Finding Connections Between Religion and Science

McGhee Orme-Johnson December 18th, 2008 MQP in Religion Professor Eddy & Professor Smith

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Abstract

Current debates about the relationship between religion and science often present these traditions and practices as ways of understanding the world that are hostile toward or disconnected from each other. By primarily looking into the works of Daniel Dennett and William James, we investigate ways in which religion and science exhibit both rational and irrational characteristics, particularly morality. Going further, new speculative arguments open up new possible connections between religion and science, including ways their conversations can add to each other. Two of these areas are faith and the soul, which indicate potential common interests for religion and science. As a consequence, they may not only be coexistent but constructively connected.

Introduction

In considering any topic, the first question that is always asked is why discuss this topic in the first place. Discussing the relationship between religion and science is no exception. For a long time, there has been a debate going on about what constitutes the relationship between religion and science, and if there is a relationship between the two at all. This debate is important because both religion and science are important aspects of society. There are those who would find religion and/or science to be a source of truth. Finding religion to be a source of truth could be called having faith in religion. For those who have faith in religion, they could draw their morals from it. Finding science to be a source of truth could be called having confidence in science. Those who have confidence in science could have their morals influenced by it. How an individual sees the rationality within religion and science and the way they relate to each other will affect society, because the way you act towards others will be affected by your morals. There are many opinions on the subject of religion and science, which offer many different perspectives. My discussion here is by no means meant to end the debate, which will most likely continue forever. I suggest that not only do religion and science have a relationship, it is shown through constructive connections. To clarify how I see these connections between religion and science, I will first discuss various concerns scientists may have about religious people and vice versa, which will allow for the rationality of religion and science to be examined. Then I will explain some new arguments about religion and science that open up the possibility for new connections between the two because these arguments create areas of common interest.

There are several ways to look at the religion and science debate. One view is that religion and science should be held completely separate from each other. That is, they offer different sets of answers to the same questions. This would indicate that religion and science couldn't be compared because they do not agree. One thinker who argues this idea is Bruno Latour. Latour is a contemporary author who is a sociologist of science. In his essay "'Thou Shall Not Freeze Frame,' or How Not to Misunderstand the Religion and Science Debate," he argues that science and religion are so different that there is no "point of contact" between the two. He states that religion and science have two

completely different purposes. According to Latour, religion is interested only explaining the here and now. That is, religion is not about understanding the supernatural, but is about eliciting a response in the present. Conversely, he sees science as serving to not actually explain anything directly, but as something that uses experiments and theories that offer larger, indirect explanations that go beyond what is in this world. That is, it offers explanations that are bigger then what it is studying. From this, Latour suggests that there could never be a relationship between religion and science, because they are seeking completely different things. He even says that calling them incommensurable would be a mistake, because they cannot be put in relation enough to be deemed incommensurable (Latour, 32, 35-36). That is, there is no characteristic of religion or science that can be compared with the other. Latour argues that to compare religion and science would be detrimental to both because it would force science to try to explain the here and now and religion to explain what goes beyond. To Latour this would distort both science and religion, defeating the purpose of studying either (Latour, 36-37). Latour by no means sees religion and science as opposites, because that would indicate that they could be considered incomparable. He sees them instead as separate aspects of society.

The first aspect of Latour's argument to be noted is what he suggests religion and science seek to do. This is important, because his whole argument against the convergence and connection between religion and science is based upon this aspect. But the difficulty in saying what religion and science seek to do is that there is no definitive answer. Religion and science serve different purposes to different people. As such, Latour's view is only one way of describing the purposes of religion and science, and there could be other views that allow for more of a compliment between religion and science. I would suggest that religion and science have different purposes than what Latour suggests. In my opinion, religion and science both want to explain how the world works. This means that they have similar purposes, which would mean that there could be a way for religion and science to be connected.

Even if religion and science seek to do different things, this does not mean that there cannot be comparison and convergence between the two. Latour seems to imply that to him a connection between religion and science would involve comparing the two, whether or not this comparison resulted in them actually being incommensurable. Despite

having different purposes, there can still be commonalities between religion and science outside of their purposes that create a connection through comparison. One commonality between religion and science has to do with morals. As I have already suggested, both religion and science can influence one's morals, either directly or indirectly. Latour's suggestion that religion and science serve different purposes does not negate this statement. If religion and science can both influence moral outlooks, there will be a conversation between them because their morals could be compared. Additionally, a connection between religion and science would not just entail understanding the commonalities and differences between the two, but also how the two could support each other. In Latour's argument, the differences between religion and science would aid in a person's full understanding of the world and beyond. As science can only be used to explain large, indirect concepts, religion would be used to explain the smaller, more direct concepts. That is, science offers explanations that can be applied beyond the current situations, whereas religion explains what is happening only in the present time. This would bring both science and religion into a person's life and would create a relationship between the two where one answered what the other could not. Therefore, I would suggest that even if one accepts Latour's estimation that religion and science have different purposes, it does not exclude a possible connection between the two in how they support each other.

There is another thinker who offers a view about the differences between science and religion, and that is Stephen Jay Gould. In his book *The Hedgehog, the Fox and the Magister's Pox,* Gould defines science as the study of the natural world and how it works. Religion, on the other hand, is concerned with ethics, meaning and the way we live our lives, as well as the questions that arise from dealing with these ideas. As such, there is no actual conflict between science and religion because they are two different things (Gould, 87). Further, in his book *Rocks of Ages*, Gould equates religion and science to oil and water - there is no overlap between the two. This is not to say that there is no relationship between the two; Gould suggests that in the area where science and religion interact, they have a relationship. But Gould says that science and religion are "absolutely inseparable, but utterly different" (Gould, 65-67). Gould's argument suggests that religion and science have different purposes because religion dictates our moral

outlook, while science simply explains the world around us. This means that though they cannot be separated, religion and science are completely different aspects of understanding. I think that Gould's argument that religion and science have no commonalities is disputable. There are commonalities between the two because both offer the concept of having confidence or faith, and both attempt to explain the soul. I will go into further detail about these concepts in a later chapter, but it is important to note here that there is convergence between religion and science because these are areas of common interest. I suggest that to have faith or confidence in religion or science is to draw truth from it, and there are those who draw their truths from religion or science, or both. The soul, an originally religious concept, is being studied as a possible material object, something that is subject to scientific law. Religion and science then have these areas of convergence in their understanding. I would agree with Gould that religion and science are inseparable, but I would suggest that this inseparability comes from the convergences between the two that are caused by these commonalities.

Bruno Latour offers an argument for what constitutes the purposes of religion and science, and argues that because of these purposes religion and science do not have a connection. Stephen Jay Gould says that while religion and science are inseparable, there is no convergence between the two. I have suggested ways to understand their arguments and still allow for a converging connection between religion and science. It is important to note that there are many ways of looking at the possible connection between religion and science, both for and against. I argue that there is a converging connection between religion and science. There are some concerns science has about religion and vice versa that would make a connection between religion and science difficult because these concerns affect how the rationalities of religion and science are viewed, but if these concerns are appeased then connection between religion and science is actually strengthened. The concerns I will be examining are fanaticism and morals in religion. In addition to these concerns, there are also commonalities between religion and science that show how the two are intertwined around certain concepts, which offer a new way to understand the connections between the two. The commonalities I will be discussing are the idea of faith in religion and confidence in science, and the idea of the soul as a religious object that can be scientifically studied.

Throughout this paper, I will be primarily, though not exclusively, focusing on the ideas of William James and Daniel Dennett. Both of these thinkers are important figures in philosophy, and offer thoughts on the concerns and commonalities that exist between science and religion that I previously mentioned. Dennett and James would see that there is a connection between religion and science, though what each believes that connection is differs between the two. William James is a key philosopher from the turn of the 20th century. He approaches religion as something that does not require an organized group or church. James also states that people who are religious believe in some sort of divinity, but he does not go as far as to call it God. As such, James could allow agnostics into his definition, and depending on the scope of the word divinity, allow for atheists as well (James, 47). Defining religion in such a way was radical, because James is suggesting that one does not need a church in order to be religious. James's book *The Varieties of* Religious Experience has been influential for many authors since its first publishing in 1902. In his book he offers not only this definition of religion, but also how he understands science, fanaticism, morals, where one finds their source of truth and the soul. Through James's discussion, I will show that he sees religion and science as having a convergence, via the idea of the soul, and how he discusses fanaticism. I will also use his discussion of religious morals and religious faith to show his views about religion as a positive aspect of society, which will indirectly support a connection between religion and science.

Daniel Dennett is a contemporary thinker. He often references James in his work, but reframes his ideas to fit his own, to more or less successful results. In his book *Breaking the Spell*, Dennett differs with James' idea of religion not requiring an organized group, or having a God. Dennett defines religions as a system within society. The subscribers to this system believe in some sort of deity or deities, who they seek to please and gain support from (Dennett, 9). Defining religion this way not only juxtaposes Dennett against James, but it also shows what Dennett finds important in religion as well. He is interested in the concept of a God and church as being key parts of religion. In addition to identifying religion, Dennett also identifies science, fanaticism, morals, sources of truth and the soul. Additionally, he engages some of James's ideas through quotes. Dennett's concern about fanaticism and faith in religion is detrimental to a

connection between religion and science, but his views on morals in religion and the soul will show how religion and science can have similarities and be constructively connected.

Within the topics I am discussing, Dennett and James have similar and differing opinions. They both identify religion and science differently. They have different views on fanatics, morals in religion, faith and the soul. Dennett and James's opinions on these topics offer a full look at two different perspectives on the issue of religion and science. By comparing and contrasting these perspectives, it can be seen how my own perspective is supported by some of their ideas, and diminished by others. But before delving into these topics, it is important to understand why they are important to the religion and science discussion.

In my first chapter, I will offer identifications of religion and science. These identifications are important for several reasons. The first is that while identifying either may initially seem obvious, both religion and science mean different things to different people. This means that there would be several possible identifications, which could alter how the religion and science are seen to connect. As I have mentioned, Dennett and James have differing identifications of religion, Dennett focusing on the societal aspect and James focusing on the individual aspect. They also have different views of science. James views science in the way it is affected by the views of the individual. Dennett looks at science in the way it has benefited human kind. For both, the way in which they define science can seem to relate to the way they define religion, in turn affecting the way they view the how religion and science connect. It is therefore important for me to identify religion and science for myself, so that my meaning of them will be clear throughout the paper. Additionally, identifying religion and science will allow me to show what I find to be necessary components of both. I think both religion and science will offer explanations of the world, and have some influence on one's morals. My identifications will also effect how I see religion and science relating to each other, because they will offer some convergence between the two through their common components. This convergence will offer some compatibility and hostility between religion and science. This will color how I view the relationship between religion and science, because my identifications will show that the two can connect and converge.

Upon defining religion and science, my next step will be to discuss what I consider a key concern that many people have about religion, and that is fanaticism. In society, fanatics can often be viewed as representing the religion of which they claim to be a part, which can have a detrimental effect on how a person sees religion in general because of the irrationality of fanaticism. Fanaticism is a large concern Dennett has about religion because he sees all fanatics as irrational, and it makes him concerned about all religious people. This will effect how he sees religion and science. He is concerned that because fanatics are irrational and fanatics draw their beliefs from their religion, religion itself could be irrational. Since Dennett sees religion as something potentially irrational, he believes that one should not draw one's morals from religion. Conversely, James tries to defend fanaticism as not being necessarily a negative aspect of society. He understands that some fanatics are dangerous, but that most are harmless. There are also some fanatics that James would consider as positive members of society. It can be further said that these positive fanatics to James would still be dangerous to Dennett. Because of fanaticism's affects on religion, science and morals, it is likely that fanaticism would color how one views the connections and convergences between religion and science. It is also important to discuss that fanaticism is not a complete representation of religion. The majority of members of most mainstream religions are not as intensely devout as their fanatical counterparts. Both Dennett and James speak of these people; Dennett calls those who are not fanatics but are still religious moderates, while James refers to them as the healthy-minded. It is important to note here that Dennett considers these moderates to be positive representations of religion, but James does not, as he believes they do not take religion seriously. James sees sick-souled and sainted people as representing what a religious person would strive for, while Dennett would consider these people fanatical. It is clear, then, that James's perception of religious people does not completely map on to Dennett's, but it is important to understand how they both view the idea of fanaticism to see how some may or may not be concerned about it. With a clear understanding of fanaticism, it can be seen how it could affect one's view of the connections between religion and science.

The next chapter will be a discussion of the idea of morality being stronger in religious people then non-religious people. Dennett completely disagrees with this notion,

and believes it has been plaguing society for quite some time. James does not come right out and state that he agrees with it, but suggests it more subtly, through his discussion and ranking of saintliness. This view of morals in religion is very important to discussing how religion can converse with science. If religion increases your morals, or is viewed as the only aspect from which to draw your morals, this elevates it in society. That is, as the sole source of your moral outlook, religion will be more important than any other aspect of society. This would create a separation between religion and science, diminishing how they can converse. I will suggest that one should not consider religion to be the only source of morals and that science could also be considered a source, because it can influence your morals views. Additionally, it is important to keep religion upon the same level as science within society so that the possibility of conversation between the two is increased. Through Chapters 2 and 3, Daniel Dennett and William James leave us with agreements, differences, and questions. The general conclusion is that William James leaves more room for these questions, while Dennett is more static in his thinking. I by no means plan to abandon these thinkers at this point, but rather take their ideas and use them in a different way. Both these previous chapters show us only one current way of having a discussion about science and religion. That is, discussing the concerns each has about the other, to find some common ground. I would like to suggest a new way of discussing science and religion.

In my final chapter, I will look upon some of the commonalities between religion and science for understanding. These commonalities will not only offer new connections between religion and science, but also allow for the shifts made by religion and science over the years to be more visible. One commonality I will look at is finding truth on both religion and science. For religion, this called faith, and for science I will call it confidence. There are some who have faith in religion, some who have confidence on science, and some who have both. Dennett has an interesting discussion of what faith in religion does to people and what it means. He seems to suggest if one has faith in religion, it could lead to fanaticism. He seems more confident in having confidence in science, despite the fallibility of scientific thought. James has a similar discussion, but with different interpretation. James sees faith as a positive aspect of religion, and complete faith in religion (or faith in God) is something that gives a person power that

cannot be gained in other way. But if one has complete faith in religion, can you also have confidence in science? To answer this, I will draw upon the ideas of Clifford Geertz. Geertz saw religion and science as cultural systems. These cultural systems have overlap, veer off from one another, and have out and out conflict, which can be seen in how Geertz describes both. But through all of these comparisons, it can be shown that you can still have faith or confidence in the ideas of both religion and science. This is a shift made by religion and science, because sensibility about (if not faith in) both has not always been the case. Faith or sensibility in both religion and science will also effect how the two connect with each other, in that it will allow them to be compared and one used to explain what the other cannot, which creates a relationship between the two. But this idea of finding truth in religion and science is not the only commonality between religion and science.

Another commonality I will examine is the idea of the soul. The soul is commonly considered a religious concept, but in past years it has been attempted to explain the soul in a more scientific, or physiological way. First I will explain two major views of the soul, materialism and dualism, and to do this I will draw upon the explanations given by Lee Silver and Evan Thompson, respectively. I will also draw upon some scientific explanations of the soul, where it is seen as the personality or the nervous system. I will then examine what both James and Dennett think about what the soul is. James suggests that the soul is in some way connected to the mind. Dennett does not seem convinced that there is a soul, but if there is one he thinks it is material. The soul is a key idea in religion, as it gives the option of an afterlife. The point of this discussion is to show that religion and science can both look to understand the soul, which gives them a convergence. This convergence could create a new connection between the two. The discussion will also show how science has shifted to attempt to better understand religious concepts by explaining them in a material way.

There are many ways and routes into discussing religion and science. A common way in is to discuss the concerns each has for the other, and attempt to create harmony by dispelling these concerns and showing how they could offer strength to the relationship between religion and science. Daniel Dennett and William James are important philosophers to recognize when discussing these concerns, as they often are on opposite

sides of the issue. But with this paper I also wanted to suggest a different way to look and the connection between religion and science, drawing not only from the thoughts of James and Dennett but also from the thoughts of others as well. I would like to argue that through looking at what religion and science have in common, and looking at how these commonalities have influenced a change in religion and science, I will emphasize the connections between them, even if these commonalities create hostility between the two. This goes beyond what understanding the concerns, which only see religion in older, static terms. It also allows for an understanding of the convergences between religion and science, which suggests a connection between the two. My hope is that this paper will allow for not only a discussion of the concerns one may have about religion and science, but also what the two have in common and how they have shifted, thus not only allowing the two to coexist, but suggesting their coexistence is based upon their constructive connections.

Chapter 1: Identifying Religion and Science

When discussing the relationship between religion and science, it is important to understand what the two terms mean. My identifications are not meant to be the unalterable definitions that everyone should stand by. Rather, my identifications should be taken as working ones I have developed for the sake of this paper. This will minimize any misunderstandings readers may have about what I mean when I say science and religion and identify the relationship between religion and science that I will discuss in later chapters.

Part 1: Identifying Religion

There is no one definitive way to identify religion. There are as many definitions as there are people attempting to define the word. As such, using religion without identifying it first can cause confusion. Therefore, I will offer an operational identification of religion so that in my discussion of religion and science what I mean by these words will be clear. Additionally, my identification of religion and science will show what I find to be important in identifying both, and how this will affect my view of the connections and convergences between religion and science. The identifications will be based upon the thoughts of authors who are key to the discourse on religion and science. Many of these authors have written about religion and science, while some have focused on just religion in their discussion. In either case, these thinkers have tried to define religion in ways that I have used to develop my own.

William James has an interpretation of religion that is focused on the individual. His identification of religion is important to the discussion of religion here because he is considered an important figure in the philosophy of religion, and there are aspects of his identification of religion that I both agree and disagree with. It will also aid in understanding his discussion of religion and science that I will address in later chapters. Before his discussion of his definition, he first puts forth the same thought I offered at the beginning of this chapter: religion does not mean the same thing to everyone, there are many people trying to define it. He suggests that religion be considered a name that encompasses all the various core beliefs that are held by these different people. For any given person, certain core beliefs will be more important than others. The definition a

person offers for religion will be based on which of these beliefs they find to be most important (James, 26). I think the value of various beliefs will be based on what the individual is trying to do with their definition of religion or what they want religion to do for them. By this I mean that the importance of any particular belief will directly correlate with not only what personal values a person has, but also with the point the person is trying to make with their definition and/or how they see religion as benefiting their life. An example James offers of a word having different important core beliefs to different people is in the word "government". Some might suggest that the core belief of government is authority or submission. Others may suggest that the core belief is the police or the army. Still others may argue that assembly or a system of laws is the core belief of government. Without any one of these things, government would not exist. Furthermore, at any one time, one of these core beliefs may be more important than the others. James believes that to best understand government, one must not be concerned with finding one core belief to describe it. Religion is just as complex as government, and should be approached with this same thought (James, 26-27). James identifying this individual aspect of religion is important to the discussion of religion and science. Understanding that religion means something different to everyone, it allows for a broader identification of religion. A broad identification of religion will make it easier for religion to connect with science because it will allow religion to incorporate ideas similar to those in science.

James also discusses the idea of "religious sentiment" (James, 27), which others have suggested has its own separate existence in the mind, a "mental entity". This entity is related to different emotions, depending on the individual relating it. Some may relate it to dependence, others may suggest that it is contrived from fear, or is in conjunction with sex, or the feeling of the infinite, etc. Religious sentiment is an all-encompassing name for the various emotions that are caused by religious objects. But all of these emotions, according to James, are not distinct, rather they are the common emotions felt by everyone, with religious influence. For example, religious love is simply love towards a religious object. Religious fear is the fear everyone feels, but is brought on by the thought of the wrath of a deity. While you can differentiate from religious emotions and non-religious emotions, this does not make the religious emotions separate. Religious

objects will cause a range of emotions that are common to everyone and are found in both religious and non-religious situations. Therefore, he does not see religious sentiment as a separate existence of the mind, but as a part of all consciousness. James postulates that it can also be supposed that there is no one religious object or religious act (James, 27-28). When James suggests that emotions cause by religion are not unique to religion, this has an affect on how religion is viewed and upon the way it relates to other aspects of society, such as science. By suggesting that a religious object causes an emotion but that this emotion is not only caused by a religious object, religion is somewhat demystified. By this I mean that religious emotions are no longer considered different from other emotions, making the mystery that often surrounds them disappear, which makes religion itself easier to understand. As such, religion will be easier to connect with science because it can be better understood.

Because religion is so broad a topic, James recognizes that he will only be able to discuss a small part of it. This makes James feel that he needs to offers a specific identification of religion that is only for the purposes of his lectures, and that draws your attention to a particular meaning of religion (James, 28). This is similar to what I suggested earlier, about a person using their identification of religion to convey a certain meaning they deem important. James states that it is important to first say what he will leave out of his identification, and that is the institutional branch of religion. This branch covers the different forms of worship; sacrifice, pleasing the deity, theology and ceremony that are part of religion. If religion were to be identified only using the institutional branch, it would be explained as something external, in that it would be about pleasing the deity. James instead chooses to focus on the personal part of religion, which is about man's personal concerns. This is not to say that personal religion does not involve pleasing a deity, but the acts caused by this are personal, and the organization of the church is second to the relationship between man and his God (James, 28-29). This emphasizes what James suggested earlier about religion being different for everyone.

Following all of this, James offers this identification for religion: "The feelings, acts and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider divine" (James, 31). James reiterates that the idea of personal religion is what he is focusing on. As such, he does not

discuss the idea of the institutional branch of religion in his identification. However, this identification does bring up one issue, and that is the issue of the divine. There are some religions, such as Buddhism, that do not have a God. Others may have a very abstract view of God. One example of this is in Emersonian religion, which believes in a divine order in the world. To deal with this concern, James suggests that the divine should be viewed as anything that is "godlike", and does not have to be a concrete deity (James, 31-34). By emphasizing the personal aspect of religion, James affects how religion is seen in relation to science and all of society. Personalized religion will make religion more flexible, allowing it to shift and move for each person. This in turn will allow the way religion relates to other aspects of society to shift, including how it relates to science. This will alter the connections between religion and science because if religion is dependent upon each person, a person can have religious views that allow it to coexist with science.

James's view of religion as being for the individual would make religion appear less rigid, which would make it easier for religion discourse with science. However, there are other authors who seem to think differently than William James. One such thinker is Daniel Dennett. Dennett's interpretation of religion has more of a societal focus. It is important to look at Dennett's identification of religion, as I will be discussing his thoughts on religion and science in later chapters, and it is important to know what he means when he uses the word religion. His identification of religion is also different from James, which when compared with James's will allow us to see how their ideas conflict, and may aid in understanding why Dennett and James disagree on of ideas such as fanaticism and religious morals, which I will discuss in later chapters.

In identifying religion, like James, Dennett recognizes that his identification is going to be somewhat arbitrary. His reason for this thought is because he plans to discuss ideas such as fanatic devotion to one's ethnic group, spirituality and superstition, which Dennett suggests are probably not religious. So no matter how he identifies religion, Dennett will be crossing over that identification. Like James, Dennett recognizes that there are many different core beliefs in religion, and that these vary. But he sees this variance as being between one religion and another, as opposed to James's view that the variance is from person to person (Dennett, 7-8). This is important, because this begins to

show Dennett's belief about religious beliefs being somewhat homogenous within any given religion. With this more societal view of religion, religion will appear to be more static and unchanging. This will make it more difficult for religion to shift with the other aspects of society, which may result in religion being somewhat outside society. The other result would be religion becoming one's only focus in society. In either case, religion will be separated from science, which would will make it hard for the to connect because they cannot interact.

Dennett suggests that defining religion has more than just an academic implication; there is a legal one as well. In the United States, religious groups have a special status, and there are New Age religions, such as Wicca (which is witchcraft), that are trying to prove that they are a religion in order to get this legal status. Dennett also suggests that traditionally, religions are not criticized the way secular organizations are (Dennett, 8-9). This means that identifying religion can have an effect beyond this discussion. With a different legal status, those who are act under the guise of their religion are treated with leniency. Therefore, religious people may be more prone to do terrible acts, which constitutes fanaticism in Dennett's opinion. How religion is defined can affect the way religious people act, and if religious people act more negatively this would be detrimental to how religion is viewed.

Dennett offers a tentative identification, which he reserves the right to change later if it can better suit his discussion. Dennett defines religions as "social systems whose participants avow belief in a supernatural agent or agents whose approval is to be sought (Dennett, 9)." Dennett expects a religion to include a defined God or deity. Dennett states that he purposefully put in the part about believing in a supernatural agent that is to be appeased as a way to exclude cult groups who would maintain that they can command demons and spirits and the like (Dennett, 12). However, his definition also excludes atheists. While some may not consider atheists a religious group, I believe that they are. I was raised in the Unitarian Universalist church, where atheism is an accepted belief – belief in God is not required to be a Unitarian Universalist. I would suggest that to be religious, you do not have to believe in any deity, but you must simply feel yourself to be a religious human being. This is not to say that all atheists consider themselves religious, and I by no means suggest that all atheists are religious people. I merely want

to include atheists as being religious if they feel they are, because God is not a necessity in being religious, you just need to consider yourself religious to be so. This immediately causes issues for me with Dennett's definition. Additionally, it is unclear as to whether or not agnostics could count as religious under Dennett's definition as well, and there is no way of knowing what he would say when asked if agnostics are religious. Dennett's definition also suggests that those who believe in the deity must also be part of some larger group or organization. This leaves out those who do not consider themselves part of a certain church, even if they still have faith in some kind of God. Dennett attempts to appease those who are not a member of a church by calling them spiritual, but not religious (Dennett, 11). Dennett's belief about the importance of deities in religion is an important part of his definition. But this definition is also important because it brings a social element to religion by using the term "social system". Dennett wishes to discuss religions as they are incorporated into society. As a part of society as a whole, Dennett's way of framing religion invites discussion of it alongside other aspects of society, including science. These are the grounds on which Dennett stands when he discusses how religion and science are related.

Initially, it would appear that Dennett and James are at odds with one another over religion. James has a personal view of religion. Dennett, on the other hand, argues that it is the society that constitutes a religion. He suggests that James cannot ignore the social and cultural factors in religion (Dennett, 11). However, in James's discussion it is clear that he is not ignoring these factors, but he chooses to focus on the personal factor of religion instead (James, 29). One wonders how inclusive Dennett wanted his definition to be, as his definition is not nearly as broad as James's, which seems to include agnostics inherently. Dennett seems to be defining religion as something that puts him outside of it, while James defines religion as something that puts him inside of it. Perhaps this is why Dennett's definition is much more specific – he wants to be sure that he does not include himself in religion. Conversely, this could explain the broadness of James's definition as well, since he wants to be sure that he is covered by his own definition. This is important to note, because if you want to put yourself inside or outside of religion, this will affect how you see religion relating to other aspects of society. By putting yourself within the realm of religion, as James does, you allow for religion to relate to the other aspects of

society of which you are also a part. If you place yourself outside of religion like Dennett, then it will be harder to see how religion can connect and converse with other aspects of society inside of which you place yourself.

It is important to note that while these two authors identify religion differently, they agree on other aspects of religion. James suggests that there is some "mystical germ" that lies inside him that creates a "need" for religion. That is, some unknown source compels him to be religious, despite him never having spoken to God and thus God only being an abstract concept to him (James, xxiv). James uses this term "germ" metaphorically. Dennett agrees with James on this notion, suggesting that perhaps it is a gene that makes religion a need, as opposed to a germ. He suggests that because James calls this thing a germ it would spread horizontally, i.e. infect other people, as opposed to spreading vertically, which would be the germ descending from parent to child. If Dennett is correct in his estimation, which I cannot say if is or is not, then his idea of a mystical gene would spread vertically and there would be some disagreement. But Dennett concedes that perhaps it is a germ and not a gene (Dennett, 84). It would seem that Dennett does not see this idea of a religious gene being as metaphorical as James's germ. In either sense, both Dennett and James think that there may be something that causes a person to be religious. This idea is important because it offers a look into the idea that religion is an important, if not required, aspect of some people's lives, which means it needs to coexist with science in society.

Another area of agreement for James and Dennett is the power religion has in society. This agreement is important because it effects how they view fanaticism and morals in religion. Because of religion's power, it can make people act only in accordance with their religious values. James says that those who believe that they are doing the will of God feel they are protected against every weakness (James, 285). Dennett adds to this by stating that those who truly believe they are doing what God wants will fear nothing, not even death (Dennett, 284). Both authors recognize the power this release from fear has over people, and why it may influence them to do things that they would otherwise never do. I will continue this discussion of fear and fanaticism in a later chapter, but I felt it was important to mention here to establish an agreement between James and Dennett.

A final agreement between these two authors is about the purpose of religion. James argues that religious thoughts and requests from gods are based on personal calls and concerns, in that they are only based upon what the individual needs (James, 491). Dennett agrees that religious requests are on an individual basis, suggesting that it is almost obvious to most religious people (Dennett, 267). Dennett also explains and agrees with two ways that James says religion might make us better: it might make us more effective and it might improve our morals. Dennett is quick to emphasize the word "might" here, so as not to suggest that there is a proven relationship between better people and religion (Dennett, 269-270). I discuss both of these thoughts in further detail later in the chapter about religion and morals, but again I simply wanted to show some areas of agreement between Dennett and James.

James and Dennett both offer important ways to define religion, but there is one more thinker who identifies religion with a different focus. Clifford Geertz identifies religion in a way that is very different from these other thinkers. His identification is important to the discussion of religion because it offers an explanation for how religion affects the way we act. Other thinkers I have discussed assume that people believe that religion influences people to act in certain ways. However, Geertz explains how this happens in his discussion of moods and motivations, in ways that I find useful for my argument. This identification is also important because Geertz offers the view of religion as a cultural system, which could be considered similar to Dennett's view of religion as a social system.

Geertz identifies religion as:

"A system of symbols which acts to establish powerful, persuasive and long-lasting moods and motivations in men by formulating conceptions of a general order and existence and clothing these conceptions with such an aura of factuality that the moods and motives seem uniquely realistic." (Geertz, 91)

He goes on to explain this identification by dividing it into five parts and discussing each part individually. The first part is "a system of symbols which acts to…" Geertz states that it is important to identify what "symbol" means, which is not simply because it has many different meanings to many different people. One meaning of "symbol" is that it means something other than what it actually is to someone. The example Geertz gives of this use of symbol is dark clouds symbolizing the coming of rain. Another use of

"symbol" is in the conventional sense, i.e. something that is universally understood. This is seen in red flags symbolizing danger and white flags representing surrender. The third use is in expressing something figuratively that cannot be stated directly. Figurative symbol use is only found in things such as poetry and not science. The final use of "symbol" Geertz discusses is any thing, act, characteristic or relation that aids in understanding. This understanding that is gained is the symbol's meaning. This is the identification Geertz chooses to use for the purposes of this book. This covers symbols of all types, including religious ones (Geertz, 91). Geertz's identification of symbol here allows the reader to have a clearer picture of what a symbol is, and offers a somewhat complex meaning for symbol, in comparison with the other meanings he offers. This understanding given by the symbol's meaning is an understanding of ideas, beliefs, judgments, etc. that are abstract or intangible. The symbols that bring this understanding are the tangible, concrete forms (Geertz, 91). Therefore, the way in which Geertz defines symbol is important because he wants it to be clear that a symbol represents something intangible in religion, and thus has an important place within religion. Understanding this aspect of religion will aid in the understanding of religion as a whole. Also, this concept of symbol in religion is different then what a symbol is in science. The idea of a symbol may then cause a separation between religion and science, but would not necessarily affect the way the two relate to each other.

The next part of the identification for religion that Geertz examines is "...to establish powerful, persuasive and long-lasting moods and motivations in men by..." In this part, Geertz identifies both moods and motivations. A motivation is being inclined to do certain things. Geertz gives the example of someone who is vain. This person is expected to look for the spotlight and not want to talk about the positive aspects of other people. It is not guaranteed that the person will behave this way, but it is likely. These motivations are not acts or feelings themselves, but give a person the likelihood to do certain "classes" of acts and have certain "classes" feelings. In the discussion of moods, Geertz explains that people are susceptible to fall into moods that get lumped together as "reverential", "solemn" and worshipful. But he believes that this conceals how much these moods vary, and characterizes them into a somewhat specific category (Geertz, 96-97). Once again, the mood is not the feeling itself, but the inclination to have this feeling.

The difference between moods and motivations is where they are going. Motivations are directional; they lead to a conclusion. Moods do not lead anywhere. They do not go away for any clear reason. They are also "totalistic," that is a mood will govern how you see everything: if you are sad, everything and everyone will seem melancholy, if you are happy, everything and everyone will seem delightful. Additionally, motivations are understood by their conclusions and where they are going. Moods are understood by their sources (Geertz, 97). Establishing moods and motivations here is important, because it is occasionally assumed that religion compels you to act and feel a certain way. But Geertz finds it necessary to explain these acts and feelings explicitly, and to argue that religion does not always have to be equated with a solemn mood, rather that there are many moods caused by religious experience. As a further clarification, this is not to say that moods and motivations are about emotions. They are, more accurately, about attitudes. That is, they are not your feelings. Moods and motivations are about how you act and feel your propensity to act and feel in such a way. This part of the identification is also important to the discussion of religion and science. If religion is seen to make you inclined to act or feel a certain way, this juxtaposes it against science if science is seen as not providing the same inclinations. This creates somewhat of a separation between religion and science. But it could also allow for a relationship between science and religion, as religion would be making up for the lack of moods and motivations coming from science. However, it is also possible that science does give one moods and motivations. In that case, the connection between religion and science would be seen in the way the moods and motivations of religion compared with the moods and motivations of science.

The third part of Geertz's identification is "...by formulating conceptions of a general order and existence and..." In this part, Geertz says that humans depend on symbols and system throughout all aspects of life – it goes beyond the religious. He uses a quote by Langer the starts "Man can adapt himself somehow to anything his imagination can cope with; but he cannot deal with Chaos" (Geertz, 99). Geertz says that there are three areas where chaos shows itself to man: when he reaches the maximum of his ability to understand something, when his physical capacity gives way and when his belief about the morals of society is challenged. In discussing the first area, his ability to

understand something, Geertz uses the example of a toadstool found in someone's house in Java. It grew much faster than a normal toadstool, and people came from all over to see it and offered different explanations for it. Because this was an odd, strange event, there was a need to explain it in some way, because a toadstool could not just grow like that without a reason. This is an example of how something that is outside ones analytical capacity; in this case a toadstool creates chaos for people because it "threatens their most general ability to understand the world" (Geertz, 101). Most people will experience something that is beyond analytical capacity in their lives. For anyone who has experienced it, something being outside what you can understand can be scary. There is a need to explain everything you experience by many people, and the chaos caused by not understanding can be very distressing. Here is where religion can aid people in understanding – using the concept of something supernatural being responsible for an event, it allows for at least some comprehension of what is happening to a person, and puts an experience back within our analytical realm. This is an example of how religion can explain what science cannot. Science and religion will then be able to connect, because one supports the other.

The next area of discussion is the capacity of the physical human body causing chaos. This manifests itself, according to Geertz, in how people deal with illness and death. He references Malinowski, who suggests that religion helps people deal with the "emotional stress" that comes with suffering. Geertz says that there is more to this, however. He suggests that religion also strikes fear into people as well as aiding their suffering, and that in every religion there is the accepted notion that "life hurts (Geertz, 103)". Suffering is something that can become unbearable, and it is the purpose of religion to make it bearable. Religion serves as an anchor not only for our analytical ideas but also for our sources of our feelings. This problem of suffering moves easily, as Geertz says, into a discussion of the problem of evil. The problem of evil is what we experience when our normal beliefs seem under attack. Religious authorities are supposed to provide a set of ethical criteria, to clarify what is good and what is evil. These three problems, "bafflement", suffering and evil bring chaos into the world of man (Geertz, 104-108). It would then follow that Geertz sees religion as a method, if not the method, for dealing with these forms of chaos and thus bring order to existence. It gives us ultimate meaning

in the world. This will effect hoe religion is seem with relation to the rest of society. As the way by which we deal with pain and suffering, religion is put somewhat outside other aspects of society because of its different purpose. This does not mean it cannot relate to science and other aspects of society in other ways. Additionally, it offers a support to science in that it helps a person in a way science cannot.

The fourth part of Geertz's identification is "...clothing these conceptions with such an aura of factuality that..." As I described above, belief is driven by the existence of something beyond our understanding, by the experience of pain and suffering, and a questioning of morals. The set of moods and motivations induced by religious ritual Geertz calls an "ethos", and the view of the way the world is, is called "a world view". These two things, ethos and worldview, fuse together in ritual. This is how religious ideas seem to become factual, as there is an acceptance of authority that comes with this fusion (Geertz, 109-118). Identifying the authority held by religion is important for Geertz, because it separates the religious perspective from all other perspectives. Like James and Dennett, Geertz recognizes the power that religious organizations can have over people. The power religion has will make it appear to some as above all other aspects of society, diminishing how it can converse with these aspects, including science.

The final section is "...that the moods and motives seem uniquely realistic". Geertz recognizes that no one lives in a world with only religious symbols. There is movement between the religious perspective and the common-sense perspective. Because of this, ritual can alter common sense dramatically. Unlike other cultural systems, the symbols in ritual can make you believe you are in touch with what is "really real." This is what makes the religious cultural system unique (Geertz, 119-122). This being linked with reality is an additional way that religion has a power over people. Therefore, it could increase the separation between religion and science in society because it would be harder for them to have discourse if religion is considered superior.

As stated earlier, I will offer an operational identification of religion for this paper. The definition is as follows: religion is a system of beliefs and practices that not only allows a person to feel in tune with what he/she considers divine, but also provides a set of moral and ethical guidelines for a peaceful existence. This in tune feeling is a feeling of relation or connection to divinity, where divinity is a godlike object, though not

necessarily a deity. Feeling in tune includes, but is not limited to, an understanding of how the world works and implies a feeling of natural purpose.

There are similarities and differences between my definition and the definitions of others that I previously discussed. My definition is similar to James, in that there is an individual aspect to religion, with the idea of feeling in tune with divinity. I also chose to define divinity the same way James did. Like James, I do not think a religious person necessarily needs to believe in a God, nor does a religious person need to be part of a church. My definition is similar to Dennett's because I suggest that there is a systematic quality to religion. However, I differ from Dennett in that I do not think this is necessarily a social system, nor does it need to have a community or church. The system is simply a compilation of the beliefs and practices. In comparison to Geertz, I would suggest that there is a similarity between his idea of moods and motivations and my concept of religion offering moral and ethical guidelines. Both are influenced by religious experience. Additionally, Geertz talks about morals and understanding the world as aspects of religion, which I do as well. This is not to say that one can only gain your morals from religion, or that you must be religious to have morals. I am saying that religion can and does influences the morals of those who are religious, but that nonreligious people may draw their morals from somewhere else.

As I explained, this identification is by no means a discussion ender. It is simply my (personal) definition, as a way of clarifying what I mean when I use the word religion. Not everyone will agree with my definition, and may have some strong objections to it. However, I wanted to make it as inclusive as possible, so as not to put any off or exclude anyone. I paid particular attention to including atheists and agnostics in my definition, because I believe that those agnostics and atheists who consider themselves religious are an important part of religion in society. With this clarification of how I will be using the word religion, the discussion of religion in relation to science can be better understood.

Part 2: Identifying Science

Science may seem to be simple to identify, almost unnecessary. But like religion, there are variations on how it can be identified. Also, because the identification is often

assumed, it can be harder to find concrete identifications in literature. Like my identification for religion, the identification for science that I will be offering will be an operational identification for this paper. This identification is necessary because like religion, it is important to understand what I mean when I use the word science so that a discussion of religion and science can be better understood. I will be drawing ideas from various thinkers, using their definitions and explanations about what science does to create my own identification.

One author who has an important identification of science is Lee Silver. He begins by discussing what Francis Bacon and Renee Descartes believed about religion, as they are the most responsible for separating science from religion and then defining science. Francis Bacon believed that scientific study should be completely empirical, and involve gather data via real world experiments. Descartes' view is a more philosophical one. Descartes took the view that instead of using experiments, science should be studied through observation of natural processes and theories. While there was much back and forth between these two ideas. Silver suggests that currently we cycle through both experiment and observation. While scientific study is done mostly in the empirical sense, there is some value in theory. The empirical can give us results about cause and effect for a specific experiment, while theory allows us to create predictions based on these results for future experiments that could not be ascertained from the empirical evidence itself. Silver also recognizes that there is natural human bias in research. He says that for some there is some emotional or monetary stake in what they are studying, and that could cause them to not let go of what they want the results to be, which could cloud their view of the actual results (Silver, 21-23). Like Geertz, I feel the need to mention Silver's identification because it is somewhat basic. Often this concept of empirical study and theory is often assumed by writers as what people believe science is. I am bringing in Silvers discussion here to clarify the base of science so that other thinkers can build upon it.

Another thinker who clearly identifies science is Ian Barbour. In *Religion in an Age of Science*, Barbour suggests that there are two fundamentals of science: experiment and general theory. Experiment is based on the view of Francis Bacon (like Silver discussed), which is how science begins. In experiment, observations are made and

theories are created based upon these observations. But as Barbour suggests, this is not adequate because theories can involve concepts that are not found in data, or can be based on unobservable relationships. Barbour recognizes that while data should be free from influence, the language of science itself has no theory-free language to describe observations. All data is influenced by the theory behind it. Science is also constantly being tested and conclusions changed. Thus science is not certain. It is always incomplete (Barbour, 31-35). While this identification may seem somewhat obvious on the surface, it is important to this conversation. Science is a changing and moving subject; the results are not static. This makes it possible that science can coexist with religion on some level. The dialogue and relationship between religion and science is more malleable here. Its incompleteness also leaves open the possibility of religion answering what science cannot. Whether this was Barbour's intention with his discussion of science I do not know, but it does leave open the opportunity.

Both William James and Daniel Dennett discuss their ideas about science. James sees science as being in no way affected by the personal view of a person. The theories of science do not take into account the concerns of the human being. Everything can be explained without reference to God. Nature, which is based upon chance, has no propensity to do one thing or another (James, 491-492). As such, the description of the world from just the scientific view would be incomplete, and rather bleak. James' view of this is important because like what I inferred from Barbour he argues that there is more to the study of the world than what science brings to light. The relation between James's view of science and his view of religion can also be seen. James' emphasizes the feelings of the individual in his identification of religion (James, 31). He may then see religion as what brings joy to a person's life in a way that science cannot. He may then see that religion and science can exist together, because what religion offers, that is an emotional evaluative view, is exactly what science lacks. This definition of science is important, because it shows the way in which James might see the possibility of science coexisting with religion, as one can add to life what the other does not.

Daniel Dennett's view of science is also important to discuss. He suggests that science is an "amplifier of human powers." He bases this on statistics that show that in the past 10,000 years, the human population, technology and intelligence have grown

immensely. He also emphasizes that people rely on science for the truth, even those who may be skeptical of some of its discoveries. The example he uses is that there are very few science critics who would be afraid to fly in an airplane because they do not trust the calculations done by the engineers who created the plane (Dennett, 370). This is an important fact, as it suggests that critics of science might have more faith in it than they are willing to own up to, so it could coexist with religion.

That being said, Dennett also recognizes that science is not infallible. Scientific theories are constantly being overturned. Dennett clarifies this by saying that when science is done right, the results must be accepted. But the interpretations of the results do not require acceptance, and can be argued. Dennett additionally claims that in science the results are often impersonalized, in that no one person claims them, to prevent people from skewing data to make themselves look good (Dennett, 371). While I admire Dennett's faith in scientists, I have to disagree with his second claim. It is not that I do not agree that in theory all scientists should act that way, but some experience in academia has led me to believe that there are scientists out there who are in it for personal gain. However, these people are few and far between, so I accept Dennett's thought on principle. This understanding of science is important because Dennett recognizes its importance in society, and how it effects what people believe to be true. Interestingly, this view of science does not seem to directly relate to Dennett's definition of religion.

The operational identification of science I will offer for this paper is this: science is the use of experiment and theory to understand how the world works, which can have an influence on one's morals. Furthermore, science itself is not rigid, the theories and conclusions in science are constantly changing. These moral influences I am speaking of are seen in how the results of science compel us to act or think, based upon previously conceived morals. For example, there is a basic moral principle in our society that all humans should be treated as human. There was a time when people of African descent were not considered human, and thus did not have to be treated as inferior. But upon the scientific discovery that people of African descent and people of European descent were of the same species, it became more morally objectionable to consider Africans as lesser to Europeans. (I by no means suggest that this was instantaneous, but it is hard not to see the affect that this discovery had on the way people were treated.) So there is no direct

step between morals and science in the way there is between morals and religion. But this does not mean that science does not have an impact on one's morals beliefs. Instead of offering new moral beliefs the way religion does, science will offer experimental results that would change how you act based upon morals you already have.

As you can see, my identification of science is similar to my identification of religion, in that I claim that both science and religion have moral and ethical ramifications. This is what primarily separates my identification from the identifications offered by these other authors. But there are some similarities between my identification and other identifications I have mentioned. Like Lee Silver, William James and Daniel Dennett, I see science as an empirical study of the world. Specifically with Silver and Barbour, I see that study involving both experiment and theory. Like both Barbour and James, I also believe that science is not necessarily the only way to understand the world. I agree with Dennett that science is important and taken as truth by many, even those who criticize certain aspects of it. I would also find myself in agreement with Dennett and Barbour about science being consistently reanalyzed and the theories changed. My defining science in this way is important because it creates an area of overlap between religion and science. This suggests that religion and science are not completely separate ideas, but in fact have similarities and a relationship.

As I stated before, identifying science can be difficult. The identification may seem obvious at first, but when you actually try to identify it, it becomes not as obvious. It's also difficult because not only is it not as clearly defined by authors, but also various authors have a stake in how they set boundaries for the field, just as in the case of religion. With my identification, I wanted to create an overlap with my religion identification, to indicate the relationship between the two. I have shown this overlap in the way religion and science can both have moral and ethical influences on people. I also wanted to create an identification that would include not only scientific study, but also what it does. Science can now be discussed as something that is similar to religion. By identifying both religion and science within this chapter, I have made it possible to discuss the way religion and science can connect and converse without any clouding of what the two terms mean. I have also made it possible for religion and science to be compared in terms of how they understand morals, which establishes a convergence

between the two. But before continuing on to my discussion of the similarities between religion and science, I will first address two concerns held about religion and science, via the ideas of fanaticism and morals in religion.

Chapter 2: Fanaticism

When considering how to understand religion and its relation to science, an important aspect is fanaticism. Fanaticism is an enthusiastic and blind devotion to a cause. The fanatical acts of others influence not only how a person views religion, but also how a person may identify science. Fanaticism will also color the morals held by fanatics, because they will base their moral choices exclusively on their religion. There is an implication that scrutiny of fanaticism affects one's perception of religion, because fanaticism is often viewed as characterizing all religion. The identification of science can also be altered by a view of fanaticism because science may be identified as a way to eliminate fanatical views. The key aspects of science that Dennett would put in opposition to fanaticism would be science's basis in rationality and its positive effect of society. James would disagree with this view. Often a fanatic will draw their morals from their cause. Fanaticism will then affect the relationship between a person's morals and the morals of society. Fanaticism is important for the discussion of religion and science due to its implications for both. Someone's perception of fanaticism may be that it represents all religion. In this case, religion would be considered as irrational as fanaticism. If science is seen as the rational alternative to religion, there would be a divide between the two. Furthermore, one would decide that religion should not be considered as very useful, if providing any use at all, because of its lack of rationality. It would then be necessary to look at fanaticism as a way into the discussion about these two topics, since its coloration of both religion and science will have some effect on how they can converse. If science is rational and religion is irrational, communication between the two would be difficult. Thus, it is important to show not only how fanaticism is viewed, but also how it affects one's view of religion and science, to see if it truly represents a whole religion and creates a divide between science and religion.

Daniel Dennett and William James have important discussions about their respective ideas about fanaticism, thus offering possible insights into their perspectives of religion, morality and science. Dennett is concerned about the dangers fanatics pose and offers methods to decrease the negative effects fanatics have on religion. He is more comfortable with those he calls moderates, who are less devout to their faith than

fanatics. James finds that while some fanatics are dangerous, not all pose a threat and he provides a distinction between threatening and nonthreatening categories. Those Dennett calls moderates James would split into healthy-minded and sick-souled. According to James, healthy-minded people are not the best representation of what a religious person should be, because they completely ignore the concept of evil. Instead, a religious person should be sick-souled. The sick-souled have seen evil and come back from it. James then offers another category of religious people, who he calls sainted, that he considers being the pinnacle of religious people. It is likely that Dennett would view these sainted people as fanatics. Dennett and James offer two different ways to look at fanaticism and its effects, and could be seen as two common views held in society.

Daniel Dennett calls fanatics people who cast "evil spells" on others to control them. He uses the term "evil spells" metaphorically, to indicate the hold some religious leaders seem to have over their followers. Dennett suggests both religious cults and fanatics cast these spells. One example of these fanatics is the fanatical madrassahs that recruit young Muslim boys and train them to become murdering martyrs. There are also fanatics those who bomb abortion clinics in the name of God (Dennett, 13). Dennett seems to include at least some religious cult members as fanatics, since he does not differentiate between the two. I would agree; there are some religious cults that could be called fanatical. As I stated earlier, fanaticism is following a cause without question. Religious fanaticism, therefore, would be blindly following a religious cause. This idea of unquestioningly following a religion is key to this discussion, because it shows the lack of rational thought in fanaticism. A fanatic will not act based on his own rationale, but will do whatever his religious doctrine tells him/her to do. Dennett argues that there was blind devotion among the followers of Jim Jones as he was able to convince many that it was necessary to kill themselves. He also suggest that there could also have been some blind devotion among the members of the Aum Shinrikyo, a cult in Japan, when they were convinced to release sarin gas into a Tokyo subway (Dennett, 13). Both of these cults were religious cults, and their members could be described as being religious fanatics. My point here is that fanatics do not just have to be extremists of a mainstream religion; fanaticism can include cults as well. This is important when considering fanaticism because it indicates what constitutes a fanatic. It also suggests that there is no

one religion that is exempt from fanaticism – that is, every religion can have a fanatical sect. In this way, religions are all put on the same level for this discussion. When speaking of fanatics, Dennett is not specifically talking about one religion or group of religions, but religion as a more abstract, non-specific concept.

Dennett continues with the suggestion that it is important to "break these spells" cast by cult leaders and extremists. Perhaps breaking these spells would prevent these groups from doing terrible things, such as killing themselves or others. Breaking this evil spell, Dennett suggests, could come by introducing these people to a good spell. Dennett recognizes, however, that this good spell may not work but it is worth trying to find out (Dennett, 13). Breaking these evil spells could be the key to ending much of the awful acts perpetrated by fanatics. Ending the hold fanaticism has on a group of people could change a negative perception a person may have about the religion associated with the fanatical acts. But differentiating between a good spell and an evil spell could be more complicated than Dennett anticipates. This brings into question what constitutes a good spell. Dennett does not clarify what a good spell is, but I would guess that it is a spell that exerts a positive control on a person by bringing religion into someone's life in a positive way, not a destructive way that Dennett thinks the extremists and cults do. Perhaps, however, "positive" and "destructive" do not offer much clarity to the issue, as they are both subjective. Maybe getting rid of all spells is the best course of action to avoid the issue of both good and bad spells, though that could prove difficult as well, for as long as there is religion, there will most likely be people enraptured by its spell.

Getting rid of a bad spell can be difficult; however the negative connotations of fanaticism make it imperative to stop the detrimental acts of fanatics. One way to alter this negative outlook could be to convince fanatics that their fanatical acts are not productive for their religion. Dennett suggests that fanatical acts, such as the Taliban destroying Buddhist monuments in Afghanistan, bring "shame and dishonor to their causes (Dennett, 256-257)." The rest of the world is tired of these demonstrations. He also maintains that fanatical acts like this are the result of symbols becoming "too sacred". The increased sanctity of symbols increases the offense people feel when their symbol is desecrated in some way. Dennett says that fanatics seek to desecrate the symbols of others to bring honor to themselves. One way for people to stop fanatics is to

spread the idea that it is in fact dishonorable to desecrate the symbols of others as a way of promoting the beliefs of their own (Dennett, 256-257). It is true that these acts are often more of an embarrassment than anything else to other more moderate members of the religion in whose name it is perpetrated. It would then be logical to try to convince fanatics that these acts are not honorable to their cause, but the success of this effort will be hard to foresee.

To take Dennett's thought one step further, it would be necessary that the people telling these fanatics about the dishonor of their actions would be of the same religion as the fanatics. This would be more likely to produce a dialogue between fanatics and nonfanatics than if they were not of the same religion, because those of the same religion would have a level of shared theological understanding that those from two different religions could not. This would increase the likelihood that fanatics would be convinced that they are doing more harm than good for their religion. In turn, this would diminish the negative view held about a given religion. The effects of fanaticism on the public perception of religion are important. Fanaticism can make a specific religion seem irrational. This negative view of a specific religion could translate to a negative view of religion as a whole, which will in turn alter how religion is viewed in relation to other aspects of society, including science. This alteration will be seen in religion being put on the outskirts of society because of its irrationality, which would make it difficult for it to have any discourse with the rational aspects of society, such as science.

Another way to alter the negative outlook held about a religion would be to diminish the number of fanatical soldiers. Often fanatical soldiers are seen as representing their religion, which could indicate that the religion they represent is violent. A violent religion, to many people, is a negative one. If a fanatical army is shown to be less effective then a non-fanatical army, the number of fanatical soldiers might be diminished. Dennett suggests that fanatics may be more willing to engage in war because they believe they are doing the will of God. But this does not mean that these fanatics are better soldiers. Dennett quotes William James to support this claim. James writes:

"Whoever not only says, but *feels* "God's will be done," is mailed against every weakness; and the whole historic array of martyrs, missionaries, and religious reformers is there to prove the tranquil-mindedness, under naturally agitating or distressing circumstances, which self-surrender brings (James, 285)."

Dennett suggests that James is saying that those who believe they are doing the will of God feel protected when going into battle. The protection is not literal, but more of a protection in the sense that it offers a justification for going into battle. This feeling could be what gives the solider the composure to fight effectively (Dennett, 284). But the section of James's book from which Dennett takes this quote has a different context then the one Dennett indicates. James is saying that belief in God will protect you, but it is not in the context of a soldier going to war. He is actually discussing this protection as aiding and calming those who are attacked for their beliefs, to help the attacked deal with the circumstances (James, 285). However, Dennett's point is still somewhat valid, because there is a sense of protection felt when you believe that you are doing the will of God, whether you are attacking or being attacked. This is one indication of the irrationality that can be seen in fanaticism, because the belief that you are doing the will of a deity would not be seen as a rational reason for going to war, according the majority of the world. It has not always been the case that this would be considered irrational, but in the present time it is more acceptable to go to war for the benefit of your country, not your religion (with the exception of some countries where religion and government are inseparable). Furthermore, many religions offer a message of peace in their doctrine, so the waging of war in the name that said religion would be illogical. This would make fanaticism seem irrational not only to those outside the religion, but also to other members of the religion.

Dennett again quotes James (who is quoting an Australian officer): "Far better is it for an army to be too savage, too cruel, too barbarous, than to possess too much sentimentality and human reasonableness (James, 366)". Dennett takes the savage army the officer refers to as a non-secular one. He believes that James is agreeing with this officer, and then disagrees with James in suggesting that better soldiers are more savage and cruel, as Dennett sees the worth of a solider not correlating with his barbarism (Dennett, 284). However, in context James is not specifically suggesting that these armies are secular or non-secular. He is actually comparing how an ascetic saint acts in comparison with these savage armies (James, 366). Dennett continues his argument by saying that a secular army could be potentially more effective than a non-secular one, though this would be hard to prove. But until it is, fanatics will continue to fight wars in the name of God, with the risk of those who lead the soldiers not actually believing in the

God their soldiers believe in (Dennett, 284). It is unclear why, other than to make his own point, Dennett would twist James's words so much. But it is true that if a leader does not believe in the God they send their soldiers to defend, it would appear that the leader would be using his soldiers for their fanaticism. This suggests that religion would be manipulated to help leaders control those that follow them.

While I agree with Dennett that proving the value of a secular army over a nonsecular one would be difficult, proving it may reduce fanaticism within the ranks and would hopefully minimize the number of holy wars fought. This discussion of fanatical soldiers is helpful in understanding fanaticism, because it shows how leaders can use their soldiers' religious fanaticism to control them and convince them to fight. But, leaders in the past have also controlled their followers with science. While some leaders have used "science" to suggest that some people are genetically superior to others and thus control those who are inferior (such as the eugenics offered by Hitler), the "science" they are using tends to not actually be science at all. Like religion, science can be manipulated to benefit those who wish to control others. This offers a comparison between religion and science, which would allow for a relationship between the two. Additionally, fanatical soldiers are often seen as the representation of their religion, which increases the negative view of the religion because of the violence perpetrated by fanatical soldiers. As I have stated previously, a negative view of an individual religion would color the view a person has of all religions, in turn effecting how religion will be able to converse and connect with all other parts of society, including science.

Belief that you are doing the will of God provides multiple motivations for being a fanatic. These motivations are important because if the motivations are not considered acceptable by general society, this will add to the negative view a person has of fanaticism and the religion it represents, which I have already suggested will affect the view a person has of religion as a whole and its connection to other pieces of society. One motivation offered from believing you are doing the will of God is the prospect of divine reward. But Dennett suggests that there is a motivator more effective than divine reward: a moral justification to kill. That is, by believing that by committing some act you are doing God's will, you are allowed to do bad things, like kill people. This moral justification affects acts that range from liberating laboratory animals to murdering

someone under the cover of a fatwa. Dennett does admit that it is likely that the influence of Hollywood makes a person want to lead more adventurous life, which in turn makes a person feel like they have "license to kill (Dennett, 285)." But he maintains that religion gives people a belief in the absoluteness of their morals. This gets people to kill people more than any other factor. He suggests that religion is to blame for zealous killings. Dennett also raises the issue that people who kill and use religious fervor as a reason are often punished less harshly, in his opinion, because those who are filled with religious conviction could not help themselves. He believes that this uneven punishment needs to change, as those who are motivated by religion are still fully responsible for what they do (Dennett, 285). The moral justification these fanatics feel is exactly what scares a lot of people about fanaticism. It adds to perception of fanatics as irrational, because in our society there is very little moral justification for killing, with the exception of war or capital punishment. For Dennett, there is a concern that religion will incite a person to kill, which makes religion dangerous. Science does not incite killing in the same way. Dennett would then see religion as a dangerous aspect of society. Religion should then be considered unconnected with science because of this danger.

Fanaticism can also affect the morals a person has. This can be detrimental because, like motivations, the morals of a fanatic can be considered unacceptable to society, which leads a negative view of fanaticism, religion, and changes how religion correlates to the rest of society. Dennett's concern with the morals of fanatics is that fanatics tend to adopt the morals of their religion without question simply because it is the word of God. This causes a problem for Dennett: if these people will believe whatever their religious authority (priest, imam, etc.) tells them, they may not look at the morals for themselves. Under the guise that their morals cannot be questioned fanatics simply will not question their faith. Dennett suggests that they hold their beliefs because that is what all people of their faith believe. This makes it impossible to have a real conversation with these kinds of people. He states that they will not listen to reason or logic, nor do they use these two tools, so their arguments cannot be taken seriously. Additionally, fanatics do not understand that even if they are right about the existence of God or the ethics of a controversial topic (such as stem-cell research), it is not unreasonable for others who are not of their faith or have not had the same experiences to

not believe in God or have the same ethical view. Dennett believes that unquestioning faith also makes fanatics dangerous, because it is another example of the irrationality of fanaticism, and without using rational thought they may do something that they or their religious authority think is right based on the word of God (Dennett, 293-297), even if it is detrimental to society. This is an extreme argument for Dennett to make, but I feel as though it is true. I agree that having an unquestioning faith in you religion could pose a problem. The morals you adopt from your faith may go against the morals of the society in which you live. The unquestioning faith of fanatics will make it harder to discuss religion with them because they are unwilling hear anything against their faith. This does make fanatics a worrisome group, because they are liable to do things that may be wrong in society, but right in the eyes of God. By having morals that go against the morals of society, society will look upon fanaticism and its associated religion in a negative light. This would lead to a changed view of religion as a whole, which effects religion's dialogue with other parts of society.

Based upon his opinions about the violent nature of fanatics and their lack of respect for the morals of society as well as their propensity to think and behave irrationally, Dennett argues that religious fanatics are responsible for the majority of terrorist acts perpetrated around the world. Though many would say that terrorist acts are more politically motivated then religiously, Dennett would suggest that even political agendas are often covered with a religious guise. The leaders who use the religious guise do so to take advantage of the complete devotion that comes with the religion, which gives them control over the followers of that religion. Dennett believes that it is the responsibility of those who are not fanatics to control those in their faith who are fanatical, even if these fanatics do not actually believe in the religion they are defending (Dennett, 299). But until this happens, Dennett may be afraid of, and at least concerned about, religious fanatics because he believes they are willing to act irrationally and kill for their faith without question. He would argue then that fanaticism for a religious cause need to be combated in all cases. However, in situations where religious belief is merely a cover-up, Dennett does not really offer a reason as to why it is the responsibility of nonfanatics in that religion to deal with it. Perhaps this is because he believes they still bear responsibility if they want to improve the view of their religion. I do not completely agree with this thought. I believe that fanatical acts that are politically motivated with a religious guise should be the responsibility of the political group they represent in addition to the religious group. Meting out the responsibility to political groups and religious ones could decrease the negative view a person has for a specific religion if the religion does not bear all the responsibility for the fanatics that claim it. This could improve the view a person has of religion as a whole, and thus make it easier for it to connect and converse with science.

William James offers a different view of fanaticism than Daniel Dennett. He sees it as a vice of devoutness. Fanaticism is an "unbalanced devoutness" that is "only loyalty carried to a convulsive extreme (James, 340)." Fanaticism comes when a person is so taken in by the deity they worship that the devotion itself gets idealized. The methods by which people show this "unbalanced devoutness" are many. One method James describes is that people will change language to exalt the deity as high as possible. Another method is that fanatics will view death as a positive if the death appeases the deity. He suggests that the reason people are like this is because of the legends that surround the deity, which can make the deity seem glorious and worthy of extreme devotion (James, 340-342). Like Dennett, James sees fanatics as those who will do anything for their deity, though he does not specify if fanatics include or do not include members of cults. This devotion to a divine being can, as I mentioned in Dennett, cause the fanatic to adopt only the morals of his religion, putting him at odds with society. The result of this opposition could be a negative view of fanaticism and the religion it embodies, which would be injurious to the view of religion as a whole and its place within society.

James divides fanatics into two categories: those who are aggressive and those who are passive. An aggressive person who becomes a fanatic will constantly feel the need to defend their deity's honor. This is the best way, in a fanatic's opinion, to show their devotion. As a result, any slight offense to the deity's honor requires the devotee to fight back. James suggests that for some, there is an obsession with this (James, 340-341). As a result, wars have been fought for the honor of God. There are religions in which the theology describes that the deity requires his name to be protected and the churches within these religions have policies that give this protection. James suggests that it is because of this that fanaticism exists. He blames the leaders of the religions as well

as the religions themselves for fanaticism. Beyond this, James argues that for some there is an association between this kind of devoutness, which results in persecution of others, and a saintly mind. James says this is because often a saintly mind has a moral outlook, which can appear cruel. He gives examples from history in which religious leaders have persecuted others to defend or unify their own religion (James, 342). This aggressive response creates an image of fanaticism as being violent. As I stated earlier, this violent fanaticism can make the religion it represents appear violent, which could make religion appear as irrational. This irrationality will prevent religion from discoursing with rational society.

These fanatics who fight in response to an offense against a deity are the aggressive fanatics. But there are those who are gentler. James notes that fanaticism makes these passive people more close-minded. As a result, these people are unwilling to discuss the morals of their beliefs. These morals will outweigh any natural human morals that a person has, as I mentioned earlier. James refers to this passive fanaticism as a "theopathic condition." It is devotion so intense that people cannot see beyond their devotion to think and behave rationally (James, 343). In this way, James would most likely agree with Dennett that these people would be hard to talk to about their beliefs, because their only basis for them is that it is the word of their religion. James offers a few examples of people who have the "theopathic condition". One example he offers is Mary Margaret Alacoque, who was a nun. One day Mary had a revelation and heard the voice of Christ. The results of this revelation were that Mary spent all her time praying and thinking about Christ, and become completely useless at the convent. James feels towards Mary, and all like her, simply pity (James, 344-345). For him, those with the "theopathic condition" offer no real benefit to society, as they are too wrapped up in their own worship. They are not agents of change in their religion, and look to help only themselves. James believes that religious people should be the creators of change in their religion and be promoting it, which cannot happen if they spend all their time worshiping by themselves. I would agree with James that there are some fanatics who are this closeminded. But does this make them detrimental to society? These are not the fighters James described before, so it cannot be concretely stated that these fanatics would do anyone else any harm. In reality, they would be simply annoying. Perhaps these are a type of

fanatics that society (and maybe Dennett) could live with and tolerate. But these fanatics can still offer a negative view of religion, because some may see that if these fanatics prove to be useless in society, perhaps all religious people of this faith are useless and that the religion itself is unbeneficial. This would certainly negatively affect the view of religion, and if religion is seen as unbeneficial, it will not be seen as something that could connect with science, which is beneficial to society.

Because aggressive fanatics being are dangerous, James does not think aggressive fanaticism is a good thing (James, 342). He would agree with Dennett that as it is the cause for many bad acts committed in the world, there might be some reason to fear it. But he himself does not seem too concerned with fanaticism in the world, despite recognizing that some of the more aggressive fanatics can be violent. James actually likes whom he might call active fanatics, who are not quite as violent as aggressive ones, because he sees them as agents of religious change and as leaders. Both Dennett's and James's views about fanaticism color how they view religion. As stated previously, Dennett has a real concern about fanatics, which he would say does and should affect how he sees other religious people. Unlike James, Dennett seems to view all fanatics as potentially dangerous. This view could in turn raise the concern for Dennett that all religiously devout people will become fanatics. In that sense, religious people would be relying heavily on the morals of their religion instead of the morals of society. This could make them act only for the benefit of their religion and not for the benefit of humanity. Dennett may see this as potential chaos if religious people were to no longer uphold the morals of their societies and instead consider only the morals of their religion. Almost everyone who is remotely religious would probably say that their morals draw upon their religion in one way or another, but that they also somewhat draw upon the morals of their society. But Dennett would worry that this is a slippery slope, and that religion may eventually take over their morals completely. This would result in everyone's actions being based on religion, which Dennett sees as irrational. Another result of this would be society being changed to encompass only religion, with all other aspects put on the outskirts. This would make it impossible for religion to converse and connect with science, because religion would be the center of morality and science would have no influence

It is doubtful that he is alone in this sentiment. Fanaticism scares people, and they may find themselves afraid of all of those who are religiously devout, not just those who act in a violent way towards others. This could be detrimental, as those who are devout may be persecuted, despite being innocent of any wrongdoing. But based on recent events, perhaps Dennett's concern about religious people is somewhat justified. There is a religious war currently going on between the Palestinians and Israelis that has resulted in many deaths on both sides. After the attack on the World Trade Center in New Your on September 11th, 2001, the fear of Muslims has increased. Almost every day, when you turn on the television, you hear stories on the news of a fanatical Muslim suicide bomber killing people, or a fanatical Christian bombing an abortion clinic. This makes people's fear of religious people heightened, but for good reason. So perhaps this fear is warranted. However, for every fanatic, there are many non-fanatics within a religion. These non-fanatics are not responsible for battling these fanatics directly, but should continue to offer a positive view of their religion to the world. A positive view may help create a separation between the religion itself and the fanatics who claim to represent it. This is not to say that non-fanatics do not already offer this positive view. Many Christians, Muslims and Jews speak out against the atrocities perpetrated in the name of their respective religions. As long as these non-fanatics continue to speak out, the view people have about that specific religion (and religion as a whole) will be altered for the better.

James's view of religion is different from Dennett, and this difference is related to his view of fanaticism. James finds himself less concerned than Dennett about the dangers fanaticism poses. He does not think that passive fanatics do any benefit to society, and while some aggressive fanatics in the past have been harmful, at his present time they are nothing to be concerned about because James only discusses fanatical events of the distant past. He sees that active fanatics, however, have a positive influence on religion because they are leaders in religious thought. But passive and aggressive fanatics are on the outskirts of religion, and religious people themselves should not be feared. Others may agree with James. While fanatics themselves can occasionally be a problem, the majority of the time they are just overbearing and not really doing anything. Those who agree with James understand that fanatics do not represent all religious

people, and that they are not accepted by others in their religion, so while they should be feared, religion and average religious people should not. This is another way to separate fanaticism from the religion it represents, which can change how people view religion in a positive way.

Whether people take Dennett's view or James's, there is a general agreement that fanatics can occasionally be dangerous. But the question is whether or not the view of religion is altered by the way fanaticism is understood. It cannot be stated decisively as to whether Dennett or James has a better view, that is, a view that best represents what fanaticism does in society. While initially James seems more understanding of fanatics because he sees them as simply overly religious, it is also possible that he gives them too much room to get out of control. James was also speaking from a different time period, and may have felt differently about fanatics today. At the same time, Dennett's view may be too disparaging of fanatics, but also somewhat justified considering recent world events. It is up to the individual to decide which view to take upon fanatics, or perhaps to take on a third view that is totally separate. With either view, however, fanaticism clearly affects not only the religion it represents, but also how religion in general relates to other aspects of society. Fanaticism representing religion makes religion itself appear on the outside of society because it does not follow the same morals and is viewed as irrational. This would make it difficult for an irrational aspect of society like religion and a rational aspect such as science to converse with another. It is important, then, for me to emphasize that fanaticism is not the same as the religion it claims to be a part of. Religion is actually separate from fanaticism and is not irrational the way fanaticism is, so it is included in society and has a connection with science.

In addition to influencing the view of religion, fanaticism can also have a dramatic effect on how morality is perceived. Often fanatics, in comparison with the rest of society, have different morals. If people take the view of Dennett, in which he may worry about some religious people becoming fanatics, the opinion may evolve that some religious people may have skewed morals, and that these morals are all based on religion. These religious morals may be in part different from the morals that are part of society. Having different morals from someone else makes interacting with them very difficult because you do not value the same things that they do. It also makes them hard to

understand. So if fanaticism alters a person's morals, it will be a problem for them to interact with the rest of society. This is why fanatics tend to be on the outside of society; their morals are different. Even those who adopt James's less concerned view would still have some concern about the morals of fanatics, and put them on the outskirts of society. For those who find a correlation between fanaticism and religion, they would also see religion as something to place on the outskirts of society. This would result in religion being disconnected from the other aspects of society, such as science, because of its incompatible morals.

This also brings in the question of how easily morals can be changed. In general, people are willing to discuss their morals and let them change over time. As society evolves, the morals it holds evolve with it. For many fanatics, there was a time when the morals they maintain were also maintained by society. For example, it used to be acceptable for Christians to persecute those who were non-Christians by killing them. But society has evolved away from allowing religions to act against those who disagree with them. However, there are still fanatical groups who perpetrate crimes against those who do not hold their fanatical beliefs. Like both Dennett and James described, these people will not question the morals of their religion, and thus, will not let them change with society. They become out of touch with society.

Different morals and being unwilling to change them creates a gap between fanatics and non-fanatics. This gap makes it difficult for the two groups to understand each other. The broader implication of this is that society ends up divided. As I have indicated, fanatics end up outside of traditional society. By being outside of society, fanaticism will appear in opposition with it, putting fanaticism in a negative light. This evolves into religion being viewed negatively because fanaticism is seen to represent it, and religion will seen as being disconnected with the rest of society because of the irrationality of fanaticism.

The perceptions of religion and morals are both affected by fanaticism. But fanaticism also affects the view of science. In Dennett's case, he does not like fanaticism, and wants to show fanatics that they are wrong in what they are doing because they are actually dishonoring their religion with their fanatical acts (Dennett, 256-257). He talks about breaking the evil spell that fanatical leader have over their followers by

implementing a good spell (Dennett, 13). Perhaps this good spell could be science. Dennett sees science as truth and as something that has greatly benefited mankind, as we saw in his identification of science. He also sees science as being rational and involving critical thinking. Describing science in this way puts it in opposition to fanaticism, which Dennett sees as destructive, unquestioning and irrational. Also, Dennett finds science to be constantly changing, which is in direct conflict to fanaticism, as fanaticism is based on ideas that cannot be questioned and thus will not change. Because Dennett dislikes fanaticism, it is possible that this is why he sees science as a positive aspect of culture, as it is the opposite of fanaticism in many ways. This greatly affects the view of the relationship between science and religion. If fanaticism is seen as representing religion as whole and science is seen as the general opposite of fanaticism, religion and science would then be put in opposition with each other, which creates a type of conflict, affecting their relationship.

James's consideration of fanaticism also may affect his identification of science. In his case, it would be his minimal concern about fanaticism that is apparent. James sees science as something that is unaffected by the wants and needs of human beings. This is where religion comes in. Because James is not concerned about fanaticism, this may indicate why he sees science as something that is incomplete; and that for a person to be whole, they need both religion and science. Fanatics, according to James, are generally not people who should be feared, and science can be an incomplete concept since it does not need to battle those who are overly religious. This allows for a more harmonious relationship between religion and science, in that one can make up for the deficits of the other.

It is clear that fanaticism can mean different things to different people. It also clear that fanaticism affects other aspects of peoples beliefs and views. The extent to which fanaticism affect people's beliefs, however, is harder to understand. While James and Dennett offer important insight into how fanaticism may affect religion, morality and science, it is important to note that these effects are not the only possible options. I do not mean to indicate that these are the definitive effects, but possibilities that have been seen in the ideas of important thinkers in religion. It is clear, however, that fanaticism is seen as somewhat detrimental to society, and thus remains outside of society. Before

concluding this discussion of fanaticism, I believe it is important to talk more about those who are not fanatics. By emphasizing the importance of these non-fanatics, maybe fanaticism itself can be viewed as separate from the religion it represents, and thus help people to perceive religious views more positively. Religion would be seen as a part of society, and thus would be able to connect and converse with science.

Fanatics represent only a small number of people in the world. Both Dennett and James recognize that not all or even most religious people are fanatics. Dennett calls the non-fanatics moderates. He suggests that most moderates revere their tradition because it is the tradition they were raised in. However, they do not take their tradition too seriously. These people are also willing to debate their morals. They do not take the morals of their religion without question. They willingly discuss and change their beliefs over time based on rational discussion. An example Dennett gives of this is the fourth annual World Parliament of Religions that was held in July 2004. Thousands of people of different religions came together to try to better understand each other and show respect for one another (Dennett, 297). Dennett sees these moderates as representing the majority of religious people. He does emphasize that the basis for being a moderate as not taking religion too seriously. This begs the question of where the line is between seriously and not seriously practicing your religion, which Dennett does not specify. I would suggest that there are those who do take their religion seriously but are still not fanatics. Dennett's perception of moderates also can create a separation between fanaticism and religion thus allowing religion to be viewed more positively.

Despite these efforts by moderates, fanatics still seem to have a lot of influence despite their minority in religion. Dennett maintains that it is the responsibility of moderates to get control over these fanatics. Whenever moderates try to do positive things in society, fanatics use the good public relations to defend what they are doing. Simultaneously, fanatics are silently condemning the moderates. So, as Dennett says, "moderates in all religions are being used by the fanatics (Dennett, 300)." This begs the question, what is it that prevents moderates from stopping fanatics? Dennett believes it is fear. Fanatics will threaten those who disagree with them, and combined with the fact that they do not listen to reason, moderates find themselves fighting an uphill, dangerous battle. But Dennett maintains that if moderates increase their voice, perhaps people will

be less afraid of religious people (Dennett, 299-301). I agree that it is dangerous for moderates to be fighting fanatics who perpetrate these crimes. But I also agree that fanatics will use the good name of moderates to defend their bad acts. In this case, moderates should voice their disagreements with these fanatics. This could not only decrease the power and influence of fanatics, but may also improve the worldview of the religion as a whole.

James does not discuss non-fanatical religious people as specifically as Dennett does, but his ideas about them are still clear. James identifies three groups of religious people besides fanatics: healthy-minded, sick-souled and sainted. Those who are healthyminded think only about the positive things in their lives, and ignore the concept of evil and sin. James sees these people as not being serious about religion, and are more religious followers than leaders (James, 78-127). Because of this, James does not think that healthy-minded people are the way religious people should be, because religious people should be leaders, not followers. James is more content with those who are sicksouled. These people have seen evil and sin and have come back from it (James, 127-166). This makes them better leaders in religion, and better religious people. Those who James calls sainted, (who I will explain more about in the following chapter), are the pinnacle of religious people to James, because they are completely devoted to religion, and are excellent examples of agents of change (James, 259-326). It is likely that Dennett would consider James's healthy-minded people as being equal to his moderates, but James does not like these healthy-minded people, and would instead suggest those who are sick-souled as being the best kind of religious people who are not sainted. Because James considers those who take religion seriously as the best kind of religious people, he would want religion to be separated from fanaticism so that these sick-souled and sainted people can be taken seriously within society.

I have described two possible ways, as explained by Dennett and James, to understand fanaticism. These are not the only two ways necessarily, but they are two distinct views that have different results. Dennett sees fanatics as generally dangerous people who need to be stopped because they are violent, while James sees them as unthreatening. I have shown that fanaticism affects how Dennett and James view religion, morality and science, and these affects may be applicable to others who share the same

beliefs. With a prominently negative view of fanaticism, similar to that of Dennett, religious devotion can be seen as a possible precursor to blind devotion, such as fanaticism. The morals of a fanatic are also brought into question when concerned about fanaticism. Science can be described as a complete answer to everything, as a way to eliminate the need for fanatical belief. Being less concerned about the dangers of fanaticism like James it can make it appear to be on the outskirts of religion, and not a threat to controlling religious belief. James is still concerned about the morals a fanatic may have, but he does not think this will necessarily lead to danger. This is because for him, violent fanatical acts seem to be in the past. His less concerned view also allows science to be more of an open-ended idea, in that it does not completely control everything. Also, both Dennett and James noted that fanatics make up only a small amount of religious people, and that Dennett believes that non-fanatical religious people bear some responsibility for changing the view of religion in world.

Dennett and James are only two thinkers, but their ideas are broad enough that they can possibly represent the ideas held by many. As to whether fanatics are people to be concerned about, that question cannot be answered. Modern times may call for more vigilance in monitoring the acts of fanatics, but this does not mean they are all dangerous. There is, however, a misconception about fanaticism that needs to be dispelled. As I have mentioned, people may believe that those who are fanatics are an accurate portrayal of all religious people. But this is simply untrue. In believing that fanaticism represents all religion, religion will be considered as irrational as it's fanatical sect. This will make it difficult, if not impossible, to see how religion could relate to other aspects of society, such as science, which are rational aspects. In an effort to understand the relationship between religion and science, it is important to understand that fanatics are not an accurate representation of all religious people. There are religious people, whether you call them moderates or healthy-minded, that do not follow their religion without question. They are rational people, and their religion is rational. By separating religion from fanaticism in this way, religion again becomes a rational concept in society and allows for it to have a relationship with science. In this way, fanaticism plays a part in how people view both religion and science. Therefore, one can look through the lens of fanaticism as a way to comprehend how religion and science can connect and converse.

Chapter 3: Religion and Morals

There are some religious people who have a concern about those who are nonreligious. This concern is that those who do not believe in God and an immortal soul do not have morals, or at least do not adhere to them. Daniel Dennett believes that this idea is a prevalent enough misconception in today's society that he needs to spend time defending non-religious people on the subject. William James neither agrees nor disagrees with this thought directly, but his discussion of saintliness speaks volumes about what he might think about morals and religion. Who is correct in their thinking? The possibility of both of them being correct completely is impossible. This is not to say that James or Dennett is completely correct at all, but one may make a better point over the other. The question of religion and morals is important to the discussion of religion and science. If you hold the view that religion is what makes a person moral, you elevate it above all else in society with regards to morality. This creates a schism between religion and everything else, as religion will trump all because it is the source of all morals. However, if you hold the belief that maybe some morals can be drawn from religion, but that they can be drawn from other parts of society as well, religion is put on an even playing field with the rest of society. Religion can relate with and be intertwined with other parts of society when it comes to the idea of morality, because there is no one central aspect of society from which morality originates.

Daniel Dennett's discussion of this misconception indicates that he is concerned about the view some may have about religion and morals. He believes that many think that in order to be good, you must not be materialistic. Dennett suggests that there are two ways to define materialism. One definition is being interested on only tangible things, such as money and possessions. Another definition, which is specifically scientific materialism, is the idea that everything can be explained without using any immaterial concept. That is, God, the Cartesian view of the soul, ectoplasm, and such concepts that do not have physical manifestations are not used to explain any phenomena. Dennett believes that these two meanings are often tied together – if someone does not believe in an immortal soul they are not concerned with the idea of heaven and thus will focus upon whatever they can get in this world (Dennett, 302). If someone does put these two

definitions together, it could make scientific materialists appear as if they do not have any morals, or that their morals are based only on what grants them material gain. As a result, a line can be drawn between scientific materialists and those who believe in an immaterial explanation for phenomena. Scientific materialists would be viewed as on the side of science, and those who believe in something immaterial would be on the side of religion. This separation would then pit science and religion against each other in society. If science and religion are put in opposition to each other because of how they explain phenomena, it will make it difficult to see the relationship between the two. This difficulty arises in that when religion and science are seen to be in opposition in some way, my suggestion on how to find how they connect is to see how one could potentially support the other. But in this case, it would not be possible for religion to support science, thus there would not be a connection between the two on the idea of morals.

Returning to Dennett's point, he believes that materialism has become somewhat vilified. He mentions a famous Benjamin Disraeli quote from 1864 to explain where the saying "on the side of the angels" comes from. But I find this quote to also offer an insight into the minds of those who are against scientific materialism. Disraeli says, "What is the question now placed before with a glib assurance the most astounding? The question is this – Is man an ape or an angel? My lord, I am on the side of the angels (Dennett, 305)." The statement suggests Disraeli's pride in the fact that he would rather believe in creationism then evolution, despite the scientific evidence that suggests otherwise, because it puts him on the side of God. Dennett says this idea, that being against evolution puts you on the side of God, has been this way for a long time, so it would be a difficult battle to try and change that view. But he maintains that it is incorrect to have this belief. Dennett suggests that there is no reason why someone who doesn't believe in religion or God or the soul means that the person is immoral. He thinks that this misconception generally stems from the belief that those who are scientific materialists are materialistic in the colloquial sense – that is, they only care about material things, like money, their car, their house, etc. But Dennett wants people to understand that scientific materialism goes beyond this. It is not that they don't care about things that are not material. They simply believe that everything is material. For example, mental health (or spiritual health, as Dennett suggests it could be called,) is

something that scientific materialists are concerned about (Dennett, 305). Dennett implicates a lot here without saying much. It would seem that he is open to understanding that religion could offer some moral views, but he is skeptical about religion. It would be incorrect to assume that scientific materialists throw out any phenomena that cannot immediately be explained by the physical. Instead, they want to try to eventually explain everything that way. By changing this perception about scientific materialists, it could be seen that scientific materialists have morals, and if people link scientific materialists with scientists in general, scientists will appear to have morals. This view will affect the relationship between religion and science, because if both religious people and scientists have morals, then how their morals compare to each other will have an effect on how religion and science can converge on the topic of morals. Additionally, understanding that scientists have morals and that not all scientists are religious, morals will no longer be equated solely with religion.

Continuing on this line of thinking, Dennett argues that a good scientific materialist is concerned with "justice, love, joy, beauty, political freedom and, yes, even religious freedom (Dennett, 305)" as much as they care about their house and car, as these all have their material benefits. He still maintains that he would want certain material comforts for all, such as food and clothing. He believes that without these material comforts, which are necessary for a person to live in even minimal contentment, the other concepts such as freedom and music are a charade (Dennett, 305). It is an important point that Dennett makes here about scientific materialist being concerned with justice, freedom, and other intangible concepts. For many, what you feel about these concepts constitutes your morals. Following this, scientific materialists have morals because as Dennett suggested they are concerned about these concepts. The morals of scientific materialists can then be compared to the morals of religious people. As the representatives of both religion and science have morals and thus have an overlap (not necessarily in the morals themselves, but simply in the fact that they have morals) a conversation between religion and science would then be evident.

Beyond this incorrect belief that those who call themselves materialists are bad, there is a misalignment in the belief that spiritual people are good. Dennett says that not all spiritual people would be considered to be moral people. He suggests that there are

deeply spiritual people who are cruel and uncaring. There are also spiritual people who are selfish and arrogant. It is upon these spiritual people that Dennett focuses. He suggests that this kind of selfishness within spirituality is why many "spiritual" people think that by simply being spiritual, they do not have to do the good works and sacrifice that their religion often calls for. They think that being morally above others is enough (Dennett, 305-306). It is important to note (and I believe Dennett would agree) that not all religious people are this way. However, like fanatics, these selfish people could seem to some to represent the religion of which they are a part. This representation could make the specific religion, and religion in general, seem to be focused only of the needs of the individual and not focusing on the needs of society. Religion would then be seen as not to have a benefit for society and would make it difficult, if not impossible, for religion to converse with other aspects of society, including science.

Of those religious people who behave selfishly and arrogantly because of their morals, Dennett believes there are two kinds of people who do this: those who do it knowingly and those who do it unknowingly. Those who do it purposefully slack off in their good works and sacrifice because they think they can get away with it (and do). These people are hypocrites in Dennett's opinion (Dennett, 306). He is correct in this estimation, because it is very hypocritical to put yourself above others because of your religion, but then not do the things your religion calls for. Dennett seems to be more concerned, though, with the people who do not do the good works and sacrifice because they do not realize that they need to. That is, these people believe that by "attending to their own personal "spiritual" needs this amounts to living a moral good life (Dennett, 306)." For Dennett, (and others, he suggests) these people who only pay attention their own needs are "deluding themselves" if they believe they are being morally good. He suggests that taking care of your own soul all the time instead of doing good works is just as selfish as practicing your golf swing constantly (Dennett, 306). I would be somewhat inclined to agree with Dennett on this. A major part of most, if not all religions is acts of charity. You are supposed to help others, not just yourself to be morally good. If religion was truly this selfish, it would have a very different relationship with science. It could create a dichotomy, where religion would be how you help yourself, while the advancements made in science could potentially help others. But it is doubtful that a

religious person, especially one who is not involved in scientific research, would look at the relationship this way because it would appear that they care for no one but themselves. They would therefore want to promote the idea that religion promotes helping others, so as to allow religion and science to have a convergence where they both seem to work for the good of all.

When it comes to changing this perception of goodness and spirit being merged, Dennett recognizes that the unmerging of the two will be very difficult. To average people, he suggests, those who believe in the immaterial soul still have the "moral high ground", because they still allow an immaterial concept to explain certain phenomena. "It is an uphill battle," he says, "But perhaps it will go better for us when it is fought in broad daylight (Dennett, 306)." What Dennett means by this is that it will be an easier issue to discuss if it is brought out into the open. This indicates that Dennett does not believe that currently morals and religion can be discussed openly, which is interesting because he gives no example of how this is so. For now, I will take him at his word that at least he personally feels that he cannot discuss morals and religion without being judged. This difficulty with the unmerging of goodness and spirit is important to mention because if Dennett is correct in his estimation, until these two are unmerged, it may be thought by some that religion is where morals come from. In comparison with science, religion would be where you draw your morals from and science would not. This would create a separation between the two, and would imply that those who do not believe in religion do not have morals. I would disagree with the notion that you must have religion to have morals. I would suggest that you can draw your morals from other aspects of society as well, such as from your parents and your community, which could be outside of your religious community. Also, I believe that there aspects of society, such as science, that may influence your morals even if they are not direct sources of them. Because of these beliefs I agree that goodness and spirit should be separated, because there is more to what constitutes morals than spirituality. By understanding that one's morals can be derived and shaped by aspects in society other than religion, religion would then be able to connect to these other aspects, including science, over the common ground of morality.

Dennett's final point gives back some ground to some religious people. He suggests that though he believes that there are many religious people who use the

morality they have gained from their religious beliefs to behave selfishly, there are some who do not. These people do good works and sacrifice themselves for their religion. They want to spread the joy of spirituality to others. He also points out that there are many non-believers who deplore the colloquial view of materialism, thus it is not limited to those who are religious (Dennett, 306-307). This suggests that not all religious people are to be perceived as selfish. It also indicates that there is a negative view of colloquial materialism held by religious and non-religious people alike. Because not all religious people are selfish, this allows for religion to be seen as something that benefits society as well as the individual. Religion will then have a commonality with other aspects of society that benefit everyone, such as science. Science and religion would then have an overlap because of this commonality, which would indicate a connection and conversation between the two.

James's view about whether religious people have more morals than non-religious people is unclear. However, from his discussion on saintliness, I would suggest that he believe that some religious people, specifically those who are sainted, have the possibility to have more morals than non-religious people. First, he states that, "the highest flights of charity, devotion, trust, patience, bravery to which the wings of human nature have spread themselves have been flown for religious ideals (James, 260-261)." This indicates that James sees all the greatest acts in the world as being driven by some religious belief. These great acts would also be based upon one's moral beliefs. In that case, morality and religious belief would be connected. James also exalts those who he considers "sainted" to a level above everyone else, and says that it is necessary to have saints for the world's benefit, though he admits that sainthood is not always going to work in certain circumstances (James, 375-377). These sainted people are devoutly religious, so their acts would be based upon their religious beliefs. If there were some connection between religious belief and moral belief, these saints would seem to have strong moral beliefs as well. This is not to say that James thinks that non-religious people have no morals. Rather, I am suggesting that because these sainted people have a devotion to religion, which as the basis for many good moral acts, James may see them as possibly having more morals then others.

Saintliness, as defined by James, is where one derives one's "personal energy" solely from "spiritual emotions", that is, one's focus is based only on religious beliefs and feelings. The needs of the individual are minimized by the belief in an "Ideal Power." He clarifies by giving the example that in Christian saintliness, this power is often personified as God, but that the abstract ideals of morals may also be a part of this power. It is from James's suggestion of morals being a part of Ideal Power that I bring in my own suggestion that James would find saints to be more moral, or at least have to the possibility of being more moral. Saintliness itself has four "consequences", as James calls them. The first consequence is asceticism. James suggests that the "self-surrender" may become so intense that it turns into causing physical harm to yourself. This happens because a saint may find that their desire to please the deity takes precedence over their dislike of pain. They may find pleasure in sacrificing and denying themselves, as they see it as a way to measure their devotion to their deity (James, 271-273). Asceticism can affect the perception a person has of the relationship between religion and science, because an ascetic may see non-religious aspects of society as not being as important as their religion, so the relationship between religion and these other aspects may seem minimal. Additionally, people who are not religious may see ascetics as representing all religious people. This could lead to non-religious people to seeing religion in a more negative light, as self-mutilation is considered inappropriate in society. Religion could then be put on the outskirts of society because of the negative view of asceticism. It is then hard to connect religion with other aspects of society because it will be seen negatively.

The second consequence of saintliness is strength of soul. Strength of soul makes the personal motives and inhibitions of a person become unimportant. As a result, these people may become more tolerant (James, 273). This tolerance will allow the saints to put up with any agitation that may be caused by those who would argue against their religion. Beyond this tolerance, James suggests that this strength of soul will fortify people, making their "fears and anxieties go (James 273)." In their place, a sense of calmness appears. The saint believes that no matter what happens, nothing is to be feared (James, 273). This strength of soul could be beneficial for the relationship between religion and science. As it makes religious people more tolerant, they would be more willing to accept

those who do not agree with them, which would be those who solely believe in science. Additionally, non-religious people may see how calm these religious people are, and will be willing to accept their beliefs, even if they don't agree with them. This would allow science and religion to exist together, because there would be acceptance between both groups that champion each aspect.

The third consequence of being a sainted person is the idea of purity. Purity is when someone becomes so sensitive to the spiritual that any other elements must be cleansed from the existence of the person. The other elements include anything "brutal and sensual", i.e. any physical sensations, such as lust and anger. This not only means that the person who is pure cannot have these feelings, but they must also not be exposed to others who are angry or lustful, etc. James suggests that for some purity becomes so important that giving into any of these other elements results in the saint punishing themselves (James, 274). When Dennett talked about religious people hiding behind their religiousness to avoid doing good works, I thought James's discussion of purity may offer a possible explanation as to why some are selfish. James's discussion about purity could show that those who have achieved purity will use this as a reason not to do good works, because they do not want to come into contact with others who are not pure. Instead of spending time sharing their religion with others, they will continue to work on their own souls and be selfish, as Dennett would see it. Therefore, purity issues could affect the way religious people are viewed, in that it makes them appear selfish and arrogant to non-religious people. This in turn could make religion appear to have a selfish and arrogant aspect to it, which would put it in opposition with science if science was seen as benefiting society. This opposition would make it difficult to connect the two, but there would still be other commonalities between religion and science that would suggest a way for them to converse.

The fourth and final consequence of saintliness according to James is charity. Charity is an increase in tenderness toward and good works for other creatures, including the person's enemies. This increase of tenderness happens because the feeling of hostility that naturally creates a divide between humans is subdued by saintliness (James, 274). This means that although often people find tenderness towards others to be a weakness, this feeling is muted in a saint. They find that helping other people is more important than

how that help makes you look. As a result, charity can make saints, who some (though not James) may see as representing all religious people appear to be caring. This would make religion look more charitable to those who are non-religious. This could strengthen the way religion and science can connect, as charity adds to the perception that religion is beneficial to society and it can be argued that science is beneficial as well, which creates a comparison and overlap between the two.

In James's portrayal of saintliness, it seems that it is no one higher in his esteem than a saint. James suggests that saintliness cannot be achieved without being religious. Therefore, everyone should be trying to achieve this saintly status via religion. This fact is shown through his statement that "the collective name for the ripe fruits of religion in a character is Saintliness (James, 271)", which indicates that saintliness is the epitome of being a religious person. He uses examples of people's experiences with saintliness to show how wonderful and meaningful it is for them. One such example is of Mrs. Jonathan Edwards. She writes about a time when she was lying in bed, and was filled with Christ's love. She speaks of losing all of her personal desires, and being willing to suffer in any way God sees fit. James argues that there are many examples of this kind of feeling and belief throughout religious literature (James, 276-277). Beyond these examples, even James's use of the word saint implies this feeling of higher level. In religion, especially in the Christian tradition, those who are called "saints" are viewed as holy people. James's view of saintliness could be common among others. Those who have this view may see saints, and possibly religion, as being above all other aspects of society, including science. This would make the conversation between religion and science different, because while there would still be comparisons to be made between the two, it would be harder to see these comparisons if religion was considered to be superior.

But there is still the question of how all of this fits in with the idea of morals. James does not say anything definitive on the subject of morals and saintliness, nor does he say much about morals at all throughout his book. But he does indicate that moral superiority is a possibility with regards to saintliness, and does not indicate that this increase in morals is possible in any other part of society. He says we should "be saints, then, if we can (James, 377)." While this by no means indicates that James definitively

equates saintliness with morals, it does put him in some opposition with Dennett, who wants to squash the view that there is any possibility of better/more morals being correlated with religion.

Looking at both Dennett's and James's ideas about morals deriving from religion, it is clear that they are not in total agreement. But what does this mean for how I understand morals and religion, and how does it relate to my view of religion and science? I find that I agree with Dennett and James about different aspects of their ideas. Neither of them is completely right or completely wrong, in my opinion. Thus, how I relate religion and science around the idea of morals will be different, but will have similarities with the possible ways science and religion could be related based on the ideas of Dennett and James.

When it comes to Dennett's belief that there is a misconception about morals, I am inclined to agree that this misconception exists. He suggests that religious people believe that those who scientific materialists do not have any morals because they are only concerned with material things. I have seen many documentaries on religious groups in which a religious person makes the claim that those who do not believe in God do not have morals. One example of these documentaries is called *Jesus Camp*. The premise of the film is to document the events at a children's summer camp called Kids on Fire. The camp is a Christian camp, where children are taught to deepen their spirituality and to fight to bring Christianity back into American culture. Throughout the whole film these Christians running the camp suggest that those who do not hold their beliefs are immoral, bad people. While this example is specific to the beliefs of the Christian community, it is not unique to Christian belief. What these people are forgetting in this instance is that there are morals that are derived from aspects of one's life and society other than religion. This is important, because it brings morality outside of religion. As a result, the perception of religion will be changed, because it no longer it the sole source of morals. This in turn will make religion have a convergence with science because science can also impact ones morals.

Because James does not have as clear a view about religion and morals as Dennett has, it is hard to say if I agree with him or not. James is not as concerned with what constitutes one's morals it seems, but rather is more concerned with how people are being

moral. He sees those that are healthy-minded as not ever being able to experience having true morals, because they do not consider evil. Beyond this, I would disagree with his suggestion that saintliness could make you more moral. I would say instead that no amount of religious belief is going to make give you higher morals than someone who is non-religious. This is because religion is not required, in my opinion, for you to be a moral person. As I have said, moral values can be gained from several aspects of life. In addition, there are aspects, such as science, that will influence your moral beliefs. One example of this in Catholic doctrine is cremation. In 1886, cremation was banned among Catholics, because it was believe that if your body was cremated your soul could not be resurrected into its immortal form (Davies & Mates, 108). Not allowing your soul to be resurrected would be immoral. However, it had been scientifically shown that the bodies of those who had died of the plague other serious illnesses could spread their disease. In 1917, a Canon Law was passed that stated it was acceptable to cremate bodies in an instance where there is an epidemic of disease and the bodies need to be disposed of quickly (Davies & Mates, 108). This is an example of science influencing a Catholic based moral belief. Because it was understood that decaying bodies spread disease, a moral view, albeit influenced by religion, was altered based upon science. Because science can influence your morals, and one can draw morals from religion, there can then be a comparison between the two. This comparison then strengthens the connection between religion and science on the idea of morals.

In chapters 2 and 3 we are left with agreements, differences and questions between Dennett and James, as well as how I interpret these two authors. One of the things these two agree upon is that violent fanaticism is not a good thing. Their difference is their belief on how not of a good thing they believe it is, but that could be related to the respective time periods they live in. Based on their agreement about the detrimental effect fanaticism, it is possible they both hope that others do not see fanaticism as representing all religion, as that could make religion appear in a negative light, which would alter how it relates to other parts of society, including science. It would seem that Dennett uses the idea of fanaticism to show religion as something more unstable then science, perhaps as a way to convince his readers that one should put more stock in science than in religion. In James's case, his point seems more to mention fanaticism, but then to quickly dispel any

concerns about it by suggesting that fanatics generally do not pose any danger. This is all speculation on my part, but I am inferring these speculations from the tones of both books. If I am correct in my estimations, fanaticism colors both Dennett's and James's views of religion, morality and science. Fanaticism's affect on the relationship between religion and science will then be dependent upon these colorations. But it is likely that any affect fanaticism has on the relationship will be a negative one, as it makes religious people act violently or become useless members of society. This will make religion itself appear to have these characteristics, which would put it on the outskirts of a non-violent society. It would then be difficult to relate religion to science, (or any other aspect of society,) within society because religion is not completely within society itself.

A smaller agreement James and Dennett may have is on how feeling pure, or "spiritual", may give people the idea that they have the license to not do the work of their religion by helping others. Both would say that this is not a good thing. However, James might be inclined to argue with this, since purity is an aspect of saintliness, and he clearly wants saintliness to be epitomized. But there is no doubting that James and Dennett agree on the fact that religious people who are selfish, no matter where this selfishness comes from, would be detrimental to religion. Dennett finds this type of persons prevalent enough to discuss them outright. They most likely have colored how he views religion in general, which will affect how he sees science and religion relating to each other. James would most likely say that selfish religious people are not that widespread in religion, so he would still see religion as whole as a good thing. However, those who are considered selfish religious people will make religion appear selfish. This would contrast it to the view that science is not a selfish practice. The relationship between religion and science would still exist in this sense, because science could be seen as how one benefits the community, whereas religion would be used to benefit oneself. However, some would not like this view because if religion is completely self-serving, what role would it really have in society? For religion and science to have a strong connection and discussion within society, both must be seen as contributing to it.

The biggest disagreement between Dennett and James is in how morality is increased by religion. Dennett is so concerned about this misalignment that he spends quite some time defending those who are not religious. He understands that uncoupling

morality and spirituality will take more than him railing against it, but he believes the end result will be worth the struggle if people to not immediately assume that because you do not belong to a religion you have no morals. Though he doesn't come out and say it, James's opinion on the subject can be inferred from his discussion. Based on the way he describes what he calls saintliness, those who achieve sainthood have the highest morals of anyone. For those who agree with Dennett's view, they may feel that religious people have an attitude that is unwarranted. This may translate into people seeing religion as having a holier-than-thou complex, which could give it a negative connotation in society, altering its relationship therein. Subscribing to James's opinion will cause you to see religion as morally above all other parts of society. This may cause you to value other aspects of society less, changing the way religion can converse with these other aspects. This change would include how religion converses to science, because if religion is seen as more valuable, the relationship between the two would be diminished.

Both Dennett and James leave us with several questions: How do views on fanaticism concretely affect religion, morality and science? Does religion give you morals, or reinforce the ones you already have? What does it mean to have faith in religion and faith in science? Does the soul exist, and if so what constitutes a soul? All of these questions are important to the discussion of religion and science. Both questions about fanaticism and morals may color a person's view of religion in various ways, which will alter how religion is viewed in relation to science. I have attempted to the first three questions with what Daniel Dennett and William James have to say about them as well as with my own opinion. This has been seen throughout chapters 1, 2 and 3. I will engage the last two questions in the following chapter. When it comes to answering these questions and allowing for expansion, between James and Dennett it seems harder for Dennett then for James. I would suggest that this is because Dennett has very concrete views about religion, whereas James seems to be more malleable.

Dennett views religion as being very set, he does not see it as something that can easily change. This way of looking at religion makes it more difficult to understand it. While each religion has its set of beliefs, often how to act based upon these beliefs is up to interpretation, either on a congregational or personal level. Perhaps then it would benefit Dennett to look upon religion as something that is malleable and shifting. If he

continues to view religion as a static aspect of society, it will create difficulties for the relationship between religion and science to change or move at all, because religion does not change or move. Since Dennett is most likely not alone in his view, this issue of religion seeming to be a static idea, those who share Dennett's opinion will face the same obstacles he does when looking at the connections between religion and science. In order to get past these obstacles, one must accept that religion is not necessarily completely static, and that the changes and movement allowed in religion will permit for changes and movement in the way religion and science connect and converse.

James does not religion as an unchanging aspect of society. He takes people's experiences and offers his interpretation of them, but he still understands that other people may have different interpretations, and that is fine. This makes it easier for him to understand religion, because his ideas and opinions are flexible. This not to say that he has no concrete opinions on religious behavior; he clearly sees some religious behavior as good and others as bad. But it would be preferable to think like James, because he still allows religion to be more up to interpretation than Dennett. This is not the same as accepting all of the beliefs James holds about fanaticism and morals. Rather, it is about accepting the attitude James brings to the table – an attitude of acceptance and understanding, allowing each individual to interpret their religious beliefs and understand that others may disagree with them. This will allow for a more flexible view of religion, which will allow for the relationship between religion and science to be also flexible.

Discussing the concerns science and religion have about each other is one way to look at how they connect and converse. It allows you to see how ideas such as fanaticism and morals can color religion and science in both positive and negative ways. However, this cannot show the whole picture of the relationship, it merely shows how it could potentially be altered. I will now offer a different way to look at science and religion: trying to understand the connection between these two concepts via a look into some of the similarities between the two. By looking at religion and science in this way, it allows us to see the overlap between them, and how this overlap necessitates coexistence between the two. This is an important way to view religion and science, because my ultimate goal is to show how religion and science not only can coexist together, but also must coexist together because they are intertwined in a way that they cannot be separated.

The two topics I will be discussing are the idea of faith in religion and confidence in science and the concept of the soul, continuing to draw from Dennett and James as well as other sources. Both of these topics will offer routes into the religion and science conversation and relationship.

Chapter 4: Commonalities Between Science and Religion

There are some who would suggest that religion and science are separate, as Latour argues, because they serve different purposes. There are others, such as Gould, who suggests that despite having interaction, religion and science are completely different. But I have suggested that religion and science have interaction because they are not completely different and are actually intertwined. Furthermore, I argue that there is a relationship between the two that is altered by how one may look at religion or science. In chapter 2, I looked at how the concerns one may have about fanaticism can make religion appear in a negative light. Fanatics are on the fringe of society and are considered irrational, but are often seen as representing the mainstream of their religion. Religion is then also placed on the edge of society and its rationality is questioned, which minimizes how it relates to other rational aspects of society, such as science. It is important to create a separation between fanaticism and religion, so that religion is placed within society and can be seen to have a relationship with other aspects. In chapter 3, I explained how the concern religious people might have about the lack of morals of those who are non-religious could affect the way religion relates to science. If religion is seen as the sole source of morals, all other aspects of society, including science, will be seen as of less importance. However, I have suggested that science does in fact influence your morals. Science is as important as religion when it comes to one's morals, and there can be a relationship between the two because morality is common ground for religion and science. These concerns are necessary to understand because the relationship between religion and science can be strengthened when these concerns are addressed. However, in only looking at the separations caused by these concerns you miss the overlap that brings science and religion together and show the connections between the two. The way to see this overlap is by looking at and understanding the areas of common interest for religion and science. One common area of interest for religion and science is both being seen as sources of truth. Another common area of interest is in how religion and science both attempt to explain the soul, which is a traditionally religious object that is being studied scientifically. The overlap that comes from these commonalities establishes that science and religion cannot be separated, and thus must be considered in some relation with one

another. This is not to say that religion and science can only converse via this overlap, or that this overlap does not breed some conflict. However, this overlap adds another dimension to the discussion about religion and science, so that when these commonalities and concerns are viewed together, it gives a more complete view of the relationship between religion and science.

Part I: Faith in Religion, Confidence in Science, and How to Have Both

When considering the idea of faith, the first thought that comes to most minds is religion. But if faith is defined as "confidence or trust in a person or thing (Random House, 1987)," it would be possible to compare and perhaps even equate faith in religion with confidence in science. However, though it may be seen as the source of truth, having faith or confidence in something does not make it the truth. In the cases of religion and science, both have been known to be incorrect. I suggest that is possible to have faith/confidence in, or at least a solid understanding of the possible validity of, both religion and science. Those that believe in the validity of both might suggest that this is a region where religion and science may overlap. Considering both religion and science as trusted sources of knowledge would allow them to be compared. To understand this overlap, the manifestation of faith in religion and confidence in science within an individual must be explained.

William James appears to have a clear idea of what faith in religion means. He suggests that this faith will show itself when your morals do not seem to hold meaning anymore. An instant like this may manifest itself when you are feeling like a failure. At these moments, it will seem impossible to use your own will and judgment, because the world will seem hopeless. This is where religion comes in. Faith in God makes people feel as if they have been imbued with the spirit of God. They give up their own morals and beliefs for the morals and beliefs of God: "...the will to assert ourselves and hold our own has been displaced by a willingness to close our mouths and be as nothing in the floods and waterspouts of God (James, 47)." In this state, James is suggesting, people regain confidence. Their fear leaves them. James believes that this complete faith in religion and God will make you life easier, because you will no longer have to make difficult moral choices. Furthermore, faith will give you a feeling of "enchantment", as

James puts it. This enchantment will make you a much happier person and is not available to everyone: you either feel the enchantment or you do not. James suggests that based upon this those who do have this enchantment have a power in them that others do not (James, 46-48). This suggests that James is arguing that religious faith will make you a stronger person. This is very important when discussing the relationship between religion and science because of this power religious people may feel they have. If faith in religion is considered to give you power, those who are religious may consider themselves more powerful and thus above non-religious people. Additionally, non-religious people may see that religious people are putting themselves above them. Both of these things may create a divide between religious people and non-religious people. Often, non-religious people have their confidence in science. This placing of religious people above non-religious people could be interpreted as placing religion above science. This would put a division between religion and science, and would make it conversation between the two difficult.

Daniel Dennett would find this kind of faith in religion to be disconcerting. He says that the word faith is often synonymous for people with the word religion, but that religious faith is only one type of faith. He equates religious faith with needing to be proven for one "extravagant act or another". Some of these acts he refers to are the Islamic act of having to pray five times a day no matter what, and the Jewish tradition of keeping kosher. Dennett further suggests that those with religious faith have a blind faith, that is, they are unwilling to question their beliefs (Dennett, 230-231). It is understandable that Dennett would want to separate out religious faith from others, because he sees religious faith as something that is negative. By suggesting that all those with religious faith will not question their ideas, it would follow that Dennett sees religious faith as what leads to fanaticism, since he later states that this unwillingness to question beliefs is a hallmark of fanatics. His view of religious faith would then affect how religion and science relate. If religious faith is considered negatively, then religion may be seen as a negative aspect of society. Further, if one were to agree with Dennett that religious faith leads to fanaticism, religion itself would be seen as fanatical. Dennett considers fanaticism irrational and if religion is tied to it, it will be impossible to relate religion to the more rational aspects of society, such as science. In this case, I disagree

with Dennett's implication that all people with religious faith have unquestionable beliefs. Those that will not question their beliefs do not represent all of religion. If religion itself is not necessarily prone to fanaticism and is a rational aspect of society, it can be compared with science.

When it comes to the idea of confidence in science, though, Dennett is more comfortable with that concept. He says himself that he has faith in science. This is because he believes that there is a difference between religious faith and scientific faith. Dennett believes that science is what people turn to for the truth, and has proven to be a consistent resource for unbiased information, no matter what its critics say (Dennett, 231-233 & 370-372). It is the changeability of science that is its biggest separation from religion for Dennett. He has faith in science because it is up for discussion, that is the laws of physics can be questioned, and unlike in religion, those who question science are not blasphemers (Dennett, 231). In this light, Dennett sees science as something to have confidence in, because it offers a reliable truth. Dennett is most likely not alone is this perception about faith in science. Many people who have confidence in science would suggest that their confidence comes from science being based upon facts. This affects how science and religion relate to each other is society. For those that have faith in science but not in religion, they would see religion and those who are religious as basing their ideas on something that is not based on fact. This would create a separation between religion and science where science is seen as fact and religion is not. In turn, science would be seen as a source of truth, while religion would be seen as fictitious.

This is not to say that science is infallible, Dennett concedes that there is fallibility in the truth of science (Dennett, 371). There are certainly some once considered "scientific facts" that have since been disproved. But I would suggest that in spite of this, many people still have confidence that science is correct, even if it turns out to be wrong. One idea that used to be accepted as a scientific fact was Dalton's idea of the model of the atom. Dalton came up with a theory in the early 1800s that said that the atom was the smallest particle. He believed it was indivisible and indestructible (Francis). Many people agreed with him. But in the early 1900s, J.J. Thompson discovered electrons, and from there the research continued and showed that the atom is in fact made of smaller parts (Davies). Since then, the concept of what the atom is and how all its part move has

changed several times. During this period, people would often accept the newest theory of the atom as fact, until it was proven wrong, and a new theory was postulated. This example of science being incorrect can have an effect on how it relates to religion. Those who have a faith in science see religion as imperfect. But the possibility of science being disproved makes it imperfect as well. The fallibility of religion and science is a similarity between the two, and this similarity allows for a connection between religion and science.

Science being incorrect does not limit itself to last century; there have been changes made in the 21st century as well. In 2005, the 26th General Assembly of the International Astronomical Union officially decided that Pluto was not in fact a planet. This was difficult for many people to understand, because since its discovery in 1930, Pluto had always been considered a planet. The change in Pluto's status from planet to "dwarf planet" was the result of further scientific research into its size. It turned out that not only was Pluto smaller than anticipated, there were objects in its orbit that were actually relatively the same size as Pluto. This violated a rule of what constitutes a planet, where it must be the dominant gravitational force within its orbit. As a result, Pluto was demoted. The outcry against this demotion was amazing; people are still upset about it (Cain). This is another example of science turning out to be incorrect, based upon further research. This example is important because it shows that even now science is changing. This allows science to be more flexible in how it connects with other aspects of society, because it is not completely rigid so it can be affected by ideas from other concepts, such as religion. Additionally, this flexibility can allow science to push and pull upon other facets of society, effecting how these other facets are understood.

My examples of science being deemed incorrect also show one key point about science that differentiates it greatly from religion, and may be why people feel more comfortable having confidence in it. This point is that science is constantly being questioned. What I mean by this is that the scientific method provides for constant reassessment of theories that allow for change and alteration. In this way, science can constantly be checking its ideas to see if they really are fact. As I mentioned, scientists recognize the fallibility of their study, so they make every effort to check their results multiple times. Religion does not have this same luxury. Most religious ideas are not based on concrete evidence or experiments that can be repeated. Also, it may be

considered wrong to question the ideas and beliefs of a religion. This is not to say that religions have never evolved, but there is not the same self-correcting element within religion. As a result, those who have faith in religion may suggest that this fallibility of science is exactly why one should not draw their morals from it, because it is always changing. Those with confidence in science may believe that because religion is inalterable, its morals become outdated compared with the rest of society. In either case, it may be difficult to find a connection in understanding between religion and science. This difficulty would arise from science being fallible and alterable and religion being static.

For some however, there is no issue of having to choose between faith in religion and confidence in science. They do not have to choose because they understand that it is possible for both religion and science to be sources of truth. By this I mean that if they do not have faith/confidence in both religion and science, they at least understand the aspects of both that contribute to understanding the world. One thinker who understood this is Clifford Geertz. Geertz saw religion and science as both being cultural systems. As he defines it, a cultural system is "...a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitudes toward life (Geertz, 89)." It is likely that two systems would have interaction with one another, via their perspectives. One result of this interaction is that these cultural systems overlap. Geertz might see this overlap between religion and science in their questioning of the "realities of everyday life", because he suggests that both those with the religious perspective and the scientific perspective do this, albeit for different reasons (Geertz, 112). With an overlap in questioning the world and the way it works, science and religion may seem to have the same goal. Because they have the same goal, they may be seen as two ways to answer the same question. This is not to say that they necessarily disagree with each other. Science and religion could have similar and different components in how they are used to address questions about the world. This could allow for the science and religion to coexist, through an overlap in what they are trying to accomplish. However, beyond this overlap between religion and science, these two cultural systems also veer off from each other.

The religious cultural system and the scientific cultural system may veer of from one another in how they question existence. The way they question existence can be seen in Geertz's comparison of the scientific perspective and the religious perspective. According to Geertz, the scientific perspective questions existence because in science nothing is a given. That is, nothing is taken for granted as fact; it must be proven. People deliberately doubt what they see before them when they have a scientific perspective. They will use systematic inquiry to understand what is going on. Geertz discussion of the scientific perspective makes those with it seem cold and detached, because he suggests that while those with the perspective offer concrete proof, they do not take into account any feelings or emotions people may be having (Geertz, 111, 230-231). They want to "...analyze the world in formal concepts (Geertz, 111)," without trying to understand what goes on outside the concepts themselves. This outlook on science and the scientific perspective could alter how science is viewed with respect to religion. If science is seen as detached from the world, it has the potential to alienate some who would want knowledge to have some insight into possible emotions caused by these scientific concepts. However, it is this exact detachment that draws others to science, because it is seen as more objective in the way it is not governed by emotion. In either case, for good or for bad science is seen as detached from emotion, where if religion is seen as offering an understanding into why there are certain emotions, the overlap between the two will shift. This shift will happen because there will be an opposition between religion and science based upon how they understand emotions.

Geertz suggests that those with a religious perspective question existence for a different reason. They do not automatically question everything simply because nothing is to be taken for granted in the world. They question as a way to better understand larger, more concrete truths. This means everything these people attempt to question is in an effort to gain a greater understanding of the world. Geertz sees the religious perspective as not being as detached as those with the scientific perspective, but rather committed to the understanding it seeks. Instead of relying on analysis, people with the religious perspective rely on experience (Geertz, 112). This commitment to understanding might suggest emotion being involved in the religious perspective, as Geertz chooses to directly contrast it against the detachment found in the scientific perspective. Understanding

Geertz's position on the religious perspective is important. He suggests that religion can give an emotional perspective to understanding the world that science cannot. Furthermore, religion seeks wider truths while science questions simply for the sake of questioning. Initially, this may appear as if Geertz is putting more stock in the religious perspective then the scientific one. But in actuality, it seems that Geertz is creating a relationship between the two by creating space for both. Religion looks at the wider truths, and science is objective in its understanding. Religion would then be used to broaden understanding, and science would be used to get results that are unaffected by emotion. So despite religion and science veering off from each other in this way, they both coexist together, as one can add to the other. That is, by combining the broadened understanding offered by religion and the objective results offered by science, one could gain a full understanding of the world.

Even further beyond these two cultural systems veering off of each other, religion and science actually have conflicts with each other. Geertz shows this when he explains each cultural system. A scientific cultural system is analytic and seeks to "maximize" intellectual clarity (Geertz, 231)." This means that this system is based completely on objective data, and is not involved in how this data affects a person. A religious cultural system, however, is about symbols. These symbols give meaning to life by affecting the "moods and motivations" of a person (Geertz, 91). These moods and motivations are the inclinations people have to feel and do certain things, based on these religious symbols. This creates a conflict between religion and science. Science does not cover what its results can make a person do and feel, whereas religion is concerned with exactly that. The conflict comes in here because some may say that when you question the world, you must choose whether or not to look at the possible feelings and actions that could be caused by your results. I would suggest, however, that even this conflict does not separate religion and science completely and allows for a person to value both religion and science. It is important to both look at the objective data and understand its effect on others. Religion and science could be used together, because science offers the objective view and religion offers the understanding of the effects that could be caused by the data. This allows religion and science to create a full understanding of the world because they bring different focuses to it.

Considering both religion and science as possible sources of knowledge, this creates an overlap that maintains a way for the two to connect and understand each other. Additionally, acceptance of both science and religion as trying to understand the world allows for new meanings for the terms religion and science. We are not confined to older terms that kept the two ideas separate and rigid, because we understand the movement between the two. Religion and science are actually allowed to expand beyond their individual meanings and affect other cultural spheres. While faith/confidence are a good example of how these two concepts can exist together, the idea of the soul allows for an additional overlap, which could allow religion and science to coexist.

Part II: The Concept of the Soul

The concept of the soul is an idea that offers a connection between religion and science. When defining the soul, an undebatable definition can be elusive. This is because, like religion, it can be defined in as many ways as there are people defining it. In this section I will attempt to give what I consider to be two major religious ways of defining the soul, which are the definitions of Aristotle and Descartes, (as explained by Lee Silver and Evan Thompson, respectively,) equal attention. Silver and Thompson are contemporary authors like Dennett, and I chose their explanations to show that Dennett is not the only one with current opinions. I will be taking Silver's view from his book Challenging Nature. The purpose Silver's writing is to discuss and understand how religion and science have had an effect on humanity. I have referred to his work already in chapter 1 when I identified science. He also spends much time discussing the soul in his book, and his discussion of the Aristotelian soul is one way he suggests the soul is understood. I use Thompson's book *Mind in Life* to explain his discussion of Descartes' view of the soul. In his book, Thompson is trying to understand how the mind relates to life, and he suggests that the two are inseparable. He explains Descartes' view as being the main reason for people believing that the body and mind are separated. Thompson also offers so references to Dennett in his book, where he discusses Dennett's belief in the idea that genes are the fundamental units of life, an idea with which Thompson disagrees (Thompson, 183). Both of these authors offer comprehensive explanations about the effect Aristotle and Descartes have had on the general understanding of the

soul. Both these views are important because Aristotle's view could offer an overlap between religion and science in that they converge on the soul, whereas Descartes' view could be seen as a way to separate religion and science.

In addition to these views of the soul, I will also look at how the soul is explained materially and scientifically, based upon the ideas of Emile Durkheim and John Teske. These two ways will offer insight into a religious concept being studied scientifically, which would show a connection between religion and science. I will then discuss the views Dennett and James have about the soul. Their views on the is subject are pertinent because James has a opinion that could potentially be seen be materialistic, and Dennett would definitely suggest that if there is a soul, which he does not seem convinced that there is, it would be material. James's view, like Aristotle's, allows for an overlap between religion and science in the possible study of the soul as something material. Dennett's view does the same, but also suggests that there may not be a soul, which would eliminate this connection between religion and science. Finally, I will offer the view of Owen Flanagan, another prominent contemporary philosopher. Flanagan's views involve the mind, body and soul as being separate entities, and in this way he explains some confusions caused by Descartes' view of the soul. Flanagan wants to understand the humanistic and scientific views in society, and the soul is a common humanistic view. His view is important to the conversation about religion and science, because it is a modification of Descartes' view, and further exemplifies that possibility that the soul cannot be studied scientifically, which would inhibit religion and science from having a connection on the idea of the soul.

The idea of the immortal soul is important in many religions. It makes life after death a possibility, which is the reward from religion that many people seek. Lee Silver has an interesting discussion of Aristotle's view of what the soul is. There are three types of souls according to Aristotle: the Vegetative Soul, the Animal Soul and the Rational Soul. The Vegetative Soul is what exists in every living thing; it causes metabolism, growth and conscious development without intervention. The Animal Soul is what differentiates animals from non-animals: it is an organism that has a functioning brain and a mental life, known as mentality. The Rational Soul is what separates humans from other animals. It is essentially being conscious of our own consciousness (Silver, 41-44).

All of these souls are driven by the goal of living. The body and the soul are inseparable, as they both have the same goal. Identifying the soul in this way is very important to the discussion of religion and science. While the soul is traditionally a religious concept, identifying it as being made of the same thing as the body gives it a scientific perspective. This scientific perspective comes from the fact that the body can be studied scientifically, and since the soul is the same as the body, it would follow that the soul could be studied scientifically as well. This creates a link between religion and science, because it involves the scientific study of a religious concept. Therefore, the relationship between religion and science will involve some overlap. This view of the body and the soul being as one and studying the soul as such, which is called the materialistic view, was the prominent view held in philosophy for a long time. But in the 16th century, the idea of what the soul is changed (Thompson, 226).

This change in the view of the soul is attributed in a large way to Descartes, which is explained by Evan Thompson. Thompson suggests that in Descartes' time there was a rejection of the idea that there are inherent goals in the natural world. The new idea was that nature is only governed by the laws that explain the how material things function. The soul was divided from the body, and was viewed only as the Rational Soul, which goes beyond nature. Descartes rejected the connection between consciousness and being alive. He suggested that consciousness is not alive because it is a part of the immaterial soul. However, the body is alive, so consciousness and the body cannot be the same (Thompson, 226-228). This is the idea of dualism. Dualism, as explained by Dennett, is the belief that the body is made up of matter, while the soul, which for Descartes is the same as the mind, is made up of some other substance that is immaterial (Dennett, 302). This dualistic view of the soul separates the soul from scientific study, which can only study what is made of matter. Science then becomes unrelated to this religious concept of the soul, altering how science and religion relate to each other. This alteration is seen in that the soul is no longer considered an overlap between the two concepts, which weakens their relationship. But Dennett suggests that since Descartes' time, the view of the soul has changed again, back to the idea suggested by Aristotle. As Dennett said in his book Consciousness Explained, dualism is dead, and this could offer a logical jump into the soul being studied scientifically (Dennett, 32). Since it is made of

the same thing as the body, and the body can be studied with science, it would follow that the mind can also be studied by science.

There are a few ways that attempt to explain the soul in a material way. Durkheim, a thinker from the beginning of the 20th century, postulates the first way. He suggests that personality is often viewed as the manifestation of the soul (Durkheim, 305). While this is not necessarily considered a scientific way of looking at the soul, personality does offer a somewhat non-immaterial view of it. It is suggested that the nervous system is the center for personality. If personality could eventually be explained physiologically, then the soul could also be explained physiologically. As such, the soul becomes a religious concept that has a material manifestation, which can be studied with science. If personality is eventually explained by science, there will be an impact on the way religion and science relate. The soul, being personality, will then be explained by the science that explains personality. This allows religion and science to have a point of convergence, because the soul will serve as a common characteristic for both. This will make religion and science intertwined, meaning they must coexist together.

This is similar to an idea John Teske suggested in his writing, which is contemporary. The soul, or human spirit as he calls it, is haunted by the idea that it must be manifested in the supernatural. Teske wants to combat this idea, as he thinks the supernatural actually makes the soul more complicated, because it is a realm of being that is "less comprehensible". He suggests instead that the spirit, or soul, is actually in the nervous system. But this brings up the question of how the spirit can live on if the nervous system is biologically dead? Teske's response is simple: it doesn't. He argues that there is not anything beyond death, but that you live on through the way people remember you and the meaning your life had (Teske, 307-319). While this is an interesting way to look at the soul scientifically, it may put some people off because of the concept of there not being a life after death. It is, however, important to look at Teske's argument about the soul. For those that agree with Teske, this idea of the soul being your nervous system and it not existing after your death offers a link between religion and science. It is a materialistic view of the soul, and offers a scientific way of studying an originally religious concept. Therefore, for those who can accept the idea that there is nothing after death, Teske's view of the soul offers a physiological explanation.

But this view could also create a schism between religion and science for those who cannot accept that there is nothing after death. For these people, Teske's view would suggest that science does not understand the soul because the soul is something that has to continue after death. Thus, those who believe in the continuation of the soul would find that the soul is something that can only be understood in a religious way. This would create a separation between religion and science instead of a convergence, which would make it more difficult for the two to converse. Thus, Teske's view could either help or hinder understanding how religion and science could be connected, depending on how his view was interpreted.

Both James and Dennett have interesting ideas about the soul. James's discussion about what he believes about the soul is rather brief. He tells people not to take it in the ontological sense, that is, the soul as the nature of being, unless you desire to see it that way. He suggests that the soul can also be viewed as a "succession of fields of consciousness (James, 195)", which suggests that the soul is on a different level of consciousness (James, 195). He does not seem concerned about which way people view the soul, ontologically or as a level of consciousness. This is most likely due to the fact that either way, the soul is connected to the mind in some way. In James's continuation after this description of the soul he discusses the individual versus what is outside the individual. Therefore, it would seem that in understanding the soul James observes that it is connected with the individual mind, however it manifests itself. James's view of the soul suggests that it has some psychological manifestation, because it is connected with the mind or consciousness. This in turn would indicate that the soul is something that could be studied scientifically, because a psychological manifestation of the soul can be studied by psychology. Therefore, the link is established between religion and science because a religious concept, the soul, is being studied by science. James's view of the soul, as being connected to the mind in some way, is the view I subscribe to because it allows for study of the soul in a scientific way, which brings religion and science together.

Dennett identifies not only the soul but also what he perceives the soul does for people. He understands the importance of the soul to some because it allows people to worry less about death, as it gives a promise of a way of living on afterwards. He gives his own "materialist slogan" about the existence of the soul: "Yes we have a soul; but it's made of lots of tiny robots (Dennett, 302)." But based on my continued reading of him, I would suggest that he might not be convinced of the existence of the soul. This is seen through his defining spirituality. Dennett suggests that the secret to spirituality is to simply "let your *self* go (Dennett, 303)". By this Dennett means that you should accept that you do not know everything about the world, and never will. If you keep this in your mind, everything will come easier and you will be a better person, and it has nothing to do with anything supernatural or an immortal soul (Dennett, 302-303). With his materialist slogan he is suggesting that if we do have a soul, it is material and can be studied by science. The fact that he is not convinced of the soul affects the connections religion and science have. For those who would agree that there is no soul, a line is drawn between religion and science. The soul is made purely a religious idea. In this way, religion and science are actually divided by the concept of the soul. However, for those who agree with the possibility of a soul that is in some way mechanical (or perhaps just material), the soul becomes not only a religious object but also a scientific one.

Another person that I will draw into the conversation is Owen Flanagan. Flanagan wrote a book call *The Problem of the Soul*, which is a discussion of just that. He discusses Descartes' view of the soul briefly. He is one of the few people who still consider the possibility of Descartes' dualistic view. But Flanagan suggests that this dual view is not good enough. He argues that if the soul is a part of the mind, then one's memory should be passed on with the soul. But this is shown to be untrue. He also believes that something that is supposed to be your essence should be something more than your mind's history (Flanagan, 162-163). Flanagan's question here is important, because it is likely that he is not the only person to ask how the soul and mind can be one if the soul does not hold onto the memories of the mind. For some this creates a conflict, in that they cannot believe that the mind and the soul are the same. As such, the soul could not be studied scientifically the way the mind is. This therefore separates the soul from science, and the soul becomes purely a religious object, dispelling the possible convergence religion and science could have because of the soul.

Flanagan offers two possibilities to address the problem of the soul and the mind being one. The first possibility he suggests is that perhaps there is a part of the mind that is permanent and lives on, and that Descartes simply did not articulate this well in his explanation. This part of the mind would be what constitutes the soul. The second possibility he offers is that the soul is separate from both the body and the mind, making a triad. This second possibility is what Flanagan believes in. He subscribes to this idea of a triad for a few reasons. The first is because it allows a person to say that they stay the same over time because they have the same soul that does not change, despite the mind and body changing. It also explains how you can exist in some way even after you body and mind die. Finally, this belief explains why you do not remember things after you die (Flanagan, 163-164). Some might agree with this understanding of the soul, finding it to be the best explanation of what happens after we die. This does not make his explanation true, but it is another way of looking at the issue of the soul. Because the soul is separate from the mind and the body, this would suggest that it is not a material concept, and thus could not be studied scientifically. Therefore, the soul becomes a solely religious object, not allowing for a convergence with science on the concept. While this may not directly create the need for one to choose between religion and science, it does remove a possible similarity between the two. This loss of similarity could make religion and science more separate entities then entwined concepts, as I would suggest them to be.

Based on my discussion of faith and the soul, I have shown that there are similarities between religion and science that cause areas of overlapping concerns. These similarities also indicate a relationship between the two. Faith in religion and confidence in science both incorporate the same idea: finding a source of truth. Thus, truth can be drawn from both religion and science. There have been times when faith in religion has failed people, but the same can be said of confidence in science. So why is faith in religion called into question more than confidence in science? One answer to this would be that science is self-correcting in a way that religion is not. But this does not let science off the hook completely – it has still been incorrect in several ways. Despite their failures, many may find that having faith in religion and confidence in science is a possibility. Both areas could then be considered sources of truth, which suggests a connection and convergence between the two.

The next idea I discussed, the idea of the soul, has been a religious concept for a long time. There have been several attempts to define it by philosophers. The ideas given

by Aristotle and Descartes are the most commonly discussed ideas, and throughout history both have been popular. Currently, materialism is on the rise as the accepted view, which is based upon Aristotle's idea of the soul and body being one. That being said, Descartes view is still up for discussion and modification. There are also scientific views of the soul, as offered by John Teske and Emile Durkheim. Seeing that the soul can be defined both religiously and scientifically, a connection is established between religion and science. Both James and Dennett discuss the soul. James seems to think that the idea of the soul is implicit in discussion, and indicates that it is something material. Dennett's view of the soul offers a more current view of the Aristotelian concept. If there is a soul, which Dennett does not definitively say there is or is not. Dennett sees it as something that is material. Flanagan offers a final thought on the subject, drawing from Descartes view and expanding it with the concept of a triad of mind, body and soul. He uses this to explain many aspects on the mind body issue that cannot be explained by dualism. Both the materialistic and dualistic views of the soul have changed over time, but their core concepts have stayed the same. The dualistic view of the soul as well as the triad Flanagan offers makes the soul something immaterial. It could therefore not be studied by science. The soul then becomes only a religious object. This separates religion and science based on the concept of the soul, and the two lose a possible connection. I suggest, however, that the correct way to look at the soul is through the materialistic view. Whether seen in the traditional view as Aristotle did or in a more modern view as suggested by Dennett, the materialistic view suggests that the soul is of the same matter as the body. Since the body can be studied scientifically, the soul could be studied scientifically as well. This would mean that the traditionally religious concept of the soul would become a scientific concept as well. Religion and science are then overlapped and have a common interest in the idea of the soul.

Conclusion

There are many different ways to look at the connections between religion and science. I have suggested that religion and science have a connection and cannot be separated, because they have convergences within their commonalities. I began the discussion of religion and science by identifying these two terms. The key points of my identifications of both religion and science are that they both are attempting to understand the way the world works, and they have moral influences. But as I have said, these identifications are not the end of the discussion. In fact, they are more of an invitation to discuss in a new direction, which discusses not only the purposes of science and religion, but also the fact that they have an influence on one's morals. I see science and religion as having an effect on every aspect of life, and should be defined in such a way.

Throughout this paper I have discussed some of the concerns about the rationalities of science and religion. One of these concerns is the idea of fanaticism. The concern about fanaticism is that some may consider it to represent all religion, when in reality it is merely a fringe group for any given mainstream religion. It is important to address this concern because if fanaticism is seen as religion in general, religion will be seen as irrational in the way fanaticism is irrational, and will thus be difficult if not impossible to converse with rational aspects of society, such as science. The other concern I addressed is the idea that those who are not religious do not have morals. If this concern is accepted as true, religion will be elevated above other aspects of society as the sole source of morals. This will make it more difficult for science and religion to have a connection and conversation, because religion would be seen as superior. In dispelling this concern, I suggest that in addition to drawing one's morals from religion, one can also have their moral views influenced by science. An example of this is the change in the Catholic moral view about cremation, based on scientific discoveries about disease. Because both religion and science can alter one's moral beliefs, there is a convergence between the two that creates a connection. My discussions of these concerns have been primarily through the voices of Daniel Dennett and William James, two thinkers that are that are a century apart and offer different views. But these concerns left us with questions as well as answers about the connections between science and religion: What is

the best way to understand fanaticism and it's affects on religion, science and morality? What is the relationship between religion and morals? Is there a soul, and what is it made of? The first two of these questions I attempted to answer in my discourse on the concerns about religion and science. I then looked towards commonalities between the two concepts to answer the last two questions, and to create new connections between religion and science. The first commonality I addressed was the commonality between confidence in science and faith in religion. Having faith or confidence in something means seeing it as a source of truth. By having faith/confidence in both religion and science, or at least accepting that one can have faith/confidence in both, this allows for a major convergence between the two. This strengthens the connection between religion and science as well as my conjecture that the two are converged, because since one considers it possible to have faith in both, it is possible to have one's morals influenced by both. The other commonality between religion and science that I discussed is the concept of the soul. While the soul is most often considered a religious object, I explained that there are attempts to understand it in a physical and scientific way. If the soul is explained by science, then a convergence is created between religion and science because they both consider the soul. Both of these commonalities allow us to see a connection between religion and science and how to expand on both of them. We can have faith/confidence in both science and religion and metaphysical concepts, like the soul, can be looked at religiously and scientifically.

But this paper is by no means a final discussion of religion and science. Beyond fanaticism and morals there are other concerns about religion and science not spoken about in this paper. One concerns is that most, if not all religious people believe in God and the soul. As I explained in my identification of religion, I do believe that belief in God is necessary to be religious. But as many people do, it would add to an understanding of the way religion can relate to other aspects of society that do not require belief in God. Additionally, addressing this concern would make it easier to connection religion with other aspects of society. In relation to this concern, one could discuss the belief that scientific people do not believe in God and the soul. But this is not true. Understanding how scientists believe in God would allow for a better understanding of

how the two can coexist and connect, and do not necessarily have to be separate. It could also lead to a discussion of how most religious people believe in scientific concepts.

There are also other commonalities and expansion upon the commonalities I have already discussed that need to be examined. When it came to the concept of sources of truth, I offered one definition to be used for the purposes of this paper. But this definition is not the only possible one. There could be a further discussion of what a source of truth means. This would allow for a better understanding of what faith in religion and confidence in science mean to people. In turn, this increased understanding would allow for a further discussion of how these two sources of truth are similar.

The discussion of the soul can also be expanded upon. I briefly discussed two common ways of looking at the soul, but these are not the only ways to view them. Flanagan himself offered a third option that would allow for a new route into the discussion. The soul also allows for an expansion into how it is being studied. There are studies out there that are looking at how brain activity may explain how the soul works. What these studies mean for understanding the soul is important. These studies also bring further convergence between science and religion closer, because they are concrete examples of science trying to study an aspect of religion.

A further discussion of the soul could include an examination of the issues the soul brings up. Today there are many controversial discussions about ideas such as abortion and evolution. The soul factors into these issues in several ways. Lee Silver discusses the idea of the embryonic soul. He talks about a not uncommon birth deformity called a teratoma. While it's often explained to the parents as a tumor on the child, but it is in fact a sort of conjoined twin, except not fully formed. The formation of the child varies from case to case, sometimes having hair, maybe a hand or a foot, or even a fully formed eye. It has a system of blood vessels and neurons that fire. If the teratoma is not removed, the child that has it will die (Silver, 99). However, what about the life of this malformed, semi-human being? Many argue that life begins with a soul. If this soul is the rational soul, life would not begin until some time after someone is born, when they are aware of their existence. This means not only would abortion be allowed, but so would the removal of this teratoma.

Another key issue is the teaching of the theory of evolution. As stated before, the human soul is different from the animal soul. Based upon the theory of evolution, humans evolved from apes, which are animals. This brings up the question, when did our souls change? Those looking for a reason to deny the theory of evolution will simply say that they never could have, so evolution is wrong. But is that completely true? I would suggest the possibility of there being somewhat of an in between soul that existed at one point and may have died out. Perhaps this is our missing link. This soul allows for basic understandings of your own existence, but peters out after that. Perhaps these souls still exist inside current apes, especially the species that have shown human-like behavior and understanding. It is something that could be discussed with further expansion.

Beyond expansion on the commonalities I have already discussed, there are other commonalities between the two that can be looked at. One key idea is that people turn to both religion and science when in need for an explanation. I have discussed this somewhat in this paper, but it would be important to look at further. This could lead to a discussion of how religion and science have had influence in the medical community. The idea of prayer versus medicine is an issue that has been discussed for quite some time, and it would be interesting to look at it from the view that people use science and religion for similar purposes.

At this moment, there are many ways the discussion of religion and science could go. I have only scratched the surface of the various concerns people may have about religion and science. I also have only begun the new discussion of the commonalities between religion and science that creates new connections and convergences between the two. For many people, my paper may have brought up more questions than answers about how to understand the two concepts and their relationship to each other. But these questions are good things. This is not the end of the discussion of religion and science, but rather a step along the journey of understanding their constructive connections.

Bibliography

Barbour, Ian. Religion in an Age of Science. New York: Harper & Row, 1990.

Cain, Fraser. "Why Pluto is No Longer a Planet." Universe Today. http://www.universetoday.com/2008/04/10/why-pluto-is-no-longer-a-planet (accessed October 8, 2008).

Davies, Douglas, and Lewis Mates. *Encyclopedia of Cremation*. Surrey, UK: Ashgate Publishing, Ltd., 2005.

Davies, Simone. "Atomic Structure." Suite 101. http://chemistry.suite101.com/article.cfm/atomic structure (accessed October 8, 2008).

Dennett, Daniel. *Breaking the Spell*. New York: Viking Adult, 2006.

Durkheim, Emile. *The Elementary Forms of the Religious Life*. Wellington, New Zealand: George & Unwin, Ltd., 1915.

Flanagan, Owen. The Problem of the Soul. New York: Basic Books, 2002.

Francis, Eden. "Dalton's Atomic Theory." Clackamas Community College. http://dl.clackamas.edu/ch104-04/dalton%27s.htm (accessed October 8, 2008).

Geertz, Clifford. The Interpretation of Cultures. New York: Basic Books, 1973.

Gould, Stephen Jay. *Rocks of Ages: Science and Religion in the Fullness of Life.* New York: The Ballantine Publishing Group, 1999.

—. The Hedgehog, the Fox and the Magister's Pox: Mending the Gap Between Science and the Humanities. Scotland, UK: Harmony, 2003.

James, William. *The Varieties of Religious Experience*. Toronto: Random House of Canada Limited, 1902.

Latour, Bruno. "Thou Shall Not Freeze Frame,' or, How Not to Misunderstand the Science and Religion Debate." In *Science, Religion and the Human Experience*, edited by James Proctor, 27-48. New York: Oxford University Press, 2005.

Silver, Lee. Challenging Nature: The Clash of Science and Spirituality at the New Frontier of Life. New York: HarperCollins, 2006.

Teske, John. "The Haunting of the Human Spirit." Zygon 4, (1999): 307-332.

Thompson, Evan. Mind in Life. Cambridge, MA: Belknap Press, 2007.