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Preface

This is an issue of *TAD* which can be thought of as having somewhat of a practical bent. Aaron Milavec's essay, "Religious Pedagogy From Tender to Twilight Years" was a 1996 paper which provoked a lively discussion at the Polanyi Society meeting held in conjunction with the annual meeting of the American Academy of Religion. Milavec contends that Polanyi's writing reflects that he did not very adequately understand how religion, and particularly Christianity, functioned in a social and cultural context. In Milavec's view, however, the seeds of a much richer account of the religious enterprise are available if one takes seriously Polanyi's discussion of the transmission and transformation of scientific traditions and applies these to religious communities. Milavec offers seven theses which he regards as a Polyanian re-visioning of religious pedagogy.

Paul Lewis takes a look at the Human Genome Initiative and some of the discussion about the ambiguous potential of the project in his article "Polyanian Reflections on Embodiment, the Human Genome Initiative and Theological Anthropology." He suggests that richer philosophical and theological notions of the body could provide a new kind of depth to Genome discussions. Lewis tries to open a cross-disciplinary dialog showing both how the Initiative raises questions for theologians, but also how philosophical and theological discussions provide good questions for the project. He draws into his reflections on embodiment some ideas from Polanyi and feminist thought, but also introduces discussions of theological anthropology and the body put forward by several theologians.

You will find in this issue notes about several new Polanyi-related publications as well as brief comments on some Polanyi Society members. On page four, there is the call for paper proposals for the November 1997 Polanyi Society meeting which will occur this year in San Francisco; there will be more about this meeting in future issues.

There are five reviews this time around. Two reviewed books focus on art and religion and are written by a scholar who makes much use of Polanyi, Doug Adams. Drusilla Scott's out of print primer on Polanyi's thought, *Everyman Revived*, has recently been reissued by Eerdman and is reviewed here. There is a review also of the late Ted Moss' final book which attempts to expand Polanyi's ideas about tacit knowing to provide a fuller understanding of consciousness. Finally, Walter Gulick provides a review of Lee Congdon's *Exile and Social Thought: Hungarian Intellectuals in Germany and Austria, 1919-1933* which sheds light on the social milieu out of which Michael Polanyi's thought grew.

Phil Mullins

Tradition and Discovery is indexed selectively in *The Philosopher's Index* and *Religion One: Periodicals*. Book reviews are indexed in *Index to Book Reviews in Religion*.

NEWS AND NOTES

The October 1996, second issue of the new journal *Appraisal* (ISSN 1358-3336), edited by **R. T. Allen**, has now been published. This issue is focused upon a reappraisal of the thought of John Macmurray. Included, however, is **Julian Ward's** review of **R. T. Allen's** *Transcendence and Immanence in the Philosophy of Michael Polanyi and Christian Theism* as well as **R. T. Allen's** own working paper "Some Notes on Polanyi's Economics." *Appraisal* is available at an annual individual subscription rate of £9 per year. Checks should be sent to **R. T. Allen**, 20 Ulverscroft Road, Loughborough, LE11 3PU, England. Allen can also be reached by fax (01509 215438) and e-mail (101625.3010@compuserve.com).

A new English issue (Vol. 5, No. 1/1996) of *Polanyiana: The Periodical of the Michael Polanyi Liberal Philosophical Association* has recently been published in Budapest. It includes the following: **R. T. Allen**, "Beyond Liberalism"; **Márta Fehér**, "Science and Liberalism"; **Richard Gelwick**, "The Calling of Being Human"; **Endre J. Nagy**, "After Brotherhood's Golden Age: Karl and Michael Polanyi"; Paul Nagy, "Philosophy in a Different Voice: Michael Polanyi on Liberty and Liberalism"; **Éva Gábor**, "A Középeurópai Liberális Filozófia Tradíciója (with Summary in English)". For information on subscription, fax **Éva Gábor**, President of MPLPA, at (36-1) 463-1042.

A conference on "Fundamental Beliefs and Presuppositions" will be held March 15, 1997 at Regents Park Theological College. Included are the following four papers on Polanyi's thought: **R. J. Brownhill**, "Polanyi and Interpretative Frameworks"; **Martin Moleski**, "Polanyi's Vision of the Moral Foundations of Scientific Revolutions"; **John Preston**, "Polanyi and Feyerabend" and **Julian Ward**, "Polanyi's Ontological Hierarchy Interested parties should write to **R. T. Allen** (see above) for additional information.

James Stodder organized a panel discussion on Karl

Polanyi at the American Economic Association convention in New Orleans on January 4, 1997; it was co-sponsored by the Association for Comparative Economic Studies and the Association for Social Economics. Although the topic was not on the formal agenda, panelists included some scholars interested in the relationship between Michael and Karl Polanyi.

Edward (Ted) Moss, who was affiliated with the former UK Polanyi group Convivium died April 1, 1995. Moss was a third generation diplomat and civil servant who ended his career as Under-Secretary to the University Grants Committee. After he retired, he took a Ph. D. in psychology at the University of Surrey and founded, with his wife, the Emmaus Counseling Service. Moss wrote or edited several volumes late in his life: **Fire from a Flint** (a 1986 anthology of the work of William Law, jointly edited), **Seeing Man Whole** (1989--reviewed in *TAD* 17:1 & 2: 51-54), **Growing into Freedom** (1993), and **The Grammar of Consciousness** (1995), his final work (which makes the most extensive use of Polanyi), reviewed in this issue.

The 20th World Congress of Philosophy will be held August 10-16, 1998, Boston, Massachusetts; the theme is: *Paideia: Philosophy Educating Humanity*. There is an opportunity for the Polanyi Society to hold a meeting in conjunction with the other meetings. Further, there is a call for papers in all of the general philosophical categories. If you are interested in this meeting, please contact: Richard Gelwick (e-mail: RGelwick@MAILBOX.UNE.EDU or Medical College, University of New England, Biddeford, ME 04005). The Society reservation must be in by August, 1997, and contributed papers by September, 1997.

Thanks to **David Rutledge** who ends his term as Convener of the annual Polanyi Society meeting at the American Academy of Religion; thanks to **Marty Moleski, S.J.** who begins his term as the new organizer of this gathering.

Polanyi Society Meeting Call for Papers

The Polanyi Society will host two sessions in its annual gathering prior to the November, 1997 annual meeting of the American Academy of Religion/Society of Biblical Literature in San Francisco.

On Friday, November 21, we will meet to honor Charles S. McCoy, Professor Emeritus at Pacific School of Religion, Berkeley. For thirty years, McCoy introduced generations of seminary and graduate students to the ideas of Michael Polanyi. A panel is being assembled to discuss both McCoy's interpretation of Polanyi and McCoy's contributions to theology, ethics and other areas. To accommodate those with late flights, this session will likely be held from 9 to 11 p.m. at the AAR/SBL host hotel. An earlier evening informal dinner gathering will be arranged for those interested and available. Additional information on Friday evening sessions will be in a future *TAD*.

We have not narrowed the focus for the session on Saturday, November 22. In New Orleans, people expressed an interest in discussing how to teach Polanyi and how to teach in a Polanyian style; this topic could be addressed, in part, by papers in a session in the AAR Academic Study and Teaching of Religion meeting section (see the AAR Call for Papers). Ron Hall's 1996 presentation on the "Primacy of the Explicit" led to questions about other contradictions, inconsistencies, lacunae or incongruities in Polanyi's texts. Others suggested that it would be of interest to look at practical applications of Polanyi in business and society. Lastly, there is the perennial topic of "Polanyi and . . .": Habermas, Whitehead, etc. We're open to proposals with further suggestions or refinements in these topics.

Many thanks to David Rutledge for his years of service as our coordinator. The welfare of the Polanyi Society depends upon your tacit awareness of what matters most and your personal commitment to write something excellent for us to consider in San Francisco. Please send comments and proposals to the address below; see you in San Francisco!

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Polanyian Reflections on Embodiment, the Human Genome Initiative and Theological Anthropology

Paul Lewis

ABSTRACT Key Words: Human Genome Initiative, embodiment, theological anthropology, Michael Polanyi
The Human Genome Initiative represents an ambitious attempt to map the genetic structure of the human species (an estimated 100,00 genes). The project has generated a vast amount of theological and ethical literature, none of which discusses the impact of the project on understandings of embodiment. This gap is surprising since Michael Polanyi and, more recently, feminist thinkers have argued that embodiment is central to human existence. I argue that theologians and scientist can teach one another some important lessons about embodiment by exploring some of the literature produced by the project and the anthropologies of Karl Rahner, Wolfhart Pannenberg, Stanley Hauerwas and James McClendon.

I. The Human Genome Initiative and the Body

The Human Genome Initiative (or Project) represents an ambitious attempt to map the entire genetic structure of human beings. This effort is not concentrated in a single lab, but refers to work taking place all over the world. Begun in 1988, it is projected to span 15 years and cost \$3 billion, of which \$200 million will be spent at labs around the United States. The basic goal of the project is to increase knowledge of humanity, or in the words of co-founder, James Watson, “to find out what being human is.”¹ The project proposes to do this by mapping the human genome, which contains an estimated 100,000 genes. To give some sense of how ambitious the project is, it has been called “biology’s moon shot,” and “the Holy Grail of genetics.” Much of the technology needed to accomplish it’s goal will have to be invented as the project unfolds.

The Human Genome Initiative was funded, after several years of debate, largely because of the anticipated practical payoffs. It promises to enable physicians and scientists better to diagnose and treat what are considered to be genetic disorders. Already, at a cost less than anticipated and at a pace much quicker than expected, the project has begun to fulfill some of those promises. People working at several of the centers which make up the Human Genome Initiative have discovered genes which seem to predispose some people to certain inherited forms of breast and cervical cancer, as well as the loci for diseases such as cystic fibrosis, Fragile X Syndrome, myotonic dystrophy and others. In all, some 50 disease causing genes have been identified and tests developed for a dozen genetic disorders.² In addition to the therapeutic gains expected from the project, another anticipated payoff to the Human Genome Initiative is increased understanding of genetic bases of behavior, such as alcoholism and homosexuality.³

It goes without saying that the Human Genome Initiative has generated a vast amount of literature thus far, and that more will be forthcoming as the project progresses. Much of the theological literature has concentrated on identifying and responding to ethical concerns about how the knowledge produced may impact on matters such as abortion, privacy and personal responsibility.⁴ Missing in the literature, however, is any extended and explicit discussion of how the Human Genome Initiative will impact our philosophical and theological understandings of human embodiment.⁵ To be sure, the ethical and theological directions taken in the literature have stressed that human beings

are deeply embedded in a biocultural world, but they have had little to say about how we are to understand, experience and understand our experiences of the human body.

This gap is a bit surprising, since Michael Polanyi and, more recently, numerous feminist thinkers have suggested that human embodiment is vitally important to human existence and self-understanding. For Polanyi, the biological or physical body is the basic building block for all knowledge. It is the means by which we discover, explore and learn about the world around us. As he puts it, “Our body is the ultimate instrument of all our external knowledge, whether intellectual or practical. In all our waking moments, we are *relying* on our awareness of contacts of our body with things outside for *attending* to these things.”⁶ As Polanyi describes the process of knowing, the body provides the means of proximal or subsidiary awareness, an awareness to which we seldom pay attention, but by which we achieve distal or focal awareness of things which exist beyond ourselves.⁷

But that is not all Polanyi says about the body. He refuses to separate the biological and cultural, by insisting that both dimensions of human existence are thoroughly intertwined. The body, as the means by which we attend to other things, can be extended in numerous ways, such as through the use of tools and the development of language. Language development provides a clear example of how body and culture are connected. The precise vocabulary and grammatical structure of language is specific to culture, but language builds on physical capacities for making and shaping sounds, extending them to create meaning. In short, the physical body is best understood as part of a multilevel system which allows for the emergence of properties and skills that cannot woodenly be predicted from the properties of the physical body.⁸ In sum, one might conclude that for Polanyi the body is an important part of human existence, and as the basic instrument for human knowing, not one to be trifled with lightly.

In a manner reminiscent of Polanyi, Beverly Wildung Harrison talks about the body as the means or instrument by which we engage, indwell and otherwise come to know the world around us. Furthermore, she identifies embodiment as one of the base points of feminist theory, an emphasis designed to help overcome the mind/body dualism of our intellectual and cultural heritage.⁹ These perspectives have not won the day on this issue, nor have they brought this insight to bear on the topic of the Human Genome Initiative or genetics, so far as I can find. This is unfortunate, because such ideas might deepen the ethical and theological reflections on the Human Genome Initiative, as I will indicate below.

My intent in this paper is not, however, to offer an extensive Polanyian critique of the Human Genome Initiative. Rather, it is to explore ways in which the Human Genome Initiative might impact our notions of embodiment and put those ways into conversation with some options in contemporary theological anthropologies, all the while bringing Polanyian insights to bear on the conversation. Two possible points of impact immediately suggest themselves. First, the Human Genome Initiative’s findings might contribute to a richer understanding of the human body. At the same time, the Human Genome Initiative might threaten a full understanding of embodiment by reinforcing both a reductionistic view of human being in which we are nothing but our genes and dominant construals of the body as an object to be manipulated and commodified.

These dual concerns suggest a two-part agenda. First, I will set out ways in which genetic knowledge can illumine theological understandings of the body by putting the theological anthropologies of Karl Rahner, Wolfhart Pannenberg and Stanley Hauerwas into conversation with issues raised by the Human Genome Initiative. The ambiguous potential of the Human Genome Initiative further suggests that we should explore potential constraints or checks which might minimize the negatives. Thus, drawing from the work of James William McClendon, I set out ways

in which theological understandings of the body, especially as created, redeemed and resurrected, can generate a critical perspective on projects such as this. This paper thus aspires to serve as a model for mutually-critical and open dialogue between the disciplines. Often, the dialogue is carried on in such a way that one partner gets the upper hand. Here, I will attempt to give both parties their due and ask them to learn from one another.

II. The Human Genome Initiative in Conversation with Theological Anthropologies

Clearly, the kind of knowledge of what it means to be human sought by the Human Genome Initiative is knowledge of the body, of the corporeal, of the stuff which makes us up. The assumption is that such knowledge is available to us and valuable for us to hold. Such an assumption challenges many contemporary theological anthropologies; I shall briefly survey three of the more influential ones.

Karl Rahner is the first of these theologians and is important because of his place among influential contemporary Roman Catholic thinkers. He is important also because he has addressed issues of genetics which touch on the promise and peril of the Human Genome Initiative in such a way as to converse with the sciences.¹⁰ As Rahner sets out his theological anthropology, he emphasizes the capacities of human beings for self-transcendence, for self-actualization and for freedom. Human existence is, in Rahner's words "open and indetermined," i.e., open to the infinite horizon which ultimately is fulfilled by God.¹¹ He thus counsels against simple condemnation of genetic research and its application, calling it "symptomatic of a cowardly and comfortable conservatism hiding behind misunderstood Christian ideals."¹² He goes on to suggest that genetic self-manipulation, the form which human freedom takes in our time, is indeed required by that freedom, Christianly understood.¹³

To be fair to Rahner, we must note that he does acknowledge, here and there, that this freedom is neither absolute nor abstract but is mediated and qualified by "materiality and history."¹⁴ Thus, Rahner finds built-in checks to what we can do, checks which take the form of biological, psychological and social laws, as well as the ultimate horizon which we call God.¹⁵ More importantly, the limit to legitimate interventions comes when those interventions threaten humanity's transcendent nature.¹⁶ In short, he offers some qualifications to our freedoms to do what we wish with ourselves, which leaves us with an uneasy tension between two affirmations: material givenness and transcendental freedom.

In contrast to Rahner, Wolfhart Pannenberg explicitly sets out to integrate the work of the sciences, particularly biology, psychology cultural anthropology and sociology, into his theological anthropology.¹⁷ Here, I shall focus only on his appropriation of biology. In that realm, Pannenberg draws upon discussions of human uniqueness in order to establish that human instincts "exist in only singularly rudimentary and attenuated form" and therefore that human beings are uniquely "open to the world."¹⁸ Thus, he concludes that whatever innate dispositions to behavior exist in human beings, they are significant only for providing "the abiding *point of departure* for the human adventure of self-transcendence and historicity."¹⁹

In the end, the general shape of Pannenberg's anthropology, although rooted in biological sciences, differs little from Rahner's. For both, the essence of human existence is its openness to the future. Biological givens, the stuff which the Human Genome Initiative investigates, provide—at best—the launching pad which makes possible the exercise of our freedom and openness. Both Rahner and Pannenberg thus offer what we might call an anthropology of transcendence.

Stanley Hauerwas operates with a theological anthropology which contrasts nicely with those of Rahner and Pannenberg. Instead of their transcendental anthropologies, Hauerwas offers what we might call a socio-historical anthropology. The titles of two early essays capture the core of his anthropology: “The Self as Story” and “The Virtues and Our Communities: Human Nature as History.”²⁰ Too oversimplify his position, human life is constituted and oriented by the stories which we learn from the communities to which we belong. Ian Burns summarizes Hauerwas’s understanding of the self nicely, saying that for Hauerwas, “the self is neither a transcendental essence existing prior to human social action, nor describable in purely naturalistic terms but is constituted within the discursive space of moral meaning embodied in various social practices and narrative traditions.”²¹

Not all that surprisingly given our previous sketches, we find little room for—or even mention of—the biological side of human existence in Hauerwas’s work—with one surprising and suggestive exception.²² In an essay on medical ethics, Hauerwas talks about “the wisdom of the body.” In this context, the body serves his argument in several ways. He describes the body as the source of its own healing. It stands outside both physician and patient as an authority to which both must defer. The body further teaches us our finitude and limitations. Finally, it forces us to face our need for one another and drives us into community.²³ In short, the body functions for Hauerwas, in the end, as the goad which reminds us of our creatureliness, and drives us into the community which trains us in the virtues which enable us to live truthfully as creatures.

We have here then three examples of contemporary and widely-discussed theological anthropologies. In spite of important differences between these various figures, all of them end up ignoring the biological rootedness of the human body. From the perspective of Human Genome Initiative supporters, this gap will be most distressing. If work in human genetics is correct and there are genetic links to diseases, as well as certain behaviors, such as alcoholism or sexual orientation, then notions of radical transcendental freedom, as well as radical social formation, will have to be qualified.²⁴

Such anthropologies will also be suspect from the perspective of those informed by Polanyi, since they fail to register two facts about the body. The first is how it is the foundation for all human knowledge. The second is that the body exists as part of a complex, hierarchically-ordered system. Again, from Polanyi’s perspective, the body should neither be seen as the only word on human existence, nor as an insignificant facet. Rahner and Pannenberg’s emphasis on transcendence focuses attention on the individual self, whereas Hauerwas’s strict attention to community all obscures the complex relationship between body, society and human possibilities for growth and transformation which Polanyi nicely registers.

Interestingly, other work in the natural sciences supports Polanyi’s views. The picture that begins to emerge is that our bodies, especially as constituted by its genes, serve as both the basis for our higher level activities and as our connection to the rest of the world around us. It is worth calling attention to the fact that higher level processes such as thought emerge out of and are dependent upon biological and chemical processes, knowledge of which does not fully explain the phenomenon of thought. It is also worth noting that human beings share more than 99 percent of their genetic makeup with African chimpanzees and gorillas and that investigation into the molecular structure of proteins indicate close kinship between human beings and other living creatures.²⁵

The Human Genome Initiative may teach another, even more sobering lesson to theologians. Rather than

simply providing a launching pad for human powers, human biology and genetics may place some boundaries around human possibilities. The Human Genome Initiative and its offshoots therefore take on theological importance in helping to qualify exaggerated or misplaced claims. Clearly, there must be more to the self than simply freedom or social formation at work in human existence. There is something there for that social formation to work on and with and to which it is responsive.²⁶

James William McClendon is one theologian who would support such an observation. His work is notable in this context because it contains important affinities to Polanyi's views in that he seeks to take the body seriously and to learn from the natural sciences. Additionally, McClendon does all this at the same time that he, like Hauerwas, is committed to maintaining vigorous Christian convictions and identity.

The focal point of McClendon's discussion of the body lies in his discussion of ethics, which attends to the body primarily as created. By way of background, we should note that McClendon insists that Christian ethics concerns itself with three different dimensions which he pictures as interrelated strands that together form a single rope: the bodily, the social and the anastatic. These strands correspond to three dimensions of human existence: we are simultaneously part of the natural or organic order, the social world and an eschatological realm, i.e., the kingdom of God.²⁷ His commitment to linking the biological and social is strikingly reminiscent of Polanyi's (although there is no direct linkage between the two), while it extends Polanyi by introducing a third, explicitly theological dimension to the fabric of human existence.

III. Theological Anthropologies in Conversation with the Human Genome Initiative

Before proceeding, however, it is important to take stock. We have seen that the Human Genome Initiative raises some important questions for at least certain theological anthropologies. A genuine dialogue between disciplines will require that these questions be addressed. But a genuine dialogue will also require that the Human Genome Initiative be open to interrogation by theologians. Take one concern over what will be done with information provided by the Human Genome Initiative. Already we can begin to "engineer" the human body to express certain traits and inhibit others. For example, patients have been successfully treated for ADA deficiency by gene replacement therapy.²⁸ The knowledge and technology produced by the Human Genome Initiative promises to enhance those skills significantly, and thus raises worries of "the perfect child syndrome" or of eugenics, that deliberate intervention into the genetic code intended to produce offspring with what are deemed socially-desirable or ideal traits. This worry is not unfounded, as many clinics which do simple ultrasound and other fetal testing often make it a policy to withhold information on gender from the parents until they confer with their physician. The reason is that many couples want to use abortion as a means to practice sex-selection of offspring, a crude form of eugenics.

Already, a consensus is emerging in the literature that somatic therapy is warranted, but not germline therapy. What this means is that it would be allowable to alter the genetic structure of a single person who suffers from a disease like diabetes so that the person's body starts to produce insulin on its own (somatic therapy). On the other hand, it would not be allowable to do the same thing in a fertilized ovum where the changes will be passed on to future generations (germline therapy).²⁹ Regardless of questions some may want to ask about this particular distinction, what is at stake in the larger discussion is whether the bodies of future generations should be treated as commodities to be designed according to individual whims or tastes. What ought theological anthropology say to this scenario?

A good place to begin is with Hauerwas, who reminds us that biology is never simply biology, that the body is never simply the body.³⁰ It is also the “lived body,” the body as experienced, understood and interpreted by a community. That insight alone should raise questions about the meaning of what we are doing when we manipulate the body by tinkering with its genetic code, for to tinker with the biological body is also to tinker with some of a community’s most cherished notions about who it thinks it is. But we should go further to explore what some robust Christian convictions might suggest in response to our concern.

McClendon reminds us that we are part of the organic world created by God, that we find ourselves endowed with certain open-ended instincts, built-in needs and what he calls our “natural moral equipment” (i.e., capacities for delight, horror, shame, blame, guilt, conscience and moral judgment).³¹ The claim that human beings are created with these capacities by God adds a certain weight to them. After all, if we are created this way, then these capacities indicate to us something of God’s desires and purposes. This inference generates caution in interfering with the genetic material from which these capacities emerge. Any interventions which would diminish these capacities would thus be out of line from a Christian perspective.

But, for McClendon, the givenness of creation is not the last word on how things ought to be; there are at least two other words that need to be spoken about the body as created. First, we can look to his recent treatment of the doctrine of creation. There he characterizes creation, using his own words, as “work in progress.” Secondly, that work in progress cannot be understood apart from “what lasts and what comes last” and “the new that comes in Christ.”³² Put differently, creation is ongoing and cannot be understood apart from redemption and eschatology. While the doctrinal focus of his most recent work precludes an explicit treatment of the ethical implications of these beliefs, we can extrapolate from what he says to what his views might mean for understanding the body and therefore for interrogating the Human Genome Initiative.

The fact that creation is ongoing suggests that the way things currently are is not necessarily the way things ought to remain. McClendon clearly affirms a place for “the creature’s own creativity,”³³ a creativity apparently to be assessed with reference to God’s intentions for creation, intentions which are disclosed as much in what is to come as in what is. And what is to come is already present via redemption, i.e., “what is new in Christ.” As McClendon reads creation in light of redemption and eschatology, redemption brings into creation signs (the biblical miracles which McClendon calls historic, remembering and providential signs) of the “point” of creation, i.e., the reign of God.³⁴ Or, in McClendon’s own words, “The ultimate end of creation and redemption alike is the fulfillment of God’s great kingdom rule. This rule, when it is achieved, will mean God’s glory fully shared, imparted to all, incorporating all.”³⁵ The ultimate criterion by which interventions in the created order should be judged, then, would appear to be God’s glory.

Such a claim is, however, abstract and formal. As such, its application to the Human Genome Initiative will likely be multi-faceted and contestable. Still, we can offer three suggestive, although far from definitive connections. First, honoring the body as created and thereby as the bearer of signals of God’s intentions and purposes, establishes a presumption against intervention with the genetic code. This claim cannot be held absolutely, however, as it is qualified by the continuing nature of creation, which is expressed in the creativity of the creature and the fact of redemption. Honoring the body as redeemed thus provides limited warrant for intervention in genetic materials for the sake of redeeming or healing what is injured or what is not correct.³⁶ Furthermore, honoring the body as resurrected means that interventions to genetic code must serve God’s intended end for creation.

Secondly, this anthropology raises questions about the assumptions behind the project. As noted earlier, Watson claims that the Human Genome Initiative will tell us what it means to be human. Implied in that remark, given the nature of the project, is a belief that knowledge of the body exhausts what it means to be human. McClendon's perspective warns against such reductionism by reminding us that human beings inhabit social and anastatic realms as well. Put differently, he reminds us that there is more to being human than being a body. On this point, Polanyi would be an ally, since he perceives this reductionism as endemic to the natural sciences. He criticizes the natural sciences for assuming that the laws which govern inanimate objects are appropriately applied to the organic realm. More specifically, he argues that by failing to account for emergence, the laws of nature that are manifest in the inanimate domain fail . . . to account for the rise of living beings."³⁷

Moreover, McClendon's perspective helps us to identify what may be a bit of hubris at work in the Human Genome Initiative. The project would appear to reflect the old Baconian drive to control a nature that is only raw material for manipulation to human benefit. The project may thus continue to underwrite and reinforce partial truths about human existence which ignore or underestimate the implications of our genetic indebtedness, our connections to all around us and the limits of our abilities.

Thirdly, McClendon's (and Polanyi's) reminder that we are social creatures points toward the realization that illnesses and diseases are social constructions as much as biological facts. Thus what counts as an illness and therefore worthy of treatment cannot simply be determined biologically.³⁸ Socially-conditioned values impact those kinds of judgments and therefore vigorous social debate must be part of the process.

What overall assessment of the Human Genome Initiative is warranted then by this particular theological anthropology? It must clearly be a nuanced assessment.³⁹ On the one hand, McClendon's perspective leads us to affirm the project as a way of gaining more knowledge of the body as created. It further suggests that we affirm the therapeutic possibilities which are likely to arise from the project. Moreover, it suggests a way to limit the kinds of interventions into genetic material that are warranted. Finally, his perspective forces consideration and debate over what it means to be human and over what conditions constitute dis-ease or illness and why.

IV. Conclusion

In conclusion, I have tried here to suggest the shape a dialog between the fields of the natural sciences and theology might take. Of course, this attempt only indicates the barest outline of such a conversation and suggests only the kinds of questions each side might want to address to the other. The Human Genome Initiative promises to contribute much to theological anthropology by forcing theologians to learn more about the body as our anchor in and connection to the material world. Theological anthropology promises to offer much to the Human Genome Initiative by raising questions about the presuppositions behind the project and the proper use of the knowledge and technology produced by the project.

Such dialogues are, of course, difficult to maintain, and have become even more so since C.P. Snow wrote about the distressing gap between the sciences and humanities.⁴⁰ A productive conversation will require learning the languages of the various disciplines and communities involved. It will require that we treat opponents' arguments with care by seeking to understand and clarify before responding. It will require attending to the interests, loyalties and commitments which motivate our inquiry. Such conversation will further require a kind of nonchalance in which

protagonists, although taking their work seriously, refuse to take themselves and their arguments too seriously. Hopefully the conversation can flourish. The fact that we can find some convergence between the philosophical perspectives of Polanyi and the theological accounts of McClendon should engender some modest hope that the project is not misguided.

Endnotes

¹Quoted in Ronald Cole-Turner, *The New Genesis: Theology and the Genetic Revolution* (Louisville: Westminster/John Knox, 1993), p. 20.

²See *Human Genome News*, 6 (September 1994):2, *Human Genome News*, 6 (November 1994):3 and “DNA Map-Makers Ahead of Schedule,” *Akron Beacon-Journal*, 15 October 1995. Complete and rather technical updates on the progress of the HGP can be found in issues *Nature*, *Science*, and *Human Genome News*. which came out in the fall of 1995.

³Ronald Cole-Turner discusses the general topic in his “Religion and the Human Genome” in *The Journal of Religion and Health* 31 (Summer 1992): 163. Ted Peters discusses homosexuality in a paper presented at the American Academy of Religion, November 1995.

⁴See, for example, James M. Childs, Jr., “Genetics, Ethics and the Human Future” in *Trinity Seminary Review* 13 (Spring 1991): 26-35; Ann Lammers and Ted Peters, “Genethics: Implications of the Human Genome Project” in *The Christian Century* (3 October 1990): 868-875, or Ted Peters, “Why Genes and Theology?” in *Dialog* 33 (Winter 1994): 2-4.

⁵The criteria used in many denominational pronouncements are not without merit, but the theological reasoning in most is, at best, thin and relies on unexamined notions of, for example, human dignity, the image of God and stewardship. See J. Robert Nelson, *On the New Frontiers of Genetics and Religion* (Grand Rapids: Eerdmans, 1994), pp. 171 ff.

⁶See his *The Tacit Dimension* (Garden City, NY: Doubleday and Company, 1966), pp. 15-16. Emphasis his.

⁷See Polanyi in *The Tacit Dimension*, pp. 9-10 and *Personal Knowledge* (Chicago: University of Chicago Press, 1962) pp. 55-59.

⁸For an insightful discussion of how these skills develop over time, see Phil Mullins, “Narrative, Selfhood and Persuasion: Polanyian Notes on Selfhood” *The Personalist Forum* 9 (Fall 1993): 109-132. Polanyi discusses emergence in *The Tacit Dimension*, pp. 36-37 and in *Personal Knowledge*, pp. 381-405.

⁹See her, *Making the Connections* (Boston: Beacon Press, 1985), pp. 12-13. For an accounting of the multiplicity of feminist treatments of embodiment, see Lisa Sowle Cahill, “Feminist Ethics” in *Theological Studies* 51 (1990): 53-56 and the introduction to *Gender/Body/ Knowledge*, ed. Alison M. Jaggar and Susan R. Bordo. (New Brunswick: Rutgers University Press, 1989), pp. 4-5. A particularly lucid example of one treatment of embodiment, i.e., the body as a social construct, can be found in Mary Stewart Van Leeuwen, et al, *After Eden: Facing the Challenge of Gender Reconciliation* (Grand Rapids: Eerdmans, 1993), pp. 268-298.

¹⁰Rahner clearly wants to acknowledge the contributions which the various sciences can make to understanding human existence, but understands them to be partial and incomplete. See his *Foundations of Christian Faith*. Trans. William V. Dych (New York: Crossroad, 1984), p. 27. The end result is that the natural sciences contribute little to understanding the heart of human existence, i.e., its openness to and fulfillment by the transcendent. While he does so in a sophisticated and astute manner, Rahner, in the end, appears to compartmentalize the findings of the sciences from faith, the biological from the spiritual.

¹¹Karl Rahner, *Foundations*, pp. 35 and 190-191.

¹²Karl Rahner, *Theological Investigations IX*. Trans. Graham Harrison (New York: Herder and Herder, 1972),

p. 211.

¹³Ibid., pp. 212-213. He does, however, note the novelty of this form of manipulation, by saying that we are now able to create ourselves corporeally, whereas in the past, our creation has been limited to our moral and theoretical selves.

¹⁴Rahner, *Foundations*, pp. 36ff. and 97.

¹⁵Rahner, *Theological Investigations*, p. 217 and 220.

¹⁶Ibid., pp. 213 and 249. It is not clear, to me at least, that Rahner consistently applies this criterion in his own discussion of artificial insemination, where he appeals more to the traditions of Catholic moral theology and natural law (see pp. 236-238 and 246). In fact, he turns the logic of his position around to stress that such manipulation may, in fact, indicate a refusal to abide by what has been given us (pp. 243-245). Put differently, it seems odd to affirm both our transcendent capacities and our givenness at the same time.

¹⁷Wolfhart Pannenberg, *Anthropology in Theological Perspective*. Trans. Matthew J. O'Connell (Philadelphia: The Westminster Press, 1985), pp. 19-21. Pannenberg has previously set out the basic theological contours of his position in his *What is Man?* Transl. Duane A. Priebe (Philadelphia: Fortress Press, 1970).

¹⁸Ibid., p. 34. By openness, Pannenberg refers to our capacities for self-reflection, self-transcendence and spirit (see p. 37). Ultimately, human openness is directed toward an Other who guarantees human well-being (see p. 69).

¹⁹Ibid., p. 41. Emphasis mine.

²⁰For the former essay, see Hauerwas's *Vision and Virtue* (Notre Dame: University of Notre Dame Press, 1981), pp. 68-89. For the latter essay, see his *Community of Character* (Notre Dame: University of Notre Dame Press, 1981), pp. 111-128. While it would be misleading to say that his project is to develop a full-blown theological anthropology, it is clear that Hauerwas makes certain assumptions about human existence. Key points he wants to make are that human existence is contingent and that we are creatures. See, for example, his *Peaceable Kingdom* (Notre Dame: University of Notre Dame Press, 1983), p. 8.

²¹Ian Burns, "The Human Genome Project and the Self" *Soundings* 77 (Spring/Summer 1994): 106.

²²Hauerwas offers the following reason for being suspicious of biology: biology is never not inscribed in the linguistic/conceptual world of a community. For this point, see his *Suffering Presence* (Notre Dame: University of Notre Dame Press, 1986), n. 1, p. 19.

²³Hauerwas, *Suffering Presence*, pp. 48-50.

²⁴Of course, it should be noted that the question of genetic determinism is largely a red herring. Given the best understandings currently available, genes at most contribute to behavior; they do not determine behavior in any tightly-wound way. At best, genes predispose us in certain directions. For helpful discussions of this issue, see R. David Cole, "Genetic Predestination" *Dialog* 33 (Winter 1994): 17-22, Philip Hefner, "Determinism, Freedom, and Moral Failure" *Dialog* 33 (Winter 1994): 23-29 and Cole-Turner, "Religion and the Human Genome," pp. 168-172.

²⁵On the former points, see Ian Barbour, *Religion in an Age of Science* (San Francisco: Harper and Row, 1990), pp. 168-170. On the latter points, see Barbour, pp. 157 and 189. We could also note that the chemicals in our bodies are the chemicals in the stars, an indication of our kinship with non-living matter.

²⁶The work of philosopher Mary Midgley is very instructive on this point. See especially her *Beast and Man* (Ithaca, NY: Cornell University Press, 1978), pp. 19-24 and throughout. I have argued this point at greater length in an unpublished paper, "Where Has Human Nature Gone? A Response to Historicist Critics," delivered at the Central States Regional Meeting of the AAR in March of 1990.

²⁷McClendon, *Ethics*, vol I: *Systematic Theology* (Nashville: Abingdon Press, 1986), pp. 62-67.

²⁸Nelson, p. 60. A friend now tells me that there is some ambiguity to this trial because patients simultaneously continued to receive replacement enzymes. Thus the researchers are unsure as to how much each cause contributed

to the effect.

²⁹See, for example, Ted Peters, “Genes, Creation, and Co-Creation,” pp. 24-25 and his “Why Genes and Theology?,” pp. 3-4.

³⁰By bringing up Hauerwas here, I do not mean to imply that of the people surveyed in the previous section of this paper only he can be critical of the HGI. As noted in the discussion of Rahner, he would likely raise some critical questions at the point which the HGI begins to threaten human transcendence. Pannenberg would also likely demur if intervention threatens humanity’s innate openness to the future. Still, they would make these criticisms without reference to the body.

³¹Ibid., pp. 90-103.

³²McClendon, *Doctrine*, Vol II: *Systematic Theology*, (Nashville: Abingdon Press, 1994), p. 189.

³³Ibid., pp. 159.

³⁴For his discussion of signs, see *ibid.*, pp. 185-188.

³⁵Ibid., pp. 147-148.

³⁶I realize that I am begging a number of important and difficult questions at this point related to how we know what counts as injury or malformation. There will be no way to do so apart from the linguistic and conceptual worlds of the communities to which we belong. The fact that different people do not all share in these worlds does not make the task of deciding at a public level what counts or does not count impossible, but it does make it difficult. For some thoughts on what such a conversation might require, see my “Toward a Nonfoundationalist Christian Social Ethic,” *Perspectives in Religious Studies* 22 (Spring 1995):45-62.

³⁷Polanyi, *The Tacit Dimension*, p. 88.

³⁸For an article that does an excellent job of showing how social values infiltrate and shape biomedical practice, see Joanne L. Finkelstein, “Biomedicine and Technocratic Power,” *The Hastings Center Report*, (July/August 1990):13-16.

³⁹To say that the assessment must be nuanced does not mean that I fall prey to the mistake Gilbert Meilander worries about in “Mastering Our Gen(i)es: When Do We Say No?” *The Christian Century* 107 (3 October 1990):872-875. As I see it, he takes a nuanced approach quite compatible with the one set out here. He affirms the project at the same time that he argues we must say no to certain uses of knowledge and technology developed by the HGI. I would wholeheartedly agree. Furthermore, I think many of the decisions as to what to affirm and what to deny—even within widely agreed upon parameters such as somatic therapy—must be made on a case-by-case basis, not in general terms and not in the abstract.

⁴⁰C.P. Snow, *The Two Cultures and the Scientific Revolution* (New York: Cambridge University Press, 1961).

Religious Pedagogy From Tender to Twilight Years:

Parenting, Mentoring, and Pioneering Discoveries by Religious Masters as Viewed from within Polanyi's Sociology and Epistemology of Science

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ABSTRACT Key Words: Michael Polanyi, science, epistemology, apprenticeship, mentoring, religious development, self-transforming discovery, tradition.

Polanyi broke through the notion that science has a distinct methodology and epistemology which sets it apart from the other cultural disciplines (law, medicine, music). When it came time to address the issues of how Christianity functions, however, Polanyi unfortunately lapsed into romantic notions based upon his own ill-informed and marginal participation in the religious enterprise. By way of addressing this deficiency, my study puts forward seven theses designed to demonstrate that everything which Polanyi put forward regarding the transmission of a scientific heritage through a successive series of apprenticeships can be seen as functioning within the religious enterprise as well. Then, when it comes to the role of masters in pursuing lines of inquiry which sometimes lead to self-transforming acts of discovery, such feats can be understood as defining the function of creative theologians and pastors who both exhibit and transform the tradition in which they dwell. In conclusion, my inquiry will attempt to show that, when Polanyi's own inadequate assessment of religion is set aside, one comes to a proper understanding as to how religious pedagogy actually functions within the Christian enterprise.

Michael Polanyi broke through the notion that science has a distinct methodology and epistemology which sets it apart from the other cultural disciplines (law, medicine, music). When it came time to address the issues of how Christianity functions, however, Polanyi unfortunately had to entirely rely upon the fragmented notions which he gained from his close colleagues since he himself had only an ill-informed and marginal participation in both Judaism (the nominal faith of his parents) and Christianity (which intrigued him after his arrival in England)[See Appendix.]

Given the inadequate nature of Polanyi's own religious self-understanding, this paper will attempt to spell out what Polanyi **might have said** had he been a theologian. My goal is not to enter into the debate as to how to interpret Polanyi's analysis of religion; rather, it is to start over and to offer seven theses which sketch the broad lines of how the religious and scientific enterprise rely upon roughly parallel processes from the tender to the twilight years.

Polanyi attempted to maintain that science and religion have some "common ground" (Polanyi:1961, 1963a; PK:279-286). This topic has intrigued numerous scientists and theologians (e.g., Coulson: 1968, Rahner: 1967). Among these, T.F. Torrance has done more than any other individual by way of bringing Polanyi's epistemology of scientific knowing to bear upon the theological enterprise (esp. Torrance, 1969: 281-382; 1984: 303-332). In the preface of his 1984 volume, he writes in his preface as follows:

[I]n the process of my explorations, . . . I became increasingly convinced that theological and physical knowledge, scientifically and rigorously pursued, have a great deal in common in spite of their very different objectives (Torrance, 1984: xii).

Torrance critiques Catholic theologians “as trapped in obsolete dualist structures of thought,” (Torrance, 1984: xiii), while he himself appears to be overly confident that Barth’s distinction between grace and nature, between divine revelation and human discovery, is foundationally correct. All in all, I find Torrance’s reliance upon Barth to have the effect of eroding much of Polanyi’s foundational conviction that religion and science rely upon the same human processes of knowing.

My own starting point has been to emphasize the Thomistic medieval notion that **grace builds upon nature**, i.e., grace elevates nature but, at every point, grace relies upon nature. As such, therefore, religious knowing and even the act of receiving revelation itself, might be understood as a human activity which takes place within the epistemological constraints and the sociological conditions which govern all knowing. Revelation, it must be emphasized, is always revelation for us and to us—hence, medieval Thomists as well as contemporary theologians are not far apart when it comes to allowing that everything that we can know or say about God necessarily has an anthropomorphic foundation.

Taking this as my point of departure, I can now proceed to rely upon my dual training in both physics and theology to sketch out a tentative set of theses which Polanyi might have put forward had he been more solidly initiated into a religious tradition.

Thesis 1: In the first instance, religion is an acquired skill. A child progressively acquires the particular tacit powers of recognition which are habitually and spontaneously exhibited by parents and guardians. In this way, children assimilate their parents’ religious experiences with the same reliability that they assimilate their responses within the various secular domains of life.

My starting point will not be an esoteric epistemology of how “God” is present in the world in a way that differs from, let us say, the presence of “neutrons.” Rather, my starting point will be the evident experience that Christians, once they are adequately trained, acquire tacit skills which enable them to “taste and see” the “hand of God” operating in their individual and collective lives. Without an adequate apprenticeship, “God” generally remains “an idea,” “a projection,” or even “a superstition” which **others have** but which never shows up “for me in my life” (as in the case of the oracle-poison of the Azande, *PK:287-292*). As Polanyi correctly notes: “You cannot speak without self-contradiction of knowledge you do not believe, or of a reality which [in your mind] does not exist” (*PK:303*). After an adequate apprenticeship, however, the tacit powers of knowing and of judging are so transformed such that the “God” inevitably and stubbornly shows up in expected and unexpected ways during the whole course of one’s life. This is what persuades average Christians that “God is alive and well.”

A parallel can be drawn with a young science student who, in due course, might become a nuclear physicist. At some point, “neutrons” is only “a new word” which appears to have significance for others, but which has had absolutely no place within the life experience of the one hearing it for the first time. Thus, even for students in science, they begin by “believing” in neutrons and, only in due course, having been guided by their trusted mentors, do they arrive at a point when they “see” and “experience” the effects of neutrons **for themselves**.

Some science students will walk away from this experience and only give “neutrons” passing attention for the remainder of their life. At this point there is a distinct analogy with the young person who grows up in a lukewarm Christian environment and who only gains some limited, spontaneous experiences of “God.” Such persons generally feel no lure to pursue “God” or to give those limited experiences any significant attention or weight in their lives.

On the other hand, some science students will be absolutely riveted by the activity of subatomic particles (for example, as “seen” within a Wilson Cloud Chamber) and feel the compelling lure to extend their knowledge and their experience of such things. Only a kind of spontaneous admiration (not only for the masters, as Polanyi would have it, but also for the “realities” themselves) sustained and pursued over many years during arduous apprenticeships can produce a **productive** nuclear physicist. With Polanyi, I emphasize “productive” because, without spontaneous and sustained admiration, a prolonged apprenticeship can result in a pedantic and bored physicist who, for practical purposes, is reduced to merely applying but never extending and transforming what he/she has learnt. In parallel fashion, one finds many Christians who superficially practice and study their religion (sometimes having even gained graduate degrees) yet who, in the end, pass their entire lives devoid of any fresh lure or engaging experiences of the living God.

Everything that Polanyi developed respecting the practice of skills within a convivial society bent upon transmitting its lore from one generation to the next can be applied equally to the production of a committed Christian or the creation of a productive nuclear physicist (*PK*:49-56, 204-211). I will assume that my readers can fill in the details here. Let only a summary statement from Polanyi suffice:

Every mental process by which man [or woman] surpasses the animals is rooted in the early apprenticeship by which the child acquires the idiom of its native community and eventually absorbs the whole cultural heritage to which it succeeds. Great pioneers may modify this idiom by their own efforts, but even their outlook will remain predominantly determined by the time and place of their origin. Our believing is conditioned at its source by our belonging (*PK*:322).

Thesis 2: Traditional Christian theology has taken the course of describing the reception of faith through baptism within a Cinderella mentality. Behind every Cinderella transformation, however, one can detect an Eliza Dolittle story working quietly and unobtrusively in the background. Consequently, the one-sided supernatural claims made by the traditional theology of baptism only hold up because these claims are supplemented and corrected by efficacious practice.

My own religious upbringing was dominated by what might be called the Cinderella mentality. By this I mean that the processes of spiritual regeneration advocated by my church fell into line with the mood and the thought patterns surrounding Cinderella’s transformation. As such, those narratives in which Jesus empowered his disciples were made to appear as effortless and instantaneous acts on Jesus’ part. It was made to appear that the disciples contributed nothing to their self-transformation save for their willingness to be passive recipients. They could no more contribute to their supernatural transformation than could the fabled Cinderella who was entirely dependent upon the “magic” of her fairy godmother.

The Cinderella mentality dominated what traditional theology had to say about faith and baptism. As far as adults were concerned, it appeared that **God alone** gave the grace of faith to some and not to others. No amount of human effort, it was emphasized, could bring a person to faith. A Christian might exhibit or witness their faith to a neighbor, a missionary might preach the Word of God; yet, in the end, it was entirely the Gift of the Holy Spirit that brought one person to accept Jesus Christ while another went away, like the rich young man, with a heavy heart.

While there is surely an element of unspecificity (see *PK*:62f) in why one person feels a spontaneous admiration for a person, for an ideal, for a tradition which leaves another cold, none the less, the role of tacit powers acquired

due to one's belonging cannot be neglected. Imagine, for example, what happens to Christian infants or young children who, in times of war, have been separated from their parents and raised by parents devoted to another God—Allah or Krishna or Vishnu. Such children end up spontaneously and habitually experiencing the “God” of their adoptive parents even though they might have been formerly baptized as Christians. The same thing can be said of children who happened to be raised by committed atheists who shape their children to believe that “God” has no more reality than the “fairies” and “dragons” which populate the imaginative stories written for children.

The presence of tacit powers of knowing shaped by one's acritical childhood upbringing and by one's freely embraced adolescent and adult apprenticeships shows up not only in the early formative years but also in the liminal experiences in the twilight years of one's life. Elizabeth Kübler-Ross and others have documented how, in the case of near-death experiences, Christians frequently meet someone “on the other side” whom they, often enough, identify as a lost loved one or even as “Jesus.” When medical doctors chronicle such near-death experiences in India, however, they discover that their patients now speak of meeting “Vishnu” or “Krishna”—with never a single instance of Jesus showing up. All this goes to demonstrate that, even in the extremities of life when the brain is beginning to shut down due to lack of blood/oxygen, those tacit powers of recognition which one cultivated during life still are in control.

When one examines the church's traditional theology of baptism, one quickly discovers that the Cinderella mentality dominates and that little or no regard is given to “nature.” For instance, even in the case of infants, the *Universal Catechism of the Catholic Church* (1989) affirms a mighty list of the wondrous effects of baptism:

By Baptism, **all sins** are forgiven, original sin and all personal sins, as well as all punishment for sin. . . . Baptism not only purifies from all sins, but also makes the neophyte “a new creature,” an adapted son of God. . . . The Most Holy Trinity gives the baptized sanctifying grace, the grace of **justification**: enabling them to believe in God, to hope in him, and to love him through the theological virtues . . . (sec. 1263, 1265f).

My own parents were committed to the church and its theology of baptism. On the first Saturday following my birth, my parents dutifully took me to Holy Cross Parish and presented me to Fr. McMonigle for baptism. They firmly believed that the Sacrament would work some great and mysterious transformation that they themselves were entirely incapable of effecting. They stood helplessly and nervously as the priest conducted his sacred rites on behalf of their firstborn son. After my baptism, they felt a sign of relief: my soul had been purified of sin. Now I was a child of God and had the supernatural gift of faith. It never occurred to them, as I was beginning to speak, that I said nothing about “God.” It never occurred to them, when I turned five and began to attend church each Sunday with them, that I didn't have the least sense of “God” being in the church. What I did notice, however, is that my Dad and Mom were mysteriously quiet. The tradition at Holy Cross was that no one spoke except in hushed whispers as soon as they entered the church. Something like the following exchange took place:

Aaron: “Hey, Papa, why is everyone so quiet?”

Dad: “Shhhhhh! People come here not to talk but to listen to God!”

Aaron: “But I don't hear anything.”

Dad: “Look at that gold box [tabernacle] on the table [altar] at the front of the church.”

Aaron: “Oh, it's shiney! I see it.”

Dad: “God lives in that little box. The people come here to silently talk to God who lives there. And God silently

talks to them.”

This was my first remembered introduction to “God.” My parents never spoke of God in any setting that made any impression upon me prior to that moment. Now, for the first time, I felt that my parents sensed the presence of something or someone which I had overlooked. This was not a first-order sensory impression like the kind offered by the cans of food that I rolled on the kitchen floor or by the cockroaches that sometimes came out from under the icebox. None the less, the clues were present. Sensory effects pointed to some unseen and unheard “presence.” As in the case of “germs” which from time to time made me sick or as in the case of the “tooth fairy” which left nickels under my pillow, “God” was now taken into account by me as the “one hidden in the gold box who silently talks to my parents.” I was impressed.

Meanwhile, my parents were undoubtedly thinking that they were witnessing the effects of baptism. According to the Thomistic theology which they were taught, my uncanny instinct for recognizing the God of my parents and for devoting myself in faith to his service was to be accounted as the “awakening” of the marvelous effects of baptism which were in a “sleeping” phase up until that point.

Had I been left to my own devices and those of my parents, I would have grown up thinking that “God” only appears in churches where people keep silent in order to somehow “hear” him. My father, however, wisely enrolled me in Holy Cross Grade School when I was five. Here, under the gentle care of the Ursaline Sisters, I quickly came to understand and to experience that “God” has many more effects in the world than those of which my own parents were aware. Increasingly I enjoyed both the study and the practice of religion—although it was so painful for me to kneel up straight during the Mass. In due course, I increasingly took God into account. I even began to depend upon “God.” Finally, after many years, I too developed the practice of silently speaking to “God” in the gold box on the altar and I “heard” him wordlessly speak back to me in my heart. The tacit skills exemplified by my parents and by my teachers, therefore, gradually became my very own. What was promoted officially as a Cinderella transformation had all the characteristics of the Eliza Dolittle story.

Eliza Dolittle, it will be remembered, was the flower girl in *My Fair Lady*. Professor Higgins, a professional linguist, took her under his wing and gradually trained her to speak “correctly” and to act like a cultivated lady. During her training, the sheer effort and repetition demanded by a sometimes impatient Professor Higgins often led Eliza to the point of despair. In the end, however, the two of them gradually succeeded. Eliza was taken by Higgins to a ball where a Rumanian count proudly declared that he had discovered the truth despite the professor’s complete silence on the subject, “She is a princess!” Higgins, gloating over **his** success, promptly ignores Eliza. A verbal fight ensues. Eliza rightly declares that it was her efforts that pulled the whole thing off. Furthermore, she claims that, now that she intimately understands the professor’s techniques by virtue of her own apprenticeship, she could go and find another flower girl and effect for her the same self-transformation which she herself has received. Unlike her counterpart Cinderella, Eliza realizes that she is not and cannot be passive in the face of her own self-transformation and that the stroke of midnight will not reverse the expanded powers which she now exhibits.

Using Polanyi analysis of parenting and of apprenticing, one can now glimpse how Christian theology has adopted for itself a Cinderella model of Christian baptism which obfuscates the Eliza Dolittle tradition which keeps the wondrous claims from lapsing into empty superstitions. It is no wonder that, given the growth of secularism in modern society, the Catholic Church has placed a healthy emphasis upon perceiving infant baptism as the beginning of a spiritual journey (technically a catechumentate) which culminates in Confirmation. During this period, parents have the obligation

to exhibit their Christian commitments and to initiate their children into them. In modern China, where societal norms work against a faith commitment, the Catholic Church has even decided to suspend the practice of infant baptism. When I asked “why” this should be the case when, in effect, the Church there was entirely locked into the pre-Vatican practice of Latin rites and of Thomistic theology, I was told, “We found that parents can no longer insure that their children will receive from them their religious commitments. In such circumstances, each one must profess the faith and be baptized for themselves.” When the general culture is directly antagonistic to the religious training which Christian parents give to their children, therefore, the claims made by traditional theology relative to the supernatural effects of baptism are exposed to rethinking.

At this juncture, the practice of the Church Fathers is revealing. Among them, the norm for training converts was the adult catechumenate which extended for two to three years prior to baptism. In effect, an adult transformation of life was presupposed by the instruction, the exorcisms, the examination of life entailed therein. In the pluralistic religious atmosphere of the Roman world, the Church Fathers had no illusions that a mere profession of faith sufficed to render a person fit for baptism or enabled a Christian to sustain a lifelong Christian commitment. Contrary to the medieval theologians who transposed into infant baptism the real effects of patristic baptisms, the Church Fathers had no polyanna confidence in the waters of baptism. Cyril of Jerusalem (d. 386), for example, emphasized that it was fatal to imagine that the efforts of the catechumens could be curtailed in view of some irresistible grace inherent in the baptismal waters. Cyril then proceeded to name persons who had been baptized but not transformed. Gregory of Nyssa (d. 394), his contemporary, even went so far as providing a pragmatic test:

If the washing [of baptism] has only effected the body, . . . and the life after the initiation is identical with that before, . . . I will say without shrinking that in such a case the water is only water, and the gift of the Holy Spirit is nowhere evident (*Oratio catechetica magna* 40).

Far from pressing forward the Scriptural promises accepted in faith (to which Protestants are prone) or exalting the supernatural agency of the rite itself (as was done in the medieval Catholic *ex opere operato*), one can glimpse from what has been said that the Church Fathers took a much more nuanced and existential approach to the efficacy of baptism.

Time and space does not allow an exhaustive treatment of the other rites and the other claims which traditional Christianity has made relative to God’s work in the hearts of believers. Suffice it to note that theology cannot be trusted to explain the human dynamics which, in every instance, are presupposed and undergird the efficacy of every Christian action. Behind every Cinderella transformation claimed by theology, one would do well, therefore, to sniff around for the Eliza Dolittle processes which go unnoticed. Interested persons might consult my analysis of Synoptic exorcisms, ordination rites, and of Pentecostal speaking in tongues (Milavec, 1982: 18-36).

Thesis 3: No cultural tradition (music, medicine, science) can hope to securely promote the cultivation of its heritage without (1) specifying its classical instances as normative and (2) accrediting teachers/mentors to authoritatively interpret/perform these classics. During the time of apprenticeship, the classics function in the hands of the masters of the tradition by way of evoking and imposing correct modes of feeling, judging, and acting upon those novices who wish to participate in and enjoy the specific satisfactions and performance skills associated with a given heritage.

David Tracy has emerged as a major spokesperson for specifying the function of the classics within Christianity as paralleling the role which classics play within the humanities. In his volume, *The Analogical Imagination* (1981), Tracy

argues that the “dangerous memory of Jesus” erupts afresh in new situations, having been evoked by those who honor the Christian classics (texts, rites, events, persons). These fresh eruptions Tracy endeavors to justify as the Christian counterpart of the solemn claim to meaning and truth which the classics in art, music, drama, literature exert upon their respective publics. Tracy himself acknowledges that “the heart of the argument of the entire book may be found in the argument on the phenomenon of the classic” (Tracy: xi).

David Tracy (b. 1939) came to the theological enterprise following upon a classical training in philosophy. Just as Polanyi was obsessed with misleading descriptions of science, Tracy, following in the footsteps of his own personal mentor, Bernard Lonergan, has dedicated himself to providing a description of theology which takes into account the issues raised by our modern historical consciousness. For Tracy, traditionalist appeals to divinely revealed truths and the positivist appeals to a scientific analysis of the past both fail. Traditionalist appeals fail because they lack an adequate sense of the historical and cultural distance which separates the classical expressions of past revelations from our own contemporary horizon of understanding (Tracy: 99f, 105). Lacking such a historical distance, the traditionalist can only authoritatively and mindlessly repeat the past, blind to its ideological conditioning and existential misfit with modernity. “Indeed,” Tracy concludes, “fundamentalist and authoritarian theologies, properly considered, are not theologies at all” (Tracy: 99).

David Tracy draws upon the artistic traditions in order to exemplify how classics exert a public impact which informs and “transforms our perceptions of the real” (Tracy: 115). Michael Polanyi, in his turn, speaks of science as a “fiduciary framework” which is sustained by a community which honors certain basic assumptions (beliefs) that are transmitted through prolonged apprenticeships under competent masters. Polanyi, in my judgment, fails to sufficiently develop the notion of how the classic experiments and theories which inform them serve to inform and impose certain “perceptions of the real” upon those who reproduce them. Thomas Kuhn, who shares enormous common ground with Polanyi including the notion of “tacit powers” (Kuhn, 1970:191, 196) has offered a more compelling function to the way that the classic experiments and problem solving function in the formation of the novice.

When Kuhn first published *The Structure of Scientific Revolutions* in 1962, he coined the term “paradigm” to refer to the habitual operative perceptions and operations which distinguish the scientific community at any given time. In his extensive postscript of 1969, he amplified his use of the term and explicitly acknowledged his indebtedness to Polanyi for the notion of “tacit knowledge” (Kuhn, 1970: 191). In this postscript, Kuhn emphasized that a paradigm is not so much a theory (as understood in the philosophy of science) but more of that “disciplinary matrix” (Kuhn, 1970: 182) imposed upon novices in science which enables them to routinely perceive and judge according to the shared patterns which define the existing scientific community (Kuhn, 1970:176). In their training, for instance, novices reproduce for themselves a classical set of laboratory and pencil and paper problems

After he [the student of science] has completed a certain number [of these problems] . . . , he views the situations that confront him as a scientist in the same gestalt as other members of his specialists’ group. For him they are no longer the same situations he had encountered when his training began. He has meanwhile assimilated a time-tested and group-licensed way of seeing (Kuhn, 1970: 189).

Every apprentice who would become a master within either an artistic or scientific tradition is required to contemplate reverentially and to reproduce painstakingly the classics for him/herself. Thus, future violinists are apprenticed to perform the concertos of Mozart such that they might progressively assimilate for themselves the standards

of performance and the aesthetic sensibilities which are shared by the living masters who take their stand within the charisma offered by Mozart. In like fashion, future physicists painstakingly reproduce the Millikan oil drop experiment such that they might develop the stubborn perception that the electrical charge is not continuous but increases or decreases in discrete jumps. At the end of an apprenticeship, the novice knows that he/she has arrived by the fact that the classics evoke the same habits of judgment and the same standards of performance exemplified by the masters of the tradition. In Kuhn's words, "he views the situations that confront him as a scientist in the same gestalt as other members of his specialists' group" (Kuhn, 1970:189).

Within the Christian tradition, the Sacred Scriptures function much in the same way as do the classics in art, music, science, i.e., they serve to evoke and to impose correct modes of feeling and of perception upon a widely dispersed (in place and in time) body of adherents. The Gospel narratives, therefore, in either their oral or written form, were created by way of specifying the particular charisma and strategy for living that characterized Jesus of Nazareth. Novices within Christianity are led by their masters to contemplate reverentially and to reproduce imaginatively these narratives until they evoke the same habits of judgment and the same powers of performance which are exemplified by their living masters.

It is sometimes suggested that a Christian only superficially trained can employ the classical texts without the necessity of being directed by a master. Sometimes it is even claimed that the Holy Spirit alone serves as the efficacious teacher of the solitary explorer of the texts. For the uninitiated, this is patently false. Augustine remarks that "every kind of scholastic discipline . . . demands a teacher or a master if it is to be acquired" (*De util. cred.* 17.35). With all the more force, therefore, do the "divine oracles" within the Scriptures demand a master if they are securely "to refresh and to restore souls" (Ibid. 6.13). In our own time, even Protestants such as Peter Stuhlmacher and C.H. Dodd have noted that the Protestant refusal to shackle the intent of Scripture within Papal or dogmatic confines did not mean that the text could properly function outside of the history of its effects within a congregational tradition. Left to oneself, the uninitiated is as incapable of discovering the true worth and function of the Sacred Scriptures as would an inexperienced violinist left entirely alone with the scores of Mozart. The classics are normatively performed and understood only in the hands of the living masters of the tradition.

Thesis 4: The masters of a tradition are not simply skilled repeaters. Every worthy master dedicates his/her energies so as to make fresh contacts with those realities which he/she has been trained to serve in revealing.

Once the initiation process is completed, Kuhn emphasizes that operative patterns have been established which insure certain habitual recognitions. These recognitions, Kuhn claims "must be as fully systematic as the beating of our hearts" and "may also be involuntary, a process over which we have no control" (Kuhn, 1970: 194). Thus, Kuhn emphasizes that the trained scientist perceives the world **differently** than does the layperson:

Consider the scientist inspecting an ammeter to determine the number against which the needle has settled. His sensation probably is the same as the layman's. . . . But he has seen the meter (again often literally) in the context of the entire circuit. . . . For the layman, on the other hand, the needle's position is not a criterion [i.e. a clue] of anything except itself (Kuhn, 1970:197f).

In sum, Kuhn notes that the tacit knowing powers of the trained scientist, informed as they are by his paradigm, operate instinctively and stubbornly. And, since this knowing is locked away within the knowing organism, Kuhn acknowledges that, in the end, "we have no direct access to what it is we know, no rules or generalizations with which

to express this [tacit] knowledge” (Kuhn, 1970:196). Kuhn’s self-expression here is sometimes awkward and unrefined; yet, the common ground shared with Polanyi is quite evident.

Once one allows that tacit powers of knowing operate habitually and stubbornly, one is inevitably faced with the recognition that there is no neutrality in perceiving and analyzing the world. All observation in science is guided and informed by theories and patterns of practice to which the scientist is committed. As a result, from within the community committed to the same paradigm, there exists a functional heuristic circularity. Rational appeals serve to draw attention to what passes for “reasonable” within given circles of commitment. Pragmatic appeals, meanwhile, fail to note that every belief has some degree of workability in the eyes of the believer. Appeals to given authorities disguise the fact that one’s prior apprenticeship(s) serve to accredit certain authorities to the exclusion of others. Appeals to the austerity, the virtue, or the passionate sincerity of chosen mentors cannot disguise the fact that systematic errors are compatible with any and all these virtues. Even such phrases as “responsible conviction” and “warranted assertability” (Emmet:5) cannot disguise the fact that our particular tacit commitments shape what we habitually perceive as “responsible” and “warranted.” “In the end, to assert something as “true,” as “reliable,” as “necessary to take into account” is to be caught red-handed affirming what one has been trained to acknowledge in a commitment situation.

Polanyi’s solution to the heuristic circularity of scientific knowing is found principally within his phenomenology of discovery set within a sociological matrix. Kuhn’s solution to the same difficulty is found principally within the sociology of discovery set within a historical matrix. In both cases, the ability of a like-minded society of scientists to revise and reform their own stubborn convictions stands as the source of assurance that science is more than a collective and slavish indoctrination which blocks any fresh or pioneering access to the realities which it purportedly serves. Teilhard de Chardin aptly coined this dynamism which purifies and perfects scientific knowing as “the mysticism of discovery.”

Christianity, meanwhile, has traditionally framed its perspective on “God” based upon Jesus as the final and absolute norm for belief and practice. If there is a “moment of discovery” within Christianity, it appears as though it is the once-for-all public revelation delivered through Jesus Christ. As such, the conservative slant on “development of doctrine” allows that some development in understanding does take place relative to the deeper intent of Jesus; yet, this “development” leaves no room for anything essential being lost or anything novel taking its place during the entire course of history. Wilken’s study, *The Myth of Christian Beginnings*, demonstrates that this has been the perspective upheld by every epoch of Christianity prior to the modern era. As such, one can have no quarrel with the long-standing serviceability of this notion.

Within the nineteenth century, an alternative notion of development emerged. Lyell’s *Principles of Geology* and Darwin’s *Origin of Species* embraced the paradigm that geological and biological development embraced evident **discontinuity** as well as patterned continuity. John Henry Newman was the first to apply this notion to historical theology in his *Essay on the Development of Christian Doctrine*. Newman differed from contemporary theologians on two decisive points:

(1) He did not expect that Jesus and his apostles stipulated every essential belief and church practice for all successive generations. Thus, Newman did not support either Anglican efforts to establish their rule of faith by appealing to a consensus among the Church Fathers, and he did not support the then-current Catholic practice of insisting that all church doctrines which were later defined were implicitly held from the beginning but not necessarily communicated as such in public texts.

(2) Newman also contended that Christianity ought to be identified in what it has become rather than in its indeterminate beginnings:

It is indeed sometimes said that the stream is clearer near the spring. Whatever use may be made of this image, it does not apply to the history of a philosophy or sect, which, on the contrary, is more equable, and purer, and stronger, when its bed has become deep, and broad, and full. It necessarily arises out of an existing state of things, and, for a time, savours of the soil. . . . At first, no one knows what it is, or what it is worth. . . . From time to time, it makes essays which fail, and are in consequence abandoned. It seems in suspense which way to go; it wavers, and at length strikes out in one definite direction. In time it enters upon strange territory; points of controversy alter their bearing . . . and old principles appear under new forms. . . . In a higher world it is otherwise; but here below to live is to change, and to be perfect is to have changed often (Newman: 100).

Against detractors who would characterize this sort of process as a human degradation for such a divine institution as Christianity, Newman appealed to the Creator's patient attendance upon the "slow successive steps" of biological development for his appointed ends (Newman: 165). He also appealed to the acknowledged suitability of the eternal Word appearing "under an earthly form" (Newman: 149).

Today nearly every historical theologian (save those devoted to a Scriptural or dogmatic fundamentalism) admits to the correctness of Newman's sense of development. One has only to read Pelikan's five volume work, *The Christian Tradition* (1971+), in order to become acutely aware of how the dynamics of history have shaped and responded to the development of doctrine. Any text, Ricoeur reminds us, has a "surplus of meaning" whereby future generations find resonances and points of inquiry which have no relation to what the initial author intended within the original horizon of understanding.

This shift in meaning(s), however, is largely obscured by the practice of upholding the selfsame classical texts in each generation. Each master is so situated such that (a) the master who trained him/her has already made extensive pastoral adaptations so as to fit the unique spiritual needs and horizon of understanding which characterizes the novice and (b) during his/her entire life, a master periodically makes fresh discoveries within the text which, during the process of training his/her successor(s), he/she includes as part and parcel of the meaning which has been passed on by his master(s) who is now long dead. Meanwhile focal meanings which can be powerfully evocative within the life and times of a given mentor can become overshadowed and outmoded and, within a few generations, nearly lost within the process of living transmission.

The plays of Shakespeare live on as classics only because each new generation of actors and directors experience the efforts of the last generation, but, feeling both moved and discontented with the past, make a fresh effort to express the depth of meaning that Shakespeare continues to evoke. Studies have been done which trace the dynamic continuities and discontinuities which mark the presentation of particular characters within Shakespeare's plays. Mozart's concertos, meanwhile, are no longer performed on baroque instruments in rococo music halls but are transposed into modern notation which makes allowances for the extended range and quality of modern instrumentation. Meanwhile, living artists perform baroque music with the keen sense that both they and their audiences have been shaped by the Romantic and Modern periods of music. Here again, the classics live on by virtue of an inevitable and irreversible tradition of interpretation.

In parallel fashion, the charism of Jesus as evoked within the classical Christian Scriptures and as celebrated within the classic rites (Sacraments and church ordinances) has undergone a tradition of continuous reinterpretation within the lives of his adherents. Jaroslav Pelikan, a living master of the historical method, writes as follows in the preface of his recent book, *Jesus Through the Centuries: His Place in the History of Culture*:

This book presents a history of such images of Jesus, as have appeared from the first century to the twentieth. Precisely because, in [Albert] Schweitzer's words, it has been characteristic of each age of history to depict Jesus in accordance with its own character, it will be an important part of our task to set these images into their historical contexts. We will want to see what each age brought to its portrayal of him. For each age, the life and teachings of Jesus represented and answer (or, more often **the** answer) to the most fundamental questions of human existence and of human destiny . . . (Pelikan, 1985: 2).

Pelikan, in this context, gives too much emphasis to how each age of Christianity transformed Jesus. The first truth, however, is that each age has been shaped by the standards of excellence which Jesus portrayed through a series of masters and saints which trace all the way back to the Galilean Master. Accordingly, Pelikan's one-sided emphasis must be corrected by an appeal to David Tracy equally one-sided emphasis upon the claim which the Christian classics have in forming each new generation:

The interpreter [of Jesus], as a finite historical subject, approaches the classic . . . [and] another force comes into play. That force is the claim to attention, a vexing, a provocation exerted on the subject by the classical text. The subject may not know why or how that claim exercises its power . . . [yet] my finite status as this historical subject is now confronted with the classic and this claim upon me: a claim that transcends any context from my preunderstanding that I try to impose upon it . . . , a claim that will interpret me as I struggle to interpret it. I cannot control the experience, however practiced I am in the techniques of manipulation. It happens, it demands, it provokes (Tracy: 119).

At this point, Tracy brings into focus the claim of Jesus upon the religious adherent. Accordingly, along with such classic studies as Rudolph Otto, *The Idea of the Holy*, and William James, *The Varieties of Religious Experience*, Tracy again asserts the evocative power of the Christian classic to serve as a medium for fresh encounters with the living God—an encounter which presupposes developed tacit skills and which, at the same time, transforms and enlarges the powers of knowing of the believer. It is to this phenomenon that our attention must now turn.

Thesis 5: The process of a pioneering discovery cannot be fully specified nor fully defended. The process of discovery provides, nonetheless, the reliable route whereby the masters of a tradition go on to make fresh and pioneering contacts with the realities which they have been trained to serve.

No one can, properly speaking, be called a master of a tradition unless he/she is capable of creatively extending the tradition by virtue of having conducted research which effects some fresh contact with the realities that he/she has been trained to serve. Thus the graduate student in physics and the Christian being trained in holiness are similarly situated. The realities which each have been trained to perceive and to serve, Polanyi insists, are expected to show up within an extended series of novel disclosures (*TD*:23f, 32f). Nuclear physicists dedicate their energies to pursuing lines of inquiry they intuit will lead to detecting and analyzing novel interactions between subatomic particles. Mature Christians, in somewhat parallel terms, so direct their energies so as to experience and apply prophetic encounters with the living God

to their lives: “If only you would listen to him [YHWH] today; do not harden your hearts” (Heb 3:7, 15; 4:7; Ps 95:7).

For the mature Christian, fresh discoveries of God can emerge in various ways. A time-honored methodology is centered upon the prayerful meditation of the Scriptures. Augustine, for instance, spoke of the divine wisdom hidden within the Scriptures as having a depth dimension which defies even a life-time of discoveries:

Such is the profundity of the Christian Scriptures, that if I were to attempt to study them and nothing else from early childhood to decrepit old age, with the utmost leisure, the more unwearied zeal, and greater talents that I have, I should still daily find something new in them (*Epistolae* 137.3).

The meditative use of Scripture might go as follows. The reader brings him/herself into a contemplative frame of mind and reads over a self-chosen text or texts. Meanwhile, the reader is subliminally guided by the whole array of successes and failures, joys and anxieties, hopes and fears which fabricate the texture of his/her subconscious existence. Simultaneously, the reader subliminally feels the lure of God which has some marginal influence on each of us at every moment. The divine lure is never coercive or clearly separable from the nexus of subconscious drives; yet, it is quietly active. And it is the quiet meditation of the reader which tries to intuitively discern the sympathies of God. The reader passes over much of the text without being noticeably affected. A familiar text might trigger a group of associated meanings coming from past encounters. The reader may sense again the he/she is being warned, judged, comforted, guided, blessed. Events of the past filter into the mind of the reader. Some of them fade quickly. Others are mulled over and their relationship to the text is again enforced and further digested. The mind wanders. Occasionally it reaches an impasse. A once-familiar text might become suddenly puzzling. Or, an unfamiliar text might become the source of a deep anxiety or fascination. The wise and experienced meditator will stay with these moods and even endeavor to intensify them. In the more dramatic cases, the reader/meditator will feel him/herself unsettled or captivated by impulses which are not yet clearly defined. He/she will be impelled to come back to them again and again -- even in those brief moments throughout the day when the mind wanders and daydreaming sets in. After weeks or months, the inquirer senses that he/she is being led by trusted intuitions into a truer perception of God's cause or into a closer sympathy with God's way. Then, in a moment of sudden and overpowering emotion or, gradually, over a prolonged period, the truth overwhelms the seeker. The inquirer knows that he/she has arrived in so far as the contemplation of the discovery has an inherent satisfaction which relieves the former straining of the quest.

Such discoveries entail some measure of a graced transformation. A discovery may entail changing the focus of one's career or getting a new job entirely in order to seek the accomplishment of a task which is urgent for God. At other times, the discovery may entail a calming reconciliation with someone who marred one's past life and who has been quietly hated for countless years. At still other times, one may be led to reassess the priorities which make one's life so strenuous and achievement-oriented. Whatever the nature of the discovery, however, the expansion of life which it entails will be greeted as a sign that one has been touched and blessed by God.

Thesis 6: The masters within a tradition are bound together by a shared commitment and exert a marginal control over the productions of their colleagues. Within such a convivial society, each master is both stimulated and restrained by his/her colleagues. In such a society wherein the pursuit of truth is the final criteria, issues cannot be decided by a centralized authority or by democratic voting.

In any given community, authoritarian appeals naturally have their place. The beginners in any profession, for instance, must intrust themselves to the direction of the authorized representatives of the community. Meanwhile, even among the masters within the tradition, certain persons are generally recognized as having more experience and more competence than others. Within both ecclesial and scientific communities, therefore, it is expected that certain hierarchies exist -- hierarchies which are ideally based upon perceived or real competence in pursuing the shared commitments of the enterprise. Even among scientists, therefore, Polanyi reminds us that every working scientist necessarily relies upon the judgment and work of colleagues in those areas wherein he/she has only minor competence. Meanwhile the judgment of editorial boards is relied upon to eliminate banal or incompetent contributions submitted for publication even though, from time to time, a work of genius will be turned down and condemned to obscurity. The selection of candidates for research or teaching positions, the awarding of prizes and grants--all of these functions effectively define the sociological operation of a hierarchy within the scientific field. Within all of this, the individual scientist trusts that petty and selfish interests will be of secondary importance as each gives him/herself to the transcendent ideal of seeking truth. The scientific hierarchy, meanwhile, is understood to safeguard the processes whereby truth can be fostered, i.e., by free inquiry, responsible reporting of one's findings, open discussion and sympathetic persuasion of one's colleagues.

Hierarchical authority, in some instances, can foster a favoritism based upon personal loyalties and act coercively against innovators. The history of every church provides ample examples of just such lamentable instances. Even the annals of science provide instances of abuse within the various scientific hierarchies. Such abuses deserve censure wherever and whenever they occur.

Issues of truth cannot be securely decided by a centralized authority nor by democratic voting. Even a benevolent centralized authority of the highest competence cannot be solely relied upon to safeguard a tradition for two reasons: (1) No individual can presume to have so mastered the entirety of a tradition (in all its past manifestations and interconnectedness) as to be universally competent; (2) no individual can presume to be the sole master of pioneering inquiry and the sole recipient of prophetic discovery so as to pass judgment upon the novel productions of ever other master within the tradition. In science as well as in religion, where competence and prophetic insight are functionally evident in various degrees among a large body of participants who are bonded together by mutual appreciation, mutual stimulation, and mutual restraint, a centralized coercive authority can not, in the long run, serve truth. Every such authority, no matter how benevolent and no matter how conceived, necessarily ends up imposing some partial and parochial version of the truth upon all. In the long run, the officially authorized version of the truth sometimes hardens into an empty ideology which invites the less-gifted to advance themselves by currying favor while the truly prophetic and dedicated members are marginalized. Meanwhile, lip service to the reigning ideology serves to parade as the substitute for dedicated inquiry. Carried to its limit, one has a totalitarian system.

At any moment, there are always those within a given church or given scientific society who are willing to sanction and even to implement measures directed toward the centralization and standardization of approved modes of thinking and doing. Such centralization is always welcome when it leads to improved collaboration and consultation in the arrival of a consensus. When it leads to closing off legitimate diversity and imposing rigid restrictions, however, then such so-called authorities are now directing service to themselves rather than to the realities which all, both high and low, are committed to serve. At this point one must ask, with Peter, "whether it is right in God's sight to listen to you rather than to God" (Acts 4:18). It is shocking, therefore, that someone of the stature of Peter Berger would intellectually condone a coercive system which imposes its own version of truth upon its adherents:

What is convincing to one man may not be to another. We cannot really blame such theoreticians if they resort to various sturdier supports for the frail power of mere argument—such as, say getting the authorities to employ armed might to enforce one argument against its competitors. In other words, definitions of reality may be enforced by the police. This, incidentally, need not mean that such definitions will remain less convincing than those accepted “voluntarily”—power in society includes the power to determine decisive socialization processes and, therefore, the power to **produce** reality (Berger: 110).

Just as issues of truth cannot be fairly settled by conformity to a central authority, so too, the democratic taking of a vote is equally unsatisfactory. When an issue within science or religion is decided entirely on the basis of voting (even presuming that those voting represent the divergent competencies within a given tradition and that free and open discussion has prevailed), this simply means that the judgment of the majority is to be artificially legitimated as true and imposed upon the minority (*SFS*: 64f). If the nature and activity of “neutrons” is to be settled by majority vote then, social indoctrination must supplant the romantic notion that “neutrons” do manifest themselves independently of what scientists claim for them. In parallel fashion, if God is just a projection of human ideals and standards of judgment upon “an imaginary being” in the skies, then religious truth can and must be decided by polling the community which is gifted at making such unconscious projections. But, in science as in theology, this is decidedly reductionistic and must be rejected.

It is true that the phenomenon that humans perceive is always partially conditioned by the particular indoctrinations which each has accepted as his/her own. This prevails in physics as well as in religion. Nonetheless, the phenomenon of discovery whereby a thoroughly conditioned master undertakes an appealing line of inquiry only to be intellectually transformed within the very solitary pursuit undertaken within the old system indicates that the realities served exert themselves independent of the investigator. They show themselves to be real precisely because of their ability to show up within surprising novel modes within our own tradition-bound lines of inquiry.

Thus, Copernicus started out to correct some of the minor flaws in the Ptolemaic system and ended up persuaded that the basic assumptions within the old system were flawed and impeded a truer description of things **as they are!** So, too, Peter in Acts 10 resisted the scandalous suggestion which came to him in his rooftop daydream three times, and yet, three days later, he ended up persuaded that the thousand-year-old divine prohibitions regarding unclean foods and unclean people were flawed and impeded a true description of what God really wanted him **to be and to do!** Peter could have dropped his prophetic revelation and reconvicted himself that it was much safer to abide by the normative practice of Jesus. Copernicus could have dismissed his “absurd departure from common sense” on the grounds that, experientially, the earth does not manifest even the slightest sign of moving in space at some 18,000 miles per hour. It is not enough to imagine that some special “divine illumination” either benevolently or coercively changed the mind of Peter and of Copernicus unless one remembers that they had both submitted to apprenticeships which were themselves characterized as filled with the highest illumination. In the end, both Peter and Copernicus could say that they had been imperceptibly led along paths which were not of their own making. Something “there,” independent of themselves, had made its presence felt and their efforts only served to reveal it. In fact, the overwhelming satisfaction that greeted the final conversion, the passionate intellectual enjoyment of their prophetic discoveries, could be understood as fulfilling the vague dissatisfaction which led and intensified their search from the beginning. In Polanyi’s own words:

There can be no explicit justification of a [novel] scientific truth. But as we can know a problem, and

feel sure that it is pointing to something hidden behind it, we can be aware also of the hidden implications of a scientific discovery, and feel confident that they will prove right. . . . The pursuit of discovery is conducted from the start in these terms; all the time we are guided by sensing the presence of a hidden reality toward which our clues are pointing; and the discovery which terminates and satisfies this pursuit is still sustained by the same vision. It claims to have made contact with reality: a reality which, being real, may yet reveal itself to future eyes in an indefinite range of unexpected manifestations (*TD:23f*).

Such words on the lips of a productive scientist could easily be shared by the Christian who has been transformed by a prophetic encounter with his/her God. The realities attained are manifestly different; yet, the human dynamics are very much the same:

Admittedly, religious conversion commits our whole person and changes our whole being in a way that an expansion of natural knowledge does not do. But once the dynamics of knowing are recognized as the dominant principle of knowledge, the difference appears only as one of degree (Polanyi, 1961: 244).

In particular, therefore, the heuristic processes of knowing “neutrons” and of knowing “God” are analogously related. In both cases, the realities are never contacted directly but only indirectly by indwelling and integrating the clues left behind as “the historic effects” of their presence. In both cases, the realities as they exist in-and-for-themselves are forever shrouded in mystery and transcendence. Both “God” and “neutrons,” therefore, are known “incarnationally”—that is, as they have historic effects in the visible world and disclose their meaning for and through the power of human knowing.

These parallels can be made without demeaning the fact that “God,” properly speaking, is not an Object among other objects. Nor can “God” merely be the supreme, all-powerful and all-knowing, personal Object. Rather, “God” is the ground of all objectivity and “appears” within the whole course of creation without being another “part” of that creation. Classical theology safeguards this transcendence and imminence of “God” by asserting that “God” is everywhere in the cosmos at all times.

Relative to this problem, Rahner noted that one must rigorously distinguish between the imminent and the transcendent Trinity. The transcendent Trinity is entirely unknown and unknowable. The humanly formulated and humanly defended doctrine of the Trinity knows nothing of God **in-and-for-himself**. The imminent Trinity, on the other hand, is very much knowable because it is imbedded within “the trinitarian nature” of our human encounters with “God” which show up within the concrete economy of salvation. Theological formulations, therefore, are always **in-and-for-us**, hence, culturally conditioned and humanly devised schema straining to capture how “God” has made his presence known and knowable within human history. While the Scriptures are referred to as the Word of God, in effect, at each point one finds culturally conditioned human words which intend to convey the memory, the actuality, and the future of God’s acts in history. As such, the Scriptures are opaque to those who read it within the horizon of “the search for religions of antiquity” while it is occasionally revelatory for those who read it as the memory, the actuality, and the promise of God-for-us. Thesis 7 will develop this further.

Based upon the Scriptures and upon graced experience in the world, each generation of Christians have formulated “dogmas” which serve to highlight, to summarize, and to guide the followers of Jesus. A committed Christian, by correctly understand and indwelling within the dogmas of his tradition, gains insights and guidance for how to act in the world so as to take notice of and harmonize himself with God’s saving grace. In a parallel fashion, theories in science also function to highlight, to summarize, and to guide the working scientist. As such, a committed nuclear physicist, by understanding and indwelling within the established theories of his own profession, gains the necessary insights and guidance for how to act in the world (but, more narrowly, in his research laboratory) so as to take notice of and harmonize his research by way of exploring and extending neutronic activity into realms hitherto unknown. Even for the physicist, therefore, there is no process for directly comparing his theories with the “neutrons” they seemingly purport to describe. Only by relying upon them and applying them to new situations does the physicist come to understand the true worth and the ever-present limitations of his theories. Thus, when Kuhn or Polanyi trace the history of the development of scientific theories, they are effectively doing what Newman and Pelikan have done for religious dogmas. One can always assert that the realities, in-and-for-themselves, **never** change; yet, in so far as humans are culturally and historically conditioned, our ability to formulate what we know **will always be subject to change**. John XXIII caught this correctly when he opened the Second Vatican Council by distinguishing between the substance of the faith and our formulations of it.

Thesis 7: The central concern of followers of Jesus is to truly imbue themselves with the Spirit of the Lord such that they can correctly discern and efficaciously follow their “calling” for the love of God and the love of neighbor. The discernment of one’s “calling” is the most momentous and, at the same time, the most ordinary form of graced discovery open to the religious seeker. By following ones “calling,” one finds one’s bliss, one’s peace, one’s self at the heart of a human history that is shot through with divine intimations of what is ripe for realization in the ongoing drama in behalf of “thy kingdom come, thy will be done, on earth as it is in heaven.” In the end, the lifelong pursuit of one’s calling (with all the twists and turns and periodic conversions that it implies) is the continuous prayer that a servant of God sings to his/her Maker.

Up to this point, apprenticeships have been held up as the sole means whereby one can make one’s own the performance skills and the habits of judgment proper to any profession, whether it be science or religion. Furthermore, the phenomenology of discovery whereby masters of a tradition are guided in their pursuit of fresh contact with the realities which they serve forms the privileged route whereby a tradition as it has been handed down is subject to pioneering discoveries which inevitably disrupt the **status quo** and call like-minded colleagues to a revision of what the tradition has been in favor of what it ought to be.

What opens up now is the reflection that the whole life of a nuclear physicist consists in a deep and mysterious “calling.” This “calling” is felt in the first flush of excitement as a science student upon “seeing” the vapor trail left by charged sub-atomic particles in a cloud chamber. This “calling” takes shape in the long nights reading and in the endless experiments conducted in the high school science lab or in the privacy of one’s own private lab in the abandoned coalbin of one’s parents’ home. Finally, this “calling” sustains one during the long years when routine problem solving and unimaginative professors tax one’s patience and force one to call into question the whole pursuit of this “calling.” Then, as a moment of grace, a chance conversation, a would-be routine lab experiment, or an unexpected inspiring lecture bring one’s “calling” into true focus. Even after graduation, the particulars of one’s employment and the calibre of one’s colleagues usher in a whole new set of challenges—some which feed and further define one’s “calling”; others which deter and postpone it. The sense of one’s “calling” gains definition when deep and mysterious guiding intuitions

constantly bring one before certain perplexing problems while a host of others are left behind. Polanyi rightly notes that, at this point, the informed and “passionate” (*SFS*: 38) energies of a pioneering inquirer are froth with “a compelling sense of responsibility” (*TD*: 25) which is bent upon revealing some yet-to-be-realized manifestation of a hidden reality which “demands his service for revealing it” (*TD*: 25, *SFS*: 54). In this process, the hunches, the straining, the false leads all lead to a self-transformation of the knowing powers of the seeker such that the new reality can be grasped. The act of discovery is thus a self-transforming act which is not, in the least, self-serving: “[F]reedom [of the pioneer] is continuous service” (*TD*:81).

Traditional theology defines “calling” by looking at the classical narratives which describe how Abraham, Moses, and Isaiah were called to step outside their ordinary course of life and to undertake a life-long mission dedicated to serving the living “God.” With some reservations, this might be extended to include Suzanna’s “calling” to resist the entrapments of the elders who tried to seduce her while she was bathing (Dan 13:1ff). This might also include the youth Daniel who, being seized by a holy spirit, successfully defended Suzanna’s innocence in the face of her strong and powerful accusers (Dan 13:44ff). This might also include the young and beautiful widow Judith who took courage and, even though she had no public office, challenged the resolve of approved town elders to surrender to the Assyrian army camped outside the city gates if God did not come to their aid within a set number of days (Judith 8:11ff). Judith, it will be remembered, stepped outside the boundaries of propriety, and, using seduction and deception, took the salvation of her people into her own hands. One would suppose that God did give her “the beguiling tongue to wound and kill those who have formed such cruel designs against your covenant” (Judith 9:13). In this fashion, Judith responded to her “calling.”

To this must be added the “calling” of John the Baptizer, the “calling” of the disciples of Jesus. From the twists and turns within Peter’s life, one can quickly grasp that his “calling” was not a one-time event but covered the whole of his life. The same can be said for Paul, Stephen, Philip. But, contrary to a false theology which would reserve this “calling” to only those celebrated in the Sacred Scriptures, one must suspect that each of the martyrs and saints of the early church discerned and fulfilled their “calling.”

Even this is too remote. One must also speak of the “calling” heard by Martin Luther King in the uncanny courage of Miss Rosa Parks, the woman who had tired feet and refused to yield her seat to a White gentleman on the bus in Montgomery in the afternoon of December 1st, 1955. One must also speak of the “calling” heard by Archbishop Oscar Romero who turned from his policy of honoring the politicians and the rich land-owners in favor of speaking out courageously against the “death squads” and the tortured bodies of socially conscious students, pastors, and union organizers in El Salvador. One might also speak of the “calling” of Pope John Paul II to visit the Jewish synagogue of Rome on the afternoon of April 13th, 1986, and to acknowledge that the Jews gathered there were “beloved of God” and the veritable “elder brothers” of the Christian people.

Yet, this sense of “calling” must be brought down and allowed to apply to ordinary people doing ordinary kindnesses with uncanny courage and determination in daily life. It can also include those crowds of thousands who gather into the stadiums to hear the Word of God preached by the Rev. Billy Graham. At the end of each crusade, the Rev. Graham asks those who have felt the movement of grace to come forward. When they arrive, he prays over them and hands them over to trained counsellors who help them to give voice to their new-found “calling” and to renew their determination to shake off their lukewarmness or their backsliding in favor of returning afresh to “what God would have them be.”

Pushed even further, every person, even those who have never stepped inside a church, has a “calling”

(technically, a “vocation” from the Latin *vocatio*, which literally means the act of “calling” or “summoning” someone). Joseph Cambell, in exploring the meaning of religious myths with Bill Moyers on public television, came to the conclusion that the whole of human existence is directed toward “following ones bliss.” This, in existential terms, is the secular counterpart of what Christians understand themselves to be doing when they set about discovering and following their “calling.”

Rahner, more than others, has tried to give voice to the reality of grace within secular existence in such terms as to break down the notion that “God” has only “religious” interests and that his “grace” is exclusively reserved for “religious” folks doing “religious” things.

The world is constantly and ceaselessly possessed by [sanctifying] grace from its innermost roots, from the innermost personal center of the spiritual subject. It is constantly and ceaselessly sustained and moved by God’s self-bestowal. . . . Whether the world gives the impression, so far as our superficial everyday experience is concerned, of being imbued with grace in this way, or whether it constantly seems to give the lie to his state of being permeated by God’s grace which it has, this in no sense alters the fact that it is so. And without this belief and hope, . . . the appeal to the sacraments as almost intermittent moments when such “engracing” takes place would seem to modern man [Christian] unworthy of belief (Rahner 13:166f).

In the end, therefore, the barrier which traditional theology erects between the past and the present, between the life-long vocation and the transitional emergency action, between the secular and the religious disappears. More particularly, the very “calling” of a scientist and, in Polanyi’s terms, his commitment to pursue his “calling” (*PK*: 323) even when it leads him to revise or overturn the position which the authority of his own former masters have credited then becomes part of a graced enterprise wherein the religious seeker and the scientific inquirer are similarly situated as they employ human processes in the service of a self-transcending goal. Polanyi, at one moment, spoke of “the tradition of science” as being a “spiritual reality which stands over them [scientists] and compels their allegiance” (*SFS*: 54). In the end, therefore, the tradition of religion can be similarly situated. Ultimately, when novices come to share the common ground which has been paved by Jesus and his Saints, they enter into a passionate framework of cosmic self-understanding. Within this framework, the practical skills which enable one to discern and pursue one’s “calling” is an intimate and risk-filled adventure. In both cases, the one who pursues and the one pursued intermingle. In both cases, the mystery of divine grace and unspecifiable organismic intuitions join hands and revolve in an ecstatic dance. In both cases, the truth which emerges transforms and heals the knower and binds him/her to the continued service of proclaiming the “miracle” which has come to birth in their lives. If we were “angels” pursuing “God” it might be otherwise, but, in this divinely ordained order of creation, no higher calling and no higher access to truth is possible.

The People of God believes that it is led by the Spirit of the Lord, who fills the earth. Motivated by this faith, it labors to decipher authentic signs of God’s presence and purpose in the happenings, needs, and desires in which this People has a part along with the other men [women] of our age (*Gaudium et Spes* 11).

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Appendix: Polanyi's Understanding Of Religion Reconsidered

The 1979 Annual Meeting of the Polanyi Society set off a debate respecting Polanyi’s epistemology of religion. Drusilla Scott and R.T. Allen took up this debate in issues number 12 (March, 1981) and 17 (October, 1983) of *Convivium*. During the summer of 1984, I received an Occasional Fellowship which enabled me to examine the letters and unpublished manuscripts of Polanyi which form part of the Special Collections at The Joseph Regenstein Library (Chicago). My attention naturally turned to the unresolved issues surrounding Polanyi’s understanding of Christianity. When my search came to a close, I published my findings in the issue number 22 (1986) of *Convivium*. With unfair brevity, my findings were as follows:

1. Regarding his religious views, Polanyi was very private but also very sympathetic to those who had a religious orientation. Thus the divergent views of Gelwick and Prosch can both be paradoxically credited due to the fact that each, in his own way, elicited from Polanyi a sympathetic response to their own personal religious commitments.
2. Polanyi never had the occasion to undergo a systematic theological apprenticeship. A spontaneous essay written at the age of 81 harkens back to the enduring impact of his having discovered *The Brothers Karamozov* at the age of 22. In sum, his personal faith might be abbreviated in the words of Dostoevski which he cites: “Let us rather go mad than accept a mechanical conception of man.”
3. J.H. Oldham, life-long friend and founder of Moot, was responsible for guiding Polanyi toward Tillich’s critique of God-talk and of historical miracles. This prompted Polanyi to focus upon the centrality of worship for evoking and sustaining the heuristic vision of “God. “ Polanyi submitted drafts of *Personal Knowledge* to Oldham for suggestions in this realm since Polanyi knew quite well that his own tacit skills did not allow him to properly make a judgment in religious matters.
4. Polanyi never had an overarching grasp of Eliade’s methodology and conclusions. Led on by trusted advisors (esp. Prosch) he borrowed elements of Eliade which were congenial to his work (e.g. Eliade’s analysis of ritual as abolishing profane, chronological time so as to recover the sacred, mythic time) and completely ignored other elements (e.g. Eliade’s contention that Abraham pioneered a revolutionary religious orientation wherein the myth of cyclic regeneration was

supplanted by the myth of linear history as theophanic).

5. Polanyi's reoccurring reference to the Pauline doctrine of saving grace does not come from Polanyi's personal religious history but from his scientific experience of having undertaken investigations which led to fresh discoveries by virtue of powers over which he had no direct control. Polanyi repeated used this metaphor. At no point, however, does Polanyi demonstrate any significant grasp of Pauline theology. Most probably, a Christian theologian (possibly, J.H. Oldham) whom he trusted made this link and, fixed in his memory, he called it into service whenever he wanted to evoke a parallelism between the Christian seeking grace and the scientist pursuing a discovery.

Submissions for Publication

Articles, meeting notices and notes likely to be of interest to persons interested in the thought of Michael Polanyi are welcomed. Review suggestions and book reviews should be sent to Walter Gulick (see addresses listed below). Manuscripts, notices and notes should be sent to Phil Mullins. Manuscripts should be doublespaced type with notes at the end; writers are encouraged to employ simple citations within the text when possible. Use MLA or APA style. Abbreviate frequently cited book titles, particularly books by Polanyi (e.g., *Personal Knowledge* becomes *PK*). Shorter articles (10-15 pages) are preferred, although longer manuscripts (20-24 pages) will be considered.

Manuscripts should include the author's name on a separate page since submissions normally will be sent out for blind review. In addition to the typescript of a manuscript to be reviewed, authors are expected to provide an electronic copy (on either a disk or via e-mail) of accepted articles; it is helpful if original submissions are accompanied by an electronic copy. For disks, ASCII text as well as most popular IBM and MAC word processors are acceptable. Be sure that electronic materials include all relevant information which may help converting files. Persons with questions or problems associated with producing an electronic copy of manuscripts should phone or write Phil Mullins (816-271-4386). Insofar as possible, *TAD* is willing to work with authors who have special problems producing electronic materials.

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Reviews

Doug Adams. *Transcendence with the Human Body in Art: George Segal, Stephen De Staebler, Jasper Johns, and Christo*. New York: Crossroad, 1991. 159 pages. No index or table of illustrations.

Eyes to See Wholeness: Visual Arts Informing Biblical and Theological Studies in Education and Worship Through the Church Year. Prescott, Arizona: Educational Ministries, 1995. 224 pages. 120 illustrations, biblical index, general index and two appendices.

Viewing art intelligently is a skilled performance that can be improved by coaching and by practice. Criticizing art is an art form in itself. Although the art that can be put into words is not the real art, and despite the fact that art always means more than we can say, the artist's performance in creating the work is incomplete until it is matched by a sympathetic act of understanding on the part of viewers. These two books are eye-opening. Adams, an art historian and theologian long interested in Polanyi, shows how to look for the clues that unlock the deeper meanings in the visual arts that escape the untrained eye.

Adams' primary concern in both works is to show how to link the visual arts with theological reflection:

If our worship, preaching, and teaching remain largely verbal, they may as well be spoken in Latin for they will not be remembered by the majority of the population whose language is now the visual arts. If we communicate with the visual arts, then the Word will be remembered. In the words of Roethke, "Give us eyes that hear and ears that see." (*ESW*, 107)

The open eye will "perceive not only connections but also transcendent relations which lead us to center beyond ourselves and to sense not only our time and our place but

also other generations and the earth beyond our place and our time" (*THBA*, 148). Awareness of complexity and ambiguity in interpreting art should "aid us in learning to love our enemies and to live with diversity in community" (*ESW*, 1).

Transcendence with the Human Body in Art meditates on the sculpture of George Segal and Stephen De Staebler, the paintings and constructions of Jasper Johns, and the land/process art of Christo. Segal uses the human body directly (13-14); De Staebler presents it in fragments (51); Johns and Christo draw attention to the embodied condition of the viewer or participant in the work of art (97-8, 140). Black and white photographs are very well integrated into the text so that the reader need turn only a page or two to see what Adams is talking about.

Adams finds three kinds of transcendence expressed by these artists. In Segal's work, he points to "the possibilities for ambiguity of interpretation and transcendence of any one viewpoint" (14). The more we indwell the work, the more we can break out of initial interpretations and find other meaningful patterns revealed. In De Staebler, transcendence means "a sense of the other beyond oneself" (45). In Johns and Christo, awareness of one's own finitude opens the viewer to greater realities:

The shared vision of Johns, Polanyi, and Wittgenstein rejects both the "cult of objectivity," which pretends that one may know things as they are in themselves, and the "cult of subjectivity," which maintains that one may only know what one projects. They mutually affirm that what is real and what can be known are functions of one's connections and interactions with the social and physical worlds in which one finds oneself. One lives on the boundary between subjectivity and objectivity.

One knows one's view is limited and influenced by one's own makeup. Yet one's very awareness of these limitations constitutes a transcendence of them. (117)

From a theological point of view, Adams suggests that "realizing oneself to be a finite creature with limited capabilities is a corollary of acknowledging God to be Creator, and Christ to be Judge and Redeemer" (126).

Eyes to See Wholeness is addressed to teachers who would like to incorporate the visual arts into catechesis or theological reflection. Each of the thirty-seven chapters concludes with "Teaching Tips." It would not serve well as a textbook because Adams discloses the expected outcome of the various classroom exercises. Exposing students to these expectations would stunt the process of personal indwelling that leads to one's own discoveries of new meanings in a work of art.

The book is very loosely organized around the key elements of the liturgical year: the first section is "Lent through Easter and Pentecost," the second, "Ordinary Time," and the third, "Advent through Epiphany." Teachers will have to make judicious selections and rearrangements of Adams' material if they want to prepare lesson plans for the four Sundays of Advent or for the forty days of Lent. Adams follows a thematic plan rather than a liturgical scheme, so that, for example, he treats of "Dancing Christmas Carols with Angels Worshipping God" (chapter 25) and "Nativity Affirms Diversity" (chapter 27) before meditating on "Expectant Madonna" (chapter 29). The same Advent section also contains essays on "Baptizing with Christ" (chapter 32), "Seeing Developmental Stages in Cole's 'Voyage of Life'" (chapter 33) and "Embracing the Prodigal in Each of Us" (chapter 35). Although there may be good theological reasons for associating this material with the celebration of the past and future Advent of the Christ, the symbolic and visual elements are pretty far removed from the conventional symbols of Advent and Christmas.

In this book, the illustrations are grouped together, which allows the use of a paper better suited to

photographic reproductions but which also requires much more fumbling around to find the desired illustration while reading Adams' essays. This slight disadvantage is offset by the generally high quality of the reproductions.

Eyes to See Wholeness lacks the unity and coherence of *Transcendence with the Human Body in Art*. The thirty-seven essays in it are self-contained and almost completely isolated from each other, except for a very few cross-references and some material that is repeated almost verbatim in two or more locations. This perhaps makes it better suited to browsing or reading as needed in preparation for a class on a particular subject; very little, if anything, would be lost by taking up the various essays in an order dictated by the reader's own taste and concerns.

Adams shows how an imagination awakened by the visual arts can enrich the biblical tradition. One of his students was assigned to visualize himself as one of the ten lepers healed by Jesus. After the exercise, he reported to the class:

As Jesus told me to do, I first went to show myself to the priests at the temple. Then I came back to thank Jesus but he was gone. In looking for Jesus, I finally ran into Peter and asked, "Where is Jesus?" Peter responded, "I don't know any Jesus." (*ESW*, 48)

This student's response shows that spiritual realities, like any other realities, continue to reveal themselves in surprising and unexpected ways.

Although Adams is very good at revealing multiple layers of meaning in works of art, he tends to write at times as if there were only one religion and one theology. In his view, "orthodox Christian theology is characterized by the *via negativa*, the negative way, so as to avoid detailing beliefs which too often lead to a static certainty rather than a dynamic faith open to the movement of the Spirit" (*ESW*, 98). For Thomists and other schools within Roman Catholicism, the *via negativa* stands in a dialectical relationship with the *via positiva*. For some orthodox Christians, creeds are not the antithesis of mysticism, but

seeds of contemplation.

Adams also seems very uncomfortable with “a glorified image of Christ” (*ESW*, 15; *THBA*, 58-62), with people who have become “perfect in their faith” (*ESW*, 47), and with the idealization of human beauty in classical sculpture (*ESW*, 85; *THBA*, 51). The unstated principle seems to be that the existence of a perfect human being would bring condemnation rather than hope for salvation to those of us who are imperfect, broken and sinful. While our culture may need fresh reminders of our solidarity with all suffering human beings, as provided by De Staebler’s statuary, I think Christians also need to retain images of Jesus risen from the dead, ascended into Heaven, and reigning in glory, for these images tell us something not just about him, but about ourselves, too: “we shall be like him, for we shall see him as he is” (1 Jn 3:2).

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Drusilla Scott, *Everyman Revived: The Common Sense of Michael Polanyi*. Grand Rapids, MI: Eerdmans. Pp viii + 215. ISBN: 0-8028-4079-5.

Scott, a friend of Polanyi, presents a rare, engaging and lucid introduction to Polanyi’s thought that is now back in print, thanks to Eerdmans. Scott’s goal is “to introduce some of [Polanyi’s] main ideas as simply as possible so as to show their value and meaning in today’s world” (viii). She does this effectively and creatively by loosely structuring the bulk of the book around the medieval play, *Everyman*. This play provides Scott with an opportunity to explore the relationship between knowledge, good deeds, wit, beauty, fellowship and other personal qualities, and in so doing, to investigate Polanyi’s contributions to the subject. For example, five wits provides the entry into a discussion of tacit knowing. Beauty connects with Polanyi’s understanding of the process of discovery and Fellowship allows Scott to expound on the role of society/conviviality in Polanyi’s thought. Discretion

leads into a discussion of Polanyi’s resolution to the mind-body problem. The picture that emerges from Scott’s discussion is that all forms of human knowing, as understood by Polanyi, are united with and dependent upon with these traits. Or, to put it in Scott’s words, “He has shown how our faith, imagination and personal judgment, so long paralyzed by the poison of skeptical doubt, in fact run right through all our knowledge” (197).

Introductory and concluding chapters frame this central section of the book. The first chapter provides some basic biographical information on Polanyi and identifies the question which occupied and drove his own investigations. Scott asks the question thusly: “How can it be that...in the most modern, democratic and humane societies, young men and women devote themselves to fanatical, cold-blooded brutality, with total contempt for human life and society?” (1). Polanyi locates the answer to the question in the cold-blooded ideal of scientific knowledge generated by modernity which seems to leave us with no choice other than radical skepticism. In the final chapter of the book, Scott examines Polanyi’s sometimes cryptic discussions of religion and suggests how his insights might play out today. In particular, she identifies several suggestive ways in which Polanyi’s epistemology illuminates the Gospels (195-197).

Overall, Scott does an excellent job of drawing out and explicating the main themes from Polanyi’s *corpus*, adding to them many wonderful examples drawn from everyday life or her own experiences. The witty, informal style with which Scott writes will help make Polanyi’s work come alive to newcomers and brings clarity to many major philosophical discussions. The drawback to that style, however, is that she can oversimplify debates and caricature positions. While the style will not satisfy the most rigorous scholars, it serves well Scott’s own purposes. What disappoints most about the book is that it neither raises many

critical questions about Polanyi's thought, nor situates it in later developments known as post-modernism. Still, the book should be required reading for introducing people to Polanyi; it also serves as a useful and appreciative secondary source for those more knowledgeable about him.

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Edward Moss, *The Grammar of Consciousness: An Exploration of Tacit Knowing* (New York: St. Martin's Press, 1995).

Dr. Moss, a therapist affiliated with the former UK Polanyi group Convivium, died in the Spring of 1995, almost immediately after his book came out. This was not Moss' first book (readers may be especially interested in *Seeing Man Whole: A New Model for Psychology* [reviewed by Joan Crewdson in *TAD* 17:1 & 2: 51-54] and *Growing Into Freedom: A Way to Make Sense of Ourselves*), but it was the first to make extensive use of Polanyi's thought. I was corresponding with Moss just prior to his death and I know that he was quite interested in seeking reactions to his book from those who know Polanyi's thought well. I have found myself reading, thinking about, and re-reading Moss' book over the last year. On the whole, *The Grammar of Consciousness* is a deeply interesting, creative effort, but it is also an extraordinarily frustrating book. It tries to do far too much in a meager 150 pages. It is a very dense read; there are loose ends everywhere, yet Moss's constructive thought is very intriguing. I hope that others will study this book; any who do will regret that Ted Moss shall develop no further some of the themes he begins to articulate here.

My comments below focus primarily on the constructive rather than the critical framework of Moss's ideas. I acknowledge that I give only the briefest attention to some of the chapters I found obscure.

Moss was convinced that Polanyi's outline of tacit knowing was a fundamentally sound account of

central elements of human experience; Moss sought, in this book, to develop what he termed "a much more precise and elaborated account of the psychological and grammatical processes of consciousness than Polanyi himself ever offered" (12-13). Put in another way, Moss believed Polanyi did not thoroughly analyze the process through which the particulars of consciousness are integrated into a comprehensive entity. He believed he could complement Polanyi's overly cognitive orientation by developing a theoretical model elaborating how personality bears on personal knowing, thus showing how "living beings establish their purposes, take their decisions and so act out the continual process of adaptation to the exigencies of life in the world" (13).

Moss argues that consciousness has a basic structure (or grammar) which language reflects and it is through this structure that human experience takes on its particular character. In the early chapters of his book, Moss sketches out this structure or grammar; he offers an extraordinarily complex but highly condensed account of the nature of mind and consciousness, an account which is folded into the theory of tacit knowing. The next three chapters turn to a comparison with the models of two other figures, Daniel Dennett, a philosopher using the digital computer to talk about mind, and Gerald Edelman, a neuroscientist who Moss finds less reductionistic. The final two chapters shift to a discussion of realism, especially as Rom Harre and John Puddefoot have framed the issues. Moss' own realism emphasizes the "importance in all knowing of personal experience in the present moment." (ix).

Here I can provide only a crude outline of the richly suggestive model of mind that Moss elaborates in his early chapters. Moss holds it is important to refine and extend Polanyi's ideas about focal wholes or meaning; especially he thinks more needs to be said about the way the mind works in classification. Meaning, according to Moss, is a form or idea; he recognizes this is a philosophical giant step that Polanyi hesitated to make, and for good reasons, but Moss believes it possible to elaborate a theory of forms that appropriately clarifies the nature of

human experience. Moss distinguishes conceptual and perceptual forms; conceptual forms divide possibilities into two groups, instances and non instances of a class, while the distinctive character of a perceptual form is “that it is a single, undivided value in a single undivided space, but a value which somehow unites other values that can be separately identified in each of the dimensions of the space. . .”(16). A form is, although we may not be aware of it, composed of subsidiary forms which Moss suggests build up the primary form as a whole. In fact, some elements of Moss’s expansion of Polanyi seem rather close to ideas about comprehensive entities which are developed in *The Tacit Dimension*, a Polyanian source which Moss did not make use of. In part, what Moss seemed concerned to develop is something like a Polyanian metaphysical scheme.

Moss contends that both perceptual and conceptual forms are always linked to a context. Perceptual forms are situated in some type of space-time framework, but conceptual forms have a context that is “metaphorical, quasi-topological, and entirely non-perceptual, so that within it any particular form can express a range of potentiality rather than a clear-cut actuality” (17).

Moss argues that conceptual thought arises because the mind has tacit, spontaneous powers to generalize and to recognize similarity. Powers to recognize similarity allow us to work out logical relationships among ideas apart from spatio-temporal relationships. We use words and symbols to label, remember, retrieve, exchange and remodel our generalizations; this is what Polanyi’s discussion of articulation points out.

Perception, according to Moss, is always inextricably bound up with conception or thinking, and thus conscious experience is a process in which the “space of perception is projected upon the quasi-topological space of thought”(18): “My argument is that in true perception, where consciousness is involved, an *ad hoc* range of possibility established by a conceptual form is resolved into actuality by the perceptual forms, qualities and intensities which are projected upon it and so resolve its

ambiguity”(18).

According to this model, we always anticipate the future and it comes towards us as a range of potentiality which is constantly revised into actuality and passes ultimately into history. Conceptual matrices are ready and waiting for interpretation of perceptual experiences, but these schemata are themselves modified by ongoing perceptual experience. Certainly, there is something like this at least implicit in Polanyi’s scheme and Moss’s discussion interestingly and artfully fleshes it out. But one might ask were there not good reasons that Polanyi avoided a framework so strictly focused around a perception/conception duality?

Moss thinks that Polanyi’s work did not say enough about what might be dubbed the internal dynamics of making meaning. He proposes a distinction between the “stored idea complex” which is embedded in the “mind-manifold” and the “evoked idea” which comes forth in present consciousness (22). Memory is highly organized and ideas are evoked from stored idea complexes by a process in which “forms recognized in the immediate Here Now resonate with similar forms across the manifold” (23). There is a complex process of selection and ordering of that which is evoked in resonance across the mind manifold. This process is tacit integration and its orderly operation constitutes the “grammar of consciousness” (24) or the rules structuring consciousness. What Moss suggests is that consciousness is of things or ideas in relation. There are spatio-temporal relation and logical relation but there is also another class of relationship which he discusses as “grammatical.” Grammatical relationships “are those which we superimpose on the other relationships in the process of selecting and ordering. . .” as well as “certain roles which help to determine how they are to be fitted together syntactically” (26). Although Moss’ notion of a “grammar of consciousness” and “grammatical relationships” seems a bit odd at first, it is clear that he is attempting to work out a way in which to discuss how meaning is always engaged or existential in the sense that it concerns a historical person’s application of information to particular purposes.

Moss contends that consciousness is a stream but it seems to flow in units or steps: “. . . after we have taken in a brief span of conscious experience in one transition (or ‘predication’ as I will call it) our position has to be shifted down the wall to the next Now for the next predication. This I call the walking motion of consciousness” (27). A “predication” is a “unit of understanding” (41) and we can build up forms in a process of generalization by combining successive predications. What Moss is preoccupied with working out in some detail here is what in Polanyi simply is noted as the fact that we are creatures of attention who discover meaning. We can attend to this or to that but we do so in succession and we do so in ways that generate progressively more encompassing coherence. Moss’ theory refines this view to suggest that consciousness builds up forms (which are always deeply colored by emotional qualities and intensities), and moves from one form to another:

All consciousness involves a process of selection and focussing both from the immensely rich input of our sense receptors and from the unceasing resonance of conceptual forms evoked as associations from the memory structures of the mind-manifold. This occurs in such a way that transitory predicative systems of relationships are created, in which subject complexes are linked over a step of time to predicate complexes, building up forms-as-a-whole; and these are recognized one by one at the focus of consciousness before sliding into the past as new predications follow them (36).

Moss not only discusses the grammatical process (i.e., integration) but also the purposive nature of thinking. Polanyi describes the purposive tension in animals as they try to develop self control as akin to human problem solving; Moss translates this more generally into what he terms the “purposive cycle”: “. . . all consciousness involves predication, and every predication forms part of a purposive cycle”(44). There are five stages to this cycle: exploring/orientation, model building, decision, actualization and readjustment. Every predication fits into one of these stages and the mind always has many purposive cycles in play and we switch among such

cycles. Humans are, for Moss, purposive creatures and forms which we grasp always fit into some purposive scheme; meaning is contextual.

Moss discusses four types or categories of meaning: there are not only forms, but also qualities, intensities and relationship. While these latter three types of meaning can become explicit ideas, they operate primarily at the tacit level and color the process of integration as indeterminate particulars. Certainly this discussion of meaning is one of the more intricate and interesting aspects of Moss’ complicated speculative model which attempts “to suggest a broad psychological underpinning for Polanyi’s theory of tacit knowing.” (53). He outlines the way in which he believes qualities, intensities and relationships are generalized and mapped in terms of what he terms “paradigm images” (51):

We have a few basic paradigms for emotion, reflected in a few basic and vaguely defined words like anger, sadness, fear, envy, anxiety or joy. But the words and the vague images of emotion which accompany them are essentially means of establishing broad classifications, broad ranges of possibility, within which subtle particularities of quality and gradations of intensity can be located and identified. In other words their function is to enable us to focus down within the very wide area of sensibility represented by the category of emotion (as also the various categories of the senses), in such a way that we proceed to locate sub-categories, and then *ad hoc* registers, on which actual instances of experience can be projected and assimilated (52).

Moss points out that some types of human endeavor aim to produce meaning in as fully a formalized and quantifiable a fashion as possible (science) while other types of human endeavor aim at producing meaning richly imbued by qualities, intensities and relationships: “Indeed the value of the communications of art, concerned as they are with resonances as much as with forms, does not seem to depend on producing the same effect on each recipient; great art has a certain inexhaustibility, a value

which is renewed in a different fashion in every generation and in every person who is able to receive its communication creatively” (49). Although Moss doesn’t say so, his discussion of meaning at some points resembles the discussion of the two basic types of integrations, those in art, myth, and religion and those of science, in *Meaning*.

As noted above, the last half of Moss’ book turns from the elaboration of his speculative model expanding Polanyi’s ideas about tacit integration to comparisons between his model and ideas of Daniel Dennett and Gerald Edelman. Dennett is a materialist and a reductionist who offers a computer based model of mind in *Consciousness Explained*. Moss’ account of Dennett is difficult to follow, but it is clear that his major critique of Dennett concerns Dennett’s failure to grasp Polanyi’s ideas about levels of control. Moss does find Dennett almost promising at some points however. He elaborates his own interesting theory of the self in relation to Dennett’s ideas about narrative:

If all our decisions were taken independently, great confusions could follow, so the mind builds together all of its plans which could still constrain future decisions into a more or less coherent structure—an idea complex within the greater idea complex of the self—which I call the ‘anticipating self. This is a sort of bundle of stories fraying out into the future, but a bundle which is ordered in the sense that broadly the shorter term stories are fitted within the existing longer term stories (and excluded if they do not fit), and similarly the more particularized stories are fitted within the more generalized. The function of this structure, is to ensure that whenever a decision comes to be made, the temporary responding self of the occasion takes account of past decisions that may affect it(73).

Moss finds much more congenial than Dennett the ideas about mind of Gerald Edelman, a biologist, neuroscientist and Nobel laureate. He offers a highly condensed explication of and dialog with the views Edelman articulated in *Bright Air, Brilliant Fire: On the Matter of*

Mind. Edelman is not a reductionist and he develops a “bottom up” theory of brain function which Moss finds largely complements his own model; he sharply contrasts the Edelman and Dennett approaches:

Perhaps the crucial difference between Edelman’s approach and Dennett’s is that Edelman uses the analogy of the selectional mechanism of the immune system as the basic for his description of the operation of the brain, whereas Dennett uses the rule-following mechanism of the digital computer (89).

The final two chapters of Moss’ book are a disappointment because they are really the most cryptic of his discussions and they draw into their net a bewildering array of thinkers. Only his occasional comments about his own model are truly illuminating:

My argument has been that all knowing takes place through the predicative steps of consciousness, it is a recognition of wholes built up through a process of tacit integration. The unit of consciousness is the whole predication. . . .

The corollary of this argument is that our contact with reality can only be through the irremediable complexity of the predicative process. What this process subserves is the realization of a comprehensive entity which is ultimately unspecified, to use Polanyi’s word” (124).

Moss’ conclusions about consciousness lead him to a painfully abbreviated set of discussions about reality and realism. He contends John Puddefoot’s discussions of “resonance realism” (*TAD* 20:3: 29-39) are a promising way to approach questions about reality. But Moss offers so little about Puddefoot’s thinking that it is hardly clear what he finds promising. There follows a discussion of Rom Harre’s ideas about “referential realism;” Moss sees Harre as drawing on and updating Polanyi, but it is far from clear how this is the case. He includes also comments on George Steiner and Thomas Torrance and a critique of deconstruction. Clearly, Moss wants to raise the banner of realism against what he takes to be the relativism of postmodernism, but he is far too ready to

make all of these players congenial bedfellows. Not all realists, even Polanyian realists, are the same. In sum, Moss's book ends on obscure notes and, sadly, he will not be able to illumine these enigmatic hints. Nevertheless, his book is certainly worth serious consideration; the speculative model of mind which he sketches in the opening four chapters is clearly a rich and imaginative edifice constructed on a Polanyian foundation.

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Lee Congdon, *Exile and Social Thought: Hungarian Intellectuals in Germany and Austria, 1919-1933*. Princeton, New Jersey: Princeton University Press, 1991. Pp. xvi + 376. Hb: ISBN 0-691-03159-2.

If one is interested in studying the social milieu out of which the young Michael Polanyi's social and philosophical thought began to grow, *Exile and Social Thought* is highly recommended as a source. Lee Congdon focuses his attention on Hungarians who went into exile after Admiral Horthy's repressive counterrevolutionary government came into power in 1919. He refers to an impressively broad array of Hungarian, German, and English language sources in his exposition; this is a rich feast of a book.

After providing an introductory chapter highlighting events transpiring in Hungary during World War I, Congdon organizes his study of these intellectuals into three parts, corresponding to three basic intellectual groupings which emerged during this period: the communists, the avant-garde, and the liberals. Two individuals are featured as the key representatives of each of these traditions, but the ideas of a multitude of others are woven into the text. Georg Lukacs and Bela Balazs are taken by Congdon as emblematic figures among the communists, Lajos Kassak and Laszlo Moholy-Nagy are the primary avant-gardists, and Aurel Kolnai and Karl Mannheim are the liberals examined in most detail.

Michael Polanyi himself is a marginal character in this historical account. After all, during the period under consideration he was a scientist with a medical background, not primarily a social thinker. But he did participate in the Galileo Circle and, to a much lesser degree, in the Sunday Circle organized by Lukacs. Active in these groups were such influential luminaries as the Marxist philosopher Lukacs, the art historian Arnold Hauser, the composer Bela Bartok, the psychologist Rene Spitz, the economist Karl Polanyi, and the sociologist Mannheim. Although Karl Polanyi is not one of the two figures featured in the chapters on liberalism, his thought is accorded almost as much attention as that of Kolnai, and on occasion Michael Polanyi's correspondence with him is cited.

Even though not explicitly dealt with very much, Michael Polanyi certainly shares in the sort of background and experience characteristic of the exiles studied in most detail. They are all examples of the "free-floating, unattached intellectual" Mannheim speaks of in his widely cited *Ideology and Utopia*. Most of these exiles were Jewish in origin, but secular Jews well assimilated into Hungarian society in the second half of the 19th century. Nevertheless, their perspective was more cosmopolitan than that of the typical Hungarian; they were particularly attuned to German cultural developments. The parents of the exiles tended to be patriotic economic liberals deeply embedded in the capitalistic and cultural expansion of the time. Jews from Poland, the Ukraine, and Russia were attracted to Budapest because of the healthy, growing Jewish community there. By 1910, almost a quarter of the city's population was Jewish in origin (hence leading to the derisive term "Judapest" among Austrian anti-Semites).

Congdon shows how Budapest's development led to an ominous backlash in Hungarian society as a whole.:

This rapid growth produced an urban culture at odds with that rooted in the nobility's country life. It centered in editorial offices and coffeehouses, and framed a liberalism tinged with socialism that chal-

lenged the official version. . . . The young Jews in the forefront of the new culture did not hesitate to break with their fathers' social and political conformism. . . . As the new century opened, however, growing numbers of non-Jewish Magyars, bursting with Millennial pride, came to regard any publicly-voiced dissent from official optimism as "un-Magyar." Patriotism rapidly degenerated into nationalism and stirred the flickering embers of anti-Semitism. (p. xii)

World War I was a disaster for Hungary. Not only were many Hungarians killed, but the alliance with Austria which afforded a small country like Hungary a place among world powers came to an end, and much Hungarian territory was lost as a result of the Trianon treaty at the war's end. After successive governments led by Karolyi (democratic) and Kun (Communist) failed to protect Hungarian interests at the end of the war, it was no longer safe for avante-garde or especially communist sympathizers to remain in Hungary once Regent Horthy assumed control with a "Christian" and "National" government. Therefore, many of the intellectuals fled Hungary, and, as it became clear that new Hungary was not a friendly place for free intellectual speculation, others joined them. Michael and Karl Polanyi were among the exiles, even though their deepest sympathies were with the less threatened liberal tradition (for a fuller exploration of this theme, see Congdon's "The Origins of Polanyi's Neo-Liberalism" in *Polanyiana*, 1-2 [1992], 99ff.).

Given their status as exiles, it is not surprising that a recurrent theme among these intellectuals was alienation and the search for authentic community. Not that it took the war and exile to highlight these themes, which, after all, were major concerns of the young Marx. The Sunday Circle talked incessantly about alienation and isolation before the war. Mary Gluck writes that "alienation did indeed constitute the central dilemma of their lives" (*Georg Lukacs and His Generation, 1900-1918*, p. 21 — this 1985 book nicely complements the work under review).

As an aside which illustrates the

interconnectedness of these thinkers, the person who first gave Lukacs a glimpse of what it may mean to overcome alienation is Irma Seidler, a cousin of Karl and Michael Polanyi. Lukacs met her in 1907 at one of Cecile Mama's literary soirees. A deep relationship soon unfolded, capped by a joint holiday in Italy in 1908. Then Irma broke off the relationship, and for a while Lukacs contemplated suicide. But in an essay on Kierkegaard in his *Soul and Forms* (1910), Lukacs suggests a parallel between his relationship with Irma and SK's relationship to Regine. He came to see his writing career as his true marriage (and hence his personal means of overcoming alienation), and he convinced himself he had to reject her. "The ultimate fear behind Lukacs' rejection of Irma was that conventional happiness, the emotional fulfillment of normal, everyday existence, would jeopardize his creativity" (Gluck, p. 125). Still, Irma's suicide in 1911 after a brief unhappy marriage and a briefer fling with Balazs hit Lukacs hard and confirmed in his thought the problematic nature of human relations in capitalistic society. Seven years later he became a leading communist intellectual.

After the war, Karl Polanyi and Karl Mannheim each continued to develop theories of social organization which might overcome alienation, and these two thinkers were the closest to Michael Polanyi of the major exiles discussed by Congdon. The brothers Polanyi corresponded extensively on social themes, and in England Polanyi worked closely with Mannheim, who indeed introduced him to the Moot. Michael Polanyi in *Science, Faith, and Society*, *The Logic of Liberty*, and the chapter on conviviality in *PK* shows the influence of ideas developed in the liberal tradition by exiles (including himself) before and after the rise of Hitler to power. But perhaps the ultimate source of Polanyi's consistent emphasis on the role of morality and self-set standards in society is to be sought beyond any intellectual tradition. Congdon claims that Karl Polanyi learned the meaning of responsibility from his father (see p. 219), and it may be that Michael's moral emphases are ultimately attributable to the same parental source. In any case, Michael Polanyi follows his brother and Mannheim in arguing for the gradual amelioration of society rather than for any form of revolution.

“Unjust privileges prevailing in a free society,” he writes, “can be reduced only by carefully graded stages; those who would demolish them overnight [e.g. Lukacs] would erect greater injustices in their place” (*PK*, p. 245).

I am not sufficiently versed in the exiles’ thought world to render any reliable judgment concerning the insightfulness of Congdon’s analysis and interpretation. I can only say that I find the book to be fascinating reading, a voyage of discovery. Congdon concentrates on the thought of his subjects, so there is an abstract quality to the narrative. The initial chapter dealing with historical and intellectual events related to Hungary during World War I is particularly dense with unfamiliar names. But Congdon is to be congratulated on his mastery of the details of such a complicated world. Polanyian scholars can learn much from *Exile and Social Thought*.

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Electronic Discussion Group

The Polanyi Society supports an electronic discussion group exploring implications of the thought of Michael Polanyi. For those with access to the INTERNET, send a message to "owner-polanyi@sbu.edu" to join the list or to request further information. Communications about the electronic discussion group may also be directed to John V. Apczynski, Department of Theology, St. Bonaventure University, St. Bonaventure, NY 14778-0012 PHONE: (716) 375-2298 FAX: (716) 375-2389.

Polanyi Society Membership

Tradition and Discovery is distributed to members of the Polanyi Society. This periodical supercedes a newsletter and earlier mini-journal published (with some gaps) by the Polanyi Society since the mid seventies. The Polanyi Society has members in thirteen different countries though most live in North America and the United Kingdom. The Society includes those formerly affiliated with the Polanyi group centered in the United Kingdom which published *Convivium: The United Kingdom Review of Post-critical Thought*. There are normally two or three issues of *TAD* each year.

The regular annual membership rate for the Polanyi Society is \$20; the student rate is \$12. The membership cycle follows the academic year; subscriptions are due September 1 to Phil Mullins, Humanities, Missouri Western State College, St. Joseph, MO 64507,. Please make checks payable to the Polanyi Society. Dues can be paid by credit card by providing the following information: subscriber's name as it appears on the card, the card name, and the card number and expiration date. Changes of address and inquiries should be mailed, faxed or e-mailed to Mullins (e-mail: mullins@griffon.mwsc.edu ; fax: USA 816-271-5987).

New members must provide the following subscription information: complete mailing address, telephone (work and home), institutional relationship, and e-mail address and/or fax number (if available). Institutional members should identify a department to contact for billing.

The Polanyi Society attempts to maintain a data base identifying persons interested in or working with Polanyi's philosophical writing. New members can contribute to this effort by writing a short description of their particular interests in Polanyi's work and any publications and /or theses/dissertations related to Polanyi's thought. Please provide complete bibliographic information. Those renewing membership are invited to include information on recent work.