Reasoned Judgment and Revelation:  
The Relation of Critical Thinking and Bible Study

Peter A. Facione  
Santa Clara University

“Reason is a light that God has kindled in the soul.” Aristotle

“Reason, however sound, has little weight with ordinary theologians.” Baruch Spinoza

For humans the impetus toward thinking is as natural as is an eagle’s impetus to fly. Birds have wings and no one asks them should they fly. Yet, although humans have minds, we sometimes wonder whether or not we should think. Our research on the aspect of critical thinking called “truth-seeking” shows that many endorse the notions that some questions are too frightening to ask and that they actually seek reasons to support their preconceptions rather than evidence to the contrary.

Some thoughts are simply too disturbing to be entertained, and some matters too sacred to be scientifically investigated. On the other hand, the overall disposition toward reasoned judgment is strong. Can we reconcile our natural inclination toward reasoning with the risks that cherished beliefs may be discovered to be unfounded? We are all aware that these tensions are no place more evident than in the frequent and bitter clashes between reason and religion.

It appears far easier for eagles to learn to soar than for humans to learn think well. Learning to make well-informed, reasoned judgments requires years of reflective practice, patient mentoring, and broad education. Perhaps this explains the cynicism of a William James who said, “A great many people think they are thinking when they are merely rearranging their prejudices.” David Ben-Gurion commented, “Thinking is strenuous art – few practice it; and then only at rare times.” Bertrand Russell suggested, “Most people would die sooner than think; in fact, they do so.” Winston Churchill said "Men occasionally stumble over the truth, but most of them pick themselves up an hurry off as if nothing had happened.”
Why do we humans often favor the familiar over the true? Moses Maimonides said, “Men like the opinions to which they have become accustomed, and this prevents them from finding truth, for they cling to the opinions of habit.” Or is the courageous pursuit of reason and evidence wherever they may lead simply a fool's adventure fraught with hazards far more serious than mere discomfiture? The ancient fable of the boy, Icarus, who flew too close to the sun with his wings of wax and feathers, warns of the grave consequences that come from pridefully overreaching our human capabilities. Are there places where our minds should not explore, ideas that would melt our mental wings, thoughts we should not think? Is it, as Ann Rice's character, Marius the Vampire, suggests, that to truly ask is to risk the whirlwind?

Perhaps. But, eagles have wings and we have minds. For humans not to think for fear of being confounded would be akin to eagles deciding not to fly for fear of falling. Before asking how critical thinking may relate to the study of the Bible, let us first be clear on what we mean by “critical thinking,” and how it functions in other aspects of life and living.
Studies of how humans think, and particularly how they conceive of the accessibility of truth, suggest that there are different levels or maturational stages of cognitive development. Patricia King and Karen Kitchener, building on the earlier work of Perry, developed a seven stage model of reflective judgment. For illustrative purposes we can simplify their model and add descriptive names of our own devising, as indicated in Figure 1. Most adults function in most contexts as trustfully comfortable or as committed skeptics. As we study and gain experience in an area of specialization we can become more nimble perspectivalists and, in time, skilled evaluators.

Just knowing that there are more advanced stages of development will not be sufficient for us to move up through the levels. Rather, the reflective realization that our assumptions about knowing are somehow inadequate leads to the kind of dissonance that opens the door to cognitive growth. With intelligence and some guidance we can learn to reason in more sophisticated ways. But we must be challenged to do so. Perhaps that is one of the greatest lessons of the Book of Job. Job is comfortable in his belief that the good will prosper and the evil will suffer misfortune. He sees himself as a blameless man, worthy of God's blessings. So when evil befalls him, Job must wrestle with his fundamental beliefs. He questions his most basic assumptions about justice, about the loyalty of friends and family, about his own virtue and godliness. The Book of Job is replete with the cognitive dissonance that the problem of evil presents to thoughtful believers. Job personifies our doubts and our fears. Ultimately faith in God's wisdom and omnipotence is presented as the wisest response. The naïve assumptions with which Job, like the rest of us, begin, cannot be sustained once they challenged and honestly evaluated in the light of that challenge.

Engaging in reasoned judgment about what to believe and what to do requires the skills and the disposition to think critically. During the decade of the 80's a great many educators and theoreticians concerned themselves with efforts to clarify the meaning of the expression “critical thinking.” Certainly, the importance of critical thinking as an educational goal drove some of that effort. In 1990, after two years of intense work using the Delphi method, a working consensus among international experts from several disciplines was attained. The conceptualization was later verified independently in research involving other educators as well as government policy makers and employers.
Critical thinking is characterized as the cognitive process of forming reasoned and reflective judgments about what to believe or what to do. The process can be engaged in by an individual, or by a group of people in collaboration with one another. At the core of the process of critical thinking are the cognitive skills of interpretation, analysis, inference, explanation, evaluation, and self-regulation. See Figure 2.

The disposition toward critical thinking is the consistent internal motivation to use those skills to form reasoned judgments. This disposition can be understood in terms of seven habits of mind: truth-seeking, open-mindedness, analyticity, systematicity, inquisitiveness, confidence in reasoning, and cognitive maturity. See Figure 3.

The question for undergraduate education is how to challenge and nurture students toward the development of their critical thinking in an ever-expanding range of academic and societal contexts. The goal is to prepare students who are willing and able to think. The same question in graduate professional schools translates into the formation of reflective practitioners with sound, professional judgment. In the study of the Bible, the question becomes how to apply our God-given skills at forming reasoned judgments to the sacred writings in ways that are intellectually honest and fair-minded.

One of the best illustrations of the integrated use of critical thinking skills, along with a display of excellent critical thinking dispositions, appears in the film Apollo 13. The scene that many may recall is the challenge issued to the ground engineers of NASA when they were told to design a filter to recycle oxygen for the stranded crew in their disabled lunar module. The problem was well defined, yet entirely novel and very high-stakes. The engineers were told

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**Figure 2**

The Disposition Toward Critical Thinking

<table>
<thead>
<tr>
<th>Seven Factor Analysis</th>
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<tr>
<td>Truth-seeking: Courageously desiring of best knowledge in any context, even if such knowledge fails to support or may undermine one's preconceptions, beliefs or self-interests.</td>
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<tr>
<td>Open-Mindedness: Tolerant of divergent views, self-monitoring for possible bias.</td>
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<tr>
<td>Analyticity: Demanding the application of reason and evidence, alert to problematic situations, inclined to anticipate consequences.</td>
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<tr>
<td>Systematicity: Valuing organization, focus and diligence to approach problems of all levels of complexity.</td>
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<tr>
<td>CT Self-confidence: Trusting of one's own reasoning skills and seeing oneself as a good thinker.</td>
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<tr>
<td>Inquisitiveness: Being curious and eager to acquire knowledge and learn explanations even when the applications of that information are not immediately apparent.</td>
</tr>
<tr>
<td>Cognitive Maturity: Prudence in making, suspending, or revising judgment. An awareness that multiple solutions can be acceptable. An appreciation of the need to reach closure even in the absence of complete knowledge.</td>
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The California Critical Thinking Disposition Inventory
exactly what supplies and equipment the astronauts had on board and had to make the filter using only those things.

But a scene that may be even more illustrative is the one during which the problem is initially identified and framed. For if people began working on the wrong problem, surely grave consequences would have resulted. At first ground control staff, not experiencing the gyrations of the space craft itself, hypothesized that there was an instrumentation malfunction, that the space craft’s antenna had been damaged, or that the craft might have been struck by a meteor. However each of these is rejected based on the evidence. For example, Astronaut Jim Levell (played by Tom Hanks) declares at one point, “If we’d been hit by a meteor we’d be dead by now.” Then, cautiously but with resolve he rightly interprets the visual evidence of a gas being vented into space and correctly analyzes the situation as being the result of a ruptured oxygen tank. A look at the instrument panel confirms this judgment. Everyone involves then draws the next obvious and grim inference, namely, that without oxygen the probability of the crew’s survival is extremely low. Once they have reasoned through all of these steps to the formulation of the problem and the evaluation of its significance, the people on the ground, guided by the executive (self-regulation) function displayed by Gene Kranz (played by Ed Harris) and the crew in the disabled space craft as well, begin to generate and evaluate, with creativity and urgency, the possibilities that would lead to a safe return of the Apollo 13 craft and her crew of three.

Given the above understanding of critical thinking as the application of a set of core cognitive skills to the formation of reasoned judgment, a natural process driven by the human disposition toward critical thinking, there emerge three fundamental postures that critical thinking can appear to have relative to religion and the study of the Bible. The first is the use of reason as a means to better understand the Bible. The second is the function of reasoned inquiry as an independent process by which truth is sought, a process that often bumps up against one’s religious beliefs. And the third is as an antagonistic process by which some criticize the Bible as a possible source of genuine evidence, theories, methods, and standards of truth. For convenience we can name the three roles “Faithful Servant,” “External Agent,” and “Hostile Antagonist.”

Critical Thinking as Faithful Servant. Anselm and Augustine used their religious faith to understand the world and they conceived of reasoned judgment as a tool whereby to
understand their faith. Both prayed that they would be able to comprehend the truths of their religion better by using the powers of their reason. The expression "faith seeking understanding" characterizes their approach. As we seek to understand the meanings of the holy texts, as we search for guidance in the Bible for how we should relate to one another as sons and daughters of God, and as we explore the mysteries of the relationship between humans and the Divine, we use our critical thinking skills and are guided by our faith commitment. A simple verse can be the source of profound insight and the object of serious analysis. We will draw inferences from the pages of the Bible for how we should live, and we will evaluate events and ideas in the light of the fundamental understandings we have about the world that we have derived from our study of the Bible. We will correct one another’s misinterpretations and misguided understandings as we acquire a more thorough knowledge of the holy texts and of the standards of their proper analysis.

The exact interpretations advanced may vary over time as we become better informed, through careful linguistic, anthropological, and cultural scholarship. Yet this does not mean that we have abandoned earlier truths, rather that we have learned the limits of our previous understandings, grounded as they were, in a less than full historical knowledge. So, for example, instead of thinking of Genesis as if it were a simple chronology composed by one author, we find that it is, in fact, an edited joining of two or more oral renditions of the creation story. Yet the fundamental message comes through. The story of Adam and Eve, rather than being a early global census, it is about human nature. It affirms our prideful human tendency to overreach ourselves, with mixed results, and our equally human tendency to deny responsibility for our acts. In Jewish tradition, generally, it’s a story about growing to an adult realization of both the limits of human beings (we are dust, we will die, childbirth is painful) and our powers (we give up individual immortality for species immortality, we can work to sustain ourselves). In a way, this is a story about taking responsibility for ourselves and seeing the necessity to use our minds to solve problems, for we do not dwell in a Garden of Eden.

We also learn, using our critical thinking skills in the service of faith, that Jesus’ parables and the other Biblical narratives have the power to shape our core understandings of who we are and how we should live. Narrative is perhaps the most powerful teaching tool for humans. Far more so than abstractions that languish in the web of theoretical constructs, themselves the productions of a maze of assumptions about the world, stories can be remembered and recounted by nearly everyone. The American Bible Society, [http://www.americanbible.org](http://www.americanbible.org) provides a video dramatizing the parable of The Good Samaritan [http://www.newmediabible.org/1goodsam/default.htm](http://www.newmediabible.org/1goodsam/default.htm). The accompanying questions, audio clips, and pictures engage the web-site's visitors in thinking about the parable and its meaning in their lives. Critical thinking is used in this web-site with the clear intention of supporting the reading of the Bible as a faith document with important messages for life today. Consider as well the story of Jesus walking on the troubled waters of Lake Galilee. The story brings vivid images to mind of storms and men in mortal danger. The story tells us that trust in the Lord will see us through even the most desperate of times. When all about us are falling, when we feel as though we are about to drown in a sea of trouble, Jesus is there, reaching out toward us, to pull us to safety.
Critical Thinking as Independent Agent. Reasoned judgment, applied as it is by truth-seekers to the business of understanding the natural causes of things, establishes the apparent limits of what can be known by the eyes of faith alone and what can be known by the light of natural reason. Not everything requires a supernatural explanation. And since predicting and controlling natural phenomena is dependent on being able to explain the how and the why of things in terms of natural causes that men might learn to manage, critical thinking plays an absolutely vital role. Unfortunately, saying that things happened because the Lord wills them does not allow one to predict what will happen next. While religion can be an important source of consolation, its way of seeking to explain things cannot feed the hungry, cure the sick, nor launch a space craft. And while it is true that the Lord loves us all, it may not be true that the Lord wants so badly that one high school basketball team should defeat the other that He (or She) causes one team to make baskets and the other to trip and lose the ball out of bounds. The Jesuit adage, “Pray like everything depends on God and work like everything depends on you,” seems to characterize the role of critical thinking as external agent.

The film, The Name of the Rose, revolves around this independent agent function of critical thinking. The protagonist, Brother William of Baskerville, played by Sean Connery, finds the mysterious deaths of several monks engaged in hand copying ancient manuscripts were due to natural events, not to demonic possession. Brother William then follows a most useful methodological principle that has came to be known as "Ockham's razor." (William of Ockham, a philosopher who wrote during the Fourteenth Century advised thinkers of his time always to prefer explanations that relied upon fewer, rather than more, assumptions.) Relying on this basic principle of explanatory parsimony, the character in the film, Brother William of Baskerville, declares, having found that one of the mysterious deaths was either a suicide or murder, “no need for the devil at all.” One might urge that suicide and murder are, themselves, evidence of demonic forces. Yet, it is hardly necessary or useful to advance such a metaphysics in order to explain the deaths under investigation.

Did Jesus really trod dry-footed on the surface of a roiling Galilean lake? Well, not if all we know about physics is true. But is that really the important thing? In fact, if some card-carrying dualistic thinker, seeing everything as "black or white," and perhaps harboring ambitions to replace Quasimoto as Chief Inquisitor, were to demand that we accept the story of a man walking on a fresh water lake as the literal truth, we might all find ourselves at a loss for how to react. And if our lives and fortunes were at stake, some of us would indeed find it not
unreasonable to suspend, at least for this one case, what is generally known about the specific gravity of an adult human and the surface tension of lake water. Yet if we were persuaded that not to do so would be to imperil our immortal soul, perhaps such an acquiescence would seem indeed to be correct outcome of the process of reasoned judgment. Or we might wonder, and not without good reason, about the whole notion of the soul, where it comes from, and whether it really makes any scientific sense.

Critical Thinking as Hostile Antagonist. For Voltaire, like Russell, Marx, Sartre, and many others, the third posture seems to emerge inevitably from an understanding of the second. For how could reason as an independent agent, forever remain, or be regarded as, simply neutral? The film, Inherit the Wind, is based on the true story of a teacher who losses his job because he was teaching about evolution. The film is the dramatic reenactment of his trial. In the end, the defense attorney, Clarence Darrow, played by Spencer Tracey bundles together into his briefcase Charles Darwin’s The Origin of the Species, and the Holy Bible, saying “The Bible is a good book. But it is not the only book.” Reasoned judgment is not a force one can turn on and off at will. It is an engine in its own right and those with a strong disposition toward critical thinking and well developed critical thinking skills cannot help but use those skills to try to better understand all the dimensions of life and living, including the spiritual dimension. A religious person might rightly ask why, if the Creator endowed us with the power to reason, would it be other than right that we should turn our reason toward trying to understand our Creator. Thomas Aquinas, for example, argued that it is right for human beings to use their power of reason to come to understand as much of God as might be possible by examining creation and developing a natural theology. Yet, when Galileo pointed his telescope toward the heavens, what he saw lead him to realize that Aristotle’s notion that the sky was made of concentric crystal spheres was, not to put too fine a point on it, nonsense. The analogy is telling, for we cannot know what will happen when we turn the power of reasoned judgment full bore at the cherished notions we derive from our study of the Bible. But, the one thing we cannot, in conscience, do without risking the ire of the Creator is to fail to use the gifts we were given. It would be wrong of us not think.

The Delphi conceptualization of critical thinking provides not only that the reasoners seek to determine what to do or what to believe, but that they do so by giving reasoned consideration to evidence, context, concepts, methods, and standards. Giving reasoned considerations to these means, at the meta-level, to subject these very elements to analysis, interpretation, and evaluation. In other words, part of excellence in critical thinking is to do such things as analyze the quality of the evidence, evaluate the appropriate applicability of the criteria, interpret the
conceptualizations and reconsider the analysis of the contexts of judgment. Just as in a jury trial
good defense attorneys seek weaknesses in the theory, evidence, methods, and standards of proof
advanced by the prosecuting attorneys, so do good critical thinkers stand ready to challenge the
methodological, epistemological, and metaphysical assumptions
upon which judgments are based.

The troubled waters need
not be the liquids that form Lake
Galilee. Instead they could be the
deep and dangerous intellectual
waters upon which one hopes to
sail as one ventures with critical
thinking into the study of the
Bible. It is no accident that Martin Luther called reason "faith’s greatest enemy.” The battle lines
are drawn sharply. Concerning religion Bertrand Russell said, “There is something feeble and a
little contemptible about a man who cannot face the perils of life without the help of comfortable
myths.” In that famous scene from Inherit the Wind when the word “day” is opened to the
possible interpretation that it might refer to a period of time other than 24 hours, we see the
tumultuous affect of the collision of reason with what is taken to be revelation.

When we try honestly to reconcile what we have come to believe through the teachings of
religion and the study of the Bible with what we have learned through reason and experience, an
intellectual storm of fearsome proportions often begins to churn. The classic conflict of evolution
as a scientific explanation and the literal reading of Genesis is but one illustration. Other
examples with perhaps even more important societal consequences include debates about the
meaning of the marriage as it relates to homosexual couples and conflicts about abortion or the
use of harvested fetal stem cells in potentially lifesaving medical research.

Can the three become one? The most fundamental assumption of the rationalism that has driven
western philosophical thought for more than two and a half millennia is that all reality, in the
final analysis, operates according to principles that make sense. The quest to know and to explain
are rooted in the idea that human inquiry is not a pointless effort to discern the caprice of
irrational gods and demented demons, but an investigation into an ordered universe. The causal
relationships may be extraordinarily complex and subtle. Entropy, uncertainty, and random
motion may be elements in the final explanation. But in the end, truth is one because reality is
one.

This basic presupposition of western rationalism is echoed down through the centuries
not only by atheists and agnostics, but by believers as well. In The Idea of a University John
Cardinal Newman offers two maxims: “Truth cannot be contrary to truth.” And, “Truth often
seems contrary to truth.” When the truths of science and reason appear to contradict the truths of
the Bible and revelation, either one’s science is incomplete or one’s revelation is a mistaken
interpretation. For if truth is fundamentally one, we have every reason to hope that truth-seeking
and God-seeking are not inconsistent vocations. Instead of fearing, squelching, or assaulting
reason, persons of faith can give full play to reasoned judgment. The challenge, however, is not to settle for using reason in a mediocre way. We should strive for the highest developmental level of reflective judgment attainable, either individually or as a thinking community, namely the level of the sage.

On February 9, 2000 NBC aired a show in the series “The West Wing.” The President of the United States, played by Martin Sheen, wrestles with the question of capital punishment. The scriptwriters tell the story so that the question has philosophical, religious, ethical, political, legal, personal, emotional, and historical dimensions. In one scene a learned rabbi advises a presidential aide. The rabbi explains that Talmud sanctions capital punishment in a number of cases, as for example as a punishment for a rebellious son. The Talmud also sanctions slavery, says the rabbi. He goes on to explain that these views may have represented the best wisdom of their times, but that they are not ethically or culturally acceptable any longer. He urges the aide to advise the President to commute the condemned man’s sentence. The wise advice the devout rabbi has offered is by no means a rejection of his Talmudic heritage but a manifestation of its deepest meanings in the context of current problems and understandings. In the rabbi’s decision we see reasoning having come full circle. For the rabbi is not using reasoning simply as a tool in the service of his faith’s propositional beliefs, nor as a neutral agent, nor as a hostile critic, but as a tool to reflectively reinterpret the core meanings of the sacred text in a situation where knowledge includes uncertainty and yet justifiable claims can and, in this example, should be made.

At the level of the sage the second and the third postures critical thinking takes toward the study of the Bible, that of independent agent and hostile antagonist, will, in the end, merge with the first relationship, that of faithful servant. But the faithful servant role must change as well. For critical thinking, truly understood, will retain its edge. Reasoned judgment, if well practiced, has the potential to reunify its triune responsibilities. It serves best not simply when it interprets from within, but when it explains independently and when it evaluates objectively. Anything less would stifle the potential of reasoned judgment to lead to a deeper understanding; it would not be critical thinking, rather it would be sophistry and intellectual dishonesty.

Using the Bible to Foster Reasoned Judgment. In addition to the Society’s orientation toward social justice, the Jesuits have historically been known for their erudition and advancement of higher learning. Like the wise rabbi in the earlier example, Jesuits have used reasoned judgment as a formidable tool in the service of faith and justice. Those who have experienced their educational philosophy of reflective engagement and reasoned inquiry often recount having learned to think in their schools and colleges. Not that the Society of Jesus has a corner on the market, by any means, but there are some important pedagogical similarities between its approach and the approach of many of the finest teachers of thinking from the time of Socrates on through to the present. The strategies to foster and strengthen critical thinking skills are well known, as are the things that one can do to nurture critical thinking habits of mind. The lists in figures 5 and 6 below summarize those.

To teach thinking one must have something to think about. The Bible makes for excellent material. It is a richly complex text, open to multiple interpretations, with profoundly deep and
conflicted historical, religious, philosophical, and cultural roots. It is at once familiar and yet not
at all transparent. It speaks to matters of tremendous human significance, yet often in ways that
are deceptive in their apparent simplicity. The relationship between the study of the Bible and
critical thinking is a two-way street. Teachers of reasoned judgment have long realized that the
problems we face in the future do not come to us in the tidy disciplinary boxes and rigidly
compartmentalized areas of study. Thinking that blends the insights of many disciplines and that
wisely considers the often divergent standards and conceptualizations of ethics, religion, science,
and politics is called for far more frequently than one might at first imagine. The quick and
simple solutions, pat answers, and unreflective application of brittle truisms of the past are often
inadequate to the task.

We are in the early years of the realization that genetics engineering will have potentially
life-altering consequences for our species, if not our entire planet. To reason well about the
genomics revolution in science and in social policy, will be to test the limits of our
conceptualizations and methods; it will cause us to reconsider standards and redraw the
boundaries of what we imagine to be possible and, indeed, thinkable. It will call for the best in
our capacities and disposition toward reasoned judgment. For the person of faith, it will be
potentially as troubling as the discovery that the Sacred Mystery is not an anthropomorphic being
seated on a golden throne just above the crystal sphere that seems to obstruct our earthbound
view of Heaven. And none of this implies that we should lose our faith. Only that we cannot
afford to abandon the best gift God has given us, namely our reason.

Conclusion. Only if the human mind is truly free to think and to apply to the study of the Bible
and the practice of religion all that is known by the light of natural reason and experience, with
all the risks and all the uncertainties that critical thinking as reasoned judgment implies, can we
humans ever be assured that our seeking for salvation and our seeking for wisdom have the
potential to be reconciled.

**Figure 5**

**Five Suggestions for Nurturing Reasoned Judgment**

- Expect and reward intellectual virtue.
- Evaluate thinking processes, not results only.
- Present information from the bottom up, explaining why, not just what or how.
- Replace rote training with thoughtful mentoring.
- Build a culture of reasoned, fair-minded, evidence-based thinking.

**Figure 6**

**To Teach Critical Thinking Skills**

- Model CT skills and dispositions.
- Create a culture of inquiry.
- Diversify contexts of judgment.
- Reward and challenge.
- Guide reflection on the thinking process.
- Engage people in thinking well.
- Ask “Why?”
References and Works Cited


