

7 The Nature of Humanity and the Origins of Religion

Contributions from Michael Tomasello

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As I understand it, the purpose of the conference on which this chapter is based was to discuss, in the words of the conference organizers, “whether it is possible to formulate a nonreductive understanding of the evolution of religion.” This might mean that we’re looking for (i) whether religion plays a role in human evolution or (ii) what evolution science can tell us about how religion evolved. I confess, I know little about the first, but I will essay a few remarks about the second. What does evolutionary biology tell us about the development of religion and what does it tell us about the nature of humanity and of evil?

To begin: just how evil and violent are we? How much is it in human nature to maraud, steal, bludgeon, and kill? The theological way to ask this is: is violence part of the way God created us—God, who is supposedly omniscient, omnipotent, and good? And if so, why? For what good purpose can humanity’s history as a “slaughter-bench,” (Hegel [1837] 2004, 21) as Hegel called it, be justified in God’s plan? In the eighteenth century, the philosopher David Hume put the problem this way: “Is he [God] willing to prevent evil, but not able? Then he is impotent. Is he able, but not willing? Then he is malevolent. Is he both able and willing? *unde malum*, whence then is evil?” (Hume [1779] 1990, 108–109).

The standard theodical answers involve (i) the importance of humanity’s free will or (ii) some lesson humanity must learn that cannot be learned in any way other than through the inflicting and suffering of pain. The key to the first, free will theodicies dating back to Augustine (Augustine [388–395] 1955), is the transfer of responsibility for evil and violence from God to humanity. God did not create evil or violence, free-will reasoning proposes; he created us with free will so that our actions are those of moral agents and not of puppets pre-programmed to be good. Without the possibility of choosing evil, there is no possibility to *choose* the good. Therefore, the consequence of being a creature capable of moral choice is the possibility of immoral choice.

While theologians for millennia have developed free will theodicies, including Alvin Plantinga’s masterful free will defense in 1974 (Plantinga 1974a; 1974b), they rather beg the question of why humanity’s moral

agency is so important as to justify the ‘slaughter-bench’. It is an uncomfortable cost-benefit analysis: does the final good (moral agency) justify the staggering suffering we perpetrate (Meister 2012, 33)? Even if moral agency is of great importance, could God not preserve it within a narrower scope of human action? Within this narrower scope, persons could still choose from a variety of actions and thus be moral agents, but the worst evils would not be among the possible choices. In fact, our conduct may already be circumscribed: evils more heinous than we can imagine may be beyond our ken. Couldn’t an omnipotent God further limit the human range to even narrower, less awful options?

There are other challenges to free will theodicies, one being the question of the source of evil: if it was not created by God, God is not the creator of all existence. If it was created by God, why and how is it consistent with God’s goodness? Second, how did people, created “very good” in an evil-less world, as the biblical creation story says (Genesis 1:31), come to the idea of evil in the first place? How could they choose evil if they didn’t know it existed?

Leaving these unanswered questions to free will theologians, we may turn to cruciform theodicies. These hold that it is through the suffering which we perpetrate and bear that we learn the donative love of the cross, to give radically for the sake of the other, as Jesus gave (Moltmann 1993a; 1993b). But this is rather tautological, for if we weren’t capable of betraying and bludgeoning to begin with, we wouldn’t have to learn to behave more lovingly. Why did God make us capable of manifold cruelties? And, do we have to be capable of so much violence to learn to reject it?

John Hick’s soul-making theodicy similarly proposes that this world is training of sorts for moral development, where persons, born immature, are able to mature into God’s ‘likeness’ by acting morally. A world without wrongdoing “would be a world without need for the virtues of self-sacrifice, care for others, devotion to the public good, courage, perseverance, skill, or honesty” (Hick 2007, 325)—in short, a world in which we would remain protected children who need never learn to take account of others. Yet again, we face the cost benefit analysis: must we perpetrate such brutality for the sake of ‘maturing’? Couldn’t an omnipotent God have created another way for us to grow up? And why, created ‘very good’ in an evil-less world, wasn’t our original ‘maturity’ sufficient for us to live without barbarous violence?

I was tweedling with these matters for a book on the theology of Leonard Cohen when I came to this: all this theodical teeth-gnashing assumes that violence and evil are within humanity’s foundation at creation such that, given free will, Adam and Eve chose wrongdoing and the rest of humanity, with some frequency, continues to do so.

But is human nature so prone to wrongdoing? How foundational is human violence? By this I mean not so much the *capacity* for aggression, needed to protect oneself from animal predation, but its execution. Are

Homo sapiens systemically aggressive or is aggression prodded by certain conditions? If contingency were the case, it would suggest that under different conditions, *Homo sapiens* would engage in significantly less conspecific (within species) aggression.

Michael Tomasello's work directed me to if not an answer then a path toward one (Pally 2020a). "[T]he key novelties in human evolution," he writes, "were adaptations for an especially cooperative, indeed hypercooperative, way of life" (Tomasello 2019, 297). Cooperativity refers to behaviors "associated with a disadvantage or cost for the actor and a benefit for the recipient" (Kappeler 2019, 39). If humanity is not systemically aggressive but "hypercooperative," perhaps theodicy has less of a problem than it thinks. Moreover, Tomasello's work on the human mind is an entrée into the emergence of ritual, specifically ritual that marks not what has happened—historical documentation—but what is *believed*. And ritual marking what is believed in an imaginative world shared with others says something about the emergence of religion (Pally 2020b).¹

Human Aggression Among Hunter-gatherer *Homo Sapiens*: Intra-group

The *Homo sapien capacity* for aggression is hundreds of thousands of years old. Yet as Mark Kissel and Nam Kim note in their important review of the literature (Kissel and Kim 2019, 141–163), evidence of the *occurrence* of systemic, severe aggression before the mid-Holocene is rare (Majolo 2019, 322). Severe aggression includes torture, maiming, enslavement, harsh imprisonment, impoverishment, and conspecific (within species) killing. "Overall," Richard Wrangham finds, "physical aggression in humans happens at less than 1 percent of the frequency among either of our closest ape relatives ... we really are a dramatically peaceful species" (Wrangham 2019, 13).

Benefits of cooperative behavior included improved food gathering, protection from animal predators, and other collaborative projects as well as more equitable resource distribution yielding greater longevity for more people and thus greater chance at reproduction. "Cooperative hunting" Bonaventura Majolo notes, "likely appeared 200,000–400,000 years BP and potentially much earlier, well before the first conclusive evidence of warfare in Homo" (Majolo 2019, 326). Peter Kappeler, Claudia Fichtel, and Carel P. van Schaik add that cooperativity became advantageous in mating: "individuals characterised by above-average frequencies of affinity, affiliation and mutual support ... enjoy greater reproductive success, higher infant survival and greater longevity" (Kappeler et al. 2019, 73). This suggests a decrease in aggression over time among *Homo sapiens* as aggressive types are bred out, an idea supported by Wrangham's "domestication" hypothesis (Wrangham 2019, 19).

Concurring with Wrangham and Kissel and Kim, Robert Seyfarth and Dorothy Cheney write, "Natural selection, therefore appears to have

favored individuals who are motivated to form long-term bonds *per se* not just bonds with kin” (Seyfart and Cheney 2012, 170). Primatologist Frans de Waal in turn observes, “We owe our sense of fairness to a long history of mutualistic cooperation,” again not just with kin (de Waal 2014, 71; Silk and House 2011; Churchland 2012; Bowles and Gintis 2013). When Donald Pfaff writes that we are “wired for goodwill” (Pfaff 2014, 5), he is not suggesting an absence of aggression among hunter-gatherer *Homo sapiens*. Fossil and archeological evidence indeed show both episodic aggression within groups and opportunistic raiding among groups. Rather, Pfaff understands early human life as including episodic aggression *amid* evolutionarily-selected egalitarianism and cooperativity—including communal property and childcare—because cooperativity was in most contexts advantageous within groups and often between them. It’s to these inter-group relations that we now turn.

Human Aggression Among Hunter-gatherer *Homo sapiens*: Inter-group

Aggression between groups arguably might be more frequent than within them owing to reduced need for cooperation and thus a lower bar to violence. Yet in the absence of stored goods that might be useful to other groups and with only infrequent, passing contact, aggression among hunter-gatherer bands was episodic in nature, occurring when (i) rewards were sufficient to justify risks, (ii) chances of success were high, and (iii) risk of harm to oneself was low (Majolo 2019, 327; Wrangham 2019, 262). While low-risk raiding opportunities episodically presented themselves, among surplus-less, mobile hunter-gatherers, the risk-benefit analysis did not come out in favor of raiding consistently enough for raids to become a *systemic* practice (Ferguson 2013). As Douglas Fry notes, “Violence tends to grab the headline, but violence constitutes only a minute part of social life” (Fry 2006, 1).

Indeed, among Pleistocene and Holocene hunter-gatherers, the scarcity of food may have led to cooperation when paths crossed. If, in a simple example, hunter-gatherer bands battle each other to be the only ones to hunt a certain animal, the winner may end with more food. But many will be downed in the fight, the capacity to overpower the animal will be diminished, and chances increase of becoming the animal’s meal rather than making it one’s own. Cooperation may be the better survival strategy as more people live (and may later reproduce) and chances of succeeding in the hunt rise. Similarly, if one group raids the food cache of another (on the rare occasion of leftovers), chances of retaliation are not trivial—not only with the motive of hunger but with added anger at the initial attack. Cooperation or non-engagement may be the more productive route.

In sum, David Barash finds that war is not genetically hard-wired but rather “historically recent,” “erratic in worldwide distribution,” and “a

capacity.” Capacities are “derivative traits that are unlikely to have been directly selected for but which have developed through cultural processes ... capacities are neither universal nor mandatory” (Barash 2013). Augustín Fuentes adds support from his work with other primates, finding conspecific killing to be unusual. A focus on it, he notes, risks both giving it an unwarranted role in evolution and underestimating far more frequent prosocial activities (Fuentes 2012, 124).

Ferguson (2013), Fry et al. (2010), and Fry and Soderberg (2013) among others make a similar case that *systemic* raiding and war required specific conditions not often found among hunter-gatherers. Consistent with these findings, Matthew Zefferman and Sarah Mathew write, “The archeological record does not provide much evidence of warfare in Pleistocene forager societies. Outside of the Gebel Sahaba Paleolithic cemetery in Sudan, dated 10,000–12,000 BC, there is no strong evidence of intergroup conflict until the Mesolithic period (approximately 10,000 BC) in Europe and the Near East” (Zefferman and Matthew 2015, 59). Lee Clare et al. date inter-group aggression even more recently, “There is presently no conclusive evidence for intergroup fighting in the early Pre-Pottery Neolithic” (10,000 to 8,800 BCE) and they caution against projecting aggression from later periods onto earlier ones (Clare et al. 2019, 101).

While some hunter-gatherer fossil material shows evidence of trauma to the body, little can be identified as systemic inter-group aggression as distinguished from episodic aggression, accident, friendly fire in hunts, ‘play’ aggression (as in today’s football), harsh initiation rites, etc. Additionally, the rare occurrence of mass graves is not evidence of mass killing but often of the accumulation of bodies (deaths from a range of causes) placed in temporary graves until time and conditions were found to dig permanent, large burial sites (Stojanowski et al. 2016, E8). Caution must also be taken in interpreting foundation burials (skeletons found in the foundation of a house) as a sacrificial killing (of in-group or out-group members) meant to boost the well-being of the house’s inhabitants. Such killing would violate human hypercooperativity, and there is at present no evidence that these fossils are anything other than skeletons of those who had died of other causes (illness, accident) before or during house construction.

Kissel and Kim conclude that fossil “signatures alone are insufficient to indicate violence, much less organized violence between groups” (Kissel and Kim 2019, 151). They note that evidence of pre-agrarian coalitional aggression (raiding and war), such as that cited by Steven Pinker (2011),

overlooks much of the evolutionary pressures that affected our ancestors. Evidence from Nataruk, Jebel Sahaba, and other cemetery burials demonstrate violence, and perhaps collective violence. However, anthropologists need to be clear that this represents only a tiny portion of the human evolutionary record.

(Kissel and Kim 2019, 151)

Kissel and Kim make two points: first, that Pinker's selection of hunter-gatherer aggression is but a "tiny portion" of the human experience and should not be given undue weight. Second, that a "tiny portion" is not an amount sufficient to consider inter-group coalitional aggression *systemic* in hunter-gatherer cultures. Kissel and Kim agree with Keeley (2014, 30) and Fry et al. (2010) that periods of the Holocene show "virtually no signs of violent conflict" inter-group, much less intra-group (Kissel and Kim 2019, 155).

The Emergence of Severe, Systemic Aggression Intra- and Inter-group

What then explains the human 'slaughter-bench' that has so occupied theodicy and philosophy? With hypercooperativity as the hunter-gatherer *modus vivendi*, what changes in conditions account for the shift to the systemic practice of severe aggression found in fossil and archeological evidence after 8000 B.C.E. in Mediterranean and certain central Asian and African regions?

Perhaps the most proximate explanation is the advent of sedentarism and agriculture. These allowed for regular (rather than episodic) surpluses ever-present for plunder and thus for the development of significant inequality and hierarchies (the last of which had diminished in the evolution to hunter-gatherer cooperativity, see e.g., Boehm 1999). With the new agrarian surpluses, the potential rewards of stealing with force, both intra- and inter-group, outweighed the risks far more often than they had under hunter-gatherer surplus-less mobility. "Hunters and gatherers," Peter Kappeler explains, "forage cooperatively, share what they hunt/collect, and consume it on the spot. Agriculturalists don't rely on cooperation; they produce surplus stock for themselves which can be taken by force."²

The desire to grab other people's food, land, and resources *and* the need to constrain those wanting one's own cache were the first prods both to endemic inter-group aggression and to systemic policing within groups, which requires use of force. "A tiny ruling group that used coercive powers to augment its authority," Robert Bellah writes, "was sustained by agricultural surpluses and labor systematically appropriated from a much larger number of agricultural producers" (Bellah, 2011, Kindle Locations 3276–3281). A further prod to aggression, Carel van Schaik and Kai Michel note, was the resentment that emerged among society's have-nots as coercive, monopolizing hierarchies violated evolution-bred, longstanding cooperativity (van Schaik and Michel 2016). This may have prodded the have-nots to try to take what they could by force, individually or in bands, and may have incentivized warfare between lesser and greater strongmen. Joel Hodge adds yet another prod to aggression, noting that the pre-agriculture fear of animal predation tended hunter-gatherers toward cooperation while the relative security of towns amid farmland decreased this worry and increased concern about thieving, aggressive neighbors.³

Bellah describes a last prod to aggression in the lure of political/military power, where resource monopolizers want not only goods but the elite position in the newly-emerging hierarchy (Bellah 2011, Kindle Locations 3974–3976).

In sum, while *Homo sapiens* had *capacities* for aggression for perhaps 300,000 years (Kissel and Kim 2019, 157), the *occurrence* of severe, systemic aggression appears to have emerged with changes in conditions associated with sedentarism and agrarianism. Surpluses, monopolizability of resources, hierarchy, and substantial inequality were among the significant contributors to the shift from hypercooperativity/episodic aggression to severe aggression systemically practiced.

Cooperativity, Interaction, and Being Human

So far, this look into the theodical question about human violence created by a good and loving God suggests that severe, systemic aggression is late in human development and contingent on sedentarism and agriculture. Theologians may want to explore why God created the agricultural world in this way, but it appears that until roughly 8000 B.C.E., for 95 percent of human development, *Homo sapiens* were, as Tomasello writes, a “hypercooperative” species (Tomasello 2019, 297). He proposes not only that *Homo sapiens* are “hypercooperative” but that our very cognitive and socio-emotional capacities—what makes us human rather than chimp—emerges from our cooperative interactivity. I’m going to suggest that this interactivity, at the core of so much of Tomasello’s work, may tell us something also about the development of ritual and religion.

Human cognitive development begins, as Tomasello explains, with the playful copying and exchange of gestures and facial expression between human infants, with long, dependent childhoods, and their kin and non-kin caretakers. This exchange requires both high and prolonged levels of interactivity and the cooperative community/social conditions that make such prolonged interactivity possible. The playful give-and-take, Shaun Gallagher notes, “brings the infant into a direct relation with another person and starts them on a course of social interaction” (Gallagher 2005, 128; see also 224–225; 244–245). We do not develop alone but within “the larger system of body-environment-intersubjectivity” (Ibid., 242–243). This back-and-forth yields a “we-centric” or “unified common intersubjective space”, Vittorio Gallese writes, (Gallese 2005, 105, 111), with a wide variety of others that even infants know are different from themselves. To mimic, be mimicked, and play around is to participate in the world of different others—not an undifferentiated we-space but an I-You space, as Vasudevi Reddy notes (Reddy 2008, 19–21; see also Hobson and Hobson 2012, 120–121). Reddy continues, “Being imitated seems to establish a powerful and immediate statement of interest, connection, and intentional relation... it is *being* imitated which is crucial for intimacy” (Reddy 2008, 64–65, emphasis original).

In short, Reddy explains, “You have to be addressed as a subject to become one” (Reddy 2008, 32). Human cognitive and emotional growth is grounded in this interaction to arrive at what Sarah Hrdy calls the “emotional modernity” of the last 250,000 or so years: the capacities to grasp and coordinate with (i) the attention of others, (ii) the intention of others, and (iii) the emotions of others in order to sustain relationships through which one feels safe and learns about the world (Hrdy 2009, 204–206; 282). Importantly, learning and relating generalize to strangers, a capacity that became critical for communal childcare, as Hrdy, Kristen Hawkes, and Tomasello note (Hawkes 2014; Hrdy 2016; Tomasello 2019). However advantageous communal childcare was in increasing fecundity, it also required each child to attract the attention of busy, kin and non-kin caretakers through social interaction.

Tomasello’s work on cognitive development elaborates on this human interaction and explains its step-by-step development into human cognition. He notes that joint attention and intention created the basis for role reversal and recursive thinking. Role reversal entails the understanding, for instance, that if I touch your arm, you touch not your arm but *my* arm—it’s touching the arm of the *other* that is the task regardless of who is doing the touching. This allows tasks to be separated from actor and distributed to various persons. Additionally, role-exchange, psychologist Lev Vygotsky noted in the 1930s, allows children to internally assume the role of the caretaker and so ‘self-regulate’ toward what they know by age three is not just a caretaker’s idiosyncratic behavior but normative group practice (Vygotsky [1930] 1978; Vygotsky/Luria [1930] 1993).

Recursive thinking involves my understanding that you want me to know that you know that I know, etc. Together, role reversal and recursive thinking allow for complex, collaborative endeavors, not only joint intention but *inter-dependent intention*, where actions are assigned to various persons, each knows the other’s role and, the success of the endeavor depends on everyone doing her part so that all benefit. The benefit is not me-you but collective. Here we have the foundations of specifically human cognition and inter-dependent planning and execution for group activities—a *group mindedness* and identity where each has a sense of obligation to act fairly, according to group norms, *for* the group. Fairness violations, Tomasello explains, upset even group members who are not harmed by them because they harm the group. Fairness violators know that they are justly criticized and will lose their identity as part of the group if they persist in violations. Even before *Homo sapiens*, Robert Bellah notes, the *Homo erectus* evolved “an entirely new level of social organization beyond anything seen in non-human primates” (Bellah 2011, Kindle Location 2019).

Playful copying-exchange bridges otherness. As our “deep enculturation,” Donald (2001, 264) writes, it emerges from and reinforces our hypercooperativity. “It isn’t just,” Alison Gopnik concludes, “that without mothering, humans would lack nurturance, warmth, and emotional

security. They would also lack culture, history, morality, science, and literature” (Gopnik 2009, 15).

We would also lack *ritual that commemorates belief of a shared world*—that is, the beginnings of religion. And it is to the link between ritual, religion, and human cognitive/emotional development that we now turn.

Cooperativity, Interaction, and Ritual Commemorating Belief

The basic socio-cognitive abilities described above foster a capacity not yet discussed: the abstraction of sequences of behavior not only from actor but from the immediate context. Whatever the action, it can be done today, tomorrow, or again next year. It can be done here, there, or in a place collectively remembered but not at present in view. This enables humans to learn and communicate tasks not only for present but also for future application and to symbolically (in gesture and language) re-enact not only past tasks but past *events*—to tell stories, to communicate future collaborative plans, and to describe a hypothetical scene (Donald 2001, 263–365). That is, not only how one used this tool but how one *could* use it in a situation that has not yet occurred.

Among humans, it is not only memories that can be recounted but imagined worlds. We coordinate with the attention, intention, and emotions of others not only about present happenings but about past—and not only about the past but about the conjectured and imagined. Taken together, the imagining of the conjectured and fictional by a species capable of (i) complex collaboration in (ii) repeatable activities with (iii) shared attention and agreed upon intentions may be the origin not only of survival-projects like food procurement but of play: games, theater, and art. Repeatable, complex collaboration about an imagined world is present in all play activities. And from play—repeatable, intentional activities that reference the past, future, and the *imagined*—may come ritual, an intentional activity that repeats action-patterns and references the past, future, and the *believed*.

I am not here attempting an exhaustive definition of religion but rather to note that religion—not private, individual faith but a *group* phenomenon—involves *at least* ritual that references the past, future, and the believed.

Johan Huizinga, in his classic study of play, wrote, “in myth and ritual the great instinctive forces of civilized life have their origin: law and order, commerce and profit, craft and art, poetry, wisdom and science. All are rooted in the *primaeva* soil of play” (Huizinga [1938] 1950, 5). Tomasello nearly 70 years later echoes, “cognitively, the dual-level structure of simultaneous sharedness (creating socially shared realities) and individuality (individuals’ perspectives within those shared realities) characterizes everything from children’s pretend play to adults’ cultural institutions” (Tomasello 2019, Kindle Locations 5769–5771). Shared worlds, real and imagined,

in a species with collaborative attention, intention, and emotion allow for communal collaborative activities from sports to worship services.

While these cognitive capacities help explain why play, theater, and ritual are humanly possible, they do not yet explain function: what benefits does play/ritual provide? I'll look at two, beginning with bonding/belonging. We have seen that playful exchange promotes a “we-centric” (Gallese 2005, 105) or “unified common intersubjective space” (Ibid., 111) through which we align ourselves with the attention, intention, and emotions of others in order to sustain relationships, feel safe, and learn about the world. As this exchange develops into collaborative play and ritual, these secondary activities too carry with them the sense of bonding, safety, and belonging. Play and ritual are heirs, so to speak, of the sense of bonding and belonging of earlier *Homo sapiens* playful exchange. *The activity of performing together shared ritual patterns gives humans the sense of relatedness and belonging needed for our long-evolved social nature.* This group activity may include music, movement, sequenced gestures, recitations, and much more. Children who lack such social interaction and collaborative play suffer from cognitive and emotional impairment (van Ijzendoorn et al. 2011; Nelson et al. 2014). Adults who become isolated suffer from increased risk of suicide, mortality (Pantell et al. 2013), and morbidity, including depression and other emotional disorders (Cacioppo and Cacioppo 2014; Leigh-Hunt et al. 2017; Laugesen et al. 2018). This process is summarized in [Figure 7.1](#).

Clare et al. describe the Göbekli Tepe hunter-gatherer ritual site as such a bond-building arena, which, “could be understood as the stage and scenery for a late hunter-gatherer mythological narrative, one used by these communities for the conveyance of shared moral values, the documentation of group memories and histories, the formation of identities, and the promotion of intergroup cooperation and altruism” (Clare et al. 2019, 105).

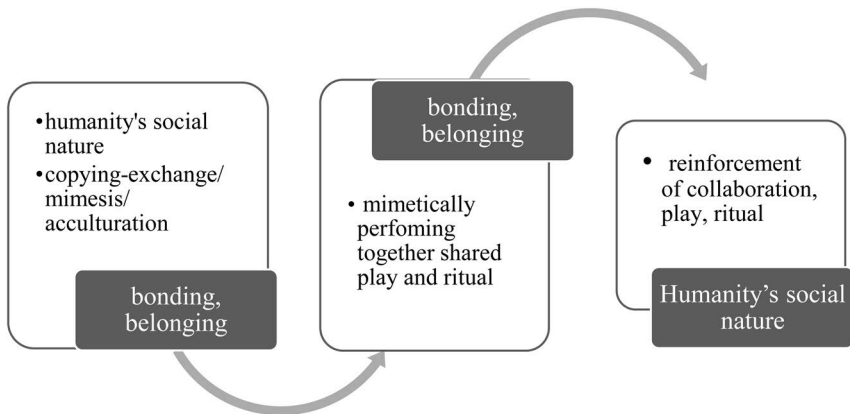


Figure 7.1 Cycle from humanity’s social nature through interaction and mimesis to play/ritual.

In addition to bolstering altruism, belonging, and common values, play and ritual serve a second function: they ‘play-act’ what troubles us. From ‘horsing around’ (playing at fighting) to fairy tales, roller coasters, and theater, play allows us to near and experience—or nearly experience—fears, tensions, and greatest hopes in the relatively safe environment of the game so as to better broker them in our emotional and psychological centers.

As we confront fears and desires that threaten safety and the self, the fictive confrontation tells us that we can survive *because* in every play-event, no matter how much it skirts danger, we—the *players* and audience—end alive and intact. The final if implicit scene of every fiction and ritual is survival: we have made it through the gauntlet, the terrifying scene, and live to tell about it and commemorate it in ritual. Robert Sklar writes that fiction gives audiences the experience of “the dangerous, the fantastic, the grotesque, the impossible, at a close but safe remove” (Sklar 1975, 21). When the game is over, the ritual ends, or the lights in the theater come up, the lesson is that no matter how many actors are ‘dead’ in the game, ritual, or on stage, we prevail. We are psychologically bolstered for the risky project of living.

The first human fictions, as Freud reminds us, are dreams, which theatricalize what disturbs and frightens us. But we do much of our play awake and together because of the cognitive/emotional processes described above: performing together shared ritualized patterns bolsters feelings of belonging and safety, and as this develops into play and ritual, these too make for feelings of belonging and safety, needed especially when confronting danger and daunting hopes. This, Siegfried Kracauer holds, is what we do when we create awake-dreams in theater, film, and other ritualized re-enactments. We depend on them “for the reflection of happenings which would petrify us were we to encounter them in real life” (Kracauer 1960, 305). When a hunter-gatherer band paints or enacts a dangerous hunt, the group confronts its hopes and trepidations in the safe, controlled arena of the ritual, and courage is bolstered for the hunt itself.

Play and ritual, then, are mediating forms that allow us to broker dread and daunting. The considerable insecurities of hunter-gatherer life, the fear of animal predation, and the severe, systemic aggression of early agrarian societies are just the sort of dread to make art and ritual about. They were dangers that the human mind mediates in dreams, play, and ritual to be better able cope in life.

The findings at the early-agrarian Çatalhöyük archeological site illustrate these functions of ritual. The artwork found at the site shows animals as predator and prey, suggestive of pre-hunt ritual or post-hunt ritual celebration. Domesticated or tame animals are almost never depicted. In some images, humans tease and overpower the animal, also suggestive of confidence-boosting theater. Animal skulls, antlers, and boar tusks were used as decorations, symbols of power over dangerous but now subdued

(successfully hunted) animals. These decorations too are a kind of theater that recalls life's perils in a form where they are no longer perilous. Several images depict animals in highly stylized formations, further suggesting their function as theater. Two leopards are seen in symmetrical mirroring, an orderly configuration that creates for the viewer a sense of power and control over the (dangerous) scene. In another image, two symmetrical rows of people—something like Busby Berkeley for the Neolithic—are dressed in leopard skins, ‘costumes’ of might and power, as they dance before a line of animals to be captured. Here, we have a full-fledged script of fictively, ritually confronting the dangers of the hunt and emerging the victor.

Ian Hodder and others have suggested that Çatalhöyük art reflects not theatricalized hunts but animal sacrifice (Hodder 2019). Yet Benoît Chantre among others finds this unlikely as Çatalhöyük art includes no images of sacrifice, of the slaughter, pyres, and other sacrifice accoutrements. Moreover, Chantre continues, only when agriculture was firmly established in the middle Çatalhöyük period, “when the basic food supply was assured, around 6,500 B.C., and when domestic animals (sheep and goats at Çatalhöyük) provided a store of meat sufficient for the group’s survival, that the sacrifice of wild animals could have acquired a ‘memorial’ value, in other words a ritual meaning” (Chantre 2019, 173).

It would be fruitful, however, to conclude this section with a discussion of the particular ritual of sacrifice, found in early agrarian societies, which as we’ve seen, engaged in endemic raiding and warfare, the enslavement of captive populations, and the subjection of domestic populations to torture, imprisonment, impoverishment, enslavement, and conspecific killing. How does the description of ritual proposed here account for ritual sacrifice?

Powerfully theatricalizing aggression, sacrifice places it ‘at a close but safe remove’—for the sacrificing community if not for the victim. First, real-life, fear-provoking brutality is fictively enacted in the brutality of the sacrifice itself. The ritual allows the sacrificers to near the mortal dangers present in agrarian society but in theatricalized form, in the murder or exile of the victim. Through this frightening but contained performance from which they emerge alive and safe, the sacrificers are bolstered for dangers of their world.

Second, sacrifice is not just any ritual but one that creates an ‘outsider’ or ‘other’ (the sacrifice victim), further reinforcing in-group bonds of belonging. Building on John Bowlby’s attachment theory (Bowlby [1969] 1983; 1973; 1980), Carol Gilligan and Naomi Snider note that the separation of me/us from ‘them’ is a psychological defense mechanism of first resort in response to trauma and fear (Gilligan and Snider 2018). Moreover, the ‘splitting’ of ‘we the good’ from ‘them the bad’ is magnified when groups of people are harmed by the same or related aggressions and fears (Volkan 1997)—as would have been the case in early agrarian communities. The staging of violence in ritual sacrifice allows the sacrificers to separate the good ‘us’ from the sacrifice victim, who either is the bad ‘them’ or

represents/symbolizes ‘them’. As this is done in ritualized form, the emotionally self-protective division between ‘us’ and ‘them’ is accomplished with no risk to the sacrificers.

Third, the sacrifice ritual did all this in a shared rite that boosts a sense of belonging and safety. Better yet, the ritual allows the elites and poor of early agrarian society to bond together against ‘them’ (the sacrifice victim), thus relieving societal (class) tensions and pre-empting revolt, its suppression, and other violence within society.

Chantre’s reading of Çatalhöyük is consistent with the Göbekli Tepe evidence of *ritual* developing pre-agriculture, in hunter-gatherer societies—either as a bonding mechanism, as a way to psychologically process fear (of natural disaster, animal predation, etc.), or both. But present evidence suggests that the specific ritual of *sacrifice* developed with agrarianism, as the meat supply somewhat stabilized and animals could be spared for the ritual purpose of fictively and ritually staging the considerable dangers of agrarian life.

A Concluding Thought

It has been noted, including by Tomasello himself, that barely a word of religion appears in his oeuvre. Yet his life’s research addresses two central religious concerns: (i) the nature of the species as ‘hypercooperative’ and only contingently violent and (ii) the specific steps of human cognitive and socio-emotional development that make ritual—commemorating the beliefs of a shared world—not only possible but what we *Homo sapiens* unavoidably do. We do so by dint of being creatures whose minds and emotions emerge from cooperative action-patterns with others and who thus create ritualized action-patterns with others to feel safe and to broker life’s dangers and daunting hopes.

There are many rituals that may not fulfill the various definitions of religion; the features of religion may be more extensive than ritual. Yet while not all rituals are religious, religions rely on ritual. Even where people are not traditionally ‘religious’, rituals of all sorts are sustained and new ones are created by families and groups, small and large, long-standing and temporary, online and in-person. I suggest this is the case because of the social nature of human cognition and emotion. So one might say that this unavoidable building block of religion runs throughout Tomasello’s work at every turn.

Notes

1. Literature reviews of the research on *Homo sapien* aggression include: Wrangham (1999); Kelly (2000); Otterbein (2004; 2009); Glowacki et al. (2017); Majolo (2019). Research arguing that aggression is very old in *Homo sapien* development and therefore formative of the species includes: Golitko and Keeley (2007); Bowles (2009); Pinker (2011); Allen (2014); LeBlanc (2014); Gat (2015). Assessing the latter group requires distinguishing between arguments for

the *capacity* for aggression/episodic occurrence, about which there is little disagreement, and arguments for aggression's *systemic* occurrence early in *Homo sapien* evolution, which are hobbled by scarce evidence.

2. Kappeler, P. (2019). Personal communication.
3. Hodge, J. (2019, Feb. 19). Personal communication.

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