

Isaiah 11 and the Teleological Essence of Fauna: Theodical Engagement with Animal Predation and Natural Evil in the Thought of Saint Augustine

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Abstract

Augustine's exposition of evil has had a profound impact on historical Christian doctrine. Traditional interpretations of Augustine predicate theodicy on a historical fall but seem incompatible with a view of creation in which violence and death in the animal world precedes humanity. Stanley P. Rosenberg argues that evolutionary theory can be coherent with Augustine's thought if decay and violence are understood as part of created nature. Doing so renders animal predation natural, a conclusion that provides logical coherence but does not address concerns regarding the nature of a God who created a world in which such violence is normal. This paper suggests that an approach in which Isaiah 11:6–9 is brought into dialogue with evolutionary development and the Augustinian concept of latent potentiality offers a potential direction for reflection on animal violence. If Isaiah indicates a trajectory in which the eschatological end of animals is peaceful co-existence, and if peace is the outcome of teleological development, then evolutionary development is reconfigured in light of this intended end. Since Augustine views creation as tending toward non-existence and decay, Rosenberg suggests that his theology should be interpreted to consider violence in the animal kingdom as part of animal nature, not as evil. Choosing to instead view animal nature in light of peace categorizes violence as an effect of created nature's mutability and views predation as natural evil, the result of choice in development leading to complexity. This developmental trajectory culminates in response to God, whose redemptive action brings about peaceful co-existence. Within an evolutionary paradigm, Augustine's thought can be largely preserved without requiring that violence in the animal world be accepted.

Introduction

Augustine of Hippo's solution to the problem of evil has received renewed attention in recent years amid dialogue between theological and scientific disciplines. In particular, interpreting Augustine's attribution of evil to human will in light of evolutionary theories of creation has become an important conversation. Does Augustine's thought necessitate a historical fall to explain the presence of evil? Stanley P. Rosenberg represents one recent interaction with this question, arguing that careful interpretation will lead the reader to exclude violent natural acts from the Augustinian definition of evil. Rosenberg concludes that Augustine's position suggests decay and destruction, including predation, are to be considered a natural part of creation and the animal world.¹

Underneath the issue of Augustinian theodicy in relation to the animal world lie broader questions regarding the implications of positing a God who sanctions privation in the evolutionary creative process. Rosenberg appears to achieve progress toward separating God's creative acts from the emergence of moral evil within an evolutionary paradigm, but his interpretation of Augustine seems to require two points of assent: the reader (a) must be willing to concede that violence in creation falls outside the definition of evil and (b) must also agree that this violence is not only natural but necessary, a condition of being "creature." Without further conversation, then, this adjustment raises theodical questions about a deity who not only allows violence but embeds it into creative processes. Such conversations further complexify in light of scholarship challenging the idea that animals do not experience trauma or violence—including predation—as recognizable suffering.²

The task of this paper is not to address such implications directly; instead, it will suggest that reconciling Augustinian theology with evolutionary development does not require a belief that God sanctions animal predation. Reading Isaiah 11:6–9 as a teleological orientation suggests that animal nature is intended toward a peaceful existence in which animals "lie down together" instead of harming one another. Such a statement may seem incongruous with evolutionary dependence on predation to drive development, but engaging Augustine's dual concept of the *rationes seminales* (primordial principles) provides a basis from

1 Rosenberg is addressing the need to account for prehistoric decay, while Augustine's concern is to explain the existence of violence in nature. See Stanley P. Rosenberg, ed., *Finding Ourselves After Darwin: Conversations on the Image of God, Original Sin, and the Problem of Evil* (Grand Rapids: Baker Academic, 2018), 226–43.

2 Robert Francescotti, "The Problem of Animal Pain and Suffering," *The Blackwell Companion to the Problem of Evil* (Malden, MA: Wiley Blackwell, 2013), 113–27; Phil Halper, et al., "Against Neo-Cartesianism: Neurofunctional Resilience and Animal Pain," *Philosophical Psychology* 34, no. 4 (2021): 474–501; Trent Dougherty, *The Problem of Animal Pain: A Theodicy for All Creatures Great and Small* (London: Palgrave Macmillan, 2014).

which to posit a “puzzle” argument.³ Mariusz Tabaczek recasts one iteration of the *rationes seminales* within Thomistic hylomorphism; his work can be utilized alongside the Augustinian concept of privation of essence to define predation as a product of animal freedom within a goal of increasing complexity and co-creation in dialogue with the work of Bethany Sollereder. The second type of *rationes seminales* provides a foundation to suggest that one outcome of complexity is response to God, whose eschatological act (incorporating this co-creative work into the new creation) will redeem creation and cause predation to cease, maintaining continuity with creation’s work while being discontinuous with privation. The Augustinian distinction of natural and moral evil can thus be maintained; predation is viewed as stemming from free teleological movement, allowing an assertion that (a) predation is undesirable—a corruption, and (b) God’s ongoing participation in the work of creation will culminate in creaturely peace.

Rosenberg’s Interpretation of Natural Decay in Augustinian Thought

Stanley P. Rosenberg’s work responds to traditional interpretations of Augustine that view the theologian as holding “privation and loss of order in nature is a breakdown of some imagined ideal ordering of the natural world.”⁴ In other words, Rosenberg feels that the majority of Augustinian scholarship attributes violence and decay in nature to the fall of humanity.⁵ On this view, the human and nonhuman world become estranged from God as a result of human sin; widespread acceptance of an evolutionary paradigm necessitates the reinterpretation of Augustine’s theodicy in light of science.

To reconcile evolutionary theory and Augustinian theology, Rosenberg begins by examining Augustine’s own words to discern whether violence in the nonhuman world is attributed to human failure. His summary begins with a progression outlined as follows: God (and thus all that is created by God) must be good. Anything that exists, regardless of state, possesses good “to the extent that it exists.” Good is linked to existence; evil, therefore, does not exist but represents a loss or diminishment of its original essence. Thus, “evil is the absence of good.”⁶

3 The argument takes a dual trajectory form beginning from *telos* and moving to peace in parallel movement—the puzzle’s outer pieces—but the solution cannot be reached without a final, central piece to link the others.

4 Rosenberg, *Finding Ourselves After Darwin*, 250.

5 John Hick, Albert Wolters, and Joseph Kelly are representative of traditional interpretations of Augustine’s theodicy. See John Hick, *Evil and the God of Love*, 3rd ed. (London: Palgrave Macmillan, 2010), 55–56; Albert Wolters, *Creation Regained: Biblical Basics for a Reformational Worldview* (Grand Rapids: Eerdmans, 1985), 46; Joseph Kelly, *The Problem of Evil in the Western Tradition: From the Book of Job to Modern Genetics* (St. John’s, Minn: Liturgical Press, 2002), 58–59.

6 This paragraph Rosenberg, *Finding Ourselves After Darwin*, 250–52.

Rosenberg proceeds to identify the first key point in Augustine's discussion of evil—corruption:

It was obvious to me that things which are liable to corruption are good. If they were the supreme goods, or if they were not good at all, they could not be corrupted ... If there were no good in them, there would be nothing capable of being corrupted. Corruption does harm and unless it diminishes the good, no harm would be done ... All things that are corrupted suffer privation of some good. If they were to be deprived of all good, they would not exist at all.... Hence I saw and it was made clear to me that you made all things good, and there are absolutely no substances which you did not make.⁷

For Augustine, evil is a corruption of an entity's original essence. Corruption cannot destroy essence, but it can alter or disrupt it. Evil cannot be existence because evil would then be good by virtue of being created. Corruption is, therefore, a movement toward non-existence, denying the good of an entity's original essence.⁸

A second pivotal concept is the idea that when original essence is restored, evil will be nowhere. Rosenberg again quotes Augustine at length as saying:

In this universe even that which is called evil, well ordered and kept in its place, sets the good in higher relief, so that good things are more pleasing and praiseworthy than evil ones. Nor would Almighty God ... since he is supremely good, in any way allow anything evil to exist among his works were he not so omnipotent and good that he can bring good even out of evil. For what else is that which is called evil but a removal of good?... A wound or a disease is not in itself a substance but a defect in the substance of flesh. The flesh itself is the substance, a good thing to which those evil things, those removals of the good, known as health, occur. In the same way all evils that affect the mind are removals of natural goods: when they are cured they are not moved to somewhere else, but, when they are no longer in the mind once it has been restored to health, they will be nowhere.⁹

Augustine thus offers salvation as a solution to human corruption, which does not

7 Augustine, *Confessions* 7.12.18, trans. Henry Chadwick (London: Oxford University Press, 1991). All references after the first on each of Augustine's works will omit his name.

8 This paragraph Rosenberg, *Finding Ourselves After Darwin*, 252–253.

9 Augustine, *Enchiridion* 3.11. Citations from the *Enchiridion on Faith, Hope and Charity* are based on the translation in *The Augustine Catechism: Enchiridion on Faith, Hope and Charity in the Works of St. Augustine for the Twenty-First Century*, trans. Bruce Harbert, ed. Boniface Ramsey (El Segundo: New City, 1999).

answer questions regarding privation in the natural world.¹⁰ Accordingly, Rosenberg continues to his third point, arguing that Augustine believes creation is necessarily contingent and mutable; therefore, all creation must be open to movement and thus to decay.¹¹ Rosenberg's task thus becomes clear—he must distinguish between decay in the natural world and the spiritual corruption of humanity.

To accomplish this goal, Rosenberg turns to Augustine's discussion of the secular state and cosmology. He outlines a threefold structure in Augustine's thought: (a) the structure of creation stems first from God as its maker, (b) God creates underlying principles or "reasons" which guide creation's trajectory, and (c) God creates the world with seminal reasons that guide structure and development in creation. One of these principles states that creation both advances and decays by virtue of being created.¹² Rosenberg argues that rot and decay—including the ability to kill—were thus part of creation's original design. His thought is worth quoting at length for greater clarity:

Decay is so obviously a part of a temporal, creaturely state, Augustine suggests, that to think otherwise would be absurd. Such defects are not blameworthy, as they are not voluntary; nor does he describe them as coming later in time or as a secondary result of the fall.... Decay and destruction are necessarily to be expected from anything that does not have its own absolute being ... Augustine ... does not suggest that God sustained creatures so that they would not experience decay or that physical decay was loosed on the cosmos only after the fall, though the fall certainly altered the human pair's natural condition for the worse.¹³

Rosenberg believes Augustine requires that the cosmos be understood as intrinsically bearing the "necessity for destruction" and indeed, Augustine does seem to see created nature as including the possibility of violence and decay:

It would be ridiculous to regard the defects of beasts, trees and other mutable and moral things which lack intelligence, sense or life, as deserving condemnation. Such defects do cause their nature to decay, which is liable to dissolution; but these creatures have received their mode of being by the will of their Creator, whose purpose is that they should bring to perfection the beauty of the lower parts of the universe by their alternation and succession in the passages of the seasons; and this is the beauty in its own kind, finding its place among the

10 Rosenberg, *Finding Ourselves After Darwin*, 253.

11 Rosenberg, *Finding Ourselves After Darwin*, 253–254.

12 This paragraph Rosenberg, *Finding Ourselves After Darwin*, 255–256.

13 Rosenberg, *Finding Ourselves After Darwin*, 256–58.

constituent parts of this world.... Consequently, in those areas of the universe where such creatures have their proper being, we see a constant succession, as some things pass away and others arise, as the weaker succumb to the stronger, and those that are overwhelmed change into the qualities of their conquerors; and thus we have a pattern of a world of continual transience. We, for our part, can see no beauty in this pattern to give us delight; and the reason is that we are involved in a section of it, under our condition of mortality, and so we cannot observe the whole design, in which these small parts, which are to us so disagreeable, fit together to make a scheme of ordered beauty . . . As for those defects, in things of this earth, which are neither voluntary nor punishable; if we observe them closely we shall find that, on the same principle as before, they attest the goodness of the natures themselves, every one of which has God as its sole author and creator.¹⁴

Rosenberg thus presents Augustine as believing that death and decay in the animal world are a part of the created order, directly linked to God, and a natural part of being created; since death and decay are part of creation's original nature, they do not constitute corruption, privation, or evil. Violent physical and biological acts in nature are not blameworthy because they do not represent moral corruption of a spiritual, reasoning creature.¹⁵ Evil is that which is *willful* corruption, whereas "decay in its gory finality" is part of a rational design and *expresses the Creator's will*.¹⁶

Expanding the Problem

Rosenberg's work takes a step toward coherence between Augustinian scholarship and modern evolution, but the last hundred years have also witnessed significant advances toward understanding animal well-being in positive and negative terms.¹⁷ Alain Boissy's 2007 review outlines a body of literature supporting positive affective states in animals.¹⁸ The criteria for adequate welfare in animals have shifted from merely denoting the absence of negativity to the need for positive emotional

14 Augustine, *City of God* 12.4, trans. Henry Bettenson (London: Penguin, 1972). Rosenberg amends this translation, and the edited version has been utilized for clarity.

15 Rosenberg, *Finding Ourselves After Darwin*, 260–261.

16 Rosenberg, *Finding Ourselves After Darwin*, 259–260.

17 That is, animal perception of well-being in addition to research on areas such as stress, pain, and grief. See D. Mellor, "Animal Emotions, Behaviour and the Promotion of Positive Welfare States," *New Zealand Veterinary Journal* 60 (2012): 1–8; Alain Boissy, et al., "Assessment of Positive Emotions in Animals to Improve Their Welfare," *Physiology and Behaviour* 92 (2007): 375–97; D. M. Broom, "Cognitive Ability and Awareness in Domestic Animals and Decisions About Obligations to Animals," *Applied Animal Behaviour Science* (2011): 1–11.

18 Boissy, "Assessment of Positive Emotions in Animals," 375.

experiences, resulting in a growing body of research dedicated to the physiological and cognitive markers of positive and negative experiences.¹⁹

Current research generally agrees that animals experience markers consistent with pain and with types of suffering, a consensus supported by varying methodological processes. While animal emotions cannot be studied subjectively,²⁰ they can be roughly correlated to human experience by measuring objective changes similar to human emotional research based on adrenocortical measures, the autonomic nervous system, and the immune system.²¹ Techniques range from basic mood state extrapolation to deviation from non-transient normality and reactions and stimulus appraisal through association.²² Animals and humans demonstrate similar impulses in their subconscious behaviours; differences lie in the *extent* to which humans move to advanced types of cognition and in the type of animal. Certain birds and mammals show markers consistent with consciousness and awareness.²³ Overall, animals can be expected to respond to various stimuli, and some have the ability to cognitively receive and process it.

The well-being of animals is thus affected by stimuli positively and negatively. Animals show markers of grief, empathy, fear, and pain; while acknowledging the pitfalls of using such terms, the general consensus is that animals experience flourishing and deprivation according to their unique needs even without access to “consciousness.”²⁴ For example, behavioural changes consistent with a decrease in well-being occurred in dogs whose companion animal died, including increased fearfulness and low food consumption; elephants also displayed changes of behaviour in response to death that varied according to whether that

19 Mellor, “Animal Emotions,” 1, and Boissy, “Assessment of Positive Emotions in Animals,” 375.

20 Human suffering is also not strictly considered subjectively verifiable. Michael Mendl, Oliver H.P. Burman, and Elizabeth S. Paul, “An Integrative and Functional Framework for the Study of Animal Emotion and Mood,” *Proceedings of the Royal Society B: Biological Sciences* 277, no. 1696 (2010): 2895–904.

21 Mendl, “An Integrative and Functional Framework,” 2896.

22 Mendl, “An Integrative and Functional Framework,” 2897–2898; D.B. Morton, “A Model Framework for the Estimation of Animal ‘Suffering’: Its Use in Predicting and Retrospectively Assessing the Impact of Experiments on Animals,” *Animals* (Basel) 13, no. 5 (2023): 800.

23 G. Ehret and R. Romand, “Awareness and Consciousness in Humans and Animals- Neural and Behavioral Correlates in an Evolutionary Perspective,” *Frontiers in Systems Neuroscience* (2022): 11–12. The study defined awareness as being aware of and reacting to stimuli, and consciousness as the ability to process and respond to stimuli.

24 A.L. Engh et al., “Behavioural and Hormonal Responses to Predation in Female Chacma Baboons (Papio Hamadryas Ursinus),” *Proceedings of the Royal Biology of Science* (2006): 707–12; D. J. Langford et al., “Social Modulation of Pain as Evidence for Empathy in Mice,” *Science* (2006). See also Marc Bekoff, “Why ‘Good Welfare’ isn’t ‘Good Enough’: Minding Animals and Increasing Our Compassionate Footprint” (2008); Ralph Adolphs, “The Biology of Fear,” *Current Biology* 23, no. 2, 79–93; Lynne U. Sneddon, “Pain in Aquatic Animals,” *Journal of Experimental Biology* (2015): 967–976; M. Stamp Dawkins, “Animal Welfare With and Without Consciousness,” *Journal of Zoology* 301, no. 1 (2017): 1–10.

death was an older elephant or a calf.²⁵ Predation also produces observable markers ranging from potential symptoms of chronic stress, such as changed birth and survival rates, to acute responses, such as a change in diet and reduced nutrient conversion efficiency.²⁶ In short, certain animals have been shown (a) to respond to negative outcomes, including pain, and (b) to have the ability to process these experiences, suggesting that animals may undergo a form of recognizable suffering when predation occurs.²⁷ Both response and processing are key reasons that Augustine sees no evil in predation: “When we read ‘Thou shalt not kill,’ we are not to take this commandment as applying to plants, for these have no sensation. Nor does it apply to the non-rational animals which fly, swim, walk or crawl, *for these do not share the use of reason with us.*”²⁸

The effects of predatory animals on prey species is strong enough to merit its own body of literature as a philosophical, ethical, and theological conundrum; the sheer pervasiveness of deprivation within the animal kingdom demands engagement.²⁹ cursory research on methods of predation in wolves suggest both the chase and death due to blood loss and suffocation in their prey can take hours—the

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- 25 S. Uccheddu, et al., “Domestic Dogs (*Canis Familiaris*) Grieve Over the Loss of a Conspecific,” *Scientific Reports* 12, no. 1920 (2022); L. Rutherford and L. E. Murray, “Personality and Behavioral Changes in Asian Elephants (*Elephas Maximus*) Following the Death of Herd Members,” *Integrative Zoology* 16 (n.d.): 170–88.
- 26 See Michael Clinchy, Michael Sheriff, and Liana Zanette, “Predator-Induced Stress and the Ecology of Fear,” *Functional Ecology* 27 no. 1 (2013): 56–65; D. Hawlena and O. J. Schmitz, “Physiological Stress as a Fundamental Mechanism Linking Predation to Ecosystem Functioning,” *The American Naturalist* 176 no. 5 (2010): 537–56.
- 27 Lynne U. Sneddon et al., “Defining and Assessing Animal Pain,” *Animal Behaviour* 97 (2014): 201–12; James W. Yeates, “Brain-pain: Do Animals With Higher Cognitive Capacities Feel More Pain? Insights for Species Selection in Scientific Experiments,” in *Large Animals as Biomedical Models: Ethical, Societal, Legal and Biological Aspects* no. 51 (2012): 24–46.
- 28 *City of God*, 12.4; emphasis mine. What precisely Augustine means by “reason” is unclear, but provided the above scholarship is correct, it appears one would either need to suggest that (a) Augustine was at likely at least partially incorrect in creating a gap argument or (b) assert that God does not regard the detriment of animals as consequential, because animals lack the highest possible tier of rational capacity, a privilege reserved for humans. The former option seems less problematic, especially given that Augustine ties his ideas back to natural laws, not to distinction between types of reason: “For the simple reason, of course, that some are the proper diet of others. Nor can we have any right to say, ‘There shouldn’t be some on which others feed.’ All things, you see, as long as they continue to be, have their own proper measures, numbers and destinies. So all things, properly considered, are worthy of acclaim; nor is it without some contribution in its own way to the temporal beauty of the world that they undergo change by passing from one thing into another.” English translations taken from Augustine, *The Literal Meaning of Genesis*, trans. John Hammond Taylor (Ramsey, NJ: Newman, 1982) 3.15.24.
- 29 For recent discussion from a variety of fields, see Julius Kapembwa, “Predation Catch-22: Disentangling the Rights of Prey, Predators, and Rescuers,” *Journal of Agricultural and Environmental Ethics* 31, no. 5 (2018): 527–42; Nathan Kowalsky, “Predation, Pain, and Evil: Anti-Hunting as Theodicy,” *Studies in Religion/Sciences Religieuses* 46, no. 4 (2017): 489–510; Kyle Johannsen, *Wild Animal Ethics: The Moral and Political Problem of Wild Animal Suffering* (London: Routledge, 2020); Mark Maller, “Animals and the Problem of Evil in Recent Theodicies,” *Sophia* 48, no. 3 (2009): 299–317; Michael Murray, *Nature Red in Tooth and Claw: Theism and the Problem of Animal Suffering* (Oxford: Oxford University Press, 2008).

stress and pain receptor activity caused by such predatory methods suggest intense physical distress in and of themselves.³⁰ Consider also the effects of death by suffocation or in being ripped apart; even the quickest manner of death results in acute stress.³¹ John Stuart Mill sums up the problem in saying:

if there are any marks at all of special design in creation, one of the things most evidently designed is that a large proportion of all animals should pass their existence in tormenting and devouring other animals. They have been lavishly fitted out with the instruments necessary for that purpose; their strongest instincts impel them to it, and many of them seem to have been constructed incapable of supporting themselves by any other food. If a tenth part of the pains which have been expended in finding benevolent adaptations in all nature, had been employed in collecting evidence to blacken the character of the Creator, what scope for comment would not have been found in the entire existence of the lower animals, divided, with scarcely an exception, into devourers and devoured, and a prey to a thousand ills from which they are denied the faculties necessary for protecting themselves! If we are not obliged to believe the animal creation to be the work of a demon, it is because we need not suppose it to have been made by a Being of infinite power.³²

Were the above to be considered untenable, a theocentric consideration of the problem still demands an explanation for a God that first creates the natural world with a certain essence but allows other aspects of that creation to deprive each other of the full expression of this essence.³³ Elizabeth Johnson and Christopher Southgate outline this problem in relation not to predation, but to the “second

30 See George B. Schaller and Gordon R. Lowther, “The Relevance of Carnivore Behavior to the Study of Early Hominids,” *Southwestern Journal of Anthropology* 25, no. 4 (1969): 329–330; George B. Kolenosky, “Wolf Predation on Wintering Deer in East-Central Ontario,” *The Journal of Wildlife Management* 36, no. 2 (1972): 266.

31 Kurt Alt and Matthew Eckert, *Predation ID Manual: Predator Kill and Scavenging Characteristics* (New York: Simon & Schuster, 2017); John L. Cloudsley-Thompson, “Predatory Techniques” in *Biotic Interactions in Arid Lands* (Springer Lehrbuch, 1995), 9–35; J. F. Eisenberg and Paul Leyhausen, “The Phylogenesis of Predatory Behavior in Mammals 1,” *Zeitschrift für Tierpsychologie* 30, no. 1 (1972): 59–93.

32 John Stuart Mill, *Three Essays on Religion*, (London: Longmans, Green, Reader, & Dyer, 1875), 58–59. Bethany Sollereeder echoes this sentiment in critiquing “classical theodicy.” See Bethany N. Sollereeder, “Compassionate Theodicy: A Suggested Truce Between Intellectual and Practical Theodicy,” *Modern Theology* 37, no. 2 (2021), 382–95. See also Trent Dougherty, *The Problem of Animal Pain: A Theodicy for All Creatures Great and Small* (London: Palgrave Macmillan, 2014).

33 At least one neo-Cartesian argument suggests that animals are not capable of perceiving deprivation as morally relevant suffering based on criteria stemming from physical difference, not similarity. See Calum Miller, “Do Animals Feel Pain in a Morally Relevant Sense?” *Philosophia* 49 (2021): 373–92.

pelican chick,” an insurance chick hatched and left to starve by pelican parents.³⁴ The pelican chick cannot be said to achieve full flourishing (that is, the full expression of its essence) unless one decides to argue that starvation *is* the chick’s final end. Predation, of course, shows many instances of such privation as young animals are eaten by others. Arguments can be made for the flourishing of an entire ecosystem that require such instances of early death, but such discussion finds difficulty in securing flourishing for the individual animal.³⁵

Rosenberg’s take on Augustine places the reader in the midst of this conundrum; if God created an earth in which deprivation in all its bloody, strangling, rending, parasitic, predatory forms must be considered as necessary for existence, contra the (at times prolonged) pain and individual deprivation of the animal—can such a God truly be considered good? In other words, it appears necessary to attempt a categorization of predation—even if such activity can at times be beneficial—as undesirable. The Augustinian solution must expand to address this consideration; God does not author moral evil, but God also should not be implied as authoring natural predation.

Isaiah 11:6–9; Eschatology and the Nature of Animals

The wolf will live with the lamb, the leopard will lie down with the goat, the calf and the lion and the yearling together; and a little child will lead them. The cow will feed with the bear, their young will lie down together, and the lion will eat straw like the ox. The infant will play near the cobra’s den, and the young child will put its hand into the viper’s nest. They will neither harm nor destroy on all my holy mountain, for the earth will be filled with the knowledge of the LORD as the waters cover the sea.³⁶

The first step in responding to this problem of predation is to determine God’s intentions regarding predatory activity. J. Richard Middleton suggests that the grand arc of biblical narrative outlines what he terms “holistic eschatology.”³⁷ For Middleton, the “logic of salvation in the Bible” necessitates the redemption

34 Elizabeth Johnson, “Christ and the Pelican Chick,” presented at Boston School of Theology and Ministry, accessed 31 March, 2025; Christopher Southgate, *The Groaning of Creation: God, Evolution, and the Problem of Evil* (Louisville: Westminster/John Knox, 2008), 82–90.

35 See Jay B. McDaniel, *Of God and Pelicans: A Theology of Reverence for Life* (Louisville: Westminster/John Knox, 1989), 51–85.

36 Isaiah 11:6–9, NIV 2011.

37 J. Richard Middleton, *A New Heaven and A New Earth: Reclaiming Biblical Eschatology* (Grand Rapids: Baker Academic, 2014), 155–75. For a theological perspective on holistic eschatology, see Richard Bauckham, “Eschatology,” in *The Oxford Handbook of Systematic Theology*, ed. Kathryn Tanner, John Webster, and Iain Torrance (Oxford: Oxford Academic, 2009).

of all of creation along with the redemption of humanity.³⁸ Themes of covenant, wisdom, and Torah in the Old Testament—and of resurrection in the New Testament—spring from an insistence that every wrong will be rectified in a vision of restorative justice that arises from YHWH's character and intentions toward humanity and the earth.³⁹ If salvation is restorative, and if Christ's work is universally redemptive, affecting all things, then it follows that creation itself must also be part of restoration, enabled to fulfill its role as God's cosmic temple.⁴⁰ Creation, too, will experience God's intentions for its existence.⁴¹

Middleton's paradigm directs inquiry into the passage at hand. Isaiah 11:6–9 is placed between discussions of messianic attributes grounded in YHWH's character and hope for YHWH's action based on that character.⁴² Patricia Tull suggests that Isaiah 11 outlines a messianic desire for a ruler characterized by wisdom, knowledge, and fear of the Lord. In following the Lord, this ruler evidences the following: (a) support of justice for the oppressed, (b) an influence extending into the animal kingdom to produce peace between predators and prey, and in whose time the Lord will gather together the remnants of the people.⁴³ Godself determines the fate of the animal kingdom as an outcropping of the nature of this ruler; peace springs forth as a result of God's determining character expressed through this ideal ruler.⁴⁴ Such hope for the future suggests a deep resonance with the idea that all is not right yet, but that things will be as they should be someday because of God's justice, peace, and sovereignty.⁴⁵

In terms of literary unity, then, Isaiah 11 seems to center around the enactment of divine intent.⁴⁶ The fate of creation is directly tied to the eschatological deliverance of God's people in this final vision of the future. The whole earth will now express devotion to the will of God in God's act of a new (or renewed)

38 Middleton, *A New Heaven and A New Earth*, 156.

39 Middleton, *A New Heaven and A New Earth*, 96–104, 137–44.

40 Middleton, *A New Heaven and A New Earth*, 156–58. See also J. Richard Middleton, *The Liberating Image: The Imago Dei in Genesis 1* (Grand Rapids: Brazos, 2005), 51–6, 87.

41 Middleton, *A New Heaven and A New Earth*, 151–58. See also J. Richard Middleton, *The Liberating Image*, 36, 41–45, 49–53, 55–56. For another argument supporting this concept, see N.T. Wright, *Paul and the Faithfulness of God* (Philadelphia: Fortress, 2013), 1043. For visions of Isaiah 11:6–9 as a future utopia, see Rodrigo Franklin De Sousa, *Eschatology and Messianism in LXX Isaiah 1–12* (New York: T&T Clark, 2010), 149, and Hans Wildberger, who connects animal peace to proper rule. See Hans Wildberger, *Isaiah 1–12: A Commentary* (Minneapolis: Fortress, 1991), 465–73.

42 Brevard S. Childs, *Isaiah* (Louisville: Presbyterian Publishing, 2001), 100.

43 Lena-Sofia Tiemeyer, ed., *The Oxford Handbook of Isaiah* (Oxford: Oxford University Press, 2020), 209.

44 Christopher R. Seitz, *Isaiah 1–39* (Louisville: Westminster/John Knox Press, 1993), 11:1–9.

45 Tiemeyer, *The Oxford Handbook of Isaiah*, 355–57. Some scholars feel that vs. 6–9 are part of a redactional layer, suggesting that the passage may have been intentionally placed in its context for literary purposes aimed at describing the divine intent for creation. Childs, *Isaiah*, 100.

46 Childs, *Isaiah*, 100.

creation.⁴⁷ There will be no destruction in this future reign, even among animals, because “the whole land is filled with the knowledge of YHWH.”⁴⁸ This thematic argument is prominent across a variety of discussions of dating, genre, forms of criticism, historical reception, and context.⁴⁹ In other words, a peaceful existence between animals who currently exist in a predator-prey relationship is an integral part of a future vision in which God’s intentions are realized and God’s character is honored.

This idea of peace in the animal kingdom can be understood as (a) impending reality, (b) allegory, or (c) metaphorical hyperbole.⁵⁰ In the former, discussion of animal peace is viewed as relating directly to the animal kingdom, part of an eschatological vision in which creation is directly restored. In semi-allegorical interpretations, animal traits can refer to animals, but the underlying thrust of the passage is to reflect these traits in people. In metaphorical hyperbole,

47 Childs, *Isaiah*, 104. Some Jewish interaction with the text supports this idea as well; while such reception does tend to focus on humanity, the overall picture is of a life filled with peace. As such, even if animals only receive peace as a byproduct of human utopia, the picture is of an idyllic world in which oppression and suffering are no more—particularly when tied to Jewish conceptions of environmentalism. Hershey H. Friedman and Joshua Krausz, “Jewish Perspective on Social Justice and Ethics: Implications for the Modern World,” *Journal of Intercultural Management and Ethics* 7, no. 2 (2024): 69–70. See also Richard H. Schwartz, *Judaism and Vegetarianism* (Ikeja: Lantern Books, 2001), 12.

48 Marvin A. Sweeney, *Isaiah 1–39: With an Introduction to Prophetic Literature* (Grand Rapids: Eerdmans, 1996), 339.

49 Sweeney, *Isaiah 1–39*, 345; Childs, *Isaiah*, 100–4; see also Joseph Blenkinsopp, *Isaiah 1–39: A New Translation with Introduction and Commentary* (Bloomsbury, 2021), 264–265; Jeff Fisher, ed., *Isaiah 1–39*, (Downers Grove: IVP Academic, 2024); and Seitz, *Isaiah 1–39*. A notable contrasting position within reception history is the 12th century Jewish scholar Maimonides, but he also appears to insist that the nature of the world does not change, raising the same issue as Augustine’s idea of form. See Maimonides, *Mishneh Torah: Kings and Wars 12*, trans. Eliyahu Touger (New York: Moznaim, 1993), 1. Maimonides’ motivation may have been to attempt a “calming” of messianic expectations, suggesting that Jews in his time were in fact hopeful for peace in the animal kingdom! See Mia Andersén-Löf, “May He Speedily Come: A Comparative Study on Haredi and Haredi Understandings of Exile and Redemption” (PhD diss., Åbo Akademi University Press, 2017–2020), (2017). For a parallel in modern reception, see Christopher Leighton and Adam Gregerman’s exploration of the text’s use in Israeli synagogue Independence Day readings: Christopher M. Leighton and Adam Gregerman, “Between Text & Sermon: Isaiah 11:1–11,” *Interpretation* 64, no. 3 (2010): 286–88.

50 For an example of the former, see J. Richard Middleton, “The Image of God in Ecological Perspective,” In *The Oxford Handbook of the Bible and Ecology* (London: Oxford University Press, 2022), 294–295. For a semi-allegorical interpretation, see Ronald E. Clements, “The Wolf Shall Live with the Lamb: Reading Isaiah 11:6–9 Today”; Arthur W. Walker-Jones and Suzanna R. Millar, eds., *Ask the Animals: Developing a Biblical Animal Hermeneutic* (Vermont: SBL Press) 2024; P. J. Harland and Robert Hayward, *New Heaven and New Earth: Prophecy and the Millennium; Essays in Honour of Anthony Gelston* (Boston: Brill, 1999), 99, and J. J. M. Roberts, *First Isaiah: A Commentary* (Minneapolis: Fortress, 2015), 180. For hyperbole, see Joshua J. Van Ee, “Wolf and Lamb as Hyperbolic Blessing: Reassessing Creational Connections in Isaiah 11:6–8,” *Journal of Biblical Literature* 137, no. 2 (2018): 319–37. A fourth option exists, but the argument seems dependent upon a presupposition of the text as anthropocentric cultural literature. See Jacob R. Evers, *Ask the Animals: Developing a Biblical Animal Hermeneutic*, ed. Arthur Walker-Jones and Suzanna R. Miller (Vermont: SBL Press, 2024).

characteristics of animal nature are assigned to ruling nations to suggest that the oppression of YHWH's people will cease through the idea that wild animals (the ruling nations) will no longer be capable of hurting domestic interests (those of the people of YHWH).⁵¹

Within the paradigm of God's character, all three positions appear to suggest that the ideal kingly rule—and existence under this rule—is peaceful. Peace is a reflection of God's character in providing for a future in which all is as it should be. The concept of interspecies peace, therefore, seems to reflect God's character in a way that violence does not. Even if the primary regard of the passage is to assure the future of Israelite interests, the underlying picture suggests that a cessation of harm fulfills the desires of YHWH. Predation, then, is portrayed as negative, not merely because it occurs in relation to humanity or represents oppressive peoples, *but because peace reflects God's character*. When God removes destruction, the result is peace. When God himself moves to destroy, God's action results in the removal of and cessation of harm and evil, not the affirmation of it.⁵² As a result, whether directly or indirectly, a holistic interpretation of Isaiah 11:6–9 appears to suggest that predatory harm does not represent God well; cessation of harm most logically represents not merely a “starting over” or a partial redemption, but instead the renewed rightness of all creation in relation to God.

The Augustinian Concept of *Telos* in Creation

If God's character and creation's rightness are represented by peace, what evidence of peace might be found in creation? For Augustine, the first point for consideration would likely be an object's *telos*: “Each nature (or form) has a *telos*—a goal, a place of rest.”⁵³ Premodern concepts of purpose generally suggested that all action was meaningful in moving to and from a goal; Augustine's idea of *telos* was no different. In breaking with thinkers such as Plotinus, who insisted creation was a “stretching” of the divine matter,⁵⁴ Augustine suggested that creation is intrinsically mutable (movable) because it is created; God is the only immutable

51 Van Ee would like to argue that “the only change is the level of peace and security that the villagers now experience in their relationship with formerly dangerous and wild animals” (Van Ee, “Wolf and Lamb,” 333), but such a statement assumes that the only relationship at work in this passage is between the two natures (human and oppressor), and does not account for the relationship between wolf and lamb, snake and child, calf and lion, even if such relationships are changed in relation to a focus on one specific relationship. See Hulisani Ramantswana, “Not Free While Nature Remains Colonised: A Decolonial Reading of Isaiah 11:6-9,” *Old Testament Essays* 28, no. 3 (2015), 82023.

52 For a broad overview of salvation as rescue from and restoration from harm, see Ernst M. Conradie, “The Salvation of the Earth from Anthropogenic Destruction: In Search of Appropriate Soteriological Concepts in an Age of Ecological Destruction,” *Worldviews* 14, no. 2/3 (2010), 111–40.

53 Scot Bontrager, “Augustine's Concept of Volition and Its Significance for the Doctrine of Original Sin” (PhD diss., Southern Methodist University, 2019), 23.

54 Simon Oliver, “Augustine on Creation, Providence and Motion,” *International Journal of Systematic Theology* 18, no. 4 (2016): 379.

substance.⁵⁵ Being mutable, creation has a *telos*; its action is meaningful because it is tied to the God who defines meaning, being drawn by God's providence.⁵⁶ For Augustine, then, the *telos* of creation is to reflect the Word: "the Word ... recalls His imperfect creature to Himself, so that it may not be formless but may be formed according to the various works of creation which He produces in due order."⁵⁷ And again, "in the conversion and in the perfecting of creatures by which their species are separated in due order, the Blessed Trinity is likewise represented ... God finds pleasure in all the limited perfections of His creatures."⁵⁸ Augustine thus (a) links the nature of creation to the Trinitarian God, (b) suggests that its *telos* is to reflect God to the capacity and fulfillment of its nature, and (c) states that God finds this all good.⁵⁹

Even in its unformed state, "*hyle*" (Augustine's term for formless matter) evidences this *telos*. Oliver Simon and Michael Hanby indicate that *hyle* (a) is not passive, (b) has a rudimentary capacity for forms—and thus, beauty and goodness, and (c) intrinsically possesses the form of seeking form.⁶⁰ This form is meant to orient in a certain way: "what God created was made solely because of His goodness ... In a word, it was made because it was good. And it was called good only after it was made to intimate to our mind that each created being reflected the goodness which was the reason of its being made."⁶¹ Form, for Augustine, is not purely intrinsic so as to become autonomous after creation, nor is form purely extrinsic in that creation is imposed upon indifferent matter. Instead, matter intrinsically seeks form because it originates and participates in the Word who determines its nature.⁶²

In other words, for Augustine, God is *Esse*; that is, God is essence and being and act itself that determines all other essences.⁶³ Created nature is determined in relation to God's character; the *telos* of creation must therefore be in accordance with God's character since otherwise it could not reflect or participate in God. Isaiah 11:6–9 (with its corresponding emphasis on the divine character as a basis for holistic eschatological renewal) thus offers good reason to suggest that the

55 See footnote 9, 13, and 15. See also *Confessions*, VII 11.17 and Augustine, *Of True Religion*, ed. Louis O. Mink, trans. John H. S. Burleigh (Washington, DC: Regnery, 1959), I 18.35.

56 Note that this meaning does not depend on creaturely consciousness, but rather on God's designation of purpose. Oliver, "Augustine on Creation, Providence and Motion," 385. See also James F. Anderson, *St. Augustine and Being: A Metaphysical Essay* (Leiden: Nijhoff, 1965), 16–17.

57 *The Literal Meaning of Genesis*, 1.4.9.

58 *The Literal Meaning of Genesis*, 1.6.12.

59 Note the thematic link: God's nature.

60 Michael Hanby, *Augustine and Modernity* (London: Routledge, 2003), 85–8; Oliver, "Augustine on Creation, Providence and Motion," 386.

61 *City of God*, 11.24.

62 Oliver, "Augustine on Creation, Providence and Motion," 387.

63 Anderson, *St. Augustine and Being*, 5–6, 12–16.

telos of creation should ultimately result in peaceful co-existence, including the cessation of predation.

Predation and the Problem of Teleology

If Isaiah 11:6–9 evidences a final endpoint of peace for all of creation within God’s redeemed creation that reflects God’s character, then it follows that, within an Augustinian paradigm, this endpoint is ultimately desirable while predation is undesirable. Accordingly, if creation is unaffected by a historical fall, one would expect to find a *telos* toward peace and supporting evidence of a progression toward peace. Unfortunately, observation of biology and evolution seems in many cases to indicate the exact opposite—or even to problematize the idea of teleology as a whole—and it is partially this issue to which Rosenberg points.

Predation itself appears to have facilitated major components of the evolutionary process from its earliest forms.⁶⁴ Microevolutionary changes in response to predator pressure are hypothesized to be one of the greatest impactors of species habit, and partially responsible for diversification; in many cases, prey species evolution moves in response to increases in predatory efficiency rather than the reverse.⁶⁵ Furthermore, predator and prey responses generally tend to complexify over time, introducing various strategies for escaping predation or for improving on it.⁶⁶ The interconnected nature of predator/prey interaction reflects a seeming evolutionary tendency toward complexity which has drastically increased the variants and forms interspecies competition and predation over time (albeit simultaneously complexifying symbiosis and mutual benefit).⁶⁷ It is therefore entirely unclear that the evolutionary process tends toward peace.

At an even deeper level, the evolutionary process and indeed life itself appear to be intertwined with and dependent on violence. When Rosenberg utilizes the phrase “red in tooth and claw,” he is referring to the phrase coined by Alfred Lord Tennyson to describe the reality of an unsentimental violence whereby predators

64 S. Bengtson, “Origins and Early Evolution of Predation,” *The Paleontological Society Papers* 8 (2002): 289–318.

65 S. A. Price, S. T. Friedman, and P. C. Wainwright, “How Predation Shaped Fish: The Impact of Fin Spines on Body Form Evolution Across Teleosts,” *Proceedings of the Royal Society B: Biological Sciences* 282, no. 1819 (2015): 2–3; Peter A. Abrams, “The Evolution of Predator-Prey Interactions: Theory and Evidence,” *Annual Review of Ecology and Systematics* 31 (2000): 90–2; Lenka Trebatická, “Predation Risk Shaping Individual Behaviour, Life Histories and Species Interactions in Small Mammals,” (PhD diss., University of Jyväskylä, 2009).

66 Geerat J. Vermeij, “The Evolutionary Interaction Among Species: Selection, Escalation, and Coevolution,” *Annual Review of Ecology and Systematics* vol. 25 (1994): 231–33.

67 See Thomas Miconi, “Evolution and Complexity: The Double-Edged Sword,” *Artificial Life* 14, no. 3 (2008): 325–326; Daniel W. McShea, and Robert N. Brandon, *Biology’s First Law: The Tendency for Diversity and Complexity to Increase in Evolutionary Systems* (Chicago: University of Chicago Press, 2010), 45–69. For a recent response on a genomic basis to arguments against complexity, see Christoph Adami, Charles Ofria, and Travis C. Collier, “Evolution of Biological Complexity,” *Proceedings of the National Academy of Sciences* 97, no. 9 (2000): 4463–68.

become covered with the blood of their prey as they eat; this same violence facilitates the well-being of other predators and even their prey through circumstances like the stabilization of food webs.⁶⁸ Furthermore, predation is in part responsible for keeping the earth from (a) becoming overpopulated, and (b) evolutionary stagnation, providing for the life needs of countless creatures who are thus dependent on violence for their very existence. One could argue that the ability to even consider observable teleological movement is a result of predation!⁶⁹ The question, then, is this: “can Augustine’s theology accommodate the idea of a peaceful endpoint for animals while accounting for the prevalence of predation?” Denying that predation is part of an animal’s intended essence will now require a dual trajectory argument as follows.

Trajectory A: Hylomorphism, Complexity, and the *Rationes Seminales*

Mariusz Tabaczek’s reworking of Augustine’s *rationes seminales* begins a response to the conundrum of peace, *telos*, and natural predation. Tabaczek cannot assume that Augustine directly allows for interspecies evolutionary development; the concept of interspecies change would have been foreign to Augustine’s Neoplatonic definition of forms.⁷⁰ Instead, rethinking Augustine’s *rationes seminales* within the tradition of Thomistic interpretation provides grounding for interspecies development.

Tabaczek argues that Augustine’s idea of the *rationes seminales* is two-fold; all of creation came about at once, but its unfolding happens across a process of time.⁷¹ The unfolding of these potentialities occurs as a result of hidden “seeds” and can take the form of either (a) “the potentiality that manifests in the slow growth [unfolding] in the favorable conditions of the environment;” or (b) “the potentiality that provides a suitable ground for the instantaneous and direct

68 Alfred Lord Tennyson, “In Memoriam A. H. H. Obiit” MDCCCXXXIII: 56, *Representative Poetry Online*, University of Toronto, accessed 3 April, 2025; A.M. De Roos, et al., “Stage-Specific Predator Species Help Each Other to Persist While Competing for A Single Prey,” *Proceedings of the National Academy of Science, U.S.A.* 105, no. 37 (2008): 13930–13931.

69 Stefan Bengtson, “Origins and Early Evolution of Predation,” *The Paleontological Society Papers* 8 (2002): 289–318; Benjamin J. Toscano, Bianca R. Rombado, and Volker H.W. Rudolf, “Deadly Competition and Life-Saving Predation: The Potential for Alternative Stable States in a Stage-Structured Predator–Prey System,” *Proceedings of the Royal Society B: Biological Sciences* 283, no. 1837 (2016): 4–5; Jeff McMahan, “The Moral Problem of Predation,” in *Philosophy Comes to Dinner* (London: Routledge, 2015), 273–75.

70 Mariusz Tabaczek, “The Metaphysics of Evolution: From Aquinas’s Interpretation of Augustine’s Concept of *Rationes Seminales* to the Contemporary Thomistic Account of Species Transformism,” *Nova et Vetera* 18, no. 3 (2020), 946.

71 Tabaczek, “The Metaphysics of Evolution,” 951.

[general or special] divine production of the first adult form of a new kind.”⁷² Tabaczek points out that these potentialities appear to both happen naturally and to require God’s direct intervention; the *rationes seminales* can thus account for (a) development that occurs within the laws of nature and (b) direct intervention by which God does not again create *ex nihilo*, but draws on the earth’s potencies to move beyond natural tendencies.⁷³ Augustine appears to think that both types of development are equally valid: “We must conclude, then, that these reasons [*rationes seminales*] were created to exercise their causality in either one way or the other: by providing for the ordinary development of new creatures in appropriate periods of time, or by providing for the rare occurrence of a miraculous production of a creature, in accordance with what God wills as proper for the occasion.”⁷⁴

Tabaczek uses a Thomistic interpretation of the *rationes seminales* to accommodate the form shifts of interspecies evolution. Thomas Aquinas subscribed not to Platonic forms but to Aristotelian hylomorphic metaphysics,⁷⁵ from which Tabaczek argues that “all representatives of a species share a ‘common nature’ (defined by a substantial form of a particular kind), which finds its expression in the variety of inter-actions and inter-relations between unique individuals that differ in terms of many accidental features.”⁷⁶ Aquinas grounds potentiality in “primary matter” that “persists through all changes that a given substance can be exposed to.”⁷⁷ Potentiality is matched by a complementary “act”—a substantiation of form, which causes a thing to be what it is;⁷⁸ *new substances therefore arise from a common potentiality of primary matter*, which then limit the possible forms of further development. From here, in conjunction with his other metaphysical commitments, Aquinas can postulate that “from the fact that matter is known to have a certain substantial mode of existing, matter can be understood

72 “The principle which makes this development possible is hidden to the eyes but not to the mind; but whether such a development must necessarily come about is completely unknown to us. We know that the principle which makes it possible is in the very nature of body; but there is no clear evidence in that body that there is a principle by which it must necessarily take place” (Augustine, *The Literal Meaning of Genesis*, 6.16); Tabaczek, “The Metaphysics of Evolution,” 953.

73 “God has established in the temporal order fixed laws governing the production of kinds of beings and qualities of beings and bringing them forth from a hidden state into full view, but His will is supreme over all. By His power He has given numbers to His creation, but He has not bound His power by these numbers.” *The Literal Meaning of Genesis*, 6.13; Tabaczek, “The Metaphysics of Evolution,” 953–954.

74 *The Literal Meaning of Genesis*, 6.14. Edited for clarity.

75 “...every physical object is a compound of matter and form.” Thomas Ainsworth, “Form vs. Matter,” *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta & Uri Nodelman (Fall 2024 Edition).

76 Tabaczek, “The Metaphysics of Evolution,” 964.

77 Tabaczek, “The Metaphysics of Evolution,” 964.

78 Tabaczek, “The Metaphysics of Evolution,” 965.

to receive accidents by which it is disposed to a higher perfection, so far as it is fittingly disposed to receive that higher perfection.”⁷⁹

The underlying hylomorphic structure of this argument allows Tabaczek to reconfigure the first conception of *rationes seminales*. He suggests that seed-principles need not be seen as a dormant organism fully present in its potential, but instead as principles that actualize entities (classified as secondary matter) and “dispose” the primary matter in different and specific ways; in other words, new substantial forms can arise from the primary matter of seed-principles.⁸⁰ These new kinds do not arise *ex nihilo* (violating the Augustinian assertion that creation was instantaneous); instead, they arise from existing potentiality. Tabaczek’s argument thus reconfigures the philosophical limitations of Neoplatonist forms while retaining the Augustinian theological concept. His reconfiguration also lends itself to a simple extension; *this entire process of actualized entities may evidence a telos of co-creation manifesting itself through a latent potential of increasing complexity*. Such an idea appears to be consistent with not only Tabaczek’s discussion of potentiality but also evolutionary science as discussed above. For the present argument, the first form of the *rationes seminales* will thus be considered the mechanism for a *telos* toward complexity. In Augustinian terms, a *telos* of complexity is good because God determined it to be so.

Trajectory B: Freedom, Natural Evil, and the Second *Rationes Seminales*

A *telos* of co-creative complexity is not a *telos* of peace, and predation also seems to increase in complexity through development; therefore, a parallel trajectory must separate the goodness of complexity from the privation of predation. Furthermore, this separation must explain desirable and undesirable movement without moving into the territory of morality. Augustine *does* link moral evil to the fall; ascribing morality to animals would thus prove problematic purely from the standpoint of evolutionary engagement, both in terms of timeline and in dealing with the potential for morality in simpler organisms such as worms or bacteria.⁸¹ As a result, describing predation as undesirable must be accomplished without appealing to morality.

Within a non-moral paradigm, Bethany Sollereeder’s concept of limited animal

79 Augustine, *Quaestio disputata de anima*, q. 9, corp. (trans. in *Questions on the Soul*, trans. James H. Robb, [Milwaukee: Marquette University Press, 1984]).

80 Tabaczek, “The Metaphysics of Evolution,” 968–969.

81 Augustine, *On The Free Choice of the Will*, ed./trans. D. M. Pontifex (Pine Beach: Newman, 1955), 74–6, 104, 125. “Therefore, in all defects, either the defective things did not receive further being, and there is no fault—just as even while they exist there is nonetheless no fault because they did not receive more being than they are—or they were unwilling to be what, if they had been willing, they would have received as their being, and, since [what they would have received] is good, it is an offense if they are unwilling.” *On The Free Choice of the Will*, 104, emphasis mine.

freedom proves helpful. Sollereider explores freedom from a narrow lens primarily concerned with animal choice in relation to existing environments, from which freedom is not seen as necessarily (a) conscious or (b) moral; this freedom still constitutes choice because differing actions alter outcomes or influence development.⁸² Placing a *telos* of complexity as an intrinsic property of the creature allows for limited freedom in animal development since these developments remain within the bounds of the developmental trajectory, but the choices within this development cannot be attributed to God since God did not ordain the specifics of these outcomes any more than he ordained the choices of man's corrupt will.⁸³

For Sollereider, evolutionary change occurs in part because of the free choices of the animal world, which can result in both disvalue and value as a result of these choices;⁸⁴ as behaviour and possible choice complexify, suffering (and predation) also appears to develop and increase.⁸⁵ God, therefore, creates a world in which choice allows animals to develop, including toward predation. Within an Augustinian frame, Tabaczek's theory provides for such a concept of freedom within development; freedom becomes one mechanism of development from latent potential—a means by which various forms of complexity are achieved. This freedom is not tied to morality or consciousness, so being a non-moral kind of freedom, it does not impinge on Augustine's thought regarding human free will and capacity; in fact, limited forms of freedom are supported by Augustine's suggestion that creation is both intrinsic and extrinsic.⁸⁶ Augustine's idea of natural law (that is, numbers, weight, and measures) indicates a creation in which God has determined the boundaries of a creature's existence, but within which creatures may develop to their fullest extent.⁸⁷ Animal freedom need only be considered non-moral and within the bounds of natural law (that is, determined by God to be so) to be consistent with Augustine's thought.

The existence of increasingly complex predation is thus linked to creaturely freedom in development, but another challenge to the endeavour of undesirable

82 Bethany N. Sollereider, *God, Evolution, and Animal Suffering: Theodicy without a Fall* (London: Routledge, 2019), 107–108. She uses the example of a killdeer that can choose between two different responses to encroaching predators.

83 “So too free will, without which no one can live rightly, must be a God-given good, and you must admit rather that those who use this good wrongly are to be condemned than that He who gave it ought not to have given it.” *On The Free Choice of the Will*, 131.

84 Sollereider, *God, Evolution, and Animal Suffering*, 107.

85 Sollereider, *God, Evolution, and Animal Suffering*, 107–108.

86 Oliver, *Augustine on Creation, Providence, and Motion*, 393–96.

87 “But clearly, if we suppose that he now sets any creature in place in such a way that he did not insert the kind of thing it is into that first construction of his, we are openly contradicting what scripture says, that he finished and completed all his works on the sixth day. Yes, within the categories of the various kinds of things which he set up at first, he manifestly makes many new things which he did not make then. But he cannot rightly be thought to set up any new kind, since he did then complete them all.” Augustine, *The Literal Meaning of Genesis*, 4.3–4.4, 5.23, and *On the Trinity*, trans. Edmund Hill (El Segundo: New City, 1991), 3.16.

predation arises; both Sollereder and Augustine deny that animal nature is affected by fallenness. Sollereder says (speaking of cannibalism in chimpanzees), “it is theologically difficult to consider a chimp’s actions as sin since they (so far as we know) have no conscious recognition of God’s laws, and therefore cannot be held culpable on a moral level, whatever proto-moral concepts of fair and unfair they might have. I contend that a theological definition of sin is uniquely human; that humans alone are fallen.”⁸⁸ She bases this contention on the idea that sinfulness is directly tied to the ability to perceive God’s law; since animals lack the ability to act in relationship to this law, their actions cannot be sinful.⁸⁹ Augustine concurs; since animals are incapable of willful corruption, their actions are not sin:

The defect, however, would not deserve blame unless it were voluntary ... Consequently it would be most absurd to say that temporal things ought not to decay. They are placed in an order of things such that, unless they decay the future cannot follow the past, nor can the beauty of the ages unfold itself in its natural course. They act in accordance with what they have received, and they pay their debt to Him to whom they owe their being, in accordance with the measure of their being.⁹⁰

Augustine desires to prevent God from being accused of authoring evil, while Sollereder’s concern is to accommodate pre-human decay.⁹¹ For both Augustine and Sollereder, a narrow definition of fallenness dictates these moves; this form of evil is that which is willfully culpable. Sollereder goes so far as to define fallenness in relation to the idea that harm need not arise from “something gone wrong,” which propels her to say that the predatory outcomes of exercising this freedom are not evil and “do not stand outside the purposes of God” since animals are not morally aware.⁹² A careful reading of Augustine, however, may provide grounds to address Sollereder’s concerns while also avoiding (a) labelling predation as voluntary sin and (b) labelling predation as part of the purpose of God.

To explore this question, recall Rosenberg’s interpretation of Augustine as asserting that (a) God (and all that is created by God) must be good, (b) anything that exists, regardless of state, possesses good “to the extent that it exists,” (c) evil therefore does not exist but represents a loss or diminishment of original essence,

88 Sollereder, *God, Evolution, and Animal Suffering*, 108.

89 Sollereder, *God, Evolution, and Animal Suffering*, 108–109.

90 *On the Free Choice of the Will*, 42–43.

91 Sollereder, *God, Evolution, and Animal Suffering*, 35–36.

92 Sollereder, *God, Evolution, and Animal Suffering*, 108–11. Sollereder critiques the use of Isaiah 11 as a basis for a peaceful purpose to creation but does not preclude the possibility of peace as an intended “end” to creation.

and (d) that evil is thus the absence of good.⁹³ Further recall that this progression forms the basis for Augustine's exposition of corruption, which insists that (a) corruptible things must be good in order to be corruptible, (b) harm is only done when corruption diminishes the good, and (c) evil is the corruption of an entity's original essence.⁹⁴ Corruption moves toward non-existence, denying the good of an entity's original essence. *When the original essence is fully realized, evil will be nowhere.* The peaceable kingdom in Isaiah 11, in an eschaton where God's intentions reign supreme, suggests that predation will be nowhere; therefore, predation ought to be considered as a form of evil.

Augustine based his insistence that predation is part of a greater good on observable animal nature and the constraints of his concept of natural law; beginning from a peaceable nature suggests his logical progression stands but requires an adjustment to its outcome. For Augustine, evil is relative to the nature a thing has.⁹⁵ Animal nature (and specifically animal freedom in creative development) is good. Doing good to that animal promotes its well-being in relation to its nature; lack of a thing required in order for the animal to fulfill its nature is therefore evil for that thing.⁹⁶ Furthermore, it is not merely the actual privation of the good, but a *tendency* to privation that is undesirable. Augustine does not suggest that privation is only the moral, willful committing of evil; instead, he acknowledges that circumstances exist which deprive an object of its ability to be itself. Even when an object is "good" (such as light) or "evil" (such as poison), harm or good can result from each, suggesting that privation is intrinsically intertwined with goodness by virtue of being a created thing (thus, not being Godself). This is the concept of natural evil.⁹⁷ Peter King comments: "The lion attacks the sheep and is undeniably a cause of evil to the sheep, but the lion is only following the imperatives of its nature and is not morally evil in doing so."⁹⁸ Predation is natural evil, not moral, but it is not "good" because predation hinders the development of both predator and prey toward an endpoint of peace.⁹⁹

A layer of complexity can thus be added to Augustine's thought by saying that freedom to creatively develop can account for the imperatives of nature, leaving

93 Rosenberg, *Finding Ourselves After Darwin*, 250–53.

94 Rosenberg, *Finding Ourselves After Darwin*, 252–56.

95 Peter King, "Augustine on Evil," in *Evil: A History*, ed. Andrew P. Chignell (Oxford: Oxford Academic, 2019).

96 King, "Augustine on Evil," 163.

97 *City of God*, 11.20–23. See also 12.2 and 12.3, where evil is evil solely because it corrupts an object's intended nature.

98 King, "Augustine on Evil," 163. See also *City of God*, 12.4.

99 King exemplifies this by saying "Augustine reasons that to be a good for something is to help or promote its doing well at being the kind of thing it is ... (speaking of a horse) ... if any of these features required to do well are missing—say, a horse has only partial lung capacity—then that horse cannot fully realize its nature as a swift animal. The horse cannot be good of its kind." King, "Augustine on Evil," 161–162.

animals *morally* blameless, but still allow discussion of predation as undesirable, since ideal development would result in peace.¹⁰⁰ “The same thing,” says Augustine, “when applied in one way, is destructive, but when applied suitably, is most beneficial.”¹⁰¹ It is not creative development in nature *but the resulting privation* which is destructive. When applied suitably, development is beautiful and beneficial; a concept can thus be good and tend to privation at the same time—creation, as Christopher Southgate says, is “good and groaning.”¹⁰² Predation is thus (a) undesirable under a broad category of privation based around deviation from God’s intentions *in any way*, and (b) an expression of the natural tendency of created beings toward non-existence. God is not the author of predation; instead, God’s work sustains, upholds, and empowers a trajectory of free complexifying development, of which predation is a privation even as it also enables development and certain forms of animal flourishing. It is the *ideal* development, then, of which creation has potential from the beginning, that is desirable.¹⁰³

Augustine defines fixed essence in terms of original nature; placing Sollereeder’s thought in Augustinian terms seems to indicate fixed essence is the freedom to develop. Both seem to define *telos* as movement in the outworking of these concepts. If original nature is considered to be *a movement through freely increasing complexity in response to God that fulfills an intended essence of peace*,¹⁰⁴ and original nature is defined as including a teleological movement toward this intended end, then both the goodness of developmental freedom and the concept of original nature are preserved while also providing for privation, redefined as *movement that is a natural result of creative developmental freedom but moves away from peace*. Corruption thus remains congruent with an Augustinian

100 Augustine provides for this idea within his discussion of humans: “but whether such a development must come about is completely unknown to us. We know that the principle which makes it (old age) possible is in the very nature of the body; but there is no clear evidence in that body that there is a principle by which it must necessarily take place.” *The Literal Meaning of Genesis*, 6.16. The existence of a potential for peace need not mean it always comes about for peace to be the desired outcome of creative development. Note that King says Augustine asserts all suffering is morally justified; in this case, animal suffering is justified by the benefit of limited animal freedom— i.e., non-coercion, which Sollereeder also suggests. King, “Augustine on Evil,” 156, and Sollereeder, *God, Evolution, and Animal Suffering*, 92–117.

101 *City of God*, 12.4.

102 Southgate, *The Groaning of Creation*, 15. Perhaps “good” and “groaning” need not mean the same thing.

103 *City of God*, 12.5. Augustine asserts that “though the corruption of transitory and perishable things brings them to utter destruction, it does not prevent their producing that which is designed to be their result . . . God is not to be found fault with on account of the creature’s faults but is to be praised in view of the natures He has made.” Perhaps God can affirm the creative development of animals as in Job 38:39 while equally affirming the existence of privation within the very same aspect of development. This affirmation could also account for Augustine’s assertion that without decay, forms of beauty could not occur (see footnote 90).

104 Note that “response” does not entail an anthropocentric conception of deliberate, but only the ability to respond in whatever way God desires the creature to achieve.

definition of natural evil. Isaiah 11's insistence that animals will eventually lie down together presents a picture in which God restores the detriment of *all* privation, not merely moral evil. Fulfillment and restoration, then, move beyond the effects of moral evil to encompass the struggles inherent in being created, since peace better reflects God's character than does predation.¹⁰⁵

One question remains: if creation tends toward privation and increasing complexity also results in increasingly complex forms of privation, how can peace result? Recall that Tabaczek outlines not one but two forms of the *rationes seminales*, where the second is "the potentiality that provides a suitable ground for the instantaneous and direct (general or special) divine production of the first adult form of a new kind."¹⁰⁶ Augustine suggests that these "seed-principles" are unfolding even now, and that God does not establish new kinds (that is, those which did not have their potentiality present in the first creative act), but that He does "in accordance with these (kinds) ... God makes many new things which He did not make then."¹⁰⁷ God's providential rule continues from creation until now, and crucially, into the future; it is God that constantly enables creation and its development, meaning that God's creative movement is constantly at work. This second type of potentiality is not created *ex nihilo* but is embedded into existence from the beginning; natural law still partially applies since God has chosen to work within the overall form of these bounds.¹⁰⁸ God's creative will, however, must move overtly within this type instead of depending on creation's impetus to development. In other words, this second type of *rationes seminales* is embedded within nature but will not occur without divine intervention.¹⁰⁹

Response and Redemption: The Final Piece

A suggestion might be made that this second type of *rationes seminales* could allow the incorporation of creaturely co-creation into God-directed eschatological peace. If, from the beginning, creatures have carried a latent potential for developmental complexity *culminating in response to God's intent*, and if creatures freely develop in a co-creative process with God, then the realization of this process might include a redemptive, creative act whereby God takes every single creature and redeems their developmental labor into a life of peace—creatures, then, realize their potential for peace inherent from the beginning.¹¹⁰ In other words, since every

105 "For He is not truly called Almighty if He cannot do whatsoever He pleases, or if the power of His almighty will is hindered by the will of any creature whatsoever," *Enchiridion*, 96.

106 See footnote 72.

107 *The Literal Meaning of Genesis*, 20.41.

108 *The Literal Meaning of Genesis*, 6.13.

109 *The Literal Meaning of Genesis*, 6.14.

110 This redemptive act is the final puzzle piece. Furthermore, this culmination of response to God's intent solves the problem of coercive essential change by suggesting that a lion will, in some way, desire God's redemption from privation stemming from his development.

creature today exists as a result of this impulse toward co-creation, and inasmuch as every creaturely existence reflects both desirable development and undesirable privation, creation will be given a life where each being realizes the goal of its development in response to God, at which point privation is no more. Such a proposal seems to fit Augustine's category of a rare and miraculous production; it also incorporates evolutionary complexity as an essential co-creative work of creation, linking the two types of *rationes seminales*. Further, this progression grounds an emergent characteristic of peace, avoiding potential problems of reductionism (peace need not logically arise from development) while incorporating physical existence to evidence continuity and discontinuity with the current world. In this vision of the eschaton, all parts of animal nature will be good in *every* way.¹¹¹ Thus, the final end of animal development can accommodate interspecies peace, arrived at via developmental complexity and co-creation in a movement culminating in response to God.

Conclusion

Traditional readings of Augustine have attributed moral evil and the created world's suffering to a historical human fall, but evolutionary science challenges the idea that creation ever existed without violence. Stanley Rosenberg suggests that predation is a natural part of creation according to God's will; such a response does not address the implications of a God who sanctions these acts. Isaiah 11:6–9 and its vision for animal interaction insists that peace is what best reflects God's character. Utilizing Mariusz Tabaczek's reconstrual of the *rationes seminales* in conjunction with Bethany Sollereder's concept of limited animal freedom allows Augustinian thought to accommodate an evolutionary trajectory of peace; further, Augustine's theory of evil as privation allows a view of predation as an undesirable part of creation resulting from creative freedom in animals. Finally, the oft-neglected second concept of the *rationes seminales* provides a basis on which to speak of eschatological redemption as God's act of new creation, one that utilizes existing matter, allowing the animal kingdom's co-creative freedom to culminate in peace. Such an argument requires adjustments to Neoplatonic ideas of form but does not impinge on Augustine's main theological priorities.

111 "For if vice does not injure, it is not vice." *City of God*, 12.3.