

AN INVESTIGATION OF HOW HUMAN MORALITY EVOLVED

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Abstract

Throughout the years, morality has been of keen interest to the many curious minds all over the world. Many wonder as to how it became what it is and why it is such an important part of human life versus why it is not exhibited to a great extent in other organisms that we share the world with. This deep contemplation resulted in morality bearing different principal meanings. In this paper, the question of how human morality evolved is tried to be investigated and answered. This investigation is done through looking at the origin, source, and evolution of morality and the connections between sexuality and morality and religion and morality also are examined.

Key words: Morality, the origin of morality, sexuality, religion, cognition

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Introduction

The term morality has its origin from the Latin term *moralitas* that means character or proper behaviour. According to Stanford University (2011)¹, morality is a body of principles derived from any philosophy, culture, religion or a standard that an individual believes should be universal. Some define it as the ability to discern what is good or bad from observed actions or intentions. In a general way, morality can be defined as a body of standards or system of ideas held by individuals, concerning conduct that might be termed as being right or wrong. This general definition highlights that morality is principally more dominant in humans than other animals even though instances of actions considered to have a moral aspect have been observed in animals living within a social environment.

The school of thought led to evolutionists asking questions about the origin of morality as pertains to human's theory of evolution. Socio-biologists are of the view that since humans evolved from animals, namely primates, then our morality should have evolved with us. This fact is discernible in the sense that we display a greater sense of morality in comparison to other species. So what is the origin of morality? How and why did it evolve? These are some of the reasons that an investigation into the evolution of human morality is deemed necessary. This investigation will be done through looking at the origin, source, and evolution of morality as deeply as possible. Then, the tie between sexuality and morality; and religion and morality will be examined.

1. Investigation

1.1. Origin

“It doesn't seem appropriate to advance an account of the origins of morality without defining the construct, but this is a daunting undertaking. To my knowledge no one has yet succeeded in accomplishing it in a manner that has stood up to critical reviews.”²

The origin of morality is closely tied to the origin of life. This is evident with the view that morality cannot exist or be practiced without life. Evolutionary biologists tie the origin of life to the theory of evolution. From this school of thought, an analysis of evolution is pertinent.

With our focus being primarily on human morality then a significant evolutionary event to look into begins about 6 million years ago where a population of great apes got isolated from other apes of the same species. This group of isolated apes are what evolved into the first bipedal apes, *Australopithecus*, and eventually into beings so different that they acquired a new genus designation, *Homo*.³ After several years of diversified exposure to the elements this new genus evolved even further to the extent of acquiring cognitive skills such as tools, forms of communication and even social practices like domestication of animals.

¹‘The Definition of Morality’ (Stanford University, 17Apr 2002) <<http://plato.stanford.edu/entries/morality-definition/>> accessed 19 April 2015

²Dennis L. Krebs, *The Origins of Morality* (Oxford University Press, 2012) 14

³Matt Ridley, *The Origins of Virtue*. (Penguin Books, 1996) 156

1.2. Source of Morality

For us to better understand the origins and evolution of morality, it is important to highlight some facts from the social interactions of other organisms. Animals may not necessarily possess moral attributes, but some of them have had to modify their behaviours so as to allow living in societies of their own. Ants are a good example of this. Their colonies show a structured form of society with different members given different assignments as pertains to the longevity of the entire colony. Some female worker ants are sterile as they forsake their reproductive duties to cater to the queen ant. This is seen as a form of adaptability that allows less mating competition within the colony resulting in the growth of cooperation among the ants instead. Cooperation is an attribute closely linked to morality and ants practice it to astounding levels, allowing colonies to thrive and the success of ants as a species.

Mammals have also been seen to display social traits that at one time were viewed as being unique only to humans. An example is how elephants have been seen to form coalitions and aiding other elephants having difficulty in moving, through actions such as these they can be said to be empathetic and altruistic in a sense.⁴ Examples such as these have led some researchers to share the view that human morality could have grown from primate sociality. These researchers base this view on the concept that primates are humanity's closest living relatives since we share a common ancestor. They further deepen this relation by examining some sociable traits exhibited by primates that would have been necessary in the process of the evolution of human morality.

Some of the traits exhibited by primates towards this end are high intelligence and an understanding and capacity for symbolic, sometimes vocal, communication. Michael Shermer⁵ supports this school of thought and further highlights characteristics like conflict resolution, sympathy, bonding and deception as some of the moral characteristics that humans share with other social animals, especially apes. This social way of life evolved in social animals as a way of addressing vulnerabilities related to individualism, an example is how wolves hunt in packs so as to ensure a source of food for the pack as a whole. Researchers and specialists in the field highlight that the fundamental importance of social skills in the animal kingdom can be attributed to the ability to understand relationships and also the ability to commit information to memory and manipulate this information as well.

From this information and historical evidence found through archaeology, it is likely that early ancestors lived in groups averaging 50 individuals like chimpanzees still do in present day. With the continuation of biological and physical evolution, the community size can be assumed to have increased so as to accommodate increasing population sizes. In order to achieve group cohesion, a greater form of enforcement would have been necessary. This is when morality is

⁴Lucy A. Bates, Richard W. Byrne, Phyllis C. Lee, Norah Nijiraini, Joyce H. Poole, Katito Sayialel, Soila Sayialel & Cynthia J. Moss, 'Do elephants show empathy?' (2008) 10 *Journal of Consciousness Studies* 11 204.

⁵Michael Shermer, *The Science of Good and Evil: Why People Cheat, Gossip, Care, Share and Follow the Golden Rule* (Henry Hold:Owl Book,2004)

determined to have evolved greatly as a means of controlling this growing society so as to maintain a level of solidarity within their ranks.

The period of evolution from apes to being human is quite short in evolutionary standards, especially with the observation that we share approximately 99% of genetic material with apes. Yet, with such a high qualitative similarity in our genetic makeup there exists a wide disparity in terms of morality. Researchers in this field attribute this to a biological mechanism that could bring such diverse changes in behaviour and cognition in such a short time. This mechanism is social or cultural transmission as supported by Tomasello⁶ who further states that the superior cognitive skills displayed by humans is as a result of some sort of a species-unique mode of cultural transmission.

This hypothesis is evidenced in how human traditions and artefacts accumulate modifications and improvements over time.⁷ These modifications are seen in how inventions begin as something primitive formulated by, a sole, or group of individuals, the inventions were passed on to other individuals who then over time made improvements. The improved inventions were later on adopted by other individuals, who then added even more modifications over time, this cycle continued and still does continue in present day society.

1.3. Evolution

The process of cultural evolution requires intellect and social interaction in order to encourage progress and further development. It requires a level of cognitive capacities that are extremely well developed in humans, and their development is attributable to the social environment that the individual is exposed to. The most notable of these capacities relating to social cognition is the ability of individuals to understand that others have independent intentions and thoughts like they themselves do; this understanding is very crucial in the development of artefacts, such as tools, and social practices.

A study was done that resulted in the production of evidence that humans had two attributes as pertains to cognition; humans could read the intentions of others and the other is the ability to interact with other humans at a social level. The latter involves a capacity to share one's attention with others and also the ability to mimic or imitate other people's actions.⁸ The ability to read the intentions of others is the basis of understanding, and eventually, developing linguistic symbols. These linguistic symbols in turn enable humans to voluntarily direct their actions and attentions outwardly towards other entities.⁹ This in turn indicates that this understanding of the independence of intention in others is closely tied to the realisation of goals and objectives. A study done¹⁰, gives a model to indicate this; actions are determined by goals that result in feedback in terms of changing

⁶Michael Tomasello, (1999) *The Cultural Origins of Human Cognition*(Cambridge, Mass.: Harvard University Press,1999) 6

⁷ Ibid 41

⁸Michael Tomasello, Malinda Carpenter, Josep Call, Tanya Behne, &Henrike Moll, 'Understanding and sharing intentions: The origins of cultural cognition'(2005) 28Behavioural and Brain Sciences 675,678.

⁹ Ibid 678

¹⁰ Ibid 679

the perception of the individual, this feedback is further compared to the goal which in the end determines the action. A chain of actions is dependent on whether the outcome of a previous action was realised.

According to Tomasello (1999, p. 7)¹¹, the complete sequence of these evolutionary events is: the development of social cognition that enabled new forms of cultural learning, these then consequently enabled new processes of cumulative cultural evolution. An integral part of this process is the continual perceptual monitoring that must take place as it all begins with what the individual sees in the information that is continuously used, whether the intended action is then executed, and eventually the outcome of said action.¹² From this, it is clear to see how the individual only pays attention to its own desired outcome, bringing to light another cognitive capacity that organisms possess selective attention.

Another cognitive capacity is joint attention. Joint attention is displayed when two individuals share their attention towards any particular object or occurrence.¹³ This can be done verbally or through physical action like pointing. An example of joint attention is seen in how children can engage in joint attention interactions since they acknowledge that the people around them are also agents of joint attention.¹⁴ This opposes the notion that infants just respond to external motives without understanding.¹⁵ These adaptations were not then created as new cognitive skills out of nothing, but rather they are a result of transforming the basic and already existing cognitive skills – like those exhibited in an ape’s understanding of tools, objects and relationships – into new cognitive skills that were culturally based and had a collectively social aspect. This transformation occurred over time.

Human beings’ impressive cognitive achievements are thus, attributed to the cumulative cultural evolution. This is evidenced in how early man consistently developed new artefacts and social practices throughout history. These “modified” artefacts and social practices resembled the collective wisdom of social groups at certain times in cultural history.

Some researchers and specialists in the field of socio-biology have explored another social-cognitive evolutionary trait, imitation. This is especially so in how infants develop the understanding of intentions. Infants see different ways to achieving a goal and they also have the capacity to follow other people’s actions to achieve their desired outcome. From the time an infant is more than 9 months old they begin observing and mimicking the actions of adults around them.¹⁶

An experiment was conducted by Tomasello and his colleagues towards this end and they were successful in proving that 14 to 16-month-old infants only copied the intentional actions of

¹¹Tomasello (n 6) 7

¹²Tomasello (n 8) 679 680

¹³Tomasello (n 6) 56

¹⁴Michael Tomasello, ‘Culture and cognitive development’ (2000), 9 *Current Directions in Psychological Science* 2 37-40.

¹⁵Michael Tomasello, Katharina Haberl, (2003) ‘Understanding attention: 12- and 18-month-olds know what is new for other persons’ (2003) 39 *Developmental Psychology* 5 906,907

¹⁶Tomassello (n 6) 57-60

adults while ignoring the accidental ones.¹⁷ Thus, this indicates that children are selective in that they mimic the actions that only help in achieving the intended outcome. Children use these cultural learning skills in the acquisition of communicative symbols. These symbolic artefacts are vital in child development as they embody the interactions of previous generations of humans in social groups, and how they found means and ways to mould the world around them for the purposes of interpersonal communication. An example is where different communicative scenarios might depict a certain symbol to mean many different things, all dependent on the communicative objectives of the people interacting at the time.

This allows for a child to acquire the ability to simultaneously adopt varied perspectives on a single perceptual situation. Through this, communicative symbols can be viewed as being based on the ways that individuals choose to depict and understand things in numerous varying ways instead of just recording the sensory and motor experiences as displayed in the cognitive associations observed in other animal species. The process of imitation is, therefore, key in the preservation of man's cognitive capacities and abilities from generation to generation throughout history.

In relation to the origins of morality, there have been numerous hypotheses raised; one of them being the cultural intelligence hypothesis, which states that the cognitive capacities attributable to humans are as a result of us being able to use social interaction as a way of exchanging knowledge within cultural groups. The social and cultural environment that humans are exposed to as they grow is quite significant in the development of cognition. Children grow up with unique and varied perceptions as have been determined through the interactive social environment provided to them by their parents or guardians. Thus, this shows that growing up in a social environment that exposes a child to many different interactions will provide the child with a more complex way of thinking. Knowledge concerning social interaction can, therefore, be seen as a factor for the growth of a bigger sense of collaboration, this then results in the improvement of cognition from one generation to the next.

As children age, they tend to have a better grasp on their native language. Through this, additional probabilities for depicting things in different ways open up. Children's growing mastery of their native language, thus, gives them the capability to participate in more complex social interactions that were not earlier comprehensible to them. In these new interactions, they encounter differing accounts and opinions that result in negotiations and resolutions. These interactions may, therefore, lead to children internalizing some adult instructions leading to them reflecting upon their own perceptions and thoughts on numerous topics and also granting them the ability to construct language from what they have been hearing around them (Abbot-Smith & Tomasello 2006, p. 284, 286).¹⁸ The capability for humans to be able to accomplish such a feat in the early years of development is proof in itself of how sociality is key in the growth of cognition and consequently the evolution of morality since its perception is shaped by the cultural environment.

¹⁷ Malinda Carpenter, Nameera Akhtar, & Michael Tomasello, (1998) 'Fourteen- through 18-month-old infants differentially imitate intentional and accidental actions' (1998) 21 *Infant Behaviour and Development* 315,328.

¹⁸ Kirsten Abbot-Smith & Michael Tomasello, 'Exemplar-learning and schematization in a usage based account of syntactic acquisition' (2006) 23 *The Linguistic Review* 275, 284-286

The school of thought supporting the development of cognition as an attribute to the evolution of morality highlights that the qualities accompanying this development do so due to several reasons. The first is that the evolution into the modern human beings that we are today enabled us to understand others as intentional and mental beings just like the self. The second is that cognition enabled cultural learning which led to the modification and improvement of artefacts and traditions over historical time. The third relates how these modified social and historical traditions and artefacts help in the development of cognition in children as they grow up exposed to them and their continual changes. This exposure grants them the inherited skills and knowledge accumulated in the social groups they are raised in, diversifies their linguistic communication skills, and eventually the ability to internalize specific interactions that in turn enable them to develop thoughts of their own.

1.4. Sexuality and Morality

There exists several mechanisms that try to explain how morality evolved. Basically, the view that most of these mechanisms share is that a general look at the higher organisms existing in the world today shows us that communal organisms are successful. Communal organisms use their numbers to their advantage due to the strength that is found in working together. Examples of such organisms are ants, bees and even piranhas. A colony of ants is clearly stronger than just an individual ant the same way a hive of bees is stronger than just a single bee. Thus, humans also resulted to this form of communal living as a way of prolonging survival; a society is stronger than just one man.

From this view, it can be said that morality is important to communal organisms because good morals like altruism and empathy can strengthen the community. On the other hand, morals that incline towards the negative are bad for the community or society and result in the weakening of the social structure. Such morals that have a focus on the self instead of the population or society as a whole should be disposed of. If they were to become prevalent then these communal organisms would be at the risk of collapse and possibly extinction because they would be less fit, in terms of survival, than they were when they were a part of a communal group or society. This is why traditional moral systems focus on acts that satisfy other people's selfish needs instead of our own.

A compelling question, then, arises as to why so much of morality is focused on sex. This question has received many different and varying answers depending on the specific moral rule that is addressed; polygamy and incest are such rules, and both probably have different cultural and biological evolutionary origins. One such answer is a hypothesis that states that human behaviours, like verbal creativity and some forms of altruism, that are not clearly associated with survival benefits are adaptations developed with the sole aim of courtship through sexual selection.¹⁹ This is supported by Ridley²⁰ who says that men succeed with women for subtle reasons when compared to non-human animals, these reasons include examples like cleverness or wittiness which are clearly

¹⁹John Klasios, 'Cognitive traits as sexually selected fitness indicators' (2013) 17Review of General Psychology 428,432

²⁰Michael Ridley, *The Origins of Virtue*(Penguin Books, 1996) 171

not part of a physical or external criteria. According to Rozsa (2008, p 685)²¹, human intelligence can be viewed as a courtship indicator of a healthy partner with a high resistance against pathogens that can cause damage to human cognitive capabilities.

Human sexuality tends to be associated with notions of virtue. Through this thinking it can be seen that sexuality has had a hand in the evolution of morality by encouraging some traits in both the male and female figures in society as being positive traits. In society, females tend to experience more social scrutiny as pertains to having an active sex life outside the institutionalized norms like marriage. The field of evolutionary psychology tries to explain this application by terming it as an evolutionary adaptation that is closely related to parental investment. Women are seen to invest much more when it comes to rearing children. This begins when the successful fertilisation of a woman's egg occurs, the woman will provide nourishment through her own body as she carries the child in her womb all through the nine-month gestation period. Through this provision of resources and care it can be said that women then evolved exacting a criteria for selecting mates since they have a stronger preference for long-term partners, thus, women need a high standard for selecting the appropriate partner.

Men, on the other hand, hold a preference for both long-term and short-term partnerships. This holds no barriers in terms of standard setting when selecting partners for themselves, therefore, it can be assumed that men can be more open to lowering their standards for short-term partnerships with their mates due to the lack of parental investment on their part. This is supported by Diamond²² who states that in non-human animals there is minimal or no investment at all from the father, while the mother invests a large amount of resources in rearing the offspring. He further points out that for humans, paternal investment is not necessarily direct but the father often supports the mother and child through indirect means such as financial aid. The level of this support is, however, linked to the certainty of paternity that the man has.

If the man is certain that he is supporting his own genetic offspring then his level of support would noticeably be higher than when he is supporting offspring that he has little confidence in them being his own. With this in mind, it can be seen that promiscuous behaviour by women would be going against the adaptations entrenched in them through evolution as they would end up with children who will be lacking a certain level of parental support. Thus, sexuality plays a part in the evolution of morality as it is closely linked with the development of cultural mechanisms to reinforce paternity certainty. This is done through a number of ways with the most conventional being that of the incorporation of the importance of marriage in society.

Arguments made in the favour of marriage highlight how useful it is in providing a stable social environment for children to be raised in so as to cultivate the proper morals to uplift the family, society and community as a whole. Some are for the concept that sex also builds up morality when it is between parties that love each other. The introduction of love into the equation eliminates the probability of sex being just a mechanical performance and instead makes it a humanely significant event. Without the aspect of love then meaningless sex could lead to

²¹LajosRozsa, 'The rise of non-adaptive intelligence in humans under pathogen pressure' (2008) 70 Medical Hypotheses 685

²²Jared Diamond, *Guns, Germs and Steal*(Vintage,1997)

psychological disintegration which would be harmful to the society and, thus, harmful to the survival of humans as a communal organism.

2.5 Religion and Morality

Religion is undoubtedly a powerful mechanism practiced globally and to varying details and beliefs. And in the pursuit of clarity towards understanding the origin, importance and evolution of morality there have been numerous conflicting ideologies between science and religion. Each discredits the other at some point, dividing the experts in the field into various categories supporting differing, and some similar, ideologies and theories. Strong religious believers claim that religion is the backbone of morality, and also that morality should not be a difficult topic to comprehend, while people more inclined to science as a practice claim that the true explanation behind the questions about morality can only be found through scientific means.

What effect does religious beliefs and religious affiliations have on our moral lives? One possibility highlights the fact that religions explicitly make moral claims that are easily accepted by the followers of the said religions. Religion does this through holy texts and the proclamation and praise of authority figures. The many existing religions make moral claims about numerous aspects of human life with a critique heavily against acts such as abortion, masturbation, adultery and so on. People believe these claims because they trust the sources of religious claims, their belief is mostly based on faith. This is not uncommon as many of our scientific, moral and even political beliefs also share this deferential nature as pertains to believing them on the basis of trust. An example is where people support political campaigns only on the basis that they are part of that political party.

According to Bloom²³, religion can also have an effect by emphasizing and highlighting certain elements of morality. Rottschaefer²⁴ supports this by stating how moral actions can be seen to emphasize refraining from harming others. An example is how Christianity explains the principle that thinking something is the same as performing the action related to that thought; thinking of murder is just the same as committing the murder itself. On the other hand, Judaism focuses more on the actual actions. This difference is seen to have an effect on how members from both religions perceive certain events and situations.

A person's attitude matters more to Christians than it does to Jews, with Christianity having a sharp focus on mental states of the believers. Another general example is how religions emphasize aspects of morality that are "irrelevant" to a person who does not believe in any religion. These are aspects like divinity, sin and reliance on a sacred order that are focused on by religion so as to promote the spiritual element of a religious believer. This shows how closely tied religion and the moralization of purity are.

²³Paul Bloom, 'Religion, Morality, Evolution' (2012) 63 Annual Review Psychology 1 184

²⁴ William Andrew Rottschaefer, *The biology and psychology of moral agency* (Cambridge England: Cambridge University Press, 1998) 42

The general view of religion is that it promotes the evolution of morality through religious beliefs and practices that might increase a person's capacity for empathy and altruism. It supports the spread and practice of numerous important virtues that would strengthen a society through the intrinsic and extrinsic nourishment of the society's need for togetherness. People unified through a common belief and faith are much more unlikely to encounter disputes or conflict as compared to a society that is made up of individuals who disregard virtues that are of this nature. All this might occur as a result of exposure to the messages, beliefs and practices – like the existence of supernatural beings and miracles - conveyed by the various religions in existence.

Conclusion

From the investigation on the evolution of human morality carried out, a wide array of the numerous theories and ideologies in place concerning this sensitive topic have been highlighted and explained in this text. Morality is a characteristic that has been exhibited by almost all the organisms in our world. From the microscopic in nature, to the largest land mammals, and eventually to humans at large.

The many theories trying to explain and justify the evolution of human morality all have valid points. However, some have more criticisms than others as is the nature of theoretical approaches to sensitive and complex topics relating to the psychology of humans, who are quite a complex being. And from all these theories, it is clearly discernible that human morality is one of the attributes that depict us humans as a superior being in comparison to non-human animals. This is especially so in the context of how diverse our development has been throughout the years. Many specialists in the field have come to appreciate the complexity and intangibility relating to the context of human morality. Thus, deep contemplation and research has been undertaken in the pursuit of unlocking the mysteries of our existence and how we came to have such attributes as altruism, love, empathy and other virtues that keep society together as a communal being.

In closing, human morality has come a long way in terms of development and diversification, but what is truly depicted in its evolutionary journey to the current state is how much of a great role it plays, and has played in the past, in unifying the human species as a collective society. All this, so as to provide a better means of surviving the elements and continuing the existence of the human race.

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