Catholic Theology and Academic Freedom

by Terence L. Nichols
Theology Department

Academic freedom, as applied to university professors, has traditionally meant freedom of teaching, of inquiry and research, and the freedom to make statements outside the classroom. This was the understanding of the 1915 "Report on Academic Freedom" issued by the newly formed American Association of University Professors. Academic freedom was designed principally to protect professors from unwarranted encroachment by the state. As James Heft notes, "Between 1890 and 1914 there were in the United States a number of well-publicized cases in which professors… were dismissed or resigned from universities on account of their views on evolution, pacifism, and economics."1

Concerning denominational colleges, the AAUP report stated that they

"do not, at least as regards one particular subject, accept the principles of freedom of inquiry, of opinion, and of teaching; and their purpose is not to advance knowledge by the unrestricted research and unfettered discussion of impartial investigations, but rather to subsidize the promotion of opinions held by persons usually not of a scholar's calling, who provide the funds for their maintenance. Concerning the desirability of the existence of such institutions, the committee does not desire to express any opinion. But it is manifestly important that they should not be permitted to sail under false colors. Genuine boldness and thoroughness of inquiry, and freedom of speech, are scarcely reconcilable with the prescribed inculcating of a particular opinion upon a controverted question."2

I take it that the "particular subject" to which the report refers is religion or theology. In the opinion of the authors of the report, it would seem, theology is not a science, which leads to the "advancement of knowledge by the unrestricted research and unfettered discussion of impartial investigations." Rather its aim is "the prescribed inculcating of a particular opinion upon a controverted question."

Similar charges have been leveled at theology by philosophers, scientists, and other thinkers, for a long time. Bertrand Russell, in his *A History of Western Philosophy,* says of Thomas Aquinas: "There is little of the true philosophic spirit in Aquinas. He does not, like the Platonic Socrates, set out to follow wherever the argument may lead. He is not engaged in an inquiry, the result of which it is impossible to know in advance. Before he begins to philosophize, he already knows the truth; it is declared in the Catholic faith."3

If these charges are correct, there is no real need for academic freedom among theologians; their task is simply to pass on and defend the truths of the Catholic faith, as defined by the Catholic magisterium (the teaching office of the Church exercised by the bishops and the pope). If Catholic theologians disagree with the magisterium, they should be disciplined or dismissed.

I will argue here that Russell's view, and that of the 1915 AAUP report, is a caricature of theology. Christian theology, and especially Catholic theology, is, it is true, bound to hold and pass on certain fundamental truths concerning the Catholic faith. A basic statement of these may be found in the Nicene-Constantinopolitan creed (though the fundamental Catholic truths are not limited to those in the creed, but include the statements of scripture, ecumenical councils, and papal teachings). Thus, I believe, a Catholic theologian could not deny the existence of God, the divinity of Christ, and other articles of the creed, while remaining a Catholic theologian in good standing. In this sense there is a fundamental system of beliefs accepted by all Catholic theologians. Such theologians do indeed remain free to pursue inquiries wherever the evidence or arguments may lead. Certainly most of them have already pursued such inquiries, and have concluded that the evidence and arguments lead to Christian and Catholic belief. But if they become convinced that the evidence or arguments lead away from the foundational truths of Catholic thought, they may cease being Catholic theologians and become some other kind of theologians.

But, I will argue, it is true of all sciences and of all academic disciplines that there is a foundational paradigm of established theory, truths, and methods which characterizes each discipline, and that any practitioner of that discipline must follow that core theory or be rejected. Thus there are limits on academic freedom. Some of these are obvious and are imposed by the laws of the land. One cannot preach treason, commit liable, teach racism, incite to violence, and so on, without threat of prosecution and dismissal from a university teaching position. Others are less obvious and are imposed by the discipline itself. The very canons of evidence, truth, and method which define academic biology as a science, also impose limits on what counts as scientific biology, and any professor who flagrantly contravenes those limits will be censured by the profession and probably dismissed from the university. That would be the fate, I imagine, of any professor at the University of Minnesota or the University of St. Thomas who taught creationist biology rather than evolution in the university classroom.

However, I will also maintain that although it is true that theologians, particularly Catholic theologians, are committed to certain previously established truths, there is within theology a surprising amount of freedom to interpret what these truths mean, including some freedom to differ from the teachings of the magisterium in non-infallible teachings. I will argue that it is essential that theologians, within the limits of their discipline, be granted academic freedom to pursue their research. To seriously curtail it would be to reduce theology to catechesis, destroy its critical responsibility, and so eviscerate it as a discipline. At the same time, there are limits to what one can teach as a Catholic theologian. Academic freedom in theology, therefore, is a balance or a tension between the need for freedom to search for the truth, and the limits to responsible use of that freedom. But this, I will maintain, is true of any science.

Paradigms in the Sciences

In his seminal 1962 book, *The Structure of Scientific Revolutions,* Thomas Kuhn, an historian of science at MIT, introduced the notion of paradigms in science. In Kuhn's

view, a paradigm is composed of the basic theory or theories, accepted examples of actual scientific practice, established facts, methods, procedures, and research strategies which are accepted by any given scientific community and which provide the foundations for its discipline. It is adherence to the paradigm which constellates the community, and it is the study of the relevant paradigm which prepares a student for membership in a scientific community.4 Examples of modern paradigms might be Neo-Darwinist evolutionary theory in biology, quantum theory and relativity theory in physics, and the atomic theory of matter in chemistry. Each of these paradigms should be understood as composed of a core theory or theories, auxiliary theories, standard methods of research, established facts, etc. Kuhn believes, however, that the paradigm which defines a given science can never be entirely reduced to a set of theories or rules. Much of what constitutes a paradigm is the normal practice of a given science. Excellence in such practice entails seasoned judgment, which cannot be stipulated in rules, and which the student must learn in graduate school under the tutelage of a mentor.

Normal science is constituted by elaborating or articulating a particular paradigm, that is, filling in the details of the paradigm by extended research. For paradigms, like general theories, always allow for a considerable amount of research within the boundaries of the paradigm. The discovery of the atomic constitution of matter did not exhaust modern chemistry, though it provided its theoretical foundation. On the contrary, it furnished it with a research program—the exploration of all the possible combinations of atoms and molecules—which still goes on. Similarly, the discovery of DNA did not answer all the questions concerning genetics and molecular biology; rather, it provided a basic paradigm within which research could flourish. In contrast to normal science, what Kuhn calls pre-science is characterized by the lack of a shared paradigm and a proliferation of competing theories, which disagree even on basic foundations, relevant facts, research procedures, etc. An example Kuhn gives is optics before Newton. (Until Newton’s theory of optics, no single theory had ever commanded the consensus of the relevant scientific community.) When one theory triumphs over its rivals and gains the consensus of the scientific community, then pre-science becomes normal science.

One of the characteristics of a paradigm-driven science is that it tells its practitioners which facts and which research strategies are likely to be meaningful and fruitful. Thus, out of the immense, almost infinite plethora of possibly relevant data and tests, the experimenter is enabled to choose a workable number of significant variables and test them. Conversely, the paradigm dictates what data and experiments are likely to be *un*fruitful. Thus modern biologists no longer try to search for a vital force which animates living things, nor do chemists try to search for phlogiston. It is thus the basic theory which tells the scientist which facts are important, and which are merely ‘noise’. In reading an X-Ray, one must learn through practice to ignore most of the shapes on the X-ray, and concentrate on the slight anomalies which might indicate a cancer. In reading a cloud chamber track, the physicist has to ignore almost all of the tracks and the background, and find the one track made by the particle being targeted in the experiment.

It is a characteristic of normal science, which is constellated by consensus concerning a given paradigm, that facts or problems which *resist* explanation are regarded as

anomalies, (which may one day be explained) and *not* as falsifications of the core theory. Kuhn gives many examples of this. The Copernican theory could not account for the lack of parallax in viewing the stars when an observer moved from one point in the earth's orbit to an opposite point six months later. In fact, such stellar parallax does occur, but because the stars are so distant it could not be observed and measured until the early nineteenth century. But this did not prevent Copernicus' theory from becoming widely accepted by the late seventeenth century. Again, throughout the eighteenth century, scientists could not derive the observed motion of the moon from Newtons' laws, yet they did not therefore jettison Newton's theory, which was the core of the paradigm of physics until the advent of relativity and quantum theory.5 Nor did the fact that Newton's theory could not account for the observed precession of the perihelion of mercury (a phenomena which was not explained until Einstein's theory of relativity) doom the theory. Kuhn believes such anomalies are inevitable with every paradigm, and do not constitute falsifications of the core theory. It is only when anomalies become unmanageable that they force the development of a new paradigm.

Kuhn's understanding of science has been criticized as emphasizing too heavily the social construction of scientific paradigms, and minimizing the importance of empirical fit, or experimental verification, in the acceptance of a paradigm.6 He is reluctant to consider 'truth' as the mark of a successful paradigm; rather he emphasizes the degree to which a paradigm commands assent of the relevant scientific community as a mark of its success. I believe there is justice in this criticism. A slightly different way to understand paradigms, which I propose here, is as those core theories, examples, and methods which have stood the test of prolonged investigation and verification. This would be true of the atomic theory of matter, quantum theory, and evolutionary theory. With this qualification, however, I think Kuhn's insight valid, that individual sciences are controlled by single paradigms, which direct research and express what is accepted as true theory and legitimate practice within that science. Theories and data which do not harmonize with the relevant paradigm will be set aside by the scientific community as anomalous, or simply ignored. And practitioners who contravene the standards and methods of the paradigm will be censured and rejected by the scientific community. Three examples of this follow.

On Sept. 26-27, 1997, a conference entitled "Dissent and Orthodoxy in Quantum Mechanics," was held at the University of Notre Dame. The consensus of the presenters (who were philosophers and physicists) was that the Copenhagen interpretation of quantum mechanics has been enforced within the community of physicists for the last seventy years as an orthodoxy which brooked no dissent. Rival interpretations, notably that associated with the name of David Bohm, were not widely discussed. One presenter, Dr. Max Dresden, a physicist from Stanford University, told how he gave a presentation on Bohm's theory in the early 1950's, and was so severely criticized by Robert Oppenheimer, Wolfgang Pauli, and others at the presentation, that he (who was a young physicist at the time) never again attempted to defend the Bohm interpretation. Only now is the Bohm interpretation beginning to be discussed among physicists. The thesis presented by Dr. James Cushing (one of the presenters at the Notre Dame conference) is

that the Copenhagen interpretation's triumph was at least in part due to historical contingency and social pressure.7

A second example is that of Dr. Rupert Sheldrake, who was a research fellow of Clare College, Cambridge, where he was director of studies in cell biology and biochemistry. In 1981 he published a book entitled *A New Science of Life,* in which he argued that Neo-Darwinist theory was inadequate to account for the growth and regeneration of organisms.8 Rather, he proposed, organisms behave as if they are governed by a holistic cause similar to Aristotelian forms. Only such a cause can account for the ability of certain organisms, such as flatworms, to regenerate whole new organisms from pieces of the original organism. Sheldrake hypothesized the existence of such holistic causes or forms, which he called "morphogenetic fields." He thought them to be similar to Aristotelian forms, except that he thought they develop or evolve over time (which Aristotelian forms do not). Morphogenetic fields, since they are not fully material, cannot be tested directly, but could be tested indirectly. Sheldrake proposed a number of possible experiments which might indicate the existence of such hypothetical fields.

The New Science of Life was reviewed anonymously in the prestigious British journal, *Nature.* After attacking the book savagely, the anonymous reviewer (who turned out to be the editor) stated that "His book is the best candidate for burning there has been in many years."9 To this day (to my knowledge), Sheldrake does not have a position in any university biology department, nor has his work been accepted by members of the biological community. Indeed, any biology professor who endorsed Sheldrake's theory would probably jeopardize his professional career. Sheldrake dared to contravene the reigning paradigm of Neo-Darwinist orthodoxy and paid the price. Though his book received generally favorable reviews in the popular press, and from some individuals in the scientific community, the biology community did not say, "Here is an unusual hypothesis which might be worthy of investigation"; instead, they rejected Sheldrake's hypothesis without any attempt to perform experiments which might have validated or invalidated the hypothesis.

A third example is that of Dr. Melvin Morse, a Seattle pediatrician. When he was practicing in Pocatello, Idaho, one of his patients, a girl of nine, drowned in a swimming pool and recovered after being comatose and near death for three days. After her recovery she reported an elaborate near death experience. Intrigued, Morse conducted extensive research on near death experiences in children and published his findings in several articles. The result was that he lost his research grant. In his own words, "Most researchers are faced with the problem of 'publish or perish'. In my case I published *and* perished."10 As he explains, modern medicine is committed to a paradigm of "medical materialism," which allows no place for spiritual experiences or causes. Hence evidence for near death experiences and pre-death visions of deceased loved ones is ignored and resisted in medical science, and researchers in those areas are routinely marginalized by the medical community. As Morse puts it: "To research near-death experiences today is to be lumped together with spiritualists, TV ministers, and UFOlogists."11 Presently there is a large body of research on near death experiences, most of it assembled by scientists (usually psychologists or physicians). Yet this literature has been entirely

ignored by the wider scientific community, or else dismissed without attention to the data as due to ‘drugs’ or ‘endorphins’, both of which explanations are contradicted by the available evidence.

These examples, drawn from three different sciences, show what happens when individual researchers violate the limits of paradigm orthodoxy within a given scientific community. Though the above examples seem to me to indicate an excessive narrowness on the part of some scientific communities, I do not wish to suggest that this is the case with all paradigm enforcement. Professional communities have a responsibility to separate good science from pseudo science in any scientific discipline. If they did not, science could not flourish, for, as Gresham’s law states: "Bad money drives out good." But one of the likely consequences of this is that the community may err on the side of rigidity and orthodoxy, and disbar ideas and theories which may later prove to be fruitful.

Therefore I believe that it is not true, as the 1915 AAUP statement implies, that science is an impartial search for truth, which fearlessly goes wherever the evidence and arguments lead. This is exactly what both Sheldrake and Morse did, and their professional careers were compromised because of it. Normal science is governed by a paradigm which determines what is and is not legitimate data and legitimate research. Evidence which falls outside the paradigm is often ignored or discredited without investigation, as Morse complains repeatedly in his book.

But perhaps it will be objected that the paradigms do change eventually over time, in response to an accumulation of evidence. After all, no one today defends such past paradigms as the phlogiston theory of combustion or Ptolemaic astronomy. Paradigm change is always difficult, according to Kuhn, and is met with great resistance on the part of those whose interest is vested in the traditional paradigm. But paradigm change does nonetheless eventually occur.

This indeed is the stereotype of science as a progressive, self-correcting enterprise. One would hope that it is true. But even if it is, there are some elements of the scientific paradigm which I think do not change. One of these is the commitment of science to explanation by *natural causes alone*. This has been true of modern science from the beginning: its method is to explain phenomena by recourse to natural causes. ‘Natural causes’ means causes that can be empirically tested and mathematically measured; in short, physical causes but not ‘spiritual’ causes. Isaac Newton is explicit about this in the introduction to the first edition of his *Principia mathematica.* He writes "Since the ancients…esteemed the science of mechanics of greatest importance in the investigation of natural things, and the moderns, rejecting substantial forms and occult qualities, have endeavored to subject the phenomena of nature to mathematic, I have in this treatise cultivated mathematics as far as it relates to philosophy."12 Similarly, the National Academy of Sciences explains: "The goal of science is to seek naturalistic explanations for phenomena…"13

But if there is more to reality than just matter, as all religions hold, then this methodological postulate limits and may bias scientific explanation. Academic biology,

for example, will tend to see evolution as driven by material factors alone, and will tend to ignore or discount any possible spiritual factors, such as divine providence. Scientific psychology will attempt to explain human behavior on the basis of material, measurable factors alone, and will likely ignore evidence of free will or the action of spiritual influences in the human psyche (in fact this is how university psychology is taught today). Scientific sociology and anthropology will do the same in their study of human societies. And so on.

Again, however, it might be objected that the foundational paradigms of the sciences are based on theories, established facts, etc. which have been empirically tested, whereas the foundational paradigm of theology (that God exists) is not open to empirical verification, but is based on tradition and authority. My response is that this also is a stereotype which is at best a half truth. In fact, most of the basic claims of Christian theology are open to 'lived verification' by the believing community. One such claim is that those who pray to God will receive answers, and those who trust in God will receive God's grace and help. This help may not preserve them from earthly suffering or death, but it is help nonetheless. This claim is put to the test every day in the lives of thousands of believers. It is the basis for the highly successful twelve step programs, derived from Alcoholics Anonymous, whose method of spiritual help is patterned after St. Augustine's theology of grace. I would claim, therefore, that it is the experiences of the believing community which provides the empirical verification of religious beliefs.

At the same time, some of the paradigms which form the basis of academic sciences are not as susceptible to direct empirical verification as the stereotypes imply. The classic example is the theory of evolution, which cannot be directly observed, nor reproduced in a laboratory. Rather its truth value rests on converging lines of inference drawn from many different types of evidence.14 But this, I would say, is also true of theological claims, for example, "God exists."15

This concludes the first part of my argument. While it is true that Catholic theology is based on a foundational paradigm which is composed of certain theories, accepted truths, methods, examples of doing theology, and so on, this is also true of the sciences. Russell's charge that Aquinas, and by implication, Catholic theology, is not truly philosophical, because it already knows in advance what it is attempting to prove, is partly true and partly false, but to the extent that it is true, it is also true of the sciences themselves. Like theology, the sciences are based on certain core theories about the nature of reality (e.g. reality is rationally intelligible, and can be explained by natural causes) which cannot be proven beyond any doubt, but which are to a certain extent validated by the ongoing fruitfulness of their enterprises. If this is so, it means that the knowledge commanded by any discipline is but a partial view of the whole, and therefore each discipline needs the perspective of others to approximate an adequate, comprehensive view of the whole of reality. In particular, as John Polkinghorne and Pope John Paul II, among others, have argued, the sciences and theology are complementary; each needs the other to achieve a comprehensive understanding of the whole of reality.16

Academic Freedom in Theology

But if it is true that Catholic theology is based on a foundational paradigm, which includes revealed truths, such as those of the creed, yet there is at the same time a great deal of latitude for theologians to explore the meaning and implications of those beliefs. The doctrine of the trinity was laid down at the councils of Nicaea and Chalcedon, and has been part of the dogma of the Church for millennia. Yet at this moment Trinitarian theology is burgeoning; many books and articles are being written about it, perhaps more than at any time in the past. The paradigm provided by the dogma of the trinity did not, then, end theological discussion of this mystery. Rather it provides the parameters within which the discussion can take place, just as the atomic theory of matter has provided a fruitful research program for modern chemistry.

There are, of course, more sensational and controversial topics treated by theology, such as artificial contraception, abortion, and questions which touch on ecclesiastical authority, such as the infallibility of the pope. But even in these areas, magisterial decrees have not silenced the pens of the theologians. Paul VI's encyclical on artificial contraception led to a long theological controversy which is far from over. Pope John Paul's statement that the magisterium's position on women's ordination must not be discussed and must be definitively held did not lead to the desired result. Articles and discussions continue; the Catholic Theological Society of America, for example, at its June, 1997 meeting (In Minneapolis) discussed and ratified a formal statement on women's ordination which disagreed with the papal teaching on the subject.

The case of Charles Curran, who was dismissed from his post at the Catholic University of America, will certainly be sited as a contradiction to what I have written above. But the Curran case, occurring as it did at the only university in America which is under direct pontifical control, is almost unique. I know of no other theologian at a university who has been dismissed because of dissent from the magisterium (though there are cases of dismissal from seminaries). Indeed, there are theologians who are far more radical dissenters than Curran, who are still teaching. In fact, a case can be made (though not here) that the bishops have been too lenient, rather than too strict, in their treatment of some dissenting theologians.

Still, it is essential that theologians have a measure of academic freedom. One of the principal tasks of theology is to think critically for the Church. This involves rationally defending the basic beliefs, such as the Christian belief in God, which come under attack in a secular and reductionist intellectual environment. But it also involves critical consideration of traditional beliefs which may need modification. Two examples of this follow.

In 1864, Pope Pius IX issued an encyclical, *Quanta Cura,* which condemned "that erroneous opinion that is especially injurious to the Catholic Church and the salvation of souls, called by our predecessor Gregory XVI a madness, namely, that freedom of conscience and worship is the proper right of each man and that this should be proclaimed and asserted in every rightly constituted society." To this encyclical was attached the so-called "Syllabus of Errors," a list of propositions that the pope condemned. Proposition number fifteen in that Syllabus condemned the proposition that a

person was free to "embrace and practice that religion which by the light of reason he (or she) thinks true." (*DS* 2915). This position of the Holy See was dramatically changed at Vatican II, which issued the document *Dignitatis Humanii* (The Document on Religious Freedom). The first chapter of that document begins with the following words:

This Vatican synod declares that the human person has a right to religious freedom. This freedom means that all men are to be immune from coercion on the part of individuals and social groups and of any human power, in such wise that in matters religious no one is to be forced to act in a manner contrary to his own beliefs.17

The document grounds this religious freedom in the dignity of the human person. It goes on to say that no one should be "forced to act in a manner contrary to his conscience."(#3)

What brought about this change in the teaching of the magisterium? It was largely the critical activity of theologians, from 1864 to 1965, especially the Jesuit John Courtney Murray.18 Murray had been arguing for religious freedom for years before Vatican II, and had been silenced for a period of time by Rome for his dissenting views. Had he and other theologians not been allowed the freedom to dissent from (non-infallible) teachings of the magisterium, the position of Pius IX would probably be that of the Church today.

Another major change from the time of Pius IX to Vatican II was in the conception of the church itself. The older conception of the Church was seen as a pyramid, with the pope at the top, the bishops as his deputies, and the people at the bottom. The Pope was styled the sole "Vicar of Christ" on earth (whereas in earlier centuries that title had been given also to kings and bishops.) The mission of the hierarchy was to teach; that of the laity, to obey. Though the laity were understood to be members of the Church, the phrase "The Church, as in "the Church Teaches" commonly referred to the hierarchy, not the laity. But the decree of Vatican II on the Church—*Lumen Gentium*—modified this. In *Lumen Gentium* the Church is seen as the whole People of God. The people are said to share in the prophetic office of Christ: "The Holy People of God shares also in Christ's prophetic office." (*LG* #12) The bishops are vicars of Christ in their own right, which means they are not merely deputies of the pope. The authority of the pope is set within the college of bishops. *Dei Verbum*, the Constitution on Divine Revelation, states that: "There is a growth in the understanding of the words and realities which have been handed down. This happens through the contemplation and study made by believers…and through the preaching of those who have received through the gift of episcopal succession the sure gift of truth" (#8). Here the growth in understanding of doctrine is said to occur through the activities of *believers* (including laity and theologians), as well as bishops.

Again, this change in the understanding of the nature of the Church, and the place of the laity, was largely brought about by the writings of theologians, especially the French Dominican, Yves Congar. But Congar, like Murray, was for a time silenced by the Vatican for his "dissenting" views. Yet he was given enough freedom to develop his thought, so that eventually it was received by the bishops and the larger Church at Vatican II.

These two historical scenarios could be supplemented by others, for example, the change in the understanding of the relationship of the Church to non-Christians, and to Protestant Christians. But they are sufficient to illustrate the importance of academic freedom for theologians. Had Murray, Congar, Henri de Lubac, Karl Rahner, and others like them not been given scope to develop theologies which deviated from existing magisterial teaching, then Catholic teaching would in all probability remain largely what it was in the time of Pius IX. (Indeed, the initial schemas for Vatican II, drafted by Roman theologians for discussion by the bishops, were largely repetitions of the teachings of Vatican Council I.) Progress in the Church, therefore, depends both on critical thinking carried on by theologians (and other members of the Church), *and* on the ratification and proclamation of that teaching by the magisterium. This is what the passage cited from *Dei Verbum* above states: that the growth in understanding of the revelation occurs *both* through the contemplation and study made by believers (including theologians— most who do professional study of revelation are theologians) *and* by the bishops.

The above passages may seem to imply that the relationship between theologians and the magisterium is usually an adversarial one. But this should not be the case. As the citation from *Dei Verbum* implies, it is in the cooperation between theologians and the magisterium that progress is made in understanding the "words and realities which have been handed down." The best example of this was Vatican II itself. Though only bishops (and abbots) could vote at the council, there were a large number of theologians present, the so-called *periti* (experts), who had been invited by individual bishops as advisors. The bishops attended council sessions in the morning, but in the afternoons and evenings, were free to attend lectures and seminars given by these *periti*, who were made up of the leading theologians in the church. In this way, the bishops were introduced to the new theology during the course of the council. After rejecting the initial schema drawn up by the Roman Curia, the bishops elected committees drawn from their own members and from the attendant *periti*, to draft new documents for discussion. Thus most of the documents actually passed at Vatican II were composed by both bishops and theologians acting in concert. This, and not an adversary relationship, is, I propose, the best model for the relation between theologians and the magisterium.

This concludes the second part of my argument. Though there are certainly limits to what one can believe and teach while remaining a Catholic Christian and a Catholic theologian, within those limits there has been a fairly wide latitude given for investigation, criticism, and discussion. This is as it should be. Lack of such academic freedom would suffocate the ability of theology to perform its critical function, and reduce it to the role of being a propagandist for the magisterium. This would not only be a disaster for Catholic theology; it would be a disaster for the whole Church. If the Christ is the light of all nations (and these are the first words of *Lumen Gentium*), and that light is truth (as Catholic tradition unanimously holds), and the Church is to be a sacramental sign of Christ, then it must be open to and express the truth in all its forms. If this is true of the Church, it is a *fortiori* true of the Catholic University. John Paul II states, in *Ex Corde Ecclesia* "A Catholic University is completely dedicated to the research of all aspects of truth in their essential connection with the supreme Truth, who is God. It does this without fear, but rather with enthusiasm, dedicating itself to every path of

knowledge.’’l9 This is what it means to be catholic, i.e. universal, as opposed to sectarian. Were the Church to suffocate the academic freedom necessary for theological exploration, it would violate its very nature and its mission, and become a sign of obscurantism rather than a sign of truth.

Endnotes

1. -James Heft, "Academic Freedom and the Catholic University", in *Theology and the University*, ed. by John Apczynski, Annual Volume of the College Theology Society, 1987, vol 33, p. 212.

2. -Cited in James Heft, "Academic Freedom and the Catholic University," *ibid*., p. 213.

3. -Simon & Schuster, 1945, 17th printing, p. 463.

4. -*The Structure of Scientific Revolutions*, 2nd edition, University of Chicago Press, 1970, pp. 10-11.

5. *Ibid*., p. 39.

6. -A.F. Chalmers provides a summary of Kuhn’s theory and reactions to it in *What is This Thing called Science?* (Indianapolis: Hackett Publishing Co.), chapter 8.

7. -See James Cushing: *Quantum Mechanics: Historical Contingency and the Copenhagen Interpretation* (Chicago: University of Chicago Press, 1994).

8. -Rochester, VT.: Park St. Press, 1981.

9. -The review is reproduced in the appendix of the second edition of *A New Science of Life*, (Rochester, VT.: Park St. Press, 1981, 1995), pp. 221-223.

10. -*Closer to the Light*, New York: Villard Books, 1990, pp. 41-42.

11. *Ibid*., p. 69.

12. -*Mathematical Principles of Natural Philosophy*, translated by Andrew Motte, in the Great Books, vol. 34, (Chicago, Encyclopedia Brittanica Inc., 1952), p. 1.

13. -*Science and Creationism: A view from the national Academy of Sciences* (Wash. D.C.: National Academy Press, 1984), p. 26.

14. -See the report from the National Academy of Sciences entitled "Science and Creationism," cited above, which summarizes the evidence for the theory of evolution.

15. -The works of John Polkinghorne, for example his Gifford lectures, *The Faith of a Physicist* (Princeton: Princeton University Press, 1994), or the shorter *Serious Talk* (Valley Forge, PA: Trinity Press International, 1995) are fine examples of this kind of theological reasoning.

16. -See John Polkinghorne, *Serious Talk* (Valley Forge, PA.: Trinity Press International) 1995; John Paul II: "Letter to the Vatican Observatory," in *John Paul II on Science and Religion*, ed. by Robert Russell, William Stoeger, and George Coyne (Vatican City: Vatican Observatory Publications, 1990, Ml-M14.

17. -*The Documents of Vatican II*, ed. by Walter Abbott, (N.Y.: Guild Press, 1966), pp. 678-679.

18. -See a history of the process in J. Robert Dionne, *The Papacy and the Church,* (N.Y.: Philosophical Library, 1987), pp. 147-194, 239-260.

19. -"The Apostolic Constitution on Catholic Universities," #4, in *Origins,* vol. 20, no. 17 (Oct. 4, 1990), p. 267.