

Science and Faith at the Movies: "Contact"

By Brain Godawa

FADE IN: Inside the royal office of the Holy Roman Pontiff in the Vatican, Papal administrator Father Patrick speaks in confidence with Papal Security Commander Rocher. They discuss the murder of a fellow priest and physicist at the Cern Laboratory, where a canister of highly volatile anti-matter has been stolen and now lies hidden somewhere under the Vatican ready to blow the Holy See to heaven. This is the climax of a war between science and religion, begun in the 16th century by the Roman Church against the Illuminati, a secret group of scientists persecuted for their devotion to science over religion. Now the Illuminati will finally exact their revenge by using technology to destroy the church "on the altar of science." "Science obliterates religion," is the metaphor used.

And here's the rub: This anti-matter is a result of the search for the "God Particle," the theoretical Higgs boson that would unify the four fields of quantum physics and explain the origin of matter. The fanatical Father Patrick scoffs, "The God Particle. To actually claim an act of creation. The blasphemy! The arrogance!"

"The Holy Father didn't see it like that," Rocher disagrees. "His Holiness thought the discovery could scientifically prove the existence of a divine power. Begin to bridge the gap between science and religion."

But Father Patrick's religion *and* science are settled. "If science is allowed to claim the power of creation, what is left for God?"

So goes the revelatory scene in the movie *Angels and Demons*, Ron Howard's adaptation of the Dan Brown novel. And so goes the myth of the war between science and faith that was fueled by the secular Enlightenment to the point of infecting both the academic and scientific establishment as well as the public zeitgeist.

Science and Faith in Conflict?

To be fair, Hollywood is not monolithic in its approach to this issue of science and faith. There are movies that reinforce faith at odds with science, and there are movies that affirm harmony between them. In fact, *Angels and Demons*, referred to above, is a movie that claims, "Galileo didn't think the church and science were enemies." Even though the atheist hero and his religious allies don't end up agreeing on their science and faith, at the end, they acknowledge that "the world needs both." However, it also makes the point that the real enemy to overcome for the Church is the fanatical faithful, not fanatical scientists, since the Illuminati turns out to be a conspiracy theory created by the believer to rationalize his religious views of science as an enemy of faith.

In my book, Hollywood Worldviews: Watching Films with Wisdom and Discernment, I lay out some of the basics of storytelling that we professional Hollywood filmmakers use to influence you, the audience, to see the world as we see it. The claim that movies are only entertainment is the oldest lie in the book -- or the script. Storytelling, since the dawn of history has always involved the transmission of a worldview or a "big picture" metanarrative of how our world makes sense and meaning to us.

The very structure of a story itself is an incarnation of an argument for redemption – that is to mean the recovery of something lost in our humanity. As we follow the story, we follow a concrete version of an abstract argument, lived out existentially through the characters and consequences of their choices. We inhabit the story, and therefore the argument, through our imagination in a way that rational or empirical



discourse simply cannot accomplish. And it does not require us to be cognitively aware of this argument for it to affect us. In fact, the less conscious we are of it, the more vulnerable we are to its influence.

Stan Williams calls this incarnate argument the "moral premise" of the story. The moral premise can be expressed in simple proverbial form, but it represents what the progression of the story will itself illustrate. One example of a moral premise common in science fiction stories is "Scientific progress without moral restraint will turn against us." This might be considered the theme of movies like *Frankenstein*, *Terminator*, *I am Legend*, or *Jurassic Park*. The monsters that result from the hubris of human knowledge come back to bite us; therefore, let us be more considerate of our moral obligation when pursuing knowledge and applied science.

I would like to analyze one specific movie that portrays a harmony between science and faith in a powerful way, the classic *Contact*, adapted from Carl Sagan's best-selling novel about humanity's first contact with extraterrestrial intelligence. This movie's moral premise is seen through the heroine's journey (Jodie Foster as scientist Ellie Arroway) and it could be put like this: Pitting faith against science leads to ignorance and loneliness, harmonizing faith with science leads to knowledge and a balanced human life. Though there may be other themes in the movie, the central moral premise is rooted in this conflict experienced by the protagonist. And here's how it does so...

Contact: A Classic Example

As Aristotle pointed out, the essence of a story is that it has a beginning, middle and end, corresponding roughly to three acts of drama. One could also liken this progression to that of a dialectic of thesis, antithesis, synthesis. The protagonist is the hero of the story and he embodies the (thesis) worldview we storytellers want you to ultimately identify with and accept. The antagonist is the incarnation of the (antithesis) worldview we want you to reject. The drama is the clash of these worldviews lived out in the clash of the protagonist and antagonist. And the worldview that leads to victory through change (synthesis) is the worldview that is proven superior to the other.

But here's the caveat: The protagonist also has a flaw in the way she views the world. And that flaw will be part of her journey of discovery that will ultimately lead her to realize that she is not entirely right, and needs to change. That change by the end of the story is called the character arc and it embodies the protagonist's redemption, which is the moral premise of the film.

In *Contact*, Ellie's worldview is one of enlightened atheistic humanism, an elevation of intellectual and scientific inquiry that values humanity but rejects the supernatural. She sees the world through the eyes of a conflict between science and faith, and God is a myth we create to make us feel significant in a vast universe. Her antagonist is not a sole individual, but is embodied in several characters who reject the pure pursuit of science: The religious fundamentalist terrorist who attacks science for its atheism, the project director she works with who only considers the economic value of applied science, and the politician who seeks it as a means of military power -- all of them pit faith against science with the result of ignorance, loneliness and obstruction of knowledge. And therein lies Ellie's flaw, that she agrees with her antagonists about the enmity between science and faith, but she "sides" with science. She may not be a "bad guy" as her antagonists are portrayed, but she has more in common with them than she would like to admit.



Beginning

Movies are the journey of a protagonist, the hero of the story, with whom we sympathize and/or identify in some way, whether through pity, humor, charisma or other human connection. Because we sympathize with them, we will root for them and in so doing, we emotionally identify with their journey and therefore with their worldview transformation. When the hero learns his or her lesson by the end of the story, we will learn it with them and will emotionally experience her transformation – whether we are intellectually aware of it or not.

The story usually begins with the protagonist's "normal world." And within the first fifteen minutes of the story we will learn about the protagonist's flaw that comes out of her past experience and haunts her in that normal world. In *Contact*, we see Ellie had lost her mother and father at an early age and therefore has struggled with that loneliness all her life. Later in the movie, she says, "Ever since I can remember, I've been searching for some reason why we are here. Who are we?" We then learn that she has grown into a scientist involved in SETI, the Search for Extra Terrestrial Intelligence. Her search for other life is an expression of her desire to fill her loneliness with real empirical proof.

Within that beginning first act, the protagonist usually gets "the call to adventure." That is, she is drawn into the pursuit of a goal which will propel the entire movie until the end. It's an outward tangible goal, not merely an inner emotional one. In Ellie's case, she loses funding on her SETI project because of its lack of economic value, so she sets out to get her own funding in order to continue her search of extraterrestrial life. Ellie's goal is to prove there is life on other planets and to make contact with them. And we root for Ellie to achieve that goal.

Within the first act, the protagonist also meets a love interest that will be another expression of her journey toward redemption. The love interest is a person that will compliment the protagonist. They will be an incarnation of what the protagonist lacks, and therefore will reflect the redemption of the protagonist in their relationship. Ellie meets Palmer Joss, a spiritual man who studied to be a priest but couldn't handle the celibacy, so he journeyed out on his own in spiritual humanitarianism. As he calls himself, he's a "man of the cloth, without the cloth." So Palmer is a kind of opposite of Ellie, or a "foil"; he is spiritual, believes in God and is involved in humanitarian issues that compete with science dollars. But he's not against science. For him, science is the pursuit of truth. "I'm not against technology. I'm against the men who deify it at the expense of human truth." He points out the irony that science and technology are meant for good, but often cut us off from one another. "We're looking for the meaning," and science does not give that meaning.

They begin a love relationship that will span the movie and provide Ellie with a means to her redemption. For the love interest's complimentary nature also becomes an antagonism that keeps the lovers from full unity until the protagonist becomes a fuller human being. Their contrast brings out the protagonist's flaw and need even as their love compels them toward one another.

So, throughout the movie, Ellie and Palmer discuss their beliefs about God, religion and science, containing some of the most memorable moments of the film. But Ellie's big problem with faith (and therefore her flaw) is that she only believes what she can empirically observe. She doesn't trust faith, which is a dominant part of the human community, and therefore, she tends to be a loner, to go it alone.

Their tension is displayed in a conversation at a party that illustrates the heart of conflict in the movie. When Ellie quotes Palmer's own book back to him that "ironically, the one thing people are hungry for, meaning, is the one thing science hasn't been able to give them." She responds that that is like saying science killed God. "What if science simply revealed that God never existed in the first place?" She explains



to him Occam's razor, the scientific principle that "all things being equal, the simplest explanation tends to be the right one." "What's more likely, an all powerful mysterious God created the universe and then decided not to give us any proof of his existence or that he simply doesn't exist at all, and we created him so we wouldn't have to feel so small and alone?"

When Palmer affirms his belief in God as a means for making sense of it all, she responds, "How do you know you're not deluding yourself? For me, I need proof." To which Palmer responds that if she loved her dad so deeply, as we saw earlier, then prove it. And for the first time in the film the condescending scientist is silent, without an answer. She is beginning to learn that maybe science and faith are not as opposed as she thought. Maybe truth is not only proven through empirical data, but also through human connection.

Middle

The second act, or middle of a movie, is a bit longer, and consists of the protagonist's new obsessive pursuit of her goal, accompanied by increasing obstacles that stop her from achieving her goal to point of apparent defeat, when it appears that she will never achieve her goal. These obstructions come from both her external adversary, the antagonist, as well as from within her internal flaw.

In *Contact*, Ellie is given the money for her project by an eccentric private billionaire and eventually discovers a coded message from an alien civilization that gives them the blueprint of a machine to transport a person into contact with those extraterrestrials. But every step of her pursuit is obstructed by her antagonists of science: first by money, then by government meddling, then by political maneuvering of another scientist to take her place as the chosen astronaut, and ultimately by a terrorist who blows up the transportation machine.

But more importantly, the one thing that holds her back from her goal of contact is her own unbelief. When the political committee must choose a scientist to make the first journey into the unknown in the transportation machine, Ellie is the obvious choice because of her seminal involvement in the discovery. However, Palmer Joss is on that committee and even though he loves her, he reveals her atheism to the world. But this betrayal is for the benefit of mankind because as Palmer tells her, "Our job was to select someone to speak for everybody. I just couldn't in good conscience vote for a person who doesn't believe in God. Someone who honestly thinks the other ninety-five percent of us suffer from some form of mass delusion." Ellie's inner flaw of rejecting faith and community is the ultimate obstacle to her goal.

Her apparent defeat occurs when that religious terrorist blows up the machine and kills the first scientist. Now it appears Ellie will never achieve her goal of contact. And that's where act three comes in.

End

The final act of a movie involves the protagonist getting one last chance against all odds to achieve that goal. It involves a "final battle" where she realizes her inner flaw and by overcoming that inner flaw finds the ability to finally overcome the outer antagonist. The protagonist learns that what they really wanted all along was not what they needed. And when they embrace their inner need, they find redemption. Sometimes, that self-revelation involves the recognition that the protagonist has operated upon the same faulty worldview as her adversary. The protagonist looks in the eyes of her antagonist and sees herself.



In *Contact*, Ellie is surprised to discover that the eccentric billionaire has secretly built a second transport machine by the same specifications in a different location and he wants Ellie to be the one to go. Ellie goes on the journey through a series of wormholes that she exclaims in uncharacteristically unscientific fashion, "I can't describe it. I can't explain it." She meets an ET who morphs into a representation of her own father in order to comfort her, and she asks him the meaning of it all. He replies, "You are an interesting species. You feel so lost, so cut off, so alone. Only you're not. You see, in all our searching, the only thing we found that makes the loneliness bearable is each other." This is an affirmation of an imminent universe with no transcendent supernatural connection to be made. Ellie meets her need for transcendent meaning through imminent contact with other beings. One might even reword this as "misery loves company": There is no god, so our lonely longing for transcendence cannot be met in contact with a transcendent supreme being, but rather in connection with other lonely imminent beings.

But there is a richer theme at play here, because Ellie's final battle is after her eighteen hour intergalactic journey. The teleportation occurs in such a way that it appears this journey never happened. That Ellie's transport pod just falls to the bottom of the machine in a few seconds without incident, observed "empirically" by forty-three different cameras from different perspectives. And her personal headset recorded static. Now Ellie is put before a hostile congressional committee to prove her experience. Her political nemesis, congressman Kitz challenges her experience with the very same "scientific" demand for proof that she used to castigate religion: Occam's Razor. Alien messages and magic machines or a personal agenda of a megalomaniac billionaire who manipulated her? Another jumps in, "Dr. Arroway, you come to us with no evidence, no record, no artifacts. Only a story that strains credibility. Are you really going to sit there and tell us that we should take this all on faith?" Kitz wraps up this empirical inquisition with robust scientific reasoning turned against Ellie, "You admit that you have absolutely no physical evidence to back up your story. You admit that you very well may have hallucinated this whole thing. You admit that if you were in our position, you would respond with exactly the same degree of incredulity and skepticism? Then why don't you simply withdraw your testimony and concede that this journey to the center of the galaxy in fact never took place?"

Ellie responds with the fervor of a religious fundamentalist: "I had an experience. I can't prove it. I can't even explain it. But everything I know as a human being tells me that it was real. A vision that tells us that we belong to something that is greater than ourselves. That we are not alone. I wish I could share that. If everyone for one moment could feel that awe, that humility, that hope." Her glance over at a teary-eyed Palmer (her ally/adversary) in the crowd tells us she now understands the element of faith in science that she never understood before. She now realizes that empirical proof is not so certain and that all truth requires some form of faith and uncertainty. She has been "changed forever." Empirical observation, in the end, is a human experience with a subjective component, not entirely devoid of faith.

Carl Sagan, the original author of *Contact*, believed this "something bigger than ourselves" was certainly not a transcendent deity, but rather the universe *as* deity substitute. He preached this faith in the series *Cosmos*, "The universe is all that is or ever was or ever will be." The movie seems to paint science in religious categories as "scientism," a viable substitute for religion in meeting the needs for meaning and community. But it also marks an attempt to recognize that the realms of science and faith are not so irreconcilably opposed as philosophical materialism or positivism claims with their polemical metaphor of warfare between science and faith.



Transcendence and Immanence

Of the themes present in *Contact*, one stands out for discussion in this essay: The interplay between an imminent universe and transcendent meaning or purpose. Does empirical observation of material processes reduce reality to meaningless purposeless existence? Is the quest for God and spirituality a wish fulfillment or an intrinsic aspect of a created order? Is the only "reality" physical material reality or are immaterial entities like love and justice legitimate aspects of a multidimensional reality? Ellie seems to represent the universal problem with a positivist view of the world, that only the things we can measure with our senses are real. Yet, she also yearns for *contact*, for real connection with something bigger than herself that gives it all meaning. It's a feeling of loneliness in our humanity that craves transcendence. This is not all that different from the Apostle Paul's expression of the God-shaped vacuum in us all:

"[T]hat which is known about God is evident within them; for God made it evident to them. For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made, so that they are without excuse." (Romans 1:19-20)

In this early part of Paul's letter to the Christians in Rome, he is seeking to establish the moral and intellectual responsibility that all humankind has before God, even those who have not had the benefit of special revelation to His people. He explains that there is a sense in which we all have a knowledge of God, both within our beings as well as through our empirical observation of the natural world around us, thus making us "without excuse" in our obligation to that Creator (v. 17). The wonders of creation around us "clearly" show God's transcendent being, which results in an internal longing for contact with our Creator. Like Psalm 19, all creation is "telling of the glory of God," "declaring the work of His hands," "pouring forth" speech and knowledge of God, yet without verbal words. This Scriptural word picture expresses the perfect integration of science, reason, and imagination. Paul even goes so far as to quote Psalm 19 later in Romans when addressing the issue of faith coming through the proclamation of the Gospel. It's almost as if he is saying that natural revelation is a kind of Gospel presentation.

Ellie's quest is our own. The grandeur of creation bids us on to seek the only thing that can give it meaning, a transcendent loving God. For without transcendent meaning, we are left with a meaningless imminent universe, like a dead-end circular argument, or a closed system that spirals in on itself. If there is no transcendent value-giver, then all values are arbitrary and equivalent. The human being is of no more value than a cockroach. A boy is a pig is a dog is a rat, as the saying goes. If there is no transcendent law-giver or moral laws, then there is no such thing as murder, rape or torture being immoral; there is only molecules in motion, without moral value. As Sartre would say, helping a little old lady across the street would be equivalent to pushing her into traffic. As Palmer challenged Ellie, all our cherished sentiments of love, justice, and compassion are self-delusions, mere subjective sentiments without real objective value. Without a transcendent standard, "what is" is right, because we cannot appeal to anything outside of (transcendent) "what is" to judge it. If you only believe in what you can prove with your senses, then what color is love? How much does justice weight? What does compassion look like in a microscope? Or as Palmer told Ellie, "Did you love your father? Prove it."

There are some materialist scientists and atheist critics who seek to affirm such absolute imminence. They espouse that morality is a fiction, or that value and meaning are arbitrary social constructs. But they cannot live consistently with their claims. For when they condemn the United States



for militaristic imperialism, or decry the evils of racism, or accuse carbon emitters of irresponsible global warming, or damn the moral atrocity of genocides, they are assuming that transcendent standards do exist and we are obligated to follow them apart from our natural genetic or social dispositions. They are appealing to a transcendent standard to judge that some actions are right and others are wrong. Ideas have consequences, and all too often, skeptics and materialists do not think through the consequences of their own ideas. Transcendence is inescapable. Even the very notion of scientific laws or the uniformity of nature is an assumption of immaterial transcendent reality that imposes upon the material imminent universe.

Herein lies a flaw in Ellie's scientism: By seeking to satisfy her lonely craving for transcendence (religion) through contact with other finite lonely beings, she is merely filling the gaps of her knowledge with an appeal to the authority of other imminent beings smarter than herself, but nevertheless subject to the same creaturely limitations of finitude — a kind of "alien of the gaps" reasoning. If we can only find beings smarter than us, then whatever they tell us about the universe will be true. But how do we know that those imperfect finite creatures are not wrong in their own views? How does she know that she was merely talking to an atheist representative of only 5% of his race, just as she was? Worse, what if that alien is simply lying?

The alien tells Ellie to turn to other humans to satisfy the loneliness. "In all our searching, the only thing we found that makes the loneliness bearable is each other." This is akin to the infinite regress argument of the world on the back of turtles *all the way down*. Telling a finite being to seek fulfillment in other finite beings to fulfill a transcendent longing is like telling the addict to seek a few more hits of his addictive substance du jour. Palmer was right. Science cannot give transcendent meaning or purpose; it can only describe imminent processes. When we engage in reductionism of reality to mere technological machinery it is no surprise that we start acting like mere machines which results in lonely despair because we were not created as mere machines.

C.S. Lewis put it succinctly in his argument from desire:

"Creatures are not born with desires unless satisfaction for these desires exists. A baby feels hunger; well, there is such a thing as food. A duckling wants to swim; well, there is such a thing as water. Men feel sexual desire; well, there is such a thing as sex. If I find in myself a desire which no experience in this world can satisfy, the most probable explanation is that I was made for another world."²

Ellie claims to have a transcendent "religious" experience of the universe itself without God. But her conclusion doesn't follow. She explains that in her intergalactic journey she was given "a vision of the universe that tells us undeniably how tiny and insignificant and how rare and precious we all are. That we belong to something greater than ourselves. That we are not, that none of us are, alone." But being tiny and insignificant could just as easily lead to a conclusion of lack of value and worthlessness as the high value that she posits. And that is just the point. "Rare and precious" and even her sense of "belonging" are all value judgments that she smuggles into her conclusion that simply are not warranted except by an appeal to a transcendent personal being. Belongingness is a personal concept. Natural forces or impersonal processes do not confer belonging upon their particles and waves. Without a personal transcendent God, the notion of preciousness and belonging are delusions constructed to avoid reality.

How unlike the personal, loving God of Judeo-Christianity who confers real value on the tiny and insignificant yet rare and precious humanity in the midst of His awesome creation:



(Psalm 8:3-9)

Concluding Non-Scientific Postscript

As indicated earlier, the power of storytelling lies in its ability to make abstract arguments concrete, to incarnate worldview. The classic story structure used in most movies is effective because it is the embodiment of conversion or persuasion. The journey of the protagonist in search of a goal, who faces obstacles from internal flaws and external adversaries, until they are taken to the end of themselves in defeat is the very process of persuasion lived out dramatically through imagination. By rooting for the protagonist, we sympathetically inhabit their journey with them. So when the protagonist is forced to face their inner flaw and change their view of the world which results in redemption, so we too open ourselves to that very same consideration, whether consciously or not. We have allowed ourselves to see the world through another paradigm. And we learn with the protagonist in a dramatic concrete way that we may not through abstract debate with all our rationalizing defenses and intellectual self-protection mechanisms. Story allows us to approach truth from a different perspective than merely rational intellect.

It is no coincidence that the very argument of scientific paradigm shift that Thomas Kuhn explains in his *The Structure of Scientific Revolutions* is described as a conversion of worldviews that is analogous to the way story persuades. Like the hero's obstacles in his journey, anomalies build tension in reigning scientific stories of reality, until a crisis occurs (a climactic apparent defeat) that forces the consideration of a different paradigm. But rather than knowledge being built up gradually in a building block manner through purely objective observation, there is much imagination and even leaping of faith involved in the breakthrough of a new paradigm. The victory of that new paradigm lies in its ability to not only encompass the old theory, but to "solve the problems that have led the old one to crisis," to explain the anomalies in the old worldview, as well as an "appeal to the individual's sense of the appropriate or the aesthetic – the new theory is said to be 'neater,' 'more suitable,' or 'simpler' than the old." ³

In this same spirit of Kuhnian paradigm shift, New Testament scholar N. T. Wright suggests that the way to handle the clash of competing cultural "stories" about reality is to tell yet another story; one that



encompasses and explains the opposing stories yet contains an explanation for the anomalies or contradictions within those stories:

There is no such thing as "neutral" or "objective" proof; only the claim that the story we are now telling about the world as a whole makes more sense, in its outline and detail, than other potential or actual stories that may be on offer. Simplicity of outline, elegance in handling the details within it, the inclusion of all the parts of the story, and the ability of the story to make sense beyond its immediate subject matter: these are what count.⁴

This is not to say that movies are reducible to worldview polemics. Far from it. But this is just one element of the influence of aesthetics on our perception of truth. It is part of our humanity to involve the emotions and imagination along with our sensory perception and intellectual reasoning. Like Ellie, we alienate ourselves from our own humanity if we divorce our science from our faith and pit them against one another.

Notes

- 1. Stan Williams, *The Moral Premise: Harnessing Virtue & Vice for Box Office Success* (Studio City: Michael Wiese Productions, 2006).
- 2. C.S.Lewis, Mere Christianity, (New York: HarperCollins, 1972), p 136-7.
- 3. Thomas S. Kuhn, The Structure of Scientific Revolutions (Chicago: University of Chicago, 1962, 1996), p. 155-56.
- 4. N. T. Wright, The New Testament and the People of God (Minneapolis: Fortress, 1992), p. 42.