THE CONTEXT OF MICHAEL POLANYI'S "WHAT TO BELIEVE"

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ABSTRACT

This essay contextualizes Polanyi's 1947 talk, "What to Believe." After reviewing connections that probably led to Polanyi's invitation to make this presentation at the Student Christian Movement conference in Manchester, I comment on Polanyi's effort to compare the connection between understanding, believing and belonging in science, Christianity and "civic morality." The main ideas in this talk should be viewed in relation to other writing from the mid-forties to the early fifties when Polanyi begins to develop his "fiduciary" philosophy as an alternative to what he views as the excessively skeptical disposition of the modern mind.

Polanyi's Text and Topic

"What to Believe" is an address Michael Polanyi gave in either April or May of 1947 at a conference of the Student Christian Movement (SCM) held at the Manchester Grammar School. The archival text of the address[1] has the date 25 April 1947 typed on its first page as the apparent date of delivery at the conference, but an editor's note included with a short two-page excerpt published in the December 1947 issue of *Credere Aude, A Magazine of Christian Thought*, a publication of the Manchester Grammar School Christian Union, identifies this as a SCM conference "lecture" which Polanyi delivered in May, 1947.[2] The note from the editor also mentions that J. K. Woods "drew up the [published] article in its present form." It advises that "Professor

Polanyi has asked me to state that some of the views expressed in it do not represent his final thoughts on the subject" (Polanyi 1947b, 10).

Polanyi's tentativeness may have reflected qualms about Woods' two-page effort to reduce his already brief remarks (a 13-page, double-spaced typescript) to a set of provocative statements to fit into available space. But his tentativeness also likely reflects that Polanyi recognized that even his full address was treating a complex topic and he did not yet have all the elements of his perspective carefully worked out. In his analogically organized discussion, he explores similarities and differences between different domains or kinds of knowledge.[3] He identifies his topic in his first sentence as "Christianity and the Modern Mind," and then notes that he will "probe our own state of mind" and will respond to "the teachings of the Christian religion," given this state of mind (Polanyi 1947a, 1). This is a talk, like a number of other Polanyi talks and essays, which sharply criticizes the dispositions of the modern mind.[4] I suggest it is helpful to describe Polanyi's topic somewhat more broadly than he does as science, Christianity, morality, and the modern mind. There are many things worth scrutiny here and these introductory comments treat, in a cursory way, only a few.

Polanyi, the SCM Conference Invitation, and the Oldham Connection

How Polanyi came to be invited to address the 1947 Manchester SCM conference is unclear. The SCM was an important movement in the UK in the late forties and the fifties and the group apparently periodically held conferences. Michael Polanyi's second son, John Polanyi, graduated from the Manchester Grammar School the year before the 1947 address.[5] Thus Polanyi's invitation perhaps came through his familiarity with the school and its teachers and administration. More likely, the invitation came through some of Polanyi's intellectual friends linked to the SCM. Allen (1998, 1-2) notes that Polanyi gave an earlier talk, "The Liberal Conception of Freedom," at a 1940 SCM conference, where he, as a Liberal Party speaker, shared the program with speakers representing the Conservative and Labor Parties.

Some of Polanyi's friends were involved in SCM affairs, including Walter Moberly, a philosopher and the Manchester University Vice Chancellor involved in hiring Polanyi in 1933. Moberly became a member of J. H. Oldham's Moot discussion group which began in the late thirties (Clements 2010, 6-12). In 1944, Polanyi became a part of Oldham's circle, and he participated thereafter in the Moot and similar successor Oldham-led discussion groups. These groups included a variety of important UK religious and literary intellectuals.[6] After he became involved in Oldham's groups in the mid-forties, much of Polanyi's subsequent writing seems to have been discussed in Oldham's groups.[7] However, Polanyi's involvement with Oldham's circle was also a window for Polanyi into some of the current religious/theological and literary ideas

discussed in the forties and fifties. Polanyi told Richard Gelwick that only his work as a research scientist influenced his thought more than his involvement in Oldham's groups (Gelwick 1965, 11, note 8).

There is a reference in "What to Believe" (1947a, 8) to nineteenth century Christian liberal theology and Karl Barth as redirecting Christian theology. Some of the discussion in Oldham's meetings that Polanyi had earlier attended likely touched on liberal theology and Neo-Orthodox Christian theology.[8] Also at the December 17-20, 1948 meeting of an Oldham group (probably the ninth or tenth such meeting Polanyi attended), Polanyi presented his short paper "Forms of Atheism"[9] that very loosely comments on Père Lubac's book *Drame de l'Humanisme Athées.* Polanyi outlines the sources and contours of modern social and political ideas in terms of the interaction of four types of "substitute deities" that have emerged in modern society and modi-fied what Polanyi suggested were earlier beliefs about the God of the Bible (see the discussion in Mullins 2013b, Moleski 2013, Yeager 2013, and Gelwick 2013). There are references in this Polanyi paper to the "doctrine of Encounter" (8) which Polanyi implies earlier discussions have touched on (see also Polanyi 1949, 20). In sum, that Polanyi accepted an invitation to speak at a 1947 SCM conference on a topic that touched on Christianity is not so surprising, given his involvement in Oldham's circle. Some who came to Oldham's groups were people with significant influence in groups like the SCM and may have suggested Polanyi as a speaker for the 1947 Manchester conference.[10]

"What to Believe "and "Fiduciary" Philosophy

Polanyi's discussion in the last section of *Personal Knowledge* (*PK*) may have been shaped in part by the charge to the Gifford Lecturer.[11] His charge was likely also important for this SCM address. But Polanyi had a peculiar facility for taking what-ever particular topic on which he was invited to speak and turning it into an occasion to present his own developing outlook. "What to Believe" may be of interest in part for what Polanyi says about Christianity, but it is important to note the way in which ideas sketched here fit into the general trajectory of Polanyi's developing philosophical perspective from about the mid-forties through the early fifties.[12] In "What to Believe," Polanyi was beginning to work out the views that he very soon began to identify as philosophy in a "fiduciary" mode or what he sometimes called his "post-critical" philo-sophical perspective.

By 1947, Polanyi was already questioning philosophical notions that doubt can be the solvent of the problems of knowledge in science and society. An essay published in early 1948 but whose first drafts were written in June 1947 summarizes what was clear to him by the time he delivered "What to Believe" a few weeks earlier. He asserts that we must examine the "foundations of modern thought" and "realise at last that

skepticism cannot in itself ever discover anything new." Skepticism can release "powers of discovery, but these powers must always spring from belief" (1948, 100). Polanyi's account of science was never focused around falsification or any type of narrow empiricism or positivism.[13] In fact from about the time he delivers "What to Believe" Polanyi begins ramping up his attack upon empiricism and positivism (see 1947c, 13-14 and 1949, 14-20). Polanyi already is focusing on discovery as central to science by the mid-forties (e.g., *SFS*, 31-38) and has for about a decade sharply criticized Marxist influenced ideas about science and society and particularly the "planned" science movement in the UK (e.g., Polanyi, 1940; 1943; 1944; 1945a).

Polanyi's March, 1946 Riddell Lectures, published as *Science, Faith and Society* (*SFS*) the same year, was his broadest to date account of science and it is worth comparing some elements of *SFS* and "What to Believe." *SFS* does in some ways build on Polanyi's important 1941 review article "The Growth of Thought in Society" (Polanyi, 1941), which he turned into an important theoretical essay that sketched some of his key ideas about science and society. Polanyi here discusses science as an important modern intellectual system of "dynamic order" (1941, 438) and society has many such linked orders which are structurally akin but not identical (Mullins 2013a, 167-169). In "The Growth of Thought in Society" and *SFS*, science is a community in which skilled scientists (working in different but overlapping neighborhoods) interact to fashion a growing and compellingly attractive organism of specialized ideas built upon a general naturalistic outlook; this framework opens a "noble vista of the natural order" and also establishes "more decent and responsible relationships between human beings" (*SFS*, 26).[14] Scientific thought achieves a relatively general coherence but is dynamic since it grows through the ongoing research and interaction of scientists in different neighborhoods (Jacobs and Mullins, 2011, 67-68). Polanyi clearly thinks the world of modernity in the West has in many ways been decisively shaped and improved by science.

Polanyi, nevertheless, argues in section II of the opening *SFS* chapter, "Science and Reality," that

> objective experience cannot compel a decision either between the magical and the naturalistic interpretation of daily life or between the scientific and the theological interpretation of nature; it may favour one or the other but the decision can be found only by a process of arbitration in which alternative forms of mental satisfaction will be weighed in the balance (*SFS*, 28).

Although there are no citations of anthropological literature in *SFS*, Polanyi does briefly discuss—much as he does in "What to Believe"(also without anthropological citations)—common modern notions about the inevitability of death and notions

affirmed by "primitive peoples" who hold "events which are harmful to man are never natural" (*SFS*, 25).[15] Polanyi portrays science, as he began to do as early as 1939, as an "organism of ideas"(Polanyi, 1940, 40) that has slowly developed in modernity and now decisively shapes the minds of most modern Western people.[16] But science is not the only fabric of ideas or framework that Polanyi recognizes as operative in human communities or even in his own contemporary society. Later in the same *SFS* chapter, Polanyi describes the propositions of science as "in the nature of guesses" which fit into the current beliefs held in the community of science composed of those properly socialized and skilled. And these guesses "are founded on the assumptions of science concerning the structure of the universe and on the evidence of observations collected by the methods of science." Although such guesses retain a conjectural character, they "are subject to a process of verification in the light of further observations according to the rules of science" (*SFS*, 31-32).

In "What to Believe," Polanyi, as in some sections of *SFS*, is interested in beliefs commonly accepted and in looking at their grounds. In this brief and direct talk, he discusses comparatively the grounds of belief in science, religion, in the form of Christianity, and what he calls "civic morality" (1947a, 9). As I implied above, Polanyi seems especially interested in exposing misguided popular notions that science proves "rigorously by experience that there can be no magic" (1947a, 4). He acknowledges that the success of scientific explanations and developments of technology linked to science has generally convinced modern (British) persons "that all magic is nonsense" (1947a, 4). But he points out that this is not the case in central Africa and that many contemporaries such as Christian Scientists and others with confidence in non-allopathic medicine and those who give any credence to astrological predictions are intelligent modern persons who "emphatically dissent" (1947a, 4) from at least some of the views of modern science. He dismisses the notion that "science is based on the evidence of our senses" and what he says sounds much like views in *SFS*: "What scientists will accept as true does no doubt greatly depend on observed facts: but it depends also on previously accepted assumptions about the nature of things. Science carries no convictions to people who refuse to share these assumptions" (1947a, 5). Science makes assumptions about natural causation and cannot provide "independent confirmation" (1947a, 5) about natural causation.

In "What to Believe," Polanyi suggests, perhaps even more insistently than in *SFS*, that the "divergence between two mentalities arises entirely from different ways of upbringing" (1947a, 3). That is, if the children of "primitive people" were educated in European schools, they would "readily accept the modern outlook" and if European children were reared in a tribal community, they would "fully believe in magic" (1947a, 3) as other tribe members do.[17] Polanyi rather bluntly declares that he and other modern people must "regard ourselves as favoured by fortune by being born to an enlightened

community which knows the truth of natural causation and which by the education which it has given us in our early childhood has imparted to us these true beliefs and protected us from accepting the errors of foolish superstitions" (1947a, 3-4).

The conclusions sketched above led Polanyi to his formulation of what I regard as the main constructive philosophical idea in "What to Believe" which he applies to science, Christianity and "civic morality":

> To understand—to believe—and to belong—these three seem indissolubly connected. Understanding, believing, and belonging are in fact three aspects of the same state of mind: of the mental process of knowing: they are its theoretical aspect, its confessional aspect and its social aspect. Only when we realise the perfect conjunction of these three aspects in all forms of knowledge, can we hope to judge rightly whether to accept or reject any particular form of knowledge (1947, 6).

Polanyi's primary interest in "What to Believe" is in the way believing and belonging inform understanding and these three cannot be severed. He illumines this indissoluble connection by sketchily discussing the theoretical, confessional and social aspects in science, Christianity and "civic morality." This short 1947 talk, as its title suggests, focuses much of its attention on belief which is tied to belonging; these aspects seem to have been particularly on Polanyi's mind in this period and he regarded them as undervalued by thinkers. Of course, understanding is important and is linked particularly to the theoretical emphasis in pure science and has parallels in religion and "civic morality." But, comparatively speaking, some of Polanyi's later philosophical work focuses more directly on and emphasizes understanding. There is, in Polanyi's philosophical development in the late forties and early fifties, a strong emphasis on belief and belonging, but later he attends more directly to the nature of understanding which, to be sure, is still deeply connected to belief and belonging. In his Gifford Lectures, Polanyi comes up with his subsidiary-focal distinction and in *PK* and later writing he develops this and articulates the theory of tacit knowing. These later writings in many ways illumine understanding as a central concern. In his 1959 *The Study of Man*, Polanyi straightforwardly summarizes and recasts his work in *PK* as an effort to reframe our understanding of understanding. (*SM*, 9, 20-39).

In "What to Believe," Polanyi argues that science is an endeavor "in which the theoretical aspect looms large, while the process of believing and the condition of belonging is taken unwittingly for granted." (1947a, 6). It is certainly not a surprise that Polanyi identifies science with an emphasis on the theoretical since his writing stretching back to the late thirties insistently makes a distinction between pure and applied science and emphasizes the importance of pure science (1940, 1-11). His

watershed 1935 discussion with Bukharin focused his attention more intently on the importance of the theoretical in science (*SFS*, 7-9). In this 1947 discussion, Polanyi suggests the scientist, particularly as a student, "unwittingly" becomes a member of the scientific community and absorbs certain scientific beliefs and acquires skills needed to work on solving current problems that drive the theoretical. As in the discussions in *SFS*, the skills of a scientist and the more particular tacit assumptions used in one or another area of science are picked up in the novice's participation as an apprentice in the scientific community.

A few years after his 1947 talk, Polanyi published "Scientific Beliefs" (1950) in which he had more to say about "belief" and "belonging" in science (Jacobs and Mullins 2017, 266ff). He argues that there are "very substantial flaws" in "the rigorously positive conception of science" which is an account that must be "supplemented by fiducial elements" that he dubs scientific beliefs (1950, 26). Polanyi does here interestingly develop his ideas about the diversity of beliefs held in different communities of interpretation. He highlights diversity in "scientific beliefs" by focusing attention on differences between fundamental assumptions underlying Soviet genetics and biology and the Western scientific mainstream (1950, 26, 35-36). He has, by 1950, long been monitoring the persecution of Soviet biologists associated with the Lysenko affair. In an odd way, Polanyi's recognition of diversity in science is linked to his earlier claim that science as most know it could "fall entirely into oblivion" (1947a, 5) if a generation fundamentally hostile to naturalistic assumptions succeeded the present generation. In "What to Believe," as in *SFS* (*SFS*, 26), he cautions that one should remember the "fate suffered by ancient science in the early Middle Ages in Europe" (1947a. 5). And he notes that if the Nazis had won World War II, "large sections of science would have disappeared" (1947a, 5) and he projects the same fate if Marxist control is extended across the world.

In "Scientific Beliefs," for the first time, Polanyi also introduces references to anthropological literature to help make his case about diversity and the intimate connections between understanding, believing and belonging. In particular, he references Lévy-Bruhl's discussion of the magical beliefs of "primitive peoples" and Evans-Pritchard's work on the Azande. Soon after his 1947 talk, Polanyi seems to have turned in earnest to the study of social anthropology. On May 23, 1947, Polanyi was invited to give the Gifford Lectures and he apparently believed to do so he needed to have a stronger background in social sciences, including social anthropology.[18] There are in MPP five different sets of notes on Lévy-Bruhl's books and these are dated from February, 1948 to 1951 (not all are dated). Some of the quotations that Polanyi copied verbatim clearly show he was interested in the same sort of epistemic questions which he addressed in "What to Believe" and later in "Scientific Beliefs." In 1949, Max Gluckman, an Oxford colleague of Evans-Pritchard took the first position in social anthropology at

Manchester; he gave an inaugural lecture the same year to the Manchester Literary and Philosophical Society (Gluckman 1972, xi). To use the language of "What to Believe," the lecture (Gluckman 1949-50, 73-98) focused on certain aspects of the interconnected dynamics of understanding, believing and belonging. Michael Polanyi and some other Manchester faculty who heard Gluckman's lecture were impressed with his account of Evans-Pritchard and the Azande and formed an academic reading/discussion group in order further to explore the logic of Azande life and Evans-Pritchard's work on this.

Polanyi, of course, uses the case of the Azande and Evans-Pritchard's discussion not only in "Scientific Beliefs" (1950) but this is the centerpiece of his 1951 eighth Series I Gifford Lecture, "The Doubting of Implicit Beliefs" (which also references Lévy-Bruhl). This lecture is a carefully positioned one integral to the unfolding argument to which Polanyi's title for the two series points, "Commitment, in Quest of a Post-Critical Philosophy." Polanyi articulates sharp criticisms in the two series of the way doubt has been idolized in modern philosophy, science and culture. His alternative constructive philosophical perspective emphasizes the pervasiveness and importance of belief. In his eighth Series I Gifford Lecture, Polanyi focused attention on the incredible stability of belief which operates in a community of interpretation which shares a relatively common framework that is reinforced by common language use, ritual practices and other social interactions among persons. In some ways, "The Doubting of Implicit Belief" with its focus on "implicit beliefs" and their stability as well as their diversity (seen when comparing different cultural communities) can be viewed as a further effort to work out some of the ramifications of his 1947 ideas about the inseparable links between understanding, believing and belonging briefly treated in "What to Believe."[19]

Polanyi's broader constructive effort in his Gifford Lectures aimed significantly to reform Enlightenment ideas. In his sixth 1951 lecture, he called this constructive reformulation "post-critical philosophy" which adopts "a fiduciary mode" that links every declaratory sentence to a speaker or writer. Polanyi argued that "the rehabilitation of overt belief…may restore the balance between observation and moral judgment in…human affairs," allowing human beings "to envisage without self-contradiction the social rootedness and social responsibility of our beliefs concerning man and society."[20] Matters concerned with the "fiduciary" and the "post-critical" become central for Polanyi soon after his "What to Believe" talk. "Forms of Atheism" (discussed above) produced for a December, 1948 Oldham group meeting, emphasizes the importance of "a finite person in the making of my fiduciary decision" (Polanyi 1948/2013, 8, see also Polanyi, 1949, 17); Oldham called attention to this Polanyian idea, suggesting it was worth discussing (Mullins 2013b, 4-5). In Polanyi's 1949 correspondence with Edward Shils about his spring 1950 lectures at the University of Chicago, Polanyi

acknowledged he wished he could lecture on the emerging "post-critical age" but he did not yet believe he had his ideas well worked out (Mullins 2019, 93). The Preface to *The Logic of Liberty* (*LL*, likely written in 1949 when the book went to press) draws attention to the link between Polanyi's emphasis on "the fiduciary foundations of science and thought in general" (*LL*, vii) and his emphasis on public liberty. In sum, "What to Believe" is a 1947 talk focusing on matters which Polanyi's constructive philosophical ideas develop more fully in the next few years.[21]

Polanyi on Christianity

What Polanyi actually says about Christianity in "What to Believe" seems particularly speculative and tentative, although he packs in many claims in a few paragraphs. Theology is the theoretical aspect of religion and it tries "to elucidate the many difficult problems" in what is a "difficult and interesting field of inquiry" (1947a, 7), which Polanyi links to mathematics. Clearly, it is the believing or confessional aspect that Polanyi wants to emphasize as central in religion. But he ties this closely to belonging, which he equates to upbringing or participation in Christian families and the variety of Christian churches. He stresses the positive dimension of the confessional aspect of Christianity, which he seems to think important in the contemporary, skeptically-disposed social environment in which he says the "religious believer is looked upon rather as a freak" (1947a, 9). He places the confessional aspect in the context of practice and emphasizes prayer and worship. He seems to suggest something oddly akin to a "will to believe" argument concerning the confessional aspect of religion (1947a, 9) and "civic morality" (1947a. 12). Some of the things Polanyi briefly touches in his discussion of the confessional aspect of Christianity are echoed in later comments about religious practices in later articles, *PK* and the still later Meaning Lectures.

Polanyi acknowledged that his knowledge of "religious history and religious doctrine" (1947a, 7) was limited and that he simply does not know much about the balance of understanding, believing, and belonging in different times and places in the broader Christian world and history. Nevertheless, he notes what he calls "obvious disparities" (1947a, 7): Roman Catholicism focuses on the "social aspect" which concerns "men's belonging to the Church," while Protestant churches emphasize "the individual acts of faith" (1947a, 7-8). He also speculates about history, suggesting that Augustine (see also *SFS*, 26) and others at a critical juncture (when "the essential Christian revelation might become submerged in a flood of similarly sounding but essentially different beliefs" [1947a, 8]) developed theology in such a way that it became a "decisive factor for the guidance of faith" (1947a, 8). He seems to think that Barth and the contemporary Neo-Orthodox movement might be a similarly important contemporary theological movement.

Civic Morality

What Polanyi's suggests in "What to Believe" about problems of "civic morality" is an early stage of ideas he soon develops about "moral inversion" (see Yeager [2002] for a definitive discussion). This key Polanyian term first appears in a 1950 essay, which is reprinted as Chapter 7 of *LL* (*LL*, 106). In his 1950 usage, Polanyi's term identifies the way the holding of traditional moral ideas has been destroyed and how "the force of homeless moral passions" flows into a mechanistic and materialistic "framework of purposes" (*LL*, 106) which he argues has brought nihilism and totalitarianism.

In "What to Believe," Polanyi argues that while religious skepticism, aided by the success of science, has disposed the modern mind "to be suspicious about religious beliefs," the modern mind has more recently become disposed to "a moral skepticism which threatens the very foundations of man's communal life" (1947a, 9). This Polanyi dubs "an even more serious crisis" than the older problem of widespread suspicion about religious beliefs. There are several essays after the mid-forties which are thematically akin to "What to Believe" insofar as Polanyi argues that public confidence in social institutions is being eroded by Enlightenment ideas and the way science has come to be understood. He frequently praises the British appreciation for civic and religious traditions embodied in practices and suggests religion has promoted gradual British social reforms. But he contrasts Britain with the political and cultural situation on the Continent where the "logic of the Leviathan" (Polanyi 1945b, 116) has tightly linked scientific materialism and progress and has unleashed violence. In the late forties, Polanyi is working out his account of the history of modern ideas and the ways in which such ideas seem to be crippling society as they bring nihilism, violence and totalitarianism. "What to Believe" is part of Polanyi's effort to sort out his broader account.

Polanyi's brief account of civic skepticism in "What to Believe" criticizes the scientistic reductionism in Freud and sociology. Freudians focus on desires and fears as determinative of individual life and this undermines appreciation of human moral motives. "Modern sociological interpretation" is a parallel insofar as "it regards all movements of history as ultimately determined by other than moral factors" (1947a, 10). In a way reminiscent of his 1944 criticisms of Mannheim's views, Polanyi suggests sociology has no place for moral judgement in social and historical life (Jacobs and Mullins 2005, 23-24). Hitler's recent aggression and Britain's defense are understood only as "historic necessities, arising from the prevailing economic and social circumstances" (1947a, 10). Polanyi links this explanatory mode downplaying "right and wrong" to "class war theory" in which history "is merely the life-and-death struggle of classes" (1947a, 10). The class struggle account (see also Polanyi 1937/2016, 21-22 and 1940, 10-11) for Polanyi is a mechanistic account that eliminates "genuine moral motives" and means only "violence" but not "arguments" can bring a "worthwhile result" (1947a, 10-11).

Polanyi suggests this interpretation of "man and the history of man" undermines "the very existence of human society" since it takes away the "measure of mutual confidence" that holds society together (1947a, 11). Polanyi affirms that "a free society can exist only if men firmly believe in each other as essentially moral beings. Free government is guided by discussion" (1947a, 11; see also Polanyi, 1937, 710).

ENDNOTES

[1]Polanyi, 1947a, cited hereafter in parenthesis, is in Box 31, Folder 10 of the Michael Polanyi Papers (hereafter MPP).

[2]Polanyi, 1947b, 10, cited hereafter in parenthesis, is in Box 3, Folder 10, MPP and online in the Gelwick Microfilm Collection, 1963 at http://www.polanyi society.org/essays.htm.

[3]The same kind of analogical argument is used in "The Growth of Thought in Society" (Polanyi, 1941) to link and distinguish the dynamic orders of science, the law, and the economy. Grene comments that Polanyi's method in *PK* "consisted essentially in broadening and stabilizing the interpretive circle through a series of analogies, by showing that human activity of many kinds are structures in the same hopeful yet hazardous fashion as those of science" (Grene,1977, 167). She rightly notes that Polanyi's "fiduciary programme" has an "analogical foundation" (Grene,1977, 167). Much more needs to be said about Polanyi's practice of analogical argument and the metaphysical affirmations about continuity that he presupposes.

[4]Polanyi's interest in the dispositions of the modern mind is a theme persisting from early to late. See, for example, "On the Modern Mind" published in May, 1965 in *Encounter* (24:12-20); available at http://www. polanyisociety.org/Intro-On-Mod-Mind.pdf with my short introduction.

[5]John Polanyi to Phil Mullins, 14 August 2018 e-mail.

[6]See Mullins, 1997 for details summarized briefly here concerning Polanyi 's participation in the Moot and successor Oldham-led discussion groups and Polanyi's relationship with J. H. Oldham. Clements (2010, 18-24) discusses members of the original Moot.

[7]Clements suggests that after Mannheim's death in early 1947, Polanyi became the central figure in Oldham's successor groups and discussion became "more focused on issues of scientific interpretation and belief rather than on society" (2009, 17). This summary may be too simple since Polanyi's interest (and I suspect Oldham's) in "scientific interpretation" was clearly very much bound up with broader matters concerned with "society."

[8]Clements provides the detailed minutes of the first twenty Moot meetings. Polanyi began attending only in the last of these meetings, although he was thereafter regularly involved in successor Moot-like Oldham groups. The minutes of the first twenty meetings show that Christian theology and the work of figures like Barth and Brunner came up with some regularity. See Clements index of subjects (Clements 2009, 728-738). Emil Brunner was a guest at a later Oldham discussion group meeting in April 1948 (Mullins 1997, 183).

[9]Included in *Tradition and Discovery* 40:2 and online at http://www.polanyisociety.org/ TAD%20WEB%20ARCHIVE/TAD40-2/TAD40-2-fnl-pg7-11-pdf.pdf. The page reference below in parenthesis is to the published 2013 *Tradition and Discovery* text of "Forms of Atheism."

[10]This includes Oldham himself, a very prominent, well-connected ecumenical leader, with whom Polanyi quickly became friendly. There are over 100 Polanyi-Oldham letters in MPP. Oldham made reading suggestions for Polanyi. He liked Buber and probably introduced Polanyi to Buber who Polanyi does reference sometimes in connection with Oldham (e.g., Polanyi, 1949, 20 and 1950, 30), Polanyi likely read and was influenced by Oldham's *Life is Commitment* (1953). As the Acknowledgements in *PK* note (*PK*, 1964, xv), Oldham later was one of five readers of the draft of *PK*; he convinced Polanyi to re-write the final chapter. (Mullins 1997, 185-187). *The Study of Man* (1959), Polanyi's 1958 Lindsay Memorial Lectures, which Polanyi describes as an "extension of the enquiry" of *PK* (*SM*, 9), was dedicated to Oldham. See Bliss (1984) and Clements (1999) on Oldham's life and work.

[11]Haught and Yeager (1997) and Sanders (2003) offer something like dueling interpretations circling around this point. The earlier article offers a metaphysically robust account of what seems to be Polanyi's sketchy naturalistic religious cosmology in *PK*, IV. Sanders makes an equally interesting case suggesting Part IV likely was perhaps a modest attempt to fulfill the charge to the Gifford Lecturer to treat the relation between God and the world; but *PK*, IV and several other Polanyi comments on religion, in Sanders' view, were not rooted in a robust religious metaphysics but in respect for religious practices.

[12]I limit discussion here primarily to 1946 to 1952. I look at "What to Believe" in relation to *SFS* (1946) and "Scientific Beliefs" (1950), with brief references to a few other Polanyi lectures and publications from before and after Polanyi's 1947 talk (e.g., Polanyi's 1951 and 1952 Gifford Lectures and "The Stability of Beliefs" [1952]). Polanyi is clearly interested in this period in rehabilitating trust in belief and in arguing science relies on beliefs held by scientists.

[13]See the extended discussion in Jacobs and Mullins (2011) of the Polanyi-Popper history. Polanyi did invite Popper to Manchester in 1946 for a presentation on *The Open Society and Its Enemies* and this was the beginning of their friendship and cooperation which lasted until the early fifties. Polanyi was likely skeptical of Popper's brand of liberalism as his remark that a free society is not merely an "Open Society" in the Preface to *LL* (*LL*, vii,) suggests.

[14]Polanyi in *SFS* notes recent changes in scientific perspectives, suggesting that today "science is not so emphatic any more in disregarding how far its generalizations make sense when extended to the world as a whole." He suggests that the late 19th century views of Laplace and Poincare now would not be accepted "without murmur" (*SFS*, 27).

[15]See the discussion of *SFS* in Jacobs and Mullins 2017, 264-266. The parallels with "What to Believe" could be drawn out in more detail than I do here.

[16]In many publications, after the mid-forties, Polanyi is critical of the way scientists and philosophers have represented science and scientific practice and he thinks particularly pernicious is the way that scientism has pervaded the social sciences and politics in modernity. See the discussion below. "What to Believe" whose subject Polanyi identifies as "Christianity and the Modern Mind" (1947a, 1) includes elements of both what I dub Polanyi's emerging critical philosophizing (i.e., his cultural criticism indicting the critical tradition) and his constructive philosophizing, which fashions an alternative to the critical tradition. As I discuss below, Polanyi's discussion of understanding, believing and belonging is an early sketch of elements of Polanyi's constructive philosophical alternative to the critical tradition. Both Polanyi's critical philosophizing and his constructive philosophizing evolve over about forty years. Clearly, Polanyi's concern about the modern mind carries forward from early to late and can be vividly seen in essays like his 1962 "History and Hope: An Analysis of Our Age"

(included in Allen 1997): "It is for us today to realise the difficulties of the modern mind to the full, and for us to accept these difficulties as our problem" (Allen 1997, 93).

[17]See Jacobs and Mullins 2018, 7-11 for a discussion of similar ideas in Polanyi's unpublished writing from 1937. See also Polanyi 1947c, 12 and Polanyi 1949, 15-16.

[18]There are some notes in MPP on Malinowski from the early forties but it is striking that Polanyi seems to have become very interested in social anthropology not long after giving his 1947 address and receiving his Gifford invitation. In March, 1948, he exchanged his Chemistry position for a position in Social Studies to prepare for his Giffords. Polanyi met Edward Shils in the fall of 1946 and they quickly become good friends with common interests. Shils seems to have become something of a social science mentor for Polanyi in the late forties. Letters exchanged with Edward Shils suggest Polanyi's new position may have included responsibility for improving the Manchester Social Studies program; he asked Shils for recommendations for short term appointments in social anthropology. Polanyi collaborates with Shils when possible and tries to arrange for Shils to come to Manchester to teach. Like his intellectual friendship with Oldham and later with Marjorie Grene, Polanyi's long-term connection with Shils helps shape Polanyi's developing ideas. See the discussion in Jacobs and Mullins, 2018, 269 and my essay on Polanyi and Shils (Mullins, 2019).

[19]Polanyi recycled his Series I eighth Gifford Lecture as the 1952 paper "The Stability of Beliefs" presented to the London Philosophy of Science group chaired by Popper in June, 1952, and this was published later in the year in *The British Journal for the Philosophy of Science* (Polanyi, 1952). The 1952 paper was the beginning of the dissolution of the Polanyi-Popper friendship. Much of the material in the Series I eighth Gifford Lecture and the article reappears in *PK* Chapter 9 subsections "Implicit Beliefs" and "Three Aspects of Stability" (*PK,* 1964, 286-292) with some elements included in other chapter sections. See the discussion in Jacobs and Mullins (2011, 74-93).

[20]The online introduction to Polanyi's Gifford Lectures (http://www.polanyi society.org/ Giffords/Intro-MP-Giffords-9-20-16.pdf) discusses at length (with many Gifford and *PK* citations) Polanyi's emerging constructive philosophy which he viewed as an alternative to the prevailing critical philosophical tradition. I limit the account here to the quotations in the preceding sentences from the Series 1 Syllabus comment on the sixth lecture (http://polanyisociey.org/Giffords/ Syllabus-S1-c2-reduced.pdf) which seems to echo "What to Believe."

[21]In his Gifford Lectures but even more directly in *PK,* Polanyi addresses what he calls "the task of justifying the holding of unproven traditional beliefs" (*PK,* 1964, ix). In 1947, Polanyi does suggest that in both the case of science and religion acquiring "certain beliefs" is "for the sake of achieving certain knowledge" (1947a, 9) and that the modern mind's uneasiness about holding religious and moral convictions "is due to a false idea of the way to know the truth" (1947a. 13). Polanyi seems to hold tightly to the idea that science, religion and "civic morality" each affirm truths, and that matters of truth and falsity can be addressed in terms of the particular balance of different aspects (i.e., the theoretical, confessional and social) which he discusses as relevant to different kinds of knowledge at particular times (1947a, 12). He says more about the nature of truth claims in science than in religion and "civic morality." But Polanyi's treatment of truth in this brief 1947 talk seems to cry out for further development. In *A Philosophical Testament* (Grene 1995), almost fifty years after Polanyi's 1947 talk, Marjorie Grene provided an illuminating discussion of the postcritical account of knowledge as justified belief. Her account is worth noting since it more directly than Polanyi (in 1947 and even later) discusses the relation of knowledge and belief for the peculiar animal which human beings seem to be. She argues that the assumed categorical difference between knowledge

and belief, running through the Western philosophical tradition since Plato, is problematic: we need first to correct the presumption that knowledge is necessary and universal and belief is contingent and parochial, and that the two have no connection with one another. Such a correction will lead to a revision of notions about truth claims. We must "look at the knowledge claims we make and see how they are structured if we take them, not as separate from, but as part of, our system of beliefs" (Grene 1995, 15). She discusses what is involved in justification as a complex historical-social, rational and commitmental process that is grounded in her biological realism which certainly seem akin to Polanyi's own realism. Grene holds that realism undercuts the dualistic approaches popular since Descartes and is built on two theses: human beings are real and exist within a real world and are surrounded by it and shaped by it. These fundamental affirmations move philosophical discussion beyond a subject-object dichotomy and a fundamental bifurcation between in-here and out-there which "makes nonsense of a world that is living, complicated, messy as you like, but real. I am myself one instantiation of that world's character, one expression of it, able also, in an infinitesimal way, to shape and alter it" (Grene 1995, 114). This kind of postcritical turn involves a re-visioning of what a person is and that includes our relation to nature and our fellow creatures; it reframes the matter of making truth claims in the many different areas of inquiry. Grene summarizes matters this way:

> …as human reality is one version of animal reality, so human knowledge is one species-specific version of the ways that animals possess to find their way around their environments. Granted, our modes of orientation in our surroundings are peculiarly dependent on the artifacts of culture. Culture mediates between ourselves and nature, and given the multiplicity of cultures, we appear, …to be able to acquire, a very much greater variety of paths of access to reality than can members of other species. Now culture, and the artifacts of culture, are of course of our own making and in the last analysis we accept their authority only on our own recognizances. But culture, rather than being a mere addendum to nature, a fiction supervenient on the naturally induced fictions of perception—culture, on our reading, while expressing a need inherent in our nature, is itself a part of nature (Grene,1995, 144).

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