irrational blight on human history.[64] Rather, sacrifice and rationality belong together. The affinity with Klawans is clear. Her approach, though, is markedly different. Whereas Klawans eschews any considerations of evolution or of sacrifice's origins, Coakley considers both of these issues head-on.[65] Her account of sacrifice builds upon Charles Darwin's observation that:

> There can be no doubt, that a tribe including many members who, from possessing in a high degree the spirit of patriotism, fidelity, obedience, courage, and sympathy, were always ready to aid one another, and to sacrifice themselves for the common good would be victorious over most other tribes and this would be natural selection.[66]

Seen in this perspective, far from being irrational, "sacrifice" is a principle which promotes evolutionary fitness.

Further development of this Darwinian insight is provided by Nowak's application of mathematical modelling, particularly game theoretical models, to evolutionary development. Through his use of modelling, Nowak has shown that evolutionary phenomena cannot be explained solely on the basis of self-preservation, or even the lightly extended version of self-preservation that also considers kinship groups.[67] Instead, cooperation, which Nowak and Coakley define as, "a form of working together in which one individual pays a cost (in terms of fitness, whether genetic or cultural) and another gains a benefit as a result,"[68] runs through the evolutionary spectrum.[69] Indeed, cooperation is a necessary condition for a wide variety of evolutionary breakthroughs.[70] As a result, Nowak proposes that cooperation be understood as a third principle of evolutionary development, "alongside mutation and selection."[71]

At the same time, cooperation is not yet sacrifice, properly conceived, but rather a precursor to the more intentionally directed altruism practiced by human beings. Coakley and Nowak define altruism as "a form of (costly) cooperation in which an individual is motivated by good will or love for another (or others)."[72] It is within this specifically motivated vista of altruism that sacrifice, properly so called, is enacted. The higher one goes along the evolutionary spectrum, the more impressive the cooperation, the more closely it approaches proper altruism. The example of dolphins surrounding a wounded compatriot, despite the risk to themselves, and waiting with her so that she does not die alone, is particularly arresting.[73] Nevertheless,

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63 Coakley, "Gifford II"; "Ethics, Cooperation and Human Motivation" (Henceforth, "Gifford III"); "Teleology Reviewed" (Henceforth, "Gifford V"); "Reconceiving 'Natural Theology'" (Henceforth, "Gifford VI").

64 Coakley, *Sacrifice Regained*, 8–15; "Gifford I."

65 There is a certain terminological slippage here with "evolution," which, in Coakley's use, refers to the biological process by which species emerge, and in Klawans's refers to a sort of model of purported intellectual progress. While "evolution" is being used differently in these two instances, the notion of development is common to both.

66 Darwin, *The Descent of Man, and Selection in Relation to Sex* (cited in Coakley, *Sacrifice Regained*, 21. Coakley's emphasis removed). See further Brooke, "'Ready to Aid One Another.'"

67 Nowak, "Five Rules on the Evolution of Cooperation,"; Coakley, "Gifford II."

68 Coakley and Nowak, "Introduction," 4. Italics removed.

69 Nowak, "Five Rules on the Evolution of Cooperation," 99; Coakley, "Gifford II"; "Gifford III"; "Ethics, Cooperation and the Gender Wars" (Gifford Lecture, University of Aberdeen, April 26, 2012).

70 Coakley and Nowak, "Introduction," 2.

71 Nowak, "Five Rules on the Evolution of Cooperation," 110. See also Coakley, "Gifford II."

72 Coakley and Nowak, "Introduction," 5.

73 Coakley, "Gifford III"; Coakley, "Evolution and Sacrifice"; Michael Rota, "The Problem of Evil and Cooperation," 363–64.

there seems to be a pronounced caesura between these precursors and properly human altruism.[74] Precisely where or how the transition from pre-human cooperation to human sacrificial altruism is a mystery, but that such a transition has occurred is undeniable.

These considerations take us back once more to the concerns we observed with Fauconnier and Turner about the singularity of language, which emerges in continuity with precursors, but in such a way that its relation to them is binary: a species either has language or it does not; a bird can fly or it cannot; an act is sacrificial or it is something else. Tantalizingly, Coakley and Nowak see behavior that can properly be called sacrificial emerging along essentially the same fault line as the one Fauconnier and Turner see for language, science, art, and religion. There is a deep formal similarity here, and that similarity represents an important opportunity to enrich Coakley's project.

By and large, the essays in *Evolution, God, and Games* operate with a theory of language derived from Noam Chomsky.[75] While Chomsky's framing of language development and deployment in terms of a formal structures has been fruitful, Fauconnier and Turner note that it has significant deficiencies. By separating form and meaning, Chomsky's account of language is not able to account for all of the data.[76] Critically, Fauconnier and Turner note that meaning and form cannot be neatly separated, a point they illustrate by the difficulty that attends modelling such simple phenomena as "seeing a line, picking up a cup, telling the difference between *in* and *out*, combining a noun with an adjective, making an analogy between your mommy and your mommy's mommy."[77] The process of learning, which a purely formal approach would seek to bypass, turns out to be essential to such basic feats as these. As it turns out, what formal systems regard as "primitives for formal analysis turn out to be higher-order products of imaginative work."[78]

In other words, formal systems are built upon the highly developed apparatus of conceptual integration that Fauconnier and Turner investigate. Phenomena such as identity are taken for granted (or unconsciously smuggled in).[79] This leaves significant portions of human cognition and language out of consideration for formal approaches such as Chomsky's. They cannot account for the full range of human meaning-construction or activity. Conceptual integration allows us to hold onto the insights of formal approaches, while also more adequately accounting for human phenomena.

Indeed, while Chomsky recognizes that the emergence of language is a singularity in human evolutionary history, his formulation sees *only* language as this singularity (missing the other crucial ingredients Fauconnier and Turner note), and does so at the cost of properly attending to gradualism and natural selection in the evolutionary process.[80] His account winds up being quasi-interventionist, requiring him to "pull a speculative, catastrophic, indeterminate, but all-powerful biological event out of a hat."[81] In contrast, both Fauconnier and Turner's, and Coakley and Nowak's account of evolutionary emergence is strongly non-interventionist, a commitment, which Coakley funds with a commitment to the classical Thomistic account of secondary causality.[82] So, when we add to our consideration the fact that the evolutionary story traced by Fauconnier and Turner is more or less the same one pursued by Coakley and Nowak, it seems that conceptual integration would be a more fruitful interlocutor than Chomsky.

Moreover, because Fauconnier and Turner's is a theory of metaphor, it provides an opportunity for engagement between Coakley's proposals and Klawans's. Such an engagement would allow for a more comprehensive account of sacrifice, which builds upon the insights of both of their projects, carrying the

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74 Coakley, "Gifford II"; "Gifford III"; "Evolution, Cooperation, and Divine Providence," 383; Johnson, "The Uniqueness of Human Cooperation."

75 Chomsky is cited in Hauser, "The Moral Organ"; Porter, "Nature, Normative Grammars, and Moral Judgments."

76 Fauconnier and Turner, *The Way We Think*, 7–8 (on separating form and meaning), 184–185 (on missing important data); See further Fauconnier, *Mappings in Thought and Language*, 7, 35.

77 Fauconnier and Turner, *The Way We Think*, 7.

78 Ibid., 8.

79 Ibid., 11–15.

80 Ibid., 184–85.

81 Ibid., 184. I say "quasi-interventionist" because the event involved should not be understood as agential.

82 See above for Fauconnier and Turner. See Coakley, "Evolution, Cooperation, and Divine Providence"; "Gifford V"; "Gifford VI" for Coakley and Nowak.

conversation forward in new, and perhaps unexpected ways. In this way both fields of discourse could be enriched, their own native insights remaining intact, while more adequate theoretical bases are provided, which allow for a clearer articulation of those insights, as I shall demonstrate presently by way of a conclusion.

4 Conclusion

As I noted at the outset, this article represents a mere beginning, maneuvering three disparate strands of discourse into proximity with one another so that a subsequent conversation between them can occur. In this way, each of the conversation's participants are enriched, while the ground is laid for a future fruitful engagement. By adopting Fauconnier and Turner's account of conceptual blending, and particularly double-scope integration, Jonathan Klawans's proposals would gain greater theoretical clarity. His important methodological insights about taking sacrifice seriously as a meaningful, and even metaphorical, practice would remain intact, only buttressed by a clearer account of what is meant by "metaphor." Taking on this more cognitive linguistic account of metaphor provides a readier answer to his critics, and allows a structure within which to articulate his own proposals regarding sacrifice. The metaphor he pursues between Israel's pastoral life, its temple cult, and God's relationship to them, is best expressed as a double-scope blend. Articulating it as such would better enable him to run the blend.

Sarah Coakley's explanation of sacrifice against the backdrop of evolutionary history would also be enriched by Fauconnier and Turner's account, which provides an account of the singularity by which language and religion emerge simultaneously with the species *homo sapiens*. This singularity also accounts for the emergence of the phenomenon of sacrifice, properly so called. Fauconnier and Turner's account upholds both the gradualism and continuity of evolutionary process *and* the unmistakable caesura between properly human behavior and its evolutionary precursors. Conceptual integration could be seen as the nature that the cross's grace perfects. As Coakley herself puts it:

> the cooperative tendencies of evolution themselves *suggest* a natural *praeparatio* in the process of selection for the potential later heights of saintly human self-sacrifice (only ultimately comprehensible as a response to divine grace), whereas the 'eyes of faith,' on the religious side, discern the phenomena of cooperation as already indications precisely of trinitarian and incarnational effects. What we have here, in other words, is a manifestation of the two-sided bridging model of the relation between evolutionary biology and philosophical theology in which empirical science acknowledges its explicative strengths *and* its philosophical limitations, and theology and metaphysics together strive to complete the vision toward which evolutionary cooperation seemingly gestures.[83]

Double-scope blending provides a better account of the evolutionary emergence of sacrifice than do purely formal language systems. It would sit better with Coakley's other commitments.

Finally, in addition to enriching both Klawans's and Coakley's individual investigations, cognitive linguistics allows them to be bound together and pursued in a novel combination: a new blend to be run. For example, if Coakley's understanding of altruism/sacrifice as costly cooperation (itself understood as paying a cost so that another might gain a benefit) motivated by the good of others were recognized as metaphorical, we would be able to distinguish several blends operative in this understanding of sacrifice. The primary blend would be SACRIFICE IS COOPERATION, yet with an important sub-blend of SACRIFICE IS LOSS, since in cooperating one loses a fitness advantage. On its own, SACRIFICE AS LOSS is an unhelpful way of conceiving things. Following Klawans, it is important to recognize that sacrifice was/is indeed a positive reality for people who believe/d in and practice/d it. Nevertheless, SACRIFICE IS LOSS is nestled

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83 Coakley, "Evolution, Cooperation, and Divine Providence," 382. Coakley's gestures towards divine grace and the cross indicate a way in which theology can enrich cognitive linguistics as well. I have left this undeveloped, because, in many cases such a suggestion would be like providing an answer to a question that is not being asked. However, I do believe that the sort of nuanced, Thomistic, teleological account of evolutionary history that Coakley provides, could be truly illuminating for our understanding of these capacities' emergence.

within a larger metaphorical framework of SACRIFICE IS COOPERATION, and COOPERATION IS LIFE, for ultimately, cooperation promotes evolutionary fitness.

Indeed, within a Christian theological framework, SACRIFICE IS COOPERATION can be readily assimilated with Klawans's blend SACRIFICE IS IMITATION OF GOD, which allows us to reconstrue SACRIFICE IS LOSS as SACRIFICE IS GIFT. In giving a gift, one forgoes what is given, but a true gift is never lost. This allows us to articulate a positive, rather than negative account of sacrifice. Within a trinitarian framework,[84] God is understood as a community of gift, and humanity is called to share in this divine exchange. Hence, SACRIFICE IS IMITATION OF GOD leads to SACRIFICE IS GIFT, and SACRIFICE IS COOPERATION, and COOPERATION IS LIFE, for, ultimately, IMITATION OF GOD IS LIFE.

Fully explicating a metaphorical understanding of sacrifice is a task for another time, but the pieces have been maneuvered onto the board. Modern humanity emerges as a singularity in the evolutionary process, though with precursors (Coakley and Fauconnier and Turner). Religion, like language, emerges simultaneously with modern humanity, and is made possible by double-scope conceptual blending/metaphoric process (Fauconnier and Turner). Sacrifice is always already metaphorical (Klawans), and there is a species-defining gulf between pre-human cooperation and human sacrificial altruism (Coakley). These elements suggest that this bringing together of these discourses opens up a new prospect in theological anthropology: one in which to be human is to be a sacrificial animal.

References

Angenendt, Arnold. *Die Revolution des geistigen Opfers: Blut – Sündenbock – Eucharistie*. Freiburg; Basel; Wien: Herder, 2011.

Brock, Rita Nakashima, and Rebecca Ann Parker. *Proverbs of Ashes: Violence, Redemptive Suffering, and the Search for What Saves Us*. Boston: Beacon, 2001.

Brooke, John Hedley. "'Ready to Aid One Another': Darwin on Nature, God, and Cooperation." In *Evolution, Games, and God: The Principle of Cooperation*, edited by Sarah Coakley and M. A. Nowak, 37–59. Cambridge, Mass: Harvard University Press, 2013.

Brown, Joanne Carlson, and Carole R. Bohn, eds. *Christianity, Patriarchy, and Abuse: A Feminist Critique*. New York: Pilgrim Press, 1989.

Chilton, Bruce. *A Feast of Meanings: Eucharistic Theologies from Jesus through Johannine Circles*. Leiden: Brill, 1994.

Chilton, Bruce. *The Temple of Jesus: His Sacrificial Program Within a Cultural History of Sacrifice*. University Park: Pennsylvania State University Press, 1992.

Coakley, Sarah. "Cooperation, Alias Altruism: Game Theory and Evolution Reconsidered." Gifford Lecture, University of Aberdeen, April 19, 2012.

Coakley, Sarah. "Ethics, Cooperation and Human Motivation: Assessing the Project of Evolutionary Ethics." Gifford Lecture, University of Aberdeen, April 24, 2012.

Coakley, Sarah. "Ethics, Cooperation and the Gender Wars: Prospects for a New Asceticism." Gifford Lecture, University of Aberdeen, April 26, 2012.

Coakley, Sarah. "Evolution and Sacrifice: Cooperation as a Scientific Principle." *The Christian Century* 126, no. 21 (October 20, 2009): 10–11.

Coakley, Sarah. "Evolution, Cooperation, and Divine Providence." In *Evolution, Games, and God: The Principle of Cooperation*, edited by Sarah Coakley and M. A. Nowak, 375–85. Cambridge: Harvard University Press, 2013.

Coakley, Sarah. "Reconceiving 'Natural Theology': Meaning, Sacrifice and God." Gifford Lecture, University of Aberdeen, May 3, 2012.

Coakley, Sarah. "Sacrifice Regained: Evolution, Cooperation and God." Gifford Lectures, University of Aberdeen, 2012. http://www.giffordlectures.org/lectures/sacrifice-regained-evolution-cooperation-and-god.

Coakley, Sarah. *Sacrifice Regained: Reconsidering the Rationality of Religious Belief*. Cambridge: Cambridge University Press, 2009.

Coakley, Sarah. "Stories of Evolution, Stories of Sacrifice." Gifford Lecture, University of Aberdeen, April 17, 2012.

Coakley, Sarah. "Teleology Reviewed: A New 'Ethico-Teleological' Argument for God's Existence." Gifford Lecture, University of Aberdeen, May 1, 2012.

Coakley, Sarah, and Martin A Nowak. "Introduction: Why Cooperation Makes a Difference." In *Evolution, Games, and God: The Principle of Cooperation*, edited by Sarah Coakley and M. A. Nowak, 1–34. Cambridge, Mass: Harvard University Press, 2013.

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84 Note Coakley's trinitarian and Christological overtures in the quote immediately above.

Daly, Robert J. *Christian Sacrifice: The Judaeo-Christian Background before Origen*. Washington, DC: Catholic University of America, 1978.

Daly, Robert J. *Sacrifice Unveiled: The True Meaning of Christian Sacrifice*. London: T & T Clark, 2009.

Darwin, Charles. *The Descent of Man, and Selection in Relation to Sex*. London: Penguin, 2004.

Detienne, Marcel, and Jean-Pierre Vernant. *The Cuisine of Sacrifice Among the Greeks*. Translated by Paula Wissing. Chicago: University of Chicago Press, 1989.

Douglas, Mary. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London: Routledge, 2002.

Dunnill, John. *Sacrifice and the Body: Biblical Anthropology and Christian Self-Understanding*. Burlington, VT: Ashgate, 2013.

Fauconnier, Gilles. *Mappings in Thought and Language*. Cambridge: Cambridge University Press, 1997.

Fauconnier, Gilles, and Mark Turner. *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books, 2002.

Finlan, Stephen. *Options on Atonement in Christian Thought*. Collegeville: Liturgical Press, 2007.

Finlan, Stephen. "Sacrificial Images in the New Testament." *Svensk Exegetisk Årsbok* 78 (2013): 57–86.

Finlan, Stephen. "Spiritualization of Sacrifice in Paul and Hebrews." In *Ritual and Metaphor: Sacrifice in the BIble*, edited by Christian A. Eberhart, 83–97. Atlanta: Society of Biblical Literature, 2011.

Flipper, Joseph S. *Between Apocalypse and Eschaton: History and Eternity in Henri de Lubac*. Minneapolis: Fortress, 2015.

Gerhart, Mary, and Allen Melvin Russell. *New Maps for Old: Explorations in Science and Religion*. New York: Continuum, 2001.

Gilders, William K. "Ancient Israelite Sacrifice as Symbolic Action: Theoretical Reflections." *Svensk Exegetisk Årsbok* 78 (2013): 1–22.

Girard, René. *Things Hidden Since the Foundation of the World*. Translated by Stephen Bann and Michael Metteer. Stanford: Stanford University Press, 1987.

Girard, René. *Violence and the Sacred*. Translated by Patrick Gregory. Baltimore: Johns Hopkins University Press, 1977.

Hauser, Marc D. "The Moral Organ: A Prophylaxis Against the Whims of Culture." In *Evolution, Games, and God: The Principle of Cooperation*, edited by Sarah Coakley and M. A. Nowak, 253–72. Cambridge, Mass: Harvard University Press, 2013.

Heim, S. Mark. *Saved from Sacrifice: A Theology of the Cross*. Grand Rapids: Eerdmans, 2006.

Jay, Nancy. *Throughout Your Generations Forever: Sacrifice, Religion, and Paternity*. Chicago: University of Chicago Press, 1992.

Jeremias, Joachim. *The Eucharistic Words of Jesus*. Translated by Arnold Ehrhardt. Oxford: Blackwell, 1955.

Johnson, Dominic D. P. "The Uniqueness of Human Cooperation: Cognition, Cooperation, and Religion." In *Evolution, Games, and God: The Principle of Cooperation*, edited by Sarah Coakley and M. A. Nowak, 168–85. Cambridge, Mass: Harvard University Press, 2013.

Klawans, Jonathan. "Interpreting the Last Supper: Sacrifice, Spiritualization, and Anti-Sacrifice." *New Testament Studies* 48 (2002): 1–17.

Klawans, Jonathan. *Purity, Sacrifice, and the Temple: Symbolism and Supersessionism in the Study of Ancient Judaism*. Oxford: Oxford University Press, 2006.

Klawans, Jonathan. "Symbol, Function, Theology, and Morality in the Study of Priestly Ritual." In *Ancient Mediterranean Sacrifice*, edited by Jennifer Wright Knust and Zsuzsanna Verhelyi, 106–17. Oxford: Oxford University Press, 2011.

Lakoff, George. "The Embodied Mind, and How to Live with One." In *The Nature and Limits of Human Understanding: The 2001 Gifford Lectures at the University of Glasgow*, edited by Anthony Sanford, 47–108. London: T&T Clark, 2003.

Lakoff, George, and Mark Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press, 1980.

Lakoff, George, and Mark Johnson. *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. New York: Basic Books, 1999.

Léon-Dufour, Xavier. *Sharing the Eucharistic Bread: The Witness of the New Testament*. Translated by Matthew J. O'Connell. New York: Paulist Press, 1987.

Levering, Matthew. *Sacrifice and Community: Jewish Offering and Christian Eucharist*. Oxford: Blackwell, 2005.

Lonergan, Bernard J. F. *Insight: A Study of Human Understanding*. Edited by Frederick E. Crowe and Robert M. Doran. Collected Works of Bernard Lonergan 3. Toronto: University of Toronto Press, 1992.

Lubac, Henri de. *Scripture in the Tradition*. Translated by Luke O'Neill. New York: Crossroad, 2012.

Masson, Robert. "Interpreting Rahner's Metaphoric Logic." *Theological Studies* 71 (2010): 380–409.

Masson, Robert. *Without Metaphor, No Saving God: Theology After Cognitive Linguistics*. Leuven: Peeters, 2013.

McGowan, Andrew. *Ascetic Eucharists: Food and Drink in Early Christian Ritual Meals*. Oxford: Clarendon, 1999.

McGowan, Andrew. "Eucharist and Sacrifice: Cultic Tradition and Transformation in Early Christian Ritual Meals." In *Mahl und religiöse Identität im frühen Christentum: Meals and Religious Identity in Early Christianity*, edited by Matthias Klinghardt and Hal Taussig, 191–206. Tübingen: Francke, 2012.

McGowan, Andrew. "Rethinking Eucharistic Origins." *Pacifica* 23 (2010): 173–91.

Milgrom, Jacob. *Leviticus: A New Translation with Commentary*. 3 vols. Anchor Yale Bible. New Haven: Yale University Press, 1998–2001.

Nowak, Martin A. "Five Rules on the Evolution of Cooperation." In *Evolution, Games, and God: The Principle of Cooperation*, edited by Sarah Coakley and M. A. Nowak, 99–114. Cambridge, Mass: Harvard University Press, 2013.

Nowak, Martin A., and Sarah Coakley, eds. *Evolution, Games, and God: The Principle of Cooperation*. Cambridge, Mass: Harvard University Press, 2013.

Porter, Jean. "Nature, Normative Grammars, and Moral Judgments." In *Evolution, Games, and God: The Principle of Cooperation*, edited by Sarah Coakley and M. A. Nowak. Cambridge, Mass: Harvard University Press, 2013.

Power, David. "Words That Crack: The Uses of 'Sacrifice' in Eucharistic DIscourse." In *Living Bread, Saving Cup: Readings on the Eucharist*, edited by R. Kevin Seasoltz, 157–75. Collegeville: Liturgical Press, 1987.

Rinderknecht, Jakob K. *Mapping the Differentiated Consensus of the Joint Declaration*. New York: Palgrave Macmillan, 2016.

Rota, Michael. "The Problem of Evil and Cooperation." In *Evolution, Games, and God: The Principle of Cooperation*, edited by Sarah Coakley and M. A. Nowak, 362–74. Cambridge, Mass: Harvard University Press, 2013.

Saarinen, Risto. *God and the Gift: An Ecumenical Theology of Giving*. Collegeville: Liturgical Press, 2005.

Sanders, John. *Theology in the Flesh: How Embodiment and Culture Shape the Way We Think about Truth, Morality, and God*. Minneapolis: Fortress Press, 2016.

Schlesinger, Eugene R. "Sacramental Efficacy in Karl Rahner and Cognitive Linguistics." *Philosophy & Theology* 25, no. 2 (2013): 337–60.

Watteville, Jean François Noël de. *Le Sacrifice dans les textes eucharistiques des premiers siècles*. Neuchatel; Paris: Delachaux et Niestlé, 1966.