significant period of time is the task of the historian.

To speak of the actual functioning of the whole or a notable part over a
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I began long before Method in Geography (Toronto: University of Toronto Press, 1972).

Boston Hall University: In this article I will describe the origins of our
been my experience in the creation of our new core curriculum at
I beg with this observation on history because it has definitely
planes, but the concrete unfolding of the battle is something else again.
halves in which the generals of opposing forces each have their own
plan, or even the result of one group's plan. History is more like a larger
why it is that. It is because history is not just the result of one person's
in another direction, sometimes in an entirely different direction, and

History is filled with the unexpected. You plan and plan and you

South Orange, New Jersey
Richard M. Liddy

CURRICULUM
A CATHOLIC CORE
The frontier of Catholic education—(Catholic University of America, 1994—2006) is a challenge that Sometimes seems to lie in the distance. I am very aware of the great diversity of thought and experience that exists within our educational community. And I am equally aware of the importance of fostering an environment where we can learn from and build upon each other's ideas. We need to create a space where we can engage in open dialogue, where we can challenge and be challenged, where we can grow together.

The Catholic University of America is committed to providing students with an education that is grounded in the rich traditions of the Church and society. Our curriculum is designed to provide a comprehensive education that will prepare students for a lifetime of learning and service. It is through our commitment to excellence in teaching and research that we are able to offer our students a unique educational experience.

The Catholic University of America is a place where we can explore the depths of intellectual inquiry and the heights of faith. Our faculty and staff are dedicated to helping students discover their own potential and to developing the skills they need to contribute to society. We believe that education is not just about acquiring knowledge, but about fostering the development of the whole person. Our goal is to help students grow in wisdom, character, and compassion, and to equip them with the tools they need to lead fulfilling lives.

I look forward to working with you all as we continue to strive for excellence in education and to build upon the rich legacy of the Catholic University of America.
ENGLISH 1201 and ENGLISH 1202 provide an introduction to, and development of, academic reading, writing and research skills (6 credits).

CORE 1001 University Life, in which mentors and peer advisors model habits, gives students the tools for success in their academic career (1 credit).

CORE 1101 Journey of Transformation, taken in the first year (3 credits).

CORE 2101 Christianity and Culture in Dialogue in the second year (3 credits).

CORE 3101 Engaging the World, a discipline-specific course in the third year (3 credits).

Proficiencies: The systematic development of proficiencies prepares students with the skills to understand, interpret, and manage the flow of information in an increasingly complex environment. The proficiencies are the following:

- Reading and Writing
- Oral Communication
- Information Fluency
- Numeracy
- Critical Thinking

Literacies are specific to each college or school and provide a diversified experience of the liberal arts and sciences.

For myself, the core of the core has been the creation of what are called “signature courses” for each of the student’s first three years at the university: for first year students, The Journey of Transformation; for second year students, Christianity and Culture in Dialogue; and for third year students, various courses that are discipline-specific, all under the rubric of Engaging the World. These latter courses link the Catholic intellectual tradition with the various disciplines and professions taught in the university.

My personal attitude toward the new core has been content-oriented, that is, toward the classic texts from the Catholic tradition that form a basis for the core. Some of those are indicated in the schema below. It was decided that in order to be true to the mandate to cover questions central but not exclusive to the Catholic intellectual tradition, a text from the Catholic tradition would be paralleled by a text from another tradition. The following diagram indicates where we are now. We are open to changing the selection of texts but only after we have experimented with a text for three years.

<table>
<thead>
<tr>
<th>Non-Christian Text</th>
<th>Christian Text</th>
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<tr>
<td><strong>1st Year</strong></td>
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<tr>
<td><em>Plato – Apologia</em></td>
<td><em>Journey of Transformation</em></td>
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<tr>
<td><em>Bhagavad Gita</em></td>
<td><em>Gospel of St. Luke</em></td>
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<tr>
<td><em>Frankl’s Man’s Search for Meaning</em></td>
<td><em>Augustine’s Confessions</em></td>
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<td></td>
<td><em>Dorothy Day’s A Long Loneliness</em></td>
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<tr>
<td><strong>2nd Year</strong></td>
<td><em>Christianity and Culture in Dialogue</em></td>
</tr>
<tr>
<td>Ibn Rushd – Ibn Sina – Maimonides</td>
<td>Thomas Aquinas</td>
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<tr>
<td>Nietzsche</td>
<td>Pascal</td>
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<tr>
<td>Galileo – Darwin</td>
<td>Genesis</td>
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<td>Marx</td>
<td>Gaudium et Spes</td>
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<tr>
<td><strong>3rd Year</strong></td>
<td><em>Discipline Specific</em></td>
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In particular, the first two courses had to be primary text oriented, that is, somewhat in the "great books" tradition. The classes have to be in small enough groupings to be discussion-oriented. I must say, that this itself has been a real education for me. For a person who has always been oriented to lecturing, it has been quite a development in one's teaching style to sit in a circle with students and find out what they are actually learning from the texts. I am sure I have been learning as much as the students.

2. A NEW LANGUAGE: "INFUSING CRITICAL THINKING"

The first course of the new core was initiated for all our first year students, about eleven hundred of them, this past year, and this present academic year (2009-2010) all the students in our first two years will be taking the first two courses of the new core. But recently, as we have been initiating the new core, a whole new discourse has entered into the mix, a whole new language – at least to me. As the new courses were being created, I began to hear discourse about "infusing proficiencies" into the courses. Gradually there was less talk about the courses and their content and more talk about something I was initially less interested in, that is, the development of "proficiencies." These proficiencies mostly focused on "critical thinking" but also included reading and writing across the curriculum, information literacy, oral communications, and numeracy. These proficiencies are to be "infused" into various courses in the curriculum: both the new signature courses as well as other courses, and students are expected to take a certain number of proficiency-infused courses. These proficiencies are to be "assessed" according to predetermined "standards" or "rubrics." The basic idea is that in teaching a course, you should have a clear idea of what you are aiming at, how you are going to get there, and how you are going to determine if you have achieved the objectives you had.

All of which is somewhat foreign to "traditional" teachers – among whom I count myself. Our modus operandi has been to come into classroom, lecture, give exams and in that way determine if students have sufficiently mastered the material. Anecdotally at least, in my opinion, these are some of the best teachers in the university – although this perhaps is not universally true.

Obviously, there has arisen a certain resistance to this whole move of infusing proficiencies. I myself found myself saying, "Let's have some critical thinking about critical thinking!" And, "Are there not other types of thinking besides critical thinking – appreciative thinking? Evaluative thinking? More intuitive types of thinking? How are these related to critical thinking? What in fact is critical thinking?"

And now, as language about new "assessment" procedures enters into the discourse, there is a growing resistance to this trend also. I found myself sympathetic to one faculty member who said, "I don't think you can really assess the effectiveness of a course until some years later – when you can truly assess what really has sunk into a student's mind and heart."

All of which has reminded me of several passages from Bernard Lonergan. One from his lectures, Topics in Education, in which he reflected on the power of the educational establishment, especially as government uses its greatest of all powers, that of taxation, to influence a nation's education. But what kind of education do we want? In Method in Theology, Lonergan writes about modern humanism harnessing modern science for all kinds of practical ends: engineering, technology, industrialism. Such is an acknowledged source of wealth and power, a power not merely material:

It is the power of the mass media to write for, speak to, be seen by all people. It is the power of an educational system to fashion the nation's youth in the image of the wise person or in the image of a fool, in the image of a free person or in the image prescribed for the Peoples' Democracies.6

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4 See David Denby, Great Books (New York: Touchstone, 1996); also Richard Liddy, "Reading Well: The Core to the Core," Proceedings of the Summer Seminar, 2000, Center for Catholic Studies, Seton Hall University, 94-39.


6 Method in Theology, 99.
3. LANCE GRIGG ON CRITICAL THINKING

In *Topics in Education*, Lonergan seems to carve out a middle ground between the traditionalists who appeal to universal principles as the basis of education and the modernists and pragmatists who see education as primarily employing “the new learning,” basically science, to change the world. But Lonergan’s is not really a compromise between these two positions but rather a new beginning that takes both the new learning and the traditionalist appeal to “the classics” seriously. My question at Seton Hall has been whether Lonergan could be of help in mediating this tension between “traditional” teachers who emphasize excellence in their various disciplines and those who insist on “infusing critical thinking” into the disciplines.

It is in this context that I was delighted to read a paper by Professor Lance Grigg of the University of Lethbridge in Alberta at the 2009 West Coast Methods Conference in Los Angeles. The paper, entitled “Critical Thinking, Pedagogy, and Lonergan: An Exploratory Sketch” involves a review of the literature on critical thinking, an overview of some of the critiques of the critical thinking literature, and a way of thinking about these issues from Lonergan’s point of view. Let me run through some of Grigg’s points.

First of all, he highlights various descriptions of critical thinking and its value, noting that between 2005 and 2008 alone, there were an excess of one hundred publications in the area of critical thinking and critical thinking pedagogy. For many, critical thinking is essential for the maintenance of participatory forms of democracy, fundamental to any deep understanding of the curriculum, basic to liberation and critical pedagogy, foundational to effective school leadership, and elemental to research methodology in education.

At the same time there have been problems and criticisms of critical thinking as it is generally presented. Basically, critical thinking as normally portrayed neglects or downplays emotions. It also privileges rational, linear, deductive thought over intuition and is aggressive and confrontational rather than collegial and collaborative. Critical thinking is said to be individualistic and privileges personal autonomy over the sense of community and relationship. It also favors the generic over the subject-specific and fails to attend to the priority of content — knowledge — in our case, “the questions central to the Catholic intellectual tradition.” Critical thinking as usually presented is said to be hostile toward mystery and opposed to faith or religious forms of belief.

Grigg himself notes that in response to these critiques, the literature on critical thinking has become more open to the complexity of the subject and less limited to thinking of critical thinking as the application of formal or informal logic. It has become more open to a holistic approach involving attitudes, dispositions, skills, action, and logic. Finally, Grigg himself asks if there is not another way of looking at this whole issue of critical thinking:

Is revision of current approaches or death by a thousand qualifications the best way to proceed? Possibly, an entirely different model informing critical thinking and critical thinking pedagogy theory and practice may be a more useful and economical solution.

Grigg answers his own question by suggesting that critical thinking can best be understood through Bernard Lonergan’s notion of “rational self-consciousness.” For Lonergan amply demonstrates that there are various levels of consciousness structurally related to each other and to the whole unfolding of personal awareness. There is the experiential level of seeing, touching, tasting, and so forth that an artist naturally focuses on; there is the intellectual level of questioning and understanding that a scientist naturally focuses on; there is the rational level of reflecting and judging that a philosopher and “critical thinker” focuses on; there is the level of rational self-consciousness focused on decision-making that the person of action focuses on; and finally, there is the level of mystery that the religious person focuses on. Grigg in his article centers on the third and fourth levels — rational and rational self-consciousness to understand the meaning of critical thinking:

Before the critical thinker makes any reasoned judgment, therefore, she is rationally conscious. Consequently, she naturally seeks out relevant explanations of her experiences,
poses questions for reflection to those explanations, remains unsatisfied with incomplete accounts of those experiences, seeks sufficient evidence for a specific explanation, and continually desires to know which explanation is the best one at the time.

Grigg's presentation of Lonergan's analysis of rational self-consciousness is certainly beyond the scope of this paper, but he does assert that Lonergan's notion of reflective insight preceding judgment may address problems in critical thinking in the following way:

- It avoids the reductionism basic to psychological models of learning theory ("rational consciousness is not synaptic firing").
- It is a context-sensitive heuristic that sees the student as a learning subject.
- Pedagogical content-knowledge is the means whereby one arrives at insights into insight — avoiding the pure skills/attitudes approach to critical thinking.
- Authenticity language becomes central to critical thinking.
- Measurement of student achievement becomes authentic to the degree that instruments (tests, projects, papers, etc.) are differentiated — not mirroring a single feature of critical thinking.

Also, according to Grigg, reflective insight's holistic associations avoid forms of reductionism that restrict critical thinking to argument analysis, learning theory, or the scientific method. It sets critical thinking within a broader theory of consciousness, seeing the student as a learning subject and not a learning object to be studied in a detached and disinterested manner. It aims at helping people become aware of the dynamics of their own consciousness: questions, insights, experiences, and so forth and how they all work together to aid us in making judgments:

Such an approach respects pedagogical content-knowledge. Specifically reasoned judgments in critical thinking are understood as reflective insights which operate upon the expressions of direct insights occurring within specific subject-areas, fields or domains. I have insights in history, literature, psychology, science, mathematics, philosophy, etc.

In this sense, reflective insight is a unique type of context-sensitive heuristic. The reflective aha moment in response to a question for reflection occurs when the prospective reasoned judgment is grasped as virtually unconditioned within a particular content-area, field of research, knowledge-domain, chosen by the teacher. One cannot abstract away or factor out context-specific, pedagogical-content knowledge from cogntional process.

Here let me briefly recur to the notion of rational consciousness as it appeared in Lonergan's 1947 work, Verbum: Word and Idea in Aquinas. There Lonergan highlights Aquinas's analysis of knowledge as consisting, not just in the obvious acts of sensitive experience and imagination, but also in the act of direct understanding that grasps the form or reason in things, as well as the further act of reflective understanding that generates in judgment the expression of consciously possessed truth through which reality is both known and known to be known. According to Thomas and Lonergan, the metaphysical principles of being, of unity, of identity, and non-contradiction — at the core of truly critical thinking — all flow from the conscious nature of our intelligence and reason. When we get an insight, our minds are metaphorically "enlightened." According to Thomas, such intellectual light can be known by intellectual light: we can introspectively know what goes on in us. "There is, then, a manner in which the light of our souls enters within the range of introspective observation." This was the whole thrust of Lonergan's 1957 Insight: A Study of Human Understanding in which Lonergan uses examples from mathematics and mathematical physics to illustrate what is meant by "understanding" and to aid the reader in an "insight into insight."

Such insight into insight comes to recognize what Lonergan called "the intelligibility of being." Our efforts at understanding, our inner fight against bias, our long search into this or that area, are all governed by the intelligibility of being — the fact that we assume that things hang together. It is a subtle point to appreciate this presupposition of all our extended and often conflict-laden thinking — but it is the key to

9 Verbum, 80.
critical thinking. It is also the key to understanding what is meant "by conscience as the normative awareness of the good as well as what is meant by 'God' as the intelligence at the source of all intelligibility and the good at the source of all value." In other words, to truly understand what is meant by critical thinking, it is also important to understand how critical thinking is related to other areas of human concern, including questions of transcendence and questions of the heart.  

4. CRITICAL THINKING AND A WIDER AUTHENTICITY

Opening up the meaning of critical thinking by means of a theoretical analysis of all that pertains to human interiority sets it in the wider context of human authenticity as such. For "being reasonable" is only one dimension of "being authentically human." Such being authentically human includes such other genuinely human dimensions as being attentive, being intelligent, being responsible, and being loving. Critical thinking is one dimension of being authentically human and such a fuller authenticity finds expression in what Lonergan called "the transcendental precepts," that is, those demands that emerge from the very makeup of our being as humans. 

Be loving!
Re responsible!
Be reasonable! (= think critically!)
Be intelligent!
Be attentive!

Lonergan often adds one other precept, "If necessary, change!" It is cognate to the New Testament message, "Repent! The kingdom of God is at hand."

Let me draw some practical conclusions from this analysis. First of all, it would seem that the list of proficiencies to be "infused" into the curriculum should be lengthened beyond reading/writing, critical thinking, information fluency, and numeracy. Should not proficiencies to be infused include such contemplative practices as meditation and contemplation? After all, getting in touch with all the resources for making reasonable judgments would seem to entail getting in touch with the "intellectual light" which is our selves at our best. For example, exercises in "being silent" can open students up to a whole other side of their being.

The list of proficiencies might also include journaling, a practice of writing that helps a person get in touch with the principles within one for making objective judgments, including objective judgments of value. Students can also in this way be encouraged to get in touch with beauty and with the desire for beauty that is within them. By doing away with religious texts in public schools, schools drastically reduce students' access to the great and beautiful texts of human literature: Augustine's Confessions, The Scriptures, Dante's Divine Comedy, and others. With the help of such texts students can be encouraged to get in touch with the springs of beauty, love, creativity, and intelligence that are within them. This is one aim of the new core curriculum at Seton Hall that requires exposure to classic texts of the Christian tradition.

Simultaneously, students also need to seriously get in touch with all that blocks them from the desire for beauty and creativity within them, such as various types of addiction - including addictions to the internet and types of music that keep them restless, frenetic, unable to stop and contemplate the beauty of little things. It is the beauty and wonder of little things that can open them up to the beauty and glory of their own consciousness.

In other words, why is "leisure the basis of culture?" Why do we need vacations? Why do we need solitude? Why retreats? Precisely so that we can get in touch with all that is in us that is related to critical thinking but that comes from other dimensions of our being. Such are levels of feelings that need to be discerned so that feelings related to authenticity can be encouraged and self-centered feelings can be transcended through the authentic emergence of our subjectivity.

5. THE "CATHOLIC" CONTENT OF THE CORE CURRICULUM

Is there a way of thinking about these subjects - critical thinking and

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10 Method in Theology, 20, 55.
the core curriculum – in such a way that the core curriculum both through its content and through its process can present a vision of the human person adequate to both a committed Catholic and to any genuinely authentic person in today's world?

Let me begin to address this question by noting that, given the benign interpretation of critical thinking that we have given, I believe we can say that critical thinking is not something that abstracts from content. The content of our knowledge is important. Even though critical thinking is a goal of much education, nevertheless “the outer word” of content is important. It is not incidental. Here is a quote from Bernard Lonergan with regard to the importance of the outer word of tradition in regard to religious experience:

When a man and a woman love each other but do not avow their love, they are not yet in love. Their very silence means that their love has not reached the point of self-surrender and self-donation. It is the love that each freely and fully reveals to the other that brings about the radically new situation of being in love and that begins the unfolding of its life-long implications. What holds for the love of a man and a woman, also holds in its own way for the love of God and man. Ordinarily the experience of the mystery of love and awe is not objectified. It remains within subjectivity as a vector, an undertow, a fateful call to a dreaded holiness.  

Perhaps with time there occur more intense experiences:

But then, as much as ever, one needs the word – the word of tradition that has accumulated religious wisdom, the word of fellowship that unites those that share the gift of God's love, the word of the gospel that announces that God has loved us first and, in the fullness of time, has revealed that love in Christ crucified, dead, and risen.

It seems to me that this is why the core curriculum at a Catholic university is important. For besides the instances of authenticity outside of Christianity – in a Plato, an Aristotle, the writings of other religious traditions, the modern sciences – so also in a Catholic university there is need for students to hear the word spoken by the Christian and Catholic tradition itself, the word of the Gospel, the Good News:

The religious leader, the prophet, the Christ, the apostle, the priest, the preacher announces in signs and symbols what is congruent with the gift of love that God works within us.  

This word can and should be spoken clearly: in the context of other words that are spoken in the modern world from all different directions. The students in our classrooms come from all different environments and all different social locations:

The word, too, is social: it brings into a single fold the scattered sheep that belong together because at the depth of their hearts they respond to the same mystery of love and awe. The word, finally, is historical. It is meaning outwardly expressed. It has to find its place in the context of other, non-religious meanings. It has to borrow and adapt a language that more easily speaks of this world than of transcendence. But such languages and contexts vary with time and place to give words changing meanings and statements changing implications.

Lonergan's distinctions between the worlds of common sense, theory, transcendence, and interiority are very helpful in separating the pieces amidst the mountainous achievements of modern thought. Catholicism through the ages has been massively influenced by each of these areas of human consciousness:

It follows that religious expression will move through the stages of meaning and speak in its different realms. When the realms of common sense, of theory, of interiority, and of transcendence are distinguished and related, one easily understands the diversity of religious utterance. For its source and core is in the experience of the mystery of love and awe, and that pertains to the realm of transcendence. Its foundations, its basic terms and relationships, its method are derived from the realm of

\[13\] Method in Theology, 113.
\[14\] Method in Theology, 113-114.
interiority. Its technical unfolding is in the realm of theory. Its preaching and teaching are in the realm of common sense.\textsuperscript{15}

Once these realms are distinguished and their relations are understood, it is easy enough to understand the broad lines of earlier stages and diverse developments:

Eastern religion stressed religious experience. Semitic religion stressed prophetic monotheism. Western religion cultivated the realm of transcendence through its churches and liturgies, its celibate clergy, its religious orders, congregations, confraternities. It moved into the realm of theory by its dogmas, its theology, its juridical structures and enactments. It has to construct the common basis of theory and of common sense that is to be found in interiority and it has to use that basis to link the experience of the transcendent with the world mediated by meaning.\textsuperscript{16}

\section*{6. CONCLUSION}

One example of Bernard Lonergan’s relevance to the contemporary world regards the notion of “critical thinking.” Accrediting agencies, principals, university presidents, teachers, and professors all seek to infuse critical thinking into students (can that really be done?) and to assess their performance. But no one else has given an adequate and full account of just what critical thinking is and how it is related to all other kinds of thinking: appreciative thinking, artistic thinking, evaluative thinking, the feminine dimensions of thinking, and so forth. No one else has so completely analyzed the process by which we critique our own insights, ask more questions about them, check out their presuppositions, expose their fallacies and the roots of those fallacies, and so forth until perhaps we might come to grasp the virtually unconditioned from which emerges the judgment: “That is so!”

One comes to this awareness of oneself by coming to know the processes of our own coming to know, our own evaluating and decision making. Such is an inner journey into our own insides: a journey no one can make for us, but a journey that when guided by masters such as Plato, Aristotle, Augustine, Aquinas, Newman, and Lonergan, can pay rich dividends. It can result in insights into our own selves and into the spiritual processes with which the Almighty has endowed our being. We can be as surprised and shocked as Augustine was in the summer of 386 when someone lent him “a few books of the Platonists” and perspectives opened up on himself that he would never have previously dreamed possible:

...[T]he problems in philosophy at least at the present time are not problems of exploitation. They are problems of getting people to the starting point. The problem is not having people repeat with Augustine that “The real is not a body, it is what you know when you know something true.” The problem is to get people to mean as much as Augustine meant when Augustine spoke about truth. And that is a transformation of the subject. It is bringing the subject up to the level of thought of a Plato and an Aristotle and an Augustine and an Aquinas. And that is a terrific development in the subject.\textsuperscript{17}

This is not an easy process, especially if one has no guide at hand to lead one on the journey. Augustine in the \textit{Confessions} tells us it took him about twelve years from the time he first got interested in philosophy until his discovery of the meaning of \textit{veritas} – “truth” – in the summer of 386. One could say it took him that long to come to understand the meaning of “critical thinking”:

St. Augustine, who was a man of extraordinary intelligence, was for years a materialist. He knew he was a materialist, and he said so. But he changed. And then when he wanted to talk about the real, what is really so, what word did he use? \textit{Veritas}. Augustine does not talk about \textit{realitas}, but about \textit{veritas}, about what is true. And the truth is known not without, \textit{non foras}, and not just within, \textit{non intus}, but above us, in a light that he describes as incommunicable and eternal. The history of Augustine’s thought is the history of the limitations of the

\textsuperscript{15} Method in Theology, 114.

\textsuperscript{16} Method in Theology, 114.

METHOD IN MEDICINE FOR
THE AGE OF
SYNDROMES AND GENOMES

Robert Luby, M.D.
Groton Wellness Center
Groton, Massachusetts

BACKGROUND AND THESIS

The medical profession has been remarkably effective in meeting many of the challenges of disease in the nineteenth and twentieth centuries, in large part because the methodology of medical inquiry was well suited to meet the demands of the extant patterns of illness. But there are two trends emerging as the twenty-first century advances which threaten to render ineffective what was once a viable methodology.

The first trend involves a change in the observed pattern of illness on a population scale. It can best be described as the predominance of acute "diseases" giving way to chronic "syndromes." The second trend involves the changes necessitated by the accumulating knowledge derived from the human genome project and the developing field of epigenetics.

The methodology of medical inquiry is by now firmly established in medical training and in the clinical setting. But its development predated these sentinel trends. As a result, physicians are frequently frustrated by the chronically ill "syndromic" patient for whom the usual questions fail to narrow the diagnostic spectrum, and the usual diagnostic tests are either poorly suited to the pattern of illness, or erroneously misinterpreted as normal. The syndromic patient encounters physician after physician unable to diagnose their malady, forever reporting that their tests are normal, and unable to offer a therapeutic plan.