A Polanyian Tack:

Political Implications

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ABSTRACT

Intellectual freedom justifies social freedom and is justified as the pursuit of truth. I argue that intellectual freedom is the creative exercise of Polanyian tacit knowing. Polanyian tacit knowing is discovery, a way to new truth.

Intellectual freedom, imagined is (1) negative or primarily critical doubt and opposition to Community, Authority and Tradition (CAT) (traditional liberalism); and (2) positive or the over-emphasis of CAT (1) and (2) are untenable and eliminates intellectual freedom by nihilism or totalitarianism; in (1) by nihilism; and (2) by totalitarianism. Nihilism starts in a wrong understanding of truth or how it is pursued while totalitarianism stems from over-emphasis on CAT.

Tacit knowledge is a way to analyse (1) the early Polanyi and the tension between social order and freedom; and (2) the late Polanyi and the gap between intellectual freedom and truth. Tacit knowledge presupposes CAT on the from side of tacit knowledge's notation and overcomes CAT's constraints by tacit knowing going to truth. Further, by restating his Hungarian Revolution as tacit knowing, tacit knowing is a way to a more truthful CAT, close the uncompleted side of tacit knowledge and solve the original problem of liberalism: its self-destruction.

By framing this query in terms of Polanyian intellectual freedom, I establish a way to bring together his early social theory and late epistemology to make an original contribution to Polanyian scholarship. A Polanyian tack ought to be given more thought as to its implications for social theory.

A Polanyian Tack:

Political Implications

by

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DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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STATEMENT 1

This thesis is the result of my own investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote.

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ACRONYMS

Conceptual

- 1. TTK Theory of Tacit Knowing
- 2. CAT Community, Authority and Tradition
- 3. TN Totalitarianism Nihilism

Books by Michael Polanyi

- 1. **CF** <u>The Contempt of Freedom</u>
- 2. KB Knowing and Being
- 3. LL <u>The Logic of Liberty</u>
- 4. M <u>Meaning (with Harry Prosch)</u>
- 5. **PK** <u>Personal Knowledge</u>
- 6. **SOM** <u>The Study of Man</u>
- 7. SEP <u>Society</u>, Economics and Philosophy
- 8. **TD** <u>The Tacit Dimension</u>

Articles by M. Polanyi

- 1. **GTS** "The Growth of Thought in Society"
- 2. **FR** "Faith and Reason"

Unpublished Papers by M. Polanyi

- 1. **LRD** Liberalism Rise and Decline
- 2. **SMS** The Struggle of Man in Society
- 3. **HH** History and Hope

1 Introduction

1.1 Context

This is an inquiry into intellectual freedom which, although commonly understood to justify social freedom, is justified and best understood as a means to new truth. Further, I maintain the traditional liberal understanding of liberalism relying on critical doubt and opposition to community, authority and tradition, is untenable and prone to nihilism or totalitarianism. I argue intellectual freedom is best understood as the creative exercise of Polanyian knowing.

I am neither a philosopher nor the son of a philosopher but do ask question. My formal education was in chemistry. But during extensive travel in the 1970s-1980s to the then-Communist bloc, after much wrestling, I had come to conclude that only a return to conscience, responsibility and rebuilding the moral order could undo, in Havel's words, "a world of appearances trying to pass for reality" which the entire system represented and thereby (re-)establish social freedom.

Looking at what transpired prior to and during the events of the 1989 collapse of Communism, I believe my sense was right. However, with the fall of the Wall and the emerging from the rubble, priority should, to my mind, have been laid in rebuilding of an order far deeper than just democratization and capitalization. Except for a handful of thinkers, issues like rebuilding trust and social capital were largely passed over.

It was in this context that I read the chapter "Conviviality" from *Personal Knowledge* (PK). It also confirmed that, if moral inversion had followed a certain path, then one walked out by reversing the way one walked in. Furthermore, having read most of his

works, I now believe Polanyi speaks to not just the post-Communist world but with particular relevance to a post-liberal order which, as to its basic philosophical assumptions, is a void and begetting a world which increasingly strikes me as taking on a similar totalitarian character of "a world of appearances trying to pass for reality."

I seek to avoid a hagiography of Polanyi. At times I have the sense if one follows the drifts of his thought, it borders on mysticism. It also seems to me Polanyi speaks from a rather privileged situation and his analogies from the world of science to the wider sphere of society become unsteady. I found it perturbing that almost the only character in his account of Soviet Communism's persecution of dissent was the biologist Vavilov. But taken as a whole, I still believe his thought deserves to be mulled over because the same epistemic dilemma, which was at work in his time, continues to be at work today.

1.2 The Problem

My concern here is with intellectual freedom and its interrelation with social freedom and truth. I argue that the self-destruction of liberalism, or social freedom, lies in its misunderstanding of the structures, function and purpose of intellectual freedom and that the theory of tacit knowing positively addresses these issues. The quest is Polanyian, imagined within the structures of the early social thought and the later epistemology of the Hungarian-born polymath, Michael Polanyi (1891-1976).

Freedom is a much sought for good. Its passions have been and are a powerful force of human action. Yet freedom and its compulsions are an enigma and its misunderstanding lies behind much strife and ill-will in our world. Its enigmatic character lies in the fact that we are aware of or know freedom in its lived-in or tacit experience. Moreover, freedom has many manifestations; there are economic, academic, scientific, social, artistic, intellectual and other freedoms. My concern is with intellectual freedom and its relation to social freedom and truth.

1.3 A Polanyian Response

Social freedom has to do with society. According to the early Polanyi, all that a society needs to be free is a general respect for truth. The late Polanyi argues that the freedom of thought is justified to the extent to which we believe in the power of thought and recognize our obligation to pursue things of the mind like truth, justice, beauty, God, etc.

Thus I understand from Polanyi that social freedom and intellectual freedom obtain from truth and are intended to aim at truth. This is to say that both society and thought derive their meaning or significance from truth. To my mind, Polanyi brings together intellectual freedom and personal responsibility for the pursuit of truth.

The freedom and obligation to truth are tacit, fiduciary and social; freedom and obligation presuppose the general framework of beliefs upholding society. Hence society and thought correlate; society has an epistemic aspect; thought a social component; they are social <u>and epistemic</u> in structure, function and purpose. Following Polanyi, the epistemic component of the intrinsic creative power of thought is decisive.

This inquiry emphasizes, teases out and develops the unfolding interaction between society and thought in Polanyi's philosophy by establishing the relations between Community- Authority-Tradition (CAT), intellectual freedom and truth. An awareness of the interaction brings into focus what I take is an original social-epistemic stereoscopic perspective of the categories. I take it that the collapse of a political community reveals the collapse of its cosmology, that is, understanding of the universe and man's place in it or general view of things. Polanyi, in witnessing the collapse of liberalism, became aware that the spiritual or moral foundations (its general view of things) of liberalism, which constitute its mental life and prescribe its social life, were inconsistent. While the inconsistency led to the self-destruction of intellectual freedom (moral inversion), it stemmed from a misunderstanding of truth and how it is pursued (objectivism.) If a general view of things, that is, society's framework of beliefs is inadequate, inconsistent or incoherent, the validity of this general view comes into question and crisis sets in. A re-examination of the general view of things is then called forth, i.e. the task of philosophy. Philosophy can criticize the problems and give a better understanding on which a truer better worldview can be built.

This being so, then both social freedom and intellectual freedom find their source in the pursuit of truth. Whatever deviates from this overarching aim distorts social and intellectual freedom as well as truth.

Both social and intellectual freedom stem from human agency, that is, the capacity to act, to form an intention and to seek its realization. Freedom is not something possessed but arises from choosing something from a scale of values. Moreover, given that self as agent takes being only in the freedom of selves in relation, both intellectual and social freedom spring from human sharing or community. Hence the life of thought and of society, in the ideal of Polanyi, is dedicated to the pursuit of truth.

Given this normative structure, it is a deviation for thought to presume itself absolutely autonomous from society and for society to presume autonomy likewise from thought. Both autonomies deny the basic conditions of their existence and self-destruct, the former into nihilism and the latter into totalitarianism. What's more, thought and society take their dynamism from the workings of their freedoms. This web of interaction takes being and is sustained out of mutual dedication to truth, to things of intrinsic excellence held to be valid and capable of boundless expansion.

As to thought, its nature, reach and implications, human knowledge is considered here by starting from tacit knowledge, the fact that we know more than we can tell. Tacit knowledge has a triadic structure: <u>from</u> - <u>to</u> and <u>knower's tacit integration</u>. Tacit knowing, as I understand it, is an act of intellectual freedom, an act formed by intention and under compulsion of norms and passions.

Tacit knowledge, on the <u>from</u> side, presupposes tacitly embodied beliefs about the general nature of things, values and skills which guide action. Beliefs, values and skills are tacitly embodied in the social structures of Community, Authority and Tradition (henceforth CAT) but because these structures embody tacit knowledge, they likewise are epistemic. All thought and society are an unfolding sequence of human actions, hence bound by time and space; they have a historical or traditional nature.

Thus tacit knowledge presupposes CAT and tacit knowledge (as tacit knowing or intellectual freedom) aims to a reality expected to reveal itself indeterminately in the future. It is the relationship between CAT, intellectual freedom and truth arising from a recrafted tacit knowledge triad and their social - epistemic implications which fascinate me and which I wish to explore in my wider research.

The essay, "Foundations of Academic Freedom", (1951:Part 4) gives the axis of the inquiry; the correlations between social freedom, intellectual freedom and truth emerge

here. The essay closes a phase which I argue is "the early Polanyi" and sets up the "late Polanyi."

It is illuminating to distinguish an early Polanyi, who is preoccupied with social freedom, from a late Polanyi, who directs himself to epistemology. The early Polanyi seeks an account of the fundamental tension in liberalism between autonomous individuals and autonomous society which leads to totalitarianism or nihilism sweeping across Europe; this is the theme of Chapter 2. He puzzles over why liberal intellectuals *en masse* have gone over to totalitarianism. The question leads to the problem of moral inversion, the theme of Chapter 3. In its own way, moral inversion sets up the later Polanyi but is a way to bring intellectual freedom into focus.

The late Polanyi believes that a false understanding of knowing based on critical doubt lies behind moral inversion and totalitarianism. I extend the argument to say critical doubt is equally a wrong understanding of intellectual freedom. His discovery of moral inversion leads to his efforts to reformulate knowing in terms of tacit knowledge which shall be discussed in the first part of Chapter 4. The late Polanyi, above all, seeks to account for the responsibility for holding our beliefs which gives, by extension, intellectual freedom proper, leading to discovery; that is to new truth, and a new mental existence or self. It is the theme of the second part of Chapter 4 and Chapter 5. Since tacit knowledge assumes CAT and a knower's action (intellectual freedom's) I can recast tacit knowledge (TTK) to render for CAT and intellectual freedom.

It is, then, the creative exercise of tacit knowing, its giving a new self-embodying new truth, and its relation to CAT which intrigues me. Polanyi does not work out this relationship and its social implications. Hence he does not close the TTK triangle by discussing how new truths change CAT and, by inference, society. I tentatively put

forward that such a move can be made and will try to show this by considering the Hungarian Revolution in sequence mentioned above: a transformed self can penetrate a morally inverted totalitarian CAT and transform its CAT. Further, I see here a possibility of linking the truth-CAT side of tacit knowing as a way to complete my theory of intellectual freedom to affect the recovery of social freedom. Such a move enables me to join the early Polanyi, who is concerned on the <u>from</u> side of society-social freedom-truth notation, with the late Polanyi, who is concerned with the intellectual freedom to the notation.

1.4 Who is Michael Polanyi

Michael Polanyi (1891-1976) was a polymath of Hungarian Jewish origin who in the course of his life studied medicine then achieved recognition as a world-class chemist before turning to social theory and philosophy to attend to the self-destruction of the liberal order he cherished. I give a short biographical sketch to anchor my analysis in his oeuvre. I have in view a search for the salient features of his early life and background to grasp how these contributed to the development of his social thought and philosophy and from which I extract intellectual freedom as the creative exercise of tacit knowing.

Polanyi was born in Budapest, the fifth child of Mihaly and Cecile Polanyi, assimilated, secular Jews, who were active in the cultural and business life of the city during the *fin-de-siecle* golden period. After WWI, Polanyi's life took a turn as he shared in the social and intellectual turmoil surrounding the collapse of the liberal order; the fall frames both his social thought and epistemology. Fleeing Hungary, he took up work in the 1920s at the famous Kaiser Wilhelm Institute as a chemist, immersing himself in its practice during the Institute's golden period when people like Einstein and Plank

presided over a remarkable cohort of intellectual giants. Sensing the danger of Hitler, Polanyi fled to England where he took up a research position at Manchester University.

There he began to publish papers on economics and took an active role in the freedom of science movement against proposals for its central planning. Although not an economist, the originality and influence of his work has been commented upon (Roberts, 1999). He is also credited with playing a significant role in keeping science free from socialist central planning schemes. His social thought took root here (Chapter 2).

Polanyi's wider intellectual engagement made him aware of a phenomenon sweeping through the ranks of Western liberals as they abandoned social freedom for social progress thereby helping to set up totalitarianism. The awareness led to his analysis of the problem of moral inversion (Chapter 3.) Moral inversion led Polanyi to the epistemic problem of objectivism and generated his response in the theory of tacit knowledge (TTK) (Chapter 4).

TTK marks Polanyi's departure from a focus on social thought to finding an adequate epistemology to ground his social thought and is the shift to the late Polanyi. TTK can be placed with the 1946 publishing of *Science, Faith and Society* (SFS) (1964b). Nascent notions there are developed later in his opus magnum, *Personal Knowledge* (PK) (1962). During the 1960s, he developed the mature concept of tacit knowledge (1969) especially as found in the works *The Tacit Dimension* (1966) and Marjorie Grene's compilation of his essays from the period (Polanyi, 1969). Tacit knowledge is considered his unique contribution to philosophy (Grene, 1977:164).

Polanyi was forty-two when, in 1933, he fled Germany to England and began to engage the pressing issues of the time. Assuming the experiences of the first forty years shaped his early social and later philosophical work, I divide those first years here into four periods: (1) secular Jewish youth in *fin-de-siecle* Budapest (1891-1914); (2) coming of age during World War I up to first exile (1914-1919); (3) the 1919 to 1933 period between first exile and second exile at Weimar Berlin's scientific community; and (4) his immersion into English civil society up to the decisive 1935 conversation with Soviet theoretician Bukharin which took him into philosophy. The first two periods are understood to be either dominated by a wrong intellectual freedom or the consequences thereof, the third was of a truer intellectual freedom pursuing spawned by CAT proper and the last of a free society guided by transcendent ideals.

While I already sketched his later years by reference to some non-scientific writings, other later pertinent biographical material appears in relevant chapters; my concern in what follows is the influence of his earlier years on his philosophy, especially his understanding of intellectual freedom.

1.4.1 Locating Polanyi: His fin-de-siecle Budapest Secular Jewish Identity

Our believing is conditioned by our belonging. Believing as I do in the justification of deliberate intellectual commitments, I accept these accidents of personal existence as the concrete opportunities for exercising our personal responsibility. This acceptance is the sense of my calling. (Polanyi, 1962:322)

Assuming the correlation of thought and society, I aim for a biographical composite that gives insight into Polanyi's social and philosophical thought by tracing his primary sources of belonging. Polanyi was part of a remarkable cohort of scientific genius and intellectual fecundity dubbed the "Hungarian phenomenon"¹; their shared background as fin-de-siecle Budapest secular Jews who experienced exile after WWI, not once but twice.

As Paul Ignotus comments:

I cannot help but feel that the intellectual environment of his youth has profoundly influenced his development. From it, he inherited the endless liberality of his mind, the simultaneity of personal and technical interests and the ability to coordinate them in behaviour as well as philosophy... What made him differ from those around him was his reverence. (1961:12)

Polanyi's father, Mihaly Polacsek, came from a prosperous, enterprising Jewish family possessed of secular outlook living in the regions where today's borders of Slovakia, Poland and Ukraine meet (Scott and Molewski, 2005:3). He trained in the 1870s as railroad engineer in Zurich, working there and in Germany before moving to Vienna in the 1880s where he met his wife Cecile (Nye, 2011:5). Polacsek was known for his honesty, uncompromising puritanism, Western outlook (2011:6) as well as his deep appreciation of science (Scott and Molewski, 2005:5-7).

Michael's mother, Cecile Wohl, came from Vilna (Jha, 2002:7), the present capital of Lithuania but then part of Czarist Russia who already in secondary school had taken up radical social activism. Her father, a rabbi of an Enlightenment cosmopolitan persuasion, sent her to Vienna out of concern for her likely arrest. (Scott and Molewski, 2005:6,7). Her outlook was Eastern and she was known for her bohemian, unkempt

¹ For studies of the "Hungarian phenomenon", see NYE, M. J. 2011. Michael Polanyi and His Generation: Origins of the social construction of science, Chicago, University of Chicago Press., GLUCK, M. 1985. George Lukacs and His Generation, 1900-1918, Cambridge, Harvard University Press. CONGDON, L. 1991. *Exile and Social Thought: Hungarian Intellectuals in Germany and Austria 1918– 1933*, Princeton University Press, LOADER, C. 1985. *The Intellectual Development of Karl Mannheim: Culture, Politics and Planning*, Cambridge, Cambridge University Press, FRANK, T. 2009. *Double Exile: Migrations of Jewish-Hungarian Professionals Throught Germany to the United States: 1919-1945*, Oxford, Peter Lang.

lifestyle as well as an active role in an avant-garde salon she ran from the family's Budapest apartment (Scott and Molewski, 2005:7). Wohl and Polacsek met and married in Vienna in the early 1880s.

As can be surmised, the couple was a study in contrasts but their influence on Polanyi is evident. Michael, the fifth of six children, was born in Budapest after the family moved there. His childhood was lived under the canopy of middle-class affluence until the age of nine when his father's railroad engineering firm suffered bankruptcy due to severe flooding, the situation worsening with his father's death in 1905 (Jha, 2002:8).

Polanyi completed his secondary education in 1908 at Budapest's prestigious *Minta* gymnasium² (2002:8) then studied medicine at university (2002:8). However, it was already apparent his true calling was in science (Scott and Molewski, 2005:21). Einstein's positive response to Polanyi's paper on thermodynamics, when aged twenty-one, sealed his calling (Scott, 1996:3).

Polanyi's youth is set against a backdrop of the European scientific culture undergoing a "second scientific revolution³." Science was the paradigm of knowledge and progress; the revolution confirmed these basic Enlightenment instincts, giving the period, on the surface, an optimistic outlook; most Europeans lived oblivious to the social and intellectual realities simmering below.

² https://en.wikipedia.org/wiki/Fasori_Gimn%C3%A1zium The mathematicians George Polya and John von Neumann as well as physicists Eugene Wigner and Edward Teller were graduates and colleagues of Polanyi . The Minta, along with other Budapest schools, had adopted a new educational philosophy and methodology which seems to have been instrumental in their pedagogic excellence..

³ PEARCEY, N. R. & THAXTON, C. B. 1994. *The Soul of Science: Christian Faith and Natural Philosophy*, Wheaton, Crossway Books. Part 4.

Fin-de-siecle Budapest was in its golden period and, from all appearances, a vibrant economic and cultural centre.⁴ Yet the city must be set within the framework of a rising *Kulturkampf* between an emerging liberal, cosmopolitan culture and declining rural, feudal order of Hungary.⁵ Woven into Budapest's rise and these tensions is the story of Jewish emancipation, migration and assimilation.⁶ Since it is well-nigh impossible to understand Polanyi's belonging or identity without reference to his secular Jewish background, or to understand the Budapest of this period without reference to Jewish immigration.

In 1866, a humiliating military defeat of Hungary's Hapsburg rulers before Prussia forced modernization upon Hapsburg lands and resulted in the 1867 *Ausgleich*.⁷ The *Ausgleich* equalized the roles of Hungarians and Austrians as well as hastened Jewish emancipation and assimilation⁸ thereby giving Budapest and Jews new possibilities. In secular Jewish minds, migration and assimilation meant emancipation from the strictures of ghetto, religious life and the medieval social order.⁹

⁴ LUKACS, J. 1988. *Budapest 1900: A Historical Portrait of a City and Its Culture*, New York, Weidenfeld & Nicholson. Between 1867 and 1900, the city population grew by three fold, its banks by fifteen, its train tonnage by one hundred fold and it became world's leading world's flour mill centre.

⁵ FRANK, T. 2010. The Budapest Roots Of Michael Polanyi's Liberalism. *Polanyiana*, 19, 5-24., IGNOTUS, P. 1961. "The Hungary of Michael Polanyi" *The Logic of Personal Knowledge:Essays Presented to Michael Polanyi on his Seventieth Birthday*. London: Routledge & Kegan Paul.

⁶ KNEPPER, P. 2005. "Michael Polanyi and Jewish Identity". *Philosophy of Social Sciences*, 35, 263-293.

⁷ MCCAGG, W. O. J. 1972. *Jewish Nobles and Geniuses in Modern Hungary*, Boulder, Eastern European Quarterly.

⁸ KNEPPER, P. 2005. "Michael Polanyi and Jewish Identity". *Philosophy of Social Sciences*, 35, 263-293.

⁹ POLANYI, M. E. B. R. T. A. 1997b. *Society, Economics and Philosophy: Selected Papers* New Brunswick, USA, Transaction Publishers. Chap 3, "Jewish Problems", reflects Polanyi's cosmopolitan views on Jews. Judaism and assimilation/

As Frank points out, Jews were best positioned commercially to serve and take advantage of modernization: as late as 1900, Magyars were barred from commerce by feudal restrictions (2010:80). Jews thus were placed to dominate finance, trade, intellectual professions and cultural activities (2010:81); they significantly constituted the middle class. Hence the modern and urban struggle against an agrarian, feudal society and the radical liberal propensities of Budapest's Jews (2010:82).

Among the first generation of secular assimilated Jews after the *Ausgleich* were the migrant parents of Polanyi. If its fathers constituted Budapest's upper middle class of capitalist enterprise, then his generation was inclined to take up intellectual, political or cultural roles reflecting their secular outlook as shaped by the cultural *Bildung*¹⁰. *Bildung* can be read as cultural tool to foster the exercise of intellectual freedom as, in large part, the exercise of critical doubt.

Yet *Bildung* was a two-edged sword. Seen originally as a cultural tool to legitimize the middle class and its leading role in citizenship and the State (Mosse, 1997:12), it increasingly became an instrument of wedding nationalism or *volk* to the State and a way to control individuals (1997:12). The development created a contradiction for Jews (1997:13); rather than assimilation, many experienced dissimilation (Congdon, 1991). Their anxiety explains in part the radical nature of their political activities.

For example, in 1908, Karl and Michael Polanyi formed the Galilei Circle of radical liberal persuasion to address urgent social issues (Jha, 2002:8-10); Galilei had a

¹⁰MOSSE, G. L. 1997. *German Jews Beyond Judaism*, Bloomington, Indiana University Libraty. p 3-12 *Bildung* was cultural outlook fostering self-creation, self-cultivation and character formation. It set out from Enlightenment presuppositions of optimism, autonomy of man and belief that acquired knowledge led to freedom. It aimed to cultivate reason and aesthetic taste even as it fostered a cult of friendship.

Spencerian, positivist, and socialist orientation. George Lukacs, on the other hand, formed in 1915 the Sunday Circle with its more German idealist bent (Gluck, 1985). Both positivist objectivism and idealistic historicism were linked by a methodology of critical doubt. Polanyi took part in both circles. Significant for my considerations of his theory of moral inversion (Chapter 3), both groups were imbued by a spirit of nihilism.¹¹

Bildung also helped create the Continental public intellectual, the learned person obligated by public education to contribute to wider public discourse (Jha, 2002), discussion being a paradigm of liberal intellectual freedom (Polanyi and Prosch, 1977). It was a social role in which Polanyi and his cohort were at home both in Budapest and in later exile. The self-perception arising from *Bildung* helps account for Polanyi's ease of engagement across many disciplines.

A welcomed development in Polanyi scholarship of recent years has been a stress on the role of his secular Jewish roots which it previously lacked. Taking his Jewish roots into account gives him a depth otherwise lacking.

1.4.2 The Meaning of World War I

WWI was for Polanyi and his generation a harsh coming of age, radically separating them from the idyllic period of their youth. But the war was more than deaths and physical devastation; in his view, WWI symbolized the *destruction of Europe* (Polanyi, 1997b:110-111). WWI negated an outstanding liberal Europe of cultural achievement and social reform as intellectual freedom devolved into moral inversion.

¹¹ See Ignotus pp. 8-12. The nihilistic atmosphere of Budapest's radical liberalism around these groups leads Ignotus to refer to them as the "Bloomsbury on Danube."

The war, in Polanyi's mind, embodied a comprehensive "descent into evil", a descent readied by modern nihilism (1997b:108) anticipated by Dostoyevsky, Marx and Nietszche (1969:15, 16) and one to which liberal intellectuals were all-too-vulnerable (1997b:111). Over time, Polanyi came to believe that the descent originated in a pathological transformation of the scientific outlook, moral inversing, which only coincided with WWI (1997b:108); the pathology led to his epistemology project.¹² Modern nihilism was consequent to liberalism's inconsistent formulation of intellectual freedom as critical doubt.

Out of the descent came the Russian revolution and modern totalitarianism. Hungary, too, fell into political chaos, Bolshevism and finally anti-Semitic chauvinism; it was Polanyi's first brush with totalitarianism. The situation was ominous hence Polanyi (and most of his cohort) chose exile, the first of two. In 1919, he looked to Germany for a new start, found work in scientific research in Karlsruhe before eventually settling in Berlin's renowned Kaiser Wilhelm Institute in 1923.¹³ While in Karlsruhe, he married fellow Hungarian émigré, Magda Kemeny; the couple had two sons; John, the younger, received the 1986 Nobel Prize in chemistry.

¹² PROSCH, H. 1986. Michael Polanyi: a critical exposition. Albany: State University of New York. Specifically uses a medical pathology motif in analysing Polanyi's project.

¹³ NYE, M. J. 2011. *Michael Polanyi and His Generation: Origins of the social construction of science,* Chicago, University of Chicago Press. Shows how German scientific culture gathered itself around the Kaiser Wilhelm Institutes under the gaze of such scientific luminaries as Fritz Haber, Albert Einstein, Max Plank, Erwin Schroedinger and Max VanLaue. Joining Polanyi in Berlin's scientific world were fellow Hungarians Leo Szilard, Eugene Wigner and John Neumann.

1.4.3 Kaiser Wilhelm Institute

Polanyi's Kaiser Wilhelm Institute¹⁴ period is crucial, to my mind, in understanding Polanyi's later social and philosophical work. For one, the Institute provided a refuge and pause from the political and social turmoil of Europe and, immediately, Weimar Germany.¹⁵ More importantly, his time at the Institute formed his understanding of the scientific enterprise, its social character and gave a fecund lived experience of intellectual freedom. The period also marks the beginning of his public engagement in the pressing social concerns tied to economics.¹⁶

Polanyi's ideals of science are the idealizations of the Institute period. The experience gave him the raw materials from which the theory of tacit knowing was forged. It was also a deeply fulfilling period in his life; his Hungarian friend, Eugene Wigner, who shared the Berlin science experience with Polanyi, commented, "I doubt he was ever again as happy as he had been in Berlin" (Wigner quoted in Nye, 2011:66). However, after Hitler's rise, personal danger loomed yet again; seizing on a narrow window of opportunity, he and his family fled to England and re-settled in Manchester, Polanyi initially doing research in physical chemistry. Two years later, he engaged in the Moscow conversation with Bukharin which changed the course of his life. This sets the stage for his social theory which is picked up in Chapter 2.

¹⁴ Ibid. KWI were the centre of German science following on the work begun by the 2nd scientific revolution. Amonst its luminaries were Albert Einstein. Max Planck, Erwin Schroedinger, Max von Laue, Fritz Haber, James Franck, Werner Heisenberg, and Wolfgang Paulie were amongst the luminaries, many of them Nobel Prize laureates. There were several regular weekly colloquia in which this outstanding collection of scientific genius participated. The Hungarian physicists John Neumann, Eugene Wigner and Leo Szilard, all previous acquaintance of Polanyi, were also associated with KWI.

¹⁵ WEITZ, E. 2007. *Weimar Germany: Promise and Tragedy*, Princeton, Princeton University Press.recreates the remarkable period of cultural creativity and social emancipation, of political and economic turmoil and the descent into Nazi totalitarianism.

¹⁶ See NYE, M. J. 2011. *Michael Polanyi and His Generation: Origins of the Social Construction of Science*, Chicago, University of Chicago Press.

1.4.4 Intellectual Context: Fin-de-siecle Crises of Philosophy¹⁷

I will briefly visit the late 19th century crisis of philosophy,¹⁸ the context in which Polanyi's philosophizing¹⁹ responds. The crisis is generally understood to lie in the increasingly tenuous position of epistemology as rendered by science's leading function in culture. I take it that modern epistemology and modern intellectual freedom derive *in principio* from epistemology's emphasis on critical doubt.

First, the post-World War I social crisis points to the more fundamental late 19th century crisis of epistemology whose roots are in the 16^{th-}- 17th centuries' scientific revolution.²⁰ Epistemology gives an inconsistent understanding of knowledge (or knowing) at work in the scientific ideal. The inconsistency culminated in the late 19th century crisis of knowledge.

Philosophy has generally assumed, until Marx, that civilization's fundamental beliefs about the structures of reality, as well as how it attains to these structures, animate civilization. Further, since basic beliefs are tacitly embedded in the idiom of social practice, they set limits to the possibilities of society and thought. Philosophy's task is

 ¹⁷ I primarily draw reference from: KUHN, H. 1968. Personal Knowledge and the crisis of philosophical tradition. In: LANGFORD, T. & POTEAT, W. (eds.) *Intellect and Hope: Essays in the Thought of Michael Polany*. Durham: Duke University Press. DIGGINS, J. P. 1994. *The Promise of Pragmatism: Modernism and the Crisis of Knowledge and Authority*, Chicago, University of Chicago Press.
 MCCARTHY, M. 1990. *The Crisis of Philosophy*, Albany, SUNY. NAUGLE, D. 2002. *Worldview: The History of a Concept*, Grand Rapids, William Eerdmans Publishing Co. and KLOPPENBERG, J. T. 1986. *Uncertain Victory: Social Democracy and Progressivism in European and American Thought*, *1870-1920*, Oxford, Oxford University Press.

¹⁸ See MCCARTHY, M. 1990. *The Crisis of Philosophy*, Albany, SUNY.

¹⁹ See KUHN, H. 1968. Personal Knowledge and the crisis of philosophical tradition. *In:* LANGFORD, T. & POTEAT, W. (eds.) *Intellect and Hope: Essays in the Thought of Michael Polany*. Durham: Duke University Press.

²⁰ MCCARTHY, M. 1990. The Crisis of Philosophy, Albany, SUNY. Quotes Griffith, p. x.

to clarify those beliefs, bring to light inconsistencies and contribute thereby to a more sound grounding of both thought and society even while liberating their potentialities.

Modern rationalism emerged when the scientific revolution sought to minimize the function of belief by stressing methodological critical doubt. The method gave grounds for modern intellectual freedom, and its myth of autonomous thought. However, emancipated empirical science, which presumed the efficacy of critical doubt, led to naturalism, deterministic materialism, eventuating nihilism and, by extension, undermined intellectual freedom. Its opposite, idealism, begun by Hegel, gave epistemological priority to history and culture (McCarthy, 1990:xiii-xv) even while maintaining the epistemic function of critical doubt. And this, to my view, also eliminated intellectual freedom by the creation of a totalitarian CAT. Epistemology, on both counts, the key to intellectual freedom, was now contradictory and vulnerable. I will now broadly reconstruct the historic development of a problematic epistemology.

The scientific revolution of the 16th-17th centuries helped to usher in the modern era and accompanying sea-change in Western outlook and culture, the change denoted as modernism.²¹ It not only brought about the liberation of reason from faith but science from philosophy (McCarthy, 1990:2). Empirical science could thus go relentlessly forward without the regulative, synoptic function of philosophy (1990:2). Philosophy under the aegis of empirical science had to carve out a new existence; it reconceived itself as the study of knowledge or epistemology (1990:6,7).

²¹Ibid. pp. x- xi. Modernism's outlook: (1) is secular rather than religious; (2) its scientific and cultural practice is autonomous of ecclesiastical and philosophical authority; (3) is sensitive to human historicity and change; (4) its working understanding of culture is empirical and pluralistic rather than normative.

Empirical science, following Descartes, initially assumed that knowledge of the truth, or at least scientific fact, was the result a knowing ego subjecting thought to critical doubt to rid it of all traces of belief and authority. Yet two centuries after Descartes and the rise of epistemology, the project was in trouble. By the late 19th century, universal reason, resting on critical doubt and upholding scientific knowledge had become divided into two camps: naturalism (objectivism) and idealism (historicism).²²

For now, objectivism can be understood as the search for a certain, foundational knowledge without reference to a knower, that is, a-personal, a-contextual fact. It began with Descartes and reached its apogee in Kant's rationalism.²³ In Polanyi's understanding, objectivism is a consequence of modern critical philosophy, antimetaphysical and reductionist in character. It includes pragmatism, operationalism, positivism, linguistics analysis and logical positivism.²⁴ Its chief spokesmen at the 19th century's close were the Viennese physicist, Ernst Mach, and English sociologist, Herbert Spencer; it dominates Anglo-American philosophy. But more importantly, objectivism was a response to historicism and its implied relativism (Miller, 1972:797).

Historicism grew out of the extension of empirical knowledge into realms formerly under moral philosophy, led to the Hegelian turn to idealism and a new rationality (McCarthy, 1990:15). The earlier notion of rationality places scientific reason in nature, purified of authority, tradition, history and cultural influence (1990:15) and emphasizes individuals. Historicism, on the other hand, locates reason in culture and history and

²² Ibid., Preface.

²³ Ibid., p. xv. Kant attempted to purify scientific reason by ridding it of all reliance on authority and tradition and any traces of history or culture.

²⁴ POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul. p. 173.

emphasizes a socio-linguistic community (1990:15). Whereas objectivism reduces knowledge to explicit fact, historicism gives knowledge an absolute social and historical character. Amongst its late 19th century-early 20th century figures are Wilhelm Dilthey, Friedrich Nietzsche, Oswald Spengler, Karl Mannheim, Martin Heidegger, Ludwig Wittgenstein (late) and Thomas Dewey (Miller, 1972:797-798) It is often accused of relativism.

The late 19th century struggle between historicism and naturalism then spawned new schools of thought in the early 20th century. They include naturalists, neo-Kantians, phenomenologists, followers of linguist and logical analysis. This is more or less the discursive field which locates Polanyi.

On initial appearance, Polanyi's philosophizing appears Continental, chiefly as an opposition to objectivism. A more nuanced reading which, among other things, includes his discussion of historicism (1959:85-89) shows his grasp of relativism and its inherent dilemmas Polanyi, as I read him, moves between historicism and objectivism, overcoming their inherent tensions by re-crafting epistemology into one more consistent to and grounded in the scientific endeavour as practiced.

1.4.5 Polanyi's Mode of Philosophizing

A brief word concerning Polanyi's mode of philosophy and thought: Helmut Kuhn, to my mind, best shows that the well-spring of his philosophy lies in his practice of natural science: Polanyi's philosophy starts in natural science, gleans from its practice a few basic concepts and, from those, branches out to reveal a comprehensive vision of reality (1968:111). In Kuhn's view, Polanyi revives the tradition of philosophy, emphasizing direct lived-in experience over the reflexive accent of modern philosophy (1968:134) re-establishing the traditional link of epistemology and metaphysics. Unlike philosophers of science who theorize science, Polanyi indwells science.

The philosopher, Phil Mullins, holds that Polanyi's philosophizing weaves together three strands: broad-based critical philosophizing, broad-based constructive philosophizing and articulation of a *Lebensphilosophie* ²⁵ (2008:159) which overtly affirms his personal beliefs (2008:160). *Lebensphilosophie* as an effort to recover meaning should be seen against the backdrop of late 19th century-early 20th century nihilism. I elaborate further on Polanyi's location in 20th century philosophy when analysing his Theory of Tacit Knowing in Chapter 4.

Polanyi's mode and vocabulary of doing philosophy have been called "unconventional" (Mitchell, 2006b: 5), unorthodox, loosely presented (Sanders, 1988: xi) a "jungle" (quote Oakeshott, Mullins, 2008:2). Detractors charge him with "irrationalism" (Brodbeck in Nye, 2011:269) subjectivism, dogmatism, relativism and psychologism (Sanders, 1988:Chs. 5&6).

Polanyi's status as an amateur causes philosophers consternation; he felt it placed him at advantage in his self-perceived task of shaping "a new philosophy to meet the need of our age." (Mitchell, 2006b). His mode of philosophizing relies on intuition. Intuition is central to TTK.

²⁵ Gaiger, Jason Concise Routledge Encyclopedia of Philosophy p. 474. Denotes Lebensphilosophie as a philosophy "which asks after the meaning, value and purpose of life, turning away from purely theoretical knowledge towards the undistorted fullness of life experience...Lebensphilosophie typically opposes rigid abstractions with a philosophy based on feeling and intuition and seeks to establish the priority of life as an all-encompassing whole." The central claim underlying its various manifestations is that life can only be understood within it.

Polanyi's heavy use of analogical thought and language, atypical in philosophy, reflects his scientific background (Jha, 2002:47). Jha, following Prirogine, believes that Polanyi's emphasis on *becoming* rather than *being* actually reflects the shift from classical to modern physical dynamics (2002:46). This view also takes on the biological attitude towards space-time found in Aristotelian physics (2002:6). In a similar vein, Thomas Torrance believes that Polanyi's philosophy of science is best understood with the Einsteinian physics revolution in view (1984:110).

While epistemology is at the heart of his philosophy, its scope and method overlaps with a multitude of disciplines.²⁶ Its breadth also makes his philosophy difficult to read let alone analyse. However, all this must considered in light of Polanyi's perception of the character of his philosophical task.

1.5 Finding My Location in the Polanyi World

I take what seems a unique approach to Polanyi by completing or bringing together, his social freedom with the notion of intellectual freedom and then establish the latter's relation to truth. Intellectual freedom is here the creative exercise of tacit knowing in pursuit of truth; tacit knowing presupposes CAT but transcends CAT in coming to truth. I thereby join the early and late Polanyi projects by a Polanyian intellectual freedom.

Three scholars, Phil Mullins (2013), Struan Jacobs (Jacobs, 1997-98, 2005, 1999) and Endre Nagy (1992) have identified an early period and considered Polanyi in that light; they do not, however, consider intellectual freedom. All of these focus on Polanyi's

²⁶ SANDERS, A. 1988. *Michael Polanyi's Post-Critical Epistemology: A Reconstruction of Some Aspects of 'Tacit Knowing'*, Amsterdam, Rodopi. Notes philosophy of psychology, philosophy of biology, social and political philosophy, philosophy of language, aesthetics, ontology, axiology and philosophy of culture.

response to totalitarianism, a political phenomenon. R. T. Allen's work with Polanyi's social thought also shows him relying primarily on early Polanyi sources but only in the end when he speaks of our emotional bonds, that tacit dimension, does he shift to the late Polanyi sources. He also keeps his freedom in the realm of social freedom.

In contrast, Richard Gelwick (1977) does not concern himself with freedom in any sense but with the moral and cultural malaise which dynamo-objective coupling (moral inversion) has set loose upon the culture and how understanding discovery in light of TTK helps us to find sources of moral order resident in tacit knowledge. But he does not equate intellectual freedom with tacit knowing. Murray Jardine's preoccupation is with finding sources of moral order by which to ground the moral order so that moral inversion (nihilism and misunderstood intellectual freedom) does not run amok; while using Polanyi to diagnose the problem, he does not go to him for a solution (Jardine, 1998).

A scholar who sees the role of creative thought and its implications for intellectual freedom is Stefania Jha although she does not pursue it as an entity on its own or in its relation to CAT. Esther Meeks (Meek, 2011) stresses Polanyi's epistemology in the context of Christian faith and brings to fore the relational nature of freedom. Jerry Gill speaks to the risks of moral inversions in both liberalism and Communism but puts Polanyi into a post-modern category, a departure from Polanyi's post-critical denotation

I find works introducing Polanyi seem to keep him in the round and make bridging his social and epistemic projects within grasp; these would include Prosch (1986), Mitchell (2006b), Gelwick (1977) and Scott (1996). But again, all of these treat his freedom primarily as a social freedom, and do not work with a category of CAT or move to take the new self after its exercise of intellectual freedom to a transformation of CAT within

the TTK structure. I discourse with other Polanyi scholars in a later discussion on a more topical basis in the unfolding work.

1.5.1 The Structure of the Thesis

To reiterate, my quest sets out to find a theoretical underpinning of a free society in the context of post-Communist transition by means of a Polanyian hermeneutic device which explores the interrelations of social freedom, intellectual freedom and truth even as it joins truth and social freedom. The structure of the thesis is as follows:

Chapter 2 looks to the early Polanyi to re-establish the structure and conditions of social freedom. I maintain that Polanyi recasts social freedom and society into public freedom and a network of spontaneous orders, both regulated, in part, by the principle of truth. From this, I infer the arrangement transposes social freedom into a more basic intellectual freedom and anticipates the social-epistemic ordering principle of CAT.

Chapter 3 considers the interrelation of intellectual to social freedoms and sets up intellectual freedom's relation to truth. I initially consider Polanyi's critique of intellectual freedom in terms of critical doubt; critical doubt leads to moral inversion, moral inversion eliminates intellectual freedom by nihilism or totalitarianism, Postively, I return to Polanyi's FAF essay to show that academic freedom coordinates the social aspect of the scientific enterprise because ultimately science is regulated by the epistemic principle of truth; Polanyian social and intellectual freedom interrelate and find their grounds in the pursuit of truth.

In Chapter 4, I restate Polanyi's critique of objectivism and its epistemic principle of critical doubt, i.e. a wrong understanding of the nature of truth and how it is pursued; critical doubt is the basic epistemic assumption of liberal intellectual freedom. Over-

emphasized individual critical doubt eliminates CAT and gives nihilism; an overemphasized CAT in collective critical doubt brings on totalitarianism; each redefines truth and how it is pursued in their own way.

TTK, Polanyi's response to critical doubt, overcomes its discrepancy by its <u>from-knower-to</u> triad. The triad entails (1) the knower's active integration of subsidiary and focal awareness, (2) presupposes the personal, fiduciary and tacit character of all knowledge; and (3) truth as contact with reality holding the promise of indeterminate, future manifestations.

Chapter 4, Part 2 is virgin territory in the Polanyian world, and anticipates a new social theory. I re-forge TTK: tacit knowledge presupposes CAT on the <u>from</u> side of its triadic notation, re-habilitates CAT's epistemic function and overcomes nihilism.

Chapter 5 re-establishes the principle of truth as contact with reality and the creative exercise of tacit knowing as means of contact. Tacit knowing transcends limits of CAT to go to truth; tacit knowing is intellectual freedom and re-establishes truth.

Truth as contact with reality is not only a new way of relating to the world but a new way of being in the world, a new self. Under the compulsion of a newly established contact with reality, a new or modified self becomes a new source of authority from which a reformed tradition and community can arise: if the creative act of tacit knowing is (1) both epistemic and social; (2) presupposes CAT; and (3) transcends CAT, then tacit knowing transforms CAT. Further, since intellectual and social freedom interrelate, the exercise of tacit knowing gives social freedom and progress by incremental social transformation. I show this by a case study of the Hungarian Revolution. However, his reading fails to follow up his own thought to show the intermediary stage where the

revolutionaries' creative exercise of tacit knowing led to a reformed CAT and thus social freedom.

My re-forged CAT-tacit knowing-truth triad is structurally parallel not only to the late Polanyi's TTK's triad but also to the spontaneous order-pubic freedom-truth triad of the early Polanyi. My re-forged structure of intellectual freedom gives the philosophical grounds to the social freedom-society relation. I thus envision this intellectual freedom as a way to bring together the early Polanyi and late Polanyi. Hence, a solution to the problem of liberalism's self-destruction emerges. I now set out to ascertain the relation between social freedom and society.

2 Polanyi's Conception of Social Freedom

Freedom *from something* is a great deal, yet not enough. It is much less than freedom *for something*...The work of human thought *should* withstand the test of brutal naked reality. If it cannot, it is worthless....Probably only those things are worthwhile which can preserve their validity in the eyes of a man threatened with instant death. (Milosz, 1981:35, 41)

2.1 Introduction

Confronted by totalitarianism, the early Michael Polanyi notes a dichotomy between liberal society and social freedom. To overcome dichotomy, I argue that he recasts traditional liberalism's understanding of social freedom and society into public liberty and a network of spontaneous order. Moreover, he claims that their tension is overcome if truth is re-established in their relation. I argue that, in introducing truth, Polanyi fails to sufficiently take into account intellectual freedom and its interrelation with social freedom and truth.

My overall inquiry assumes: (1) the interrelations of intellectual freedom, social freedom and, truth; (2) an early Polanyi social theory and a late Polanyi epistemology; and (3) intellectual freedom is the creative exercise of tacit knowing. The present chapter raises questions about the nature, grounds and justification of social freedom from within the framework of Polanyi's early social/political thought.

I first consider the discussion of social-freedom's negative-positive divide as a way to locate Polanyi. I shall then extract from primary "early' Polanyi texts his society-tosocial freedom relationship to consider how he overcomes the instability between social order and freedom by his theory of spontaneous order and public freedom; I do this by considering his three theories addressing three freedoms: economic, social and scientific. Finally I interact with scholars of Polanyi set in current political discourse to consider how Polanyi's social freedom is interpreted in relation to intellectual freedom with special attention given to those who note an early Polanyi body of scholarship.

Polanyi's thought did not rise in a vacuum; its context was one of liberal social crises from which totalitarianism sprang. Totalitarianism shows that the relation between liberal society and social freedom is problematic, as it is society that has the power to eliminate social freedom. By the same token, social freedom can lead to political nihilism - to the elimination of social structures Thus social freedom and society may be at odds.

The primary concern of the early Polanyi is the extent to which society fulfils the purposes for which it exists and how this can be best achieved. He opposes totalitarianism not because it is undemocratic, but because it is ineffective in supporting the ends for which persons enter and remain in association with one another (1951:244). A free society should help humans flourish, whereas a society in which either social freedom (1997b:139) or social order (1951:Ch. 8) prevails over the other reduces the possibilities for human flourishing. Ultimately, in Polanyi's mind, human well-being relates to a pursuit for things of intrinsic, enduring excellence, i.e. truth, beauty, righteousness, God and compassion (1962:380, 1951:57).

We should be aware of Polanyi's reliance on analogical reasoning. 'An analogy is a comparison between objects, or systems of objects, that highlights in which they are to be similar. Analogical reasoning plays an important but mysterious role in problem solving and is a distinctive feature of scientific, philosophical and legal reasoning' (Bartha, 2013). An analogy, in seeing and using a similarity, presupposes a relation between its objects; but not necessarily a one-to-one correspondence (Jha, 2002: 127). Within an analogy, there can be variance in levels of being, knowing or value ; the self-

adjustment of scientists embodies a higher principle (truth) which can be *reduced* to the market mechanism pursuit of profit (Polanyi, 1969:69) just as a living organism embodies mechanical principles reduced to machines but the organisn cannot be reduced to machine. But neither market nor machine mechanisms can achieve the dynamics of the higher level of scientific thought or life. Finally, analogies are a means to show how reality hangs together (Jha, 2002: 128)

The analogies used here are: economics-to-society, economics-to-science and scienceto-society. Each sphere embodies a unique but public freedom and all use a common ordering principle, mutual or spontaneous adjustment, which Polanyi takes to permit the use of analogy. Finally, in his context, these individual spheres face pressure to yield to central planning.

I use social freedom-interchangeably with liberty:

Freedom...is... the ability to think or act as one wishes. An important distinction is nevertheless made between negative freedom and positive freedom (Berlin, 1958). Negative freedom means non-interference...The individual is thus 'at liberty' to act as he or she wishes. Positive freedom is linked to the achievement of some identifiable goal or benefit, usually personal development or self-realisation. (Heywood, 2000:129)

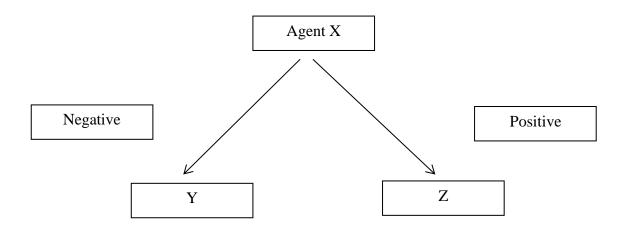


Figure 2.1 MacCullum's Model of Freedom

MacCullum proposes a triadic model of freedom in the form: 'X is free from Y to do or be Z'... (1967: Ch. 3), which I adopt here (Figure 2.1). The question 'are we free?' should be replaced by a more complete and specific statement specifying what we are free from and what we are free to do (2000:129, 130).

In traditional liberalism (following Richard Allen), social freedom is not the means to a higher political end but is itself the highest political end (Acton in Allen, 1998:4); it is the freedom to live one's life in one's own way, without interference from private persons or public authorities (J.S. Mill in Allen, 1998:4); it requires the mutual respect of the freedom of others (1998:4); and it requires a public authority whose power is reduced primarily to the task of enforcing general and known laws which uphold mutual respect and restraint in society (1998:4). As will be seen, it is a primarily negative freedom.

Liberalism stands for notions (thought); institutions and practices (social relations); and the interaction thereof. The core notions of liberalism are individualism, social freedom and progress (Freeden, 1998:144); whereas some add reason (Heywood, 2003:33). Polanyi's reform of liberalism modifies these notions. The social institutions and practices of liberalism which primarily occupy Polanyi are capitalism, science, and civil government although he does often refer to jurisprudence and occasionally to Protestantism. **S**ocial freedom presupposes a society of free association.

Figure 2.2 presents on the left the dilemma of liberal social freedom and on the right, Polanyi's solution.

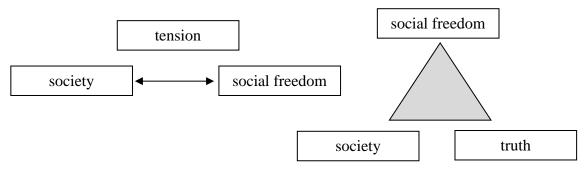


Figure 2.2 Dilemma of Liberal Social Freedom

On the left side, social freedom is at tension with social order, the source of coercion. There are two ways forward. Firstly, one can place limits on society (negative freedom); secondly, society can be transformed to rationally create conditions of autonomy (positive freedom) in which society is a way to social freedom.

2.2 Overcoming Social Freedom: A Polanyian Tack

2.2.1 Social Freedom's Dichotomy

Liberal freedom faces the age-old problem of the relation between social order and social freedom. Polanyi states the problem of social freedom as follows:

To prevent lawless conflict a paramount power is required: How can this power be prevented from suppressing freedom? How can it indeed fail to suppress if it is to eliminate lawless strife? Government appears as essentially supreme and absolute, leaving no room for freedom. (1964b:63)

The question is ultimately one of how authority is to be constituted.

First let me discuss Isaiah Berlin's classic essay that points out two notions of social freedom present in liberal thought as a way to frame Polanyi's social freedom. I shall discuss Berlin's essay and then relate Friedrich's Hayek's and Hannah Arendt's understanding of freedom to those two notions and to Polanyi's views. I will then try to see how Polanyi attempts to bridge the dichotomy of social freedom.

Berlin is really concerned with the nature and origins of authority out of which social freedom arises:

[The conflict stems from] differing and conflicting answers to what long has the central question of obedience and coercion: why should I (or anyone else) obey anyone else? Why should I not live as I like? Must I obey? If I disobey, may I be coerced? By whom and to what degree and in the name of what and for the sake of what? (1958:2)

Following a long tradition, he claims in "Two Concepts of Liberty" (1958) that the concept of social freedom actually encompasses two types of freedom, a negative and positive one. They are differentiated by their attitude toward authority. Hence, it is order or authority that provides a context for the discussion of social freedom.

Negative freedom originates in the desire to limit authority regardless of its source (1958:28). Negative social freedom is freedom from coercion rooted in an urge to create a personal (private) space within which one is free from interference of others. Authority is by nature a political force and thus is limited if negative freedom exists.

Positive freedom, on the other hand, seeks autonomy, the right and power of self-rule, which places authority in our own hands (1958:7,28). It is concerned with the origins of authority rather than with its nature. The goal of positive freedom is rational self-realization (or self-creation) (1958:9). Self-realization comes through knowledge (1958:14); positive freedom links rationality and freedom (1958:8). Positive freedom uses authority to achieve individual self-realization through society (collective of individuals). Authority is thus comprised in and by the will of the people. In this sense, it is a freedom constituted in public space.

For Berlin, the positive freedom resulting from Continental rationalism leads to totalitarianism. Hence, he favours negative freedom rooted in English empiricism but cut off from values or traditional ideals. He thus fails to detect the latent nihilism of negative freedom (Jardine, 1998:35-37, Allen, 1998:Ch. 1); Berlin cannot fully

overcome the opposition between society and social freedom, and between order and freedom.

Friedrich Hayek (1899-1992), a Nobel laureate in economics, social thinker and neoliberal pioneer, restates the conditions of social order to revive social freedom (Hayek, 1960). Like Polanyi, he argues that collectivism is coercive and opposes social freedom (1960:Chap 9). Likewise, he seeks a social order fostering individual initiative which would contribute to its development. To some extent, Hayek's concept of social freedom fuses positive and negative freedom.

Hayek, like Polanyi, argues that the continued progress of the social order depends upon taking advantage of the individual's intrinsic creative powers (1960:22-24). Otherwise, the order collapses. Likewise, social progress depends upon the growth of knowledge (1960:24, 25) by which it can be taken the growth of thought and the exercise of creative powers of thought are connected.

Moreover, similar to Polanyi, Hayek's concept of knowledge is not only formal, but acknowledges the tacit dimension and correlative skills, traditions, habits and tools (1960:25, 26). The nature of knowledge, freedom, progress and human limits requires a spontaneous order if knowledge is to expand. Finally, in the vein of Polanyi, Hayek links responsibility and freedom, rights and duties (1960:Ch. 5).

Hayek, like Berlin, sees two conflicting epistemic traditions at work in the liberal world One is rationalism, which leads to totalitarianism, (1960:58, 65) and the second one is empiricism, an evolving body of knowledge drawn from experience, which accounts for social freedom (1960:64-70). However, as Richard Allen argues, there is a utilitarian and nominalist strand in Hayek's freedom which makes it prone to nihilism (1998:Chap 7 & 8). It leaves him no transcendent grounds to root values. Here Hayek and Polanyi part. I agree with Allen.

Like Polanyi, Hannah Arendt (1906-1975), a political theorist, sees totalitarianism as a uniquely modern, liberal phenomenon. As can be seen in her essay, "What is Freedom?" (1976:Ch.4), her conceptualization of public freedom overlaps with that of Polanyi. (1976:145). Similar to Polanyi, she maintains that freedom is problematic because it is divorced from the public sphere; it is private and negative (1976:147).

Arendt argues that social freedom can arise only in community (1976:148) for a community creates a man-made world, a common public space as a stage for individual action and speech (1976:148) within which social freedom is experienced and exists. Arendt's vision of social freedom is akin to Polanyi's vision of the symbiosis of thought and society (Polanyi, 1959:60-70) Social freedom is an art to be performed and judged on this stage (1976:153, Polanyi, 1964b:67) . For both, freedom is known as lived experience (Arendt, 1976:148, Polanyi, 1962:54) Freedom is rooted in the human capacity "to call into being something which did not exist before" (1976:151) for Polanyi, originality (1951:48). However, Arendt's public freedom relates directly to the whole polis and is not mediated by spontaneous orders of the wider polis.

2.2.2 Polanyi's Early Social Thought: Its Structure and Context

Polanyi's academic freedom frames his social freedom and society. For his part, Polanyi seeks to overcome a discrepant negative/positive freedom because it tends towards nihilism or totalitarianism (1951:40). From the practice of science, he extracts the principles of coordination (1951:42), constraint (1951:48) and originality (1951:48) by which individual action, guided by individual judgment, produces spontaneous and

efficient coordination amongst the members of a community as they strive towards the achievement of a shared task (1951:44).

Polanyi puts forward that academic freedom gives a way to bridge negative and positive freedom (1951:40). As I infer, academic freedom unites the epistemic principle of scientific coherence (1951:48) and social principle of the spontaneous coordination between scientists (1951:47). Coherence points to a consistent expansion of truth as something real, a spiritual reality (1951:48) which forms the grounds of the shared beliefs embodied in the scientific tradition (1951:47) in which the scientific community is grounded (1951:33). It is these commonly shared beliefs in a spiritual reality (scientific truth) which lay claim upon individual conscience (1951:47). Science then is an expression of a community of consciences rooted in shared ideals (1964b:56). As I read Polanyi, the bond of coherence (1951:48) and individual conscience (1951:53) gives a way to transcend the tension between originality and constraint (1951:48).

Polanyi then extends the principles of academic freedom to a wider social freedom to mean that a free society is one under the obligation to the "invisible things which guide men's creative impulses and in which men's consciences are naturally rooted" (1951:57). Thus his notion of social freedom is one of a society rooted in transcendent ideals (1951:57). I see Polanyi's appeal to truth as regulative principle of social freedom and society is distinct amongst our interlocutors.

In retrospect, Polanyi has experienced the collapse of the pre-WWI liberal order as well as being confronted in the ensuing years by three totalitarian regimes. Just as importantly, he was witness to his fellow liberal intellectuals' betrayal of liberal social freedom and embrace of collectivism's call for the central planning of society by the state. The crisis of European civilization is the context of Polanyi's social theory. He has, since 1917, ardently defended its liberal social order and been dedicated to its basic beliefs as well as to the liberal institutional order. In over three decades, he has contributed to the discourse on social freedom two key concepts: public freedom and spontaneous order.

Polanyi assumes there is a link between thought and society (1964b:17). His mode of thought is analogical. He extracts principles pertaining to social freedom from specific institutions and practices, especially science, which he then extends to the free society. Polanyi uses three theories to address three social crises (practice and institutions) of a wider crisis of liberalism: economic, social and scientific.

He traces the practice of social freedom back to the institutions/practices of capitalism and modern science, (Polanyi, 1945a) which propelled the transition from medieval to modern times. To his mind, calls for central planning of economy and science portend the elimination of social freedom, free society and the pursuit of transcendent ideals.

Polanyi believed capitalism and science are essential to a liberal society. He believed their elimination would be the end of the liberal social order. He reasons, "General planning is wholesale destruction of freedom; cultural planning would be the end of all inspired enquiry, of every creative effort and planned economy would make life into something between a monastery and a forced labour camp" (1940a:60).

Polanyi argues, and I follow, social freedom and free society collapse when their essential institutional order and functions fail and when the sources of creative thought, upon which they depend, falter or are cut off. The foregoing sets the background to Polanyi's defence of the liberal order and its social freedom.

2.2.3 Polanyi's Economic Theory

I shall limit my remarks on Polanyi's economic theory because it does not bear on truth as do his theory of scientific practice and his social theory Yet because economic theory helps to locate his social theory in its discourse and because he does extract from the economic enterprise principles which apply to social freedom and society (1951:Chap 8,) as well as scientific freedom in the social order of science (1969:Chap 4), I trace its historical and theoretical context. The economy points to more general law(s) pertaining to the relationship between social freedom and society (1969:52).

Polanyi's economic theory should be seen as adjunct to, developing from, and support of, his social theory. Economics gives or reinforces the all-important principle of mutual adjustment or spontaneous order out of which a free society arises (1951:195). It also makes tangible the notion of public liberty as an exercise of individualism performing a social function (1951:194). Economics, like social freedom, is an instrumental art whose end is a good society respecting truth, justice and compassion (1951:244).

Since economy and society are inextricably bound and their interaction shapes the discourse of social freedom in Polanyi's time, here are its broad historical lines. Economics were a main topic of interest in the years leading up to WWI (Nye, 2011:145) but intensified in the wake of the Russian revolution... the early 20's Weimarian hyperinflation and the 30's Great Depression (2011:145). Theoretical scheme and practical experiment alike sought to circumvent the inextricable link of society and economy

Vienna has a central place in this discussion, not only to due to its bold "Red Vienna" experiment(2011:147-150); it was also an unusually fecund arena of economics theorizing, ranging from O. Neurath's central planning of economy to L. von Mises'

libertarianism¹ (2011:150). While this was the heyday of Viennese positivism (2011:152); more importantly, for my research, Vienna gave the 'Austrian school², inveighing for the social tradition of individual liberalism (Vinti, 2005:133).

Some scholars³ hold that Polanyi is closely related to the Austrian school's social thought; they share common roots⁴, passion for traditional liberalism⁵, and an epistemological orientation in their political and economic outlook⁶ (2005:135). All were anti-totalitarian, anti-socialist, anti-collectivist and anti-social engineering (2005:135,136) However, with Vinti, I hold that Polanyi and the Austrians ultimately part over epistemological methodology and disagree on the ends of freedom.⁷

Polanyi also disagrees with the Austrian school with regards to Keynesian economics. Polanyi is mildly pro-Keynes and, in fact believed that Keynes had achieved a Copernican revolution in economics. Both he and Keynes criticize and redefine the capitalist economy by attending to a previously overlooked feature of economics-money

⁵ Ibid.

¹ NYE, M. J. 2011. *Michael Polanyi and His Generation: Origins of the social construction of science,* Chicago, University of Chicago Press. pp.150-152. Friedrich Hayek, Joseph Schrumpeter,Ludwig von Mises and Karl Polanyi came out of this settting.

² VINTI, C. 2005. Polanyi and the "Austrian School.". *In:* JACOBS, S. & ALLEN, R. T. (eds.) *Emotion, reason and tradition.* Hampshire: Ashgate.133-The school's leading figures were von Mises, Karl Popper, and Friedrich Hayek

³ Ibid., p. 13. Besides himself, Vinti mentions Philippe Nemo. Allen's treatment of traditional liberalism is essentially one dealing with the Austrian school.

⁴ Ibid., p.135 All came from the former Austro-Hungarian empire, were refugees and had a passion for the rebirth of traditional liberalism. The four met initially at a 1938 symposium in Paris which discussed Lippmann's *Good Society* and were in 1948 founding members of the Mon Pelerin Society. The relationship between Poalnyi and Hayek was respectful but between Popper and Polanyi acrimonious.

⁶ Ibid., p.136. They share a commitment to the individual's centrality, his responsibility and liberty, to a fallible, partial and revisable political program reflecting their epistemological outlook and to pluralism

⁷ Ibid. Epistemically, the others were utilitarian and empiricists. They part ways the ends of social freedom; while the Austrians hold to methodological individualism and its private freedom, Polanyi insists on a public liberty the exercise of which contributes to collective social entities given to the pursuit of transcendent ideals.

supply-and introduce monetary policy as remedy (Manucci, 2005:150-155). Unlike Keynes, Polanyi opposed economic schemes aimed at social justice (2005:155) and insisted the political and economic realms be separate (2005:156). An optimally functioning economy could thereby serve the ends of society which were to be defined in terms of transcendent ideals (Polanyi, 1951:57,58). In light of this, I argue that Polanyi tacks between the Austrian and Keynesian schools.

Polanyi claims that capitalism is essential to a free society. It is a form of dynamic or spontaneous order (1951:189) and a sphere within which to exercise public freedom (1951:195-197). Substantively a capitalist economy advantageously provides for its participants even while lifting society above subsistence (1997b:185, 1951:71) and it makes intellectual and cultural activity (1951:205-207) possible. Furthermore, capitalism can exist only within a liberal framework of legally enforceable contracts (1997b:190) overseen by the supervisory authority of civil government.

He argues that only two ordering options are possible in the economic sphere of a modern society: a spontaneous order from which self-coordination arises or a centrally planned economy (Polanyi: Ch. 8). The first option features more or less horizontal relations of equals, whereas the second is a vertical relationship of superiors to inferiors (1940a:33,34). The two orders are mutually exclusive (1951:141). By his extension, the principles hold for science and society.

Polanyi maintains that the spontaneous order is not only functionally superior to the centrally planned economy but the latter is impossible to achieve⁸. Capitalism is,

⁸ POLANYI, M. 1951. *The Logic of Liberty*, Indianopolis, Liberty Fund. pp.150-155. Here he argues against, on one hand, the liberals von Mises, Knight and Hayek who see central planning as perhaps,

therefore, more humane. In other words, if the corporate order of central planning is unachievable, then, logically, human duress follows all attempts at its implementation. He presents evidence against a centrally planned economy using the failure of the Soviet economy as well as mathematical or physical models (1951:Chs. 8&10).

I agree on the foregoing points but I criticize Polanyi's economic theory on two points. First, he relies primarily on the rule of law to maintain order. I argue, together with Michael Novak and Francis Fukuyama, that even more basic to capitalism is its moralcultural order (1982:166-170, 1995:Part One). Second, Polanyi does not emphasize that the workings of capitalism depends upon creativity as a form of intellectual freedom; I agree with Hernando DeSoto's insights as to the role of intellectual creativity in capitalism (DeSoto, 2000).

2.2.4 Polanyi's Social Theory

I will now consider Polanyi's early vision of the free society as a way to re-establish the relation between social order and freedom. As historical and theoretical foil for his social theory, I use the 1938 Paris symposium on Walt Lippmann's *The Good Society* (Nye, 2011) not only as way to locate Polanyi but to mark the revival of liberalism⁹ Lippmann's work (2004) reaffirms traditional liberalism but mitigates its laissez-faire attitude; it culminates a personal journey from progressive, pragmatic liberalism to

under certain conditions, achievable, and on the other, the new Socialist school (H. M Dickenson, Oscar Lange, et al.) finally bringing even in the Bolshevik Trotsky who all but admit conditions of freedom which eliminate by definition central planning.

⁹ JONES, D. S. 2012. *Masters of the Universe: Hayek, Friedman and the Birth of Neo-Liberal Politics,* Princeton, Princeton University Press. p. 31 Besides Polanyi, attendees included economists Friedrich Hayek, Ludwig von Mises, Alexander Rostow and, Wilhelm Roeopke,, and: political philosophers Raymond Aron, Bertrand deJouvenel and Jacques Rueff. (Karl Popper was living in New Zealand and not present.) The colloquium, rejecting both laissez- faire and collectivist economics (totalitarian as well New Deal), sought a new bearing for economics. Of those just mentioned, all would be founding members of the Mont Pelerin Society in 1948.

conservative liberalism. Together with the Austrian school, the colloquium locates Polanyi vis-a-vis the an emerging context of neo-liberalism¹⁰

I first consider Polanyi's views of the substantive origins and nature of social freedom. I then think about how Polanyi viewed the relation between thought and society, before going on to consider social freedom and order individually and together. I then consider the function of progress in his scheme of liberalism. Finally, I juxtapose the above notions to their position as found in either the traditional liberal or totalitarian scheme.

Polanyi's social theory is a response to the crisis of liberalism yet from the start considers the crisis in the light of the mutual relation of society and thought. He understands the modern, dynamic society to be unique in human history yet divided by two dynamisms, revolutionary and reformist (1962:213). These distinctive dynamic societies replace the system of fixed social relations that had up until the modern era determined human relationships (1962:213). It is his understanding that any order of fixed social relationships is incompatible to political and cultural freedom (1997b:201).

Polanyi is conscious that modern equality of status and its freedoms arose in a lengthy historical process which revolved around the reconstruction of the self and gave rise to a new social role, the individual (Polanyi, 1945a). Polanyi gathers around this individual his notions of personhood (1962:320), knowledge of persons (1962:321), and person as active centre (1962:287,336) about which his later tacit knowledge revolves. Hence, in Polanyi, social and intellectual developments go hand-in-hand.

¹⁰ Ibid., TURNER, R. S. 2011. *Neo-Liberal Ideology: History, Concepts and Policies,* Edinburgh, Edinburgh University Press.

Two essential features frame, to my mind, Polanyi's discussion of social order. First modern life depends upon society and society needs the co-ordination of the sum of its joint activities. Only two options exist for achieving coordination: spontaneous adjustment (free society) and central planning (totalitarian society), the latter being an evil society in terms of its effects upon basic human dignity and worth.

Second, however, there is implied in Polanyi's texts an evil worse than totalitarianism because it threatens the survival of humanity: anarchy, barbarism or the collapse of civilization (1940b:57). It is on these grounds Polanyi opposes the private, individualist formulation of social freedom first and foremost. We cannot forget in considering totalitarianism, a more evil prospect exists if the fragile bonds of civil behaviour breakdown altogether.

Let's first consider Polanyi's understanding of the free society and its claims. In overview "The Struggle of Man in Society" (SMS) shows (1940b) that Polanyi from the start clarifies the relations between social freedom and society by squaring them up to the pursuit of truth. The same theme persists in "The Growth of Thought in Society" which "analyses the part played in society...by the ideals of truth" (1941:429). Both works clearly foreshadow the social theory appearing later in "Conviviality" (1962:Chap 7) and "Dedication or Servitude" (1964b:Ch. 3). The interrelation between thought and society is already central for Polanyi, the pursuit of truth the central function of a free society. Moreover, the attitude towards this pursuit forms the distinction between a free and totalitarian society; freedom and truth are identical in the battle against totalitarianism (1964b:19).

SMS's task is to establish (1) the fundamental claims of society; (2) the social function performed by social freedom; (3) how present obsessions have weakened public

conscience; and (4) to redeem public conscience by setting up its proper aims (1940b:13). In sum, he aims to re-constitute democracy by redeeming its conscience. (1940a:13).

Readers acquainted with Polanyi's other work will discern later notions first appearing here. For one, truth and other values enable individual and society to make sense of surroundings, giving order to society (1940b:Ch. 2 p. 1). Yet truth is dependent on society (1940b:Ch. 2 p. 1). Thought and society are deeply enmeshed because our powers of thought are enhanced by our cultural inheritance (tradition) (Polanyi, 1940b:Ch. 2 p. 2), ensconced in a web of authority (1940b:Ch. 2 p. 4) arising within various estates (1940b:Ch. 2 p. 4). Polanyi has laid out the social-epistemic functions of CAT without seizing on them; they are the centre-piece of my inquiry.

Moving on to consider the social structure, function and purpose of freedom, Polanyi defines freedom as "a system of ideas, each of which fundamentally is a precondition of the other" (1940b:23). Further, freedom is "a policy (or behaviour) which springs from the faith that society makes sense with the ideas to which the pursuit of sympathy, justice and truth gives rise" (1940b:23). Here again we see the interaction between thought (aiming for truth) and society as well but with priority on thought

"The Contempt of Freedom" (CF) adds that the human mind has "an attraction to rare structures of sound and consistent ideas" from which springs the love of knowledge and joy of discovery" (1940a:13); I take the "attraction of sound ideas and love of knowledge" (Polanyi, 1940a) to be the nascent form of Polanyi's doctrine of intellectual passions (Polanyi, Ch. 6, p. 196). This love and joy give the life of thought, the pursuit of truth for its own sake. Indeed the life of thought exists independent of the life of society and this life constitutes the grounds of social freedom (1940a:10,11).

Moreover, social freedom is embodied in the life of free institutions (objective establishments or established spheres) (1940b:24) which, in turn, embody certain fundamental or objective principles (1940b:24). These principles are gradually modified under the influence of individual initiative (Polanyi, 1940b). An objective principle is confined to a particular intellectual domain where it belongs (1940b:25) and it is determined by the nature of the domain in which it operates; it is normative. An objective principle can be modified but not by gaining personal favour or by provoking personal antagonism (1940b:24); these are conditions of freedom (1940b:24). While not stated explicitly, I take it that an objective principle may be changed by free discussion yet such change is only incremental because truth is only disclosed incrementally.

Polanyi informs the reader that the objective principles upon which freedom depends are embodied in the life of society (1940b:59) and are linked to intuition or instinctive powers (1940b:57) or to creative instinct (1940b:58). Freedom becomes a lived practice of tacit yet objective principles, a tradition transmitted by and under the tutelage of authority, all this taking place within the social boundaries of a community (1940b:58, 59). These will soon become his spontaneous order. I claim that the foregoing foreshadows both Polanyi's theory of tacit knowing and my social theory derived from tacit knowing.

A society's corporate decisions are arrived at not so much by reasoned arguments but by joint intuitive judgment flowing from its lived practice (1940a:33). Hence, by the guidance arising from the interaction of thought and society, humans achieve evergreater intellectual coherence (1940b:23), which regulates thought and society. Thus, freedom arises from an intellectual framework of ideals and a society regulated by these ideals, a cultural process where thought and society comingle; it is both intellectual and social.

If priority is given to the life of thought, then an institutional arrangement arises in which a member of society is little controlled or restrained by fellow members (1940b:23). Indeed, freedom does not come about by creating a private sphere for the individual but by the person's interaction with society (1940b:24). Social freedom must therefore be primarily a public freedom which makes possible the life of thought.

A private, negative freedom satisfying personal desires does not concern Polanyi so much as his concern for public freedom (1940a:57, 1951:194,195). However, the freedom of both traditional liberalism and collectivism is a private freedom (1940a:57, 1941:430) and thereby liberalism is rendered vulnerable to totalitarianism. Indeed, private freedom is in the interests of totalitarianism because it justifies giving over social responsibility to the State (1941:430) and it prepares the mind for public despotism (1951:194).

Hence Polanyi opposes an "individualist formula" of social freedom (1951:xviii). He believes its predominance, justified by *laissez fair* economics, had led to disastrous social consequences bordering on anarchy and barbarism (1940a:57). Private freedom had handed over to collectivism the guardianship of social interests (1940a:58). Polanyi clearly aims to attend to this deficiency by imagining freedom in terms of the public good.

While Polanyi makes allowance for private freedom, he is concerned with public freedom for the reason that it serves society (1941:438, 1951:194, 1940a:57). Public freedom is one with a responsible purpose, a privilege combined with duties which calls

for initiative and judgment of a higher order (1941:438). The exercise of public freedom serves a social function (1951:194,195) and is justified by its contribution to the life of society.

Public freedom is an instrumental art, a means to a higher end, whose responsible exercise achieves benefit not only for good of the person exercising it but society as a whole. Even the exercise of public freedom in what, to some, is a profane realm, economics, turns out to be society's most effective means of providing for its material needs and why its freedom is worthy of public protections. Above all, though, Polanyi's ideal is a free society in which public freedom reigns to an end: a good society animated by the pursuit of transcendental ideals (1951:57). This is Polanyi's principle of public freedom.

Having denoted social freedom as public freedom, we can consider the social order from which it springs. Just as social freedom is governed by public freedom, so too is the order of society governed by the principle of a spontaneous mutually adjusting order (1941:432) or "established spheres" (1940b:23). Such orders enable the individual pursuit of a particular transcendent ideal within a framework of "objective principles" (norms) pertinent to this ideal, the objective principle regulating the interaction of a sphere's members; the established spheres later become individual culture (1962:216-222). Established spheres include science, religion, law, art and economic enterprise.

The "established spheres" of thought are denoted socially as spontaneous orders which arise out of the mutual adjustments of members' action to the actions of others (1941:432, 1951:194,195). From mutual adjustment, a sphere's self-co-ordination comes forth (1951:42, 1969:84). It is also from these mutual interactions that the mutual authority which governs the sphere issues forth (1977:191). Thus Polanyi gives the principle of spontaneous order with its freedom and authority ruling over relations in the sphere and between the relations of other spontaneous orders. It is from these spontaneous orders and their interaction that the civil society and civic virtue springs. Their conspicuous absence explains the ease with which totalitarianism came to dominate in Central and Eastern Europe (1951:123).

The spontaneous orders comprise a network. Over the network of spontaneous orders, however, there is the need for another kind of authority, supervisory, the State, which presides over the sum of free individual initiatives occurring under its watch (1941:439). The supervisory nature of a free society's State is set in opposition to the corporate order which a centrally planned order demand as we shall shortly see (1941:439). It falls upon the State of a free society to primarily protect individual actions "in which a real public interest ought to be preserved" precisely because of its social effects (1940a:57).

As the breadth of society is too complex for one individual to span the whole so, too, the free life of an individual is limited to those spheres in which she has duties and rights (1940b:26). A person gains access to a sphere by interest and competence in the same sphere (1940b:26). The individual's place in society is first referred to as a "standing" (1940b:27) and then as a "calling" (1962:322). The vast array of spheres and the ideas they offer do not affect a person directly; only those spheres in which a person exercises their freedom and responsibility affect a person.

Polanyi's free society is not egalitarian: a person is linked with others "who are not too superior to him in the sphere in question or just not too inferior" (1940b:27) and able to see each other face to face (1940b:27). It would be consistent to his later epistemology

to infer he stresses the informal over the formal characters of social interaction. This gives rise to the principle of small distances or of hierarchical structures (1940b:27).

Further, personal leadership in a free society is the product of competition, initiative and originality (Polanyi, 1940b:30). Leadership involves allegiance, trusted judgment and transcends reason (1940b:33), these being the conditions which create a following of disciples. (Leadership later becomes personal authority.)

Finally, society is necessary for truth and values (Polanyi, 1940a) (the theme developed in Chapter 4 when discussing the transmission of tacit knowledge within social structures.) Since thought has roots in society (1959:60), I extend this to mean truth or knowing is (tacitly) dependent upon society (1940b:Ch. 2:1). Our sense of reality arises from the confirmation of our senses by our fellows hence man's thought or perception of reality are social by nature (1940b:2:4); by inference, thought and society are connected.

Yet thought has meaning and can grow only if it can transcend its roots in society. In other words, if society subsumes thought then creativity, new thoughts and intellectual growth are blocked, then social dynamism is checked and thus social freedom is eliminated. While Polanyi does not use the concept of intellectual freedom as freedom for creativity and new thought, I maintain they are equivalent to the former and point to intellectual freedom. The growth of thought (truth) depends upon the maintenance and growth of the dynamic systems of order in society therefore it is in the interest of the State to foster its dynamic order (1941:439).

Finally, we should establish Polanyi's notion of progress, and the hope connected to it, to its bearing upon the social order and freedom. First, the recovery of progress was to

Polanyi central in the battle against totalitarianism for progress was its animating force. Simply stated, 19th century *laissez fair* liberalism "had brought contempt on the name of freedom" by depriving it of a public conscience and its relinquishing the mantle of progress (1940a:58); "the tragic separation of progress and liberty are yet with us" (1940a:vi) "But no-one can lead the peoples of this planet who does not lead them to progress; and therefore liberty cannot be saved unless it again becomes a progressive idea" (1940a:vi) and other transcendent ideals.

For Polanyi, "this hope of progress lies in the pursuit of various forms and aspects of truth...by a number of autonomous circles, each of them devoted to one of them, is essential ideal of a Liberal Society, as contrasted to a Totalitarian State" (1941:448). Progress is connected by Polanyi to the discovery of natural laws, human capacities and their social possibilities (1940b:23). In other words, progress lies in the pursuit of truth.

Yet it is equally important to accept that society would always have moral imperfections (1962:245, 1977:215); idealism must be framed within the circumference of human reality to error. Polanyi thus seeks a realistic hope that tacks between the resignation of static societies and the utopian aspirations of collectivism. I suggest that it is his secular restatement of the Christian doctrine of original sin and the awaited Kingdom of God.

To summarize, Polanyi's image of the free society is largely an organic one. There is symbiosis between individual and society as well as between society and thought. But it does have a mechanistic component in the State. Therefore, the fundamental tension will and should be between the life of thought in pursuit of truth and the State which by nature seeks to gather power to itself. In sum, social freedom is interpersonal, communal and the absence of coercion. It is tacit and understood from within the experience of living in it and its traditions, a matter of prudence and natural feeling, an art whose rules are tacitly interpreted in their performance. Social freedom is the positive freedom needed to do our duty, a set of competences and immunities, rights and responsibilities.

2.2.5 Polanyi on Totalitarianism

Polanyi was part of a wider discourse of traditional liberal intellectuals who were responding to the rise of totalitarianism.¹¹ Many had escaped nations succumbing to totalitarianism and others had awoken to the danger which their own advocacy of radical liberalism brought. They were not so much concerned with totalitarianism but with the liberty's lack of appreciation. They thus laboured to gather a cogent intellectual defence of social freedom to revitalize it.

Having just interacted with the texts of Polanyi's social theory to state his case for a free society, I will now juxtapose his view of the free society with his view of the totalitarian society. To reiterate, Polanyi's social theory aims to transcend the gaps between: negative and positive social freedom; social freedom and society; and,

Totalitarianism, New Yord, Harcourt, Brace, Jovanovich.;BERLIN, I. 1958. Two Concepts of Liberty. *Four Essays On Liberty*. Oxford: Oxford University Press.; POPPER, K. 2013. *The Open Society and Its Enemies* Princeton, Princeton University Press.; POPPER, K. 1957. *The Poverty of Historicism*, Boston, The Beacon Press, LIPPMANN 2004. The Good Society. New Brunswick: Transaction Publishers.; ARON, R. 1939. Democratic States and Totalitarian States. *Salmagund* [Online]. Available: http://www.jstor.org/stable/40547669?seq=1#page_scan_tab_contents [Accessed 2017-04-01].;ibid.; KOLNAI, A. 1938. *The War Against the West*, London, Gollancz.;KOLNAI, A. 1995. *The Utopian Mind and other papers*, London, Athlone Press.; HAYEK, F. A. 1952. *The Counter-revolution of Science: Studies on the Abuse of Reason*, Glencoe, The Free Press. HAYEK, F. A. 1944. *The Road to Serfdom*, London, Routledge.;ROEPKE, W. 1992. *The Social Crisis of Our Time*, New Brunsick, Transaction, MILOSZ, C. 1981. *The Captive Mind*, 1981, Vintage Books. TALMON, J. I. 1965. *The Origins of Totalitarian Democracy*, New York, Praeger.,and; VOEGELIN, E. 1952. *The New Science of Politics: An Introduction*, Chicago, University of Chicago Press.

¹¹While many I shall list here have been mentioned or will be mentioned, I bring some of the notables in this effort into one group here on the basis of Polanyi's acquaintance: ARENDT, H. 1968a.

politically, freedom and authority. To achieve this, he reforms traditional liberalism by his notions of spontaneous order and public freedom; both are guided by the pursuit of truth.

Totalitarianism is without precedent; it is not only feckless authoritarianism, or tyranny. Grounded in the belief in the efficacy of total revolution, it seeks the destruction of every existent institution, creed and value; it is by nature nihilistic. It uses terror to eliminate society, social freedom, authority and thought. Ultimately, its nihilism brings up the mystery of evil,¹² of inverted moral aspirations, of humanism reverting to barbarism¹³.

Totalitarianism is usually a political category, involving authority and power while correlating individual, society and state. As will be developed later, a Polanyian, epistemic totalitarianism is established by society's ascendancy to thought; society eliminates intellectual freedom and is totalitarian.

The interrelation of thought and society are at the centre of Polanyi's analysis of totalitarianism in both his social theory and epistemology. Presently, I am interested to draw out the relations of thought to society and authority to power in the view of other scholars as a way to place Polanyi's in totalitarianism's broader 30's-50's discourse. Raymond Aron¹⁴ and Robert Nisbet,¹⁵ for example, focus on its sociological aspects,

¹² See WALSH, D. 1990. *After Ideology: Recovering the Spiritual Foundations of Freedom*, San Francisco, Harper and Collins. Chs. 1, 2.

¹³ LEVY, B.-H. 1978. Barbarism With A Human Face, New York, Harper & Row.

¹⁴ ARON, R. 1939. Democratic States and Totalitarian States. *Salmagund* [Online]. Available: http://www.jstor.org/stable/40547669?seq=1#page_scan_tab_contents [Accessed 2017-04-01]. The French sociologist, philosopher and political theorist focuses sociologically on the totalitarian elites as opposed to the masses they despise and manipulate by violence. Aron participated in the 1938 Lippmann colloquium and was a founding member of Mon Pelerin Society.

that is, the nature of the masses and elites as well as their relations. J. I. Talmon, on the other hand, looks for the intellectual origins of democratic totalitarianism, finding them, like Hayek and Berlin, in rationalism (1965).

It is in the realm of political theory, though, that the problematic relation between power and authority connected to totalitarianism arises and points us to the liberalism's failure to find the necessary moral grounds of political order thereby anticipating the problem of moral inversion discussed in Chapter 3. Hannah Arendt's work, considered the benchmark in totalitarian studies, brings together (1) society and thought in considering totalitarianism (Arendt, 1968a); the interrelations of: (2) the masses and elites (social) (3) power and authority (political): and (4) ideology and terror (intellectual and political) (Arendt, 1968a). . Her account of totalitarianism has parallels to Polanyi's and shows the same sensitivity to epistemology as his account. Ultimately, however, in my view, Arendt seems to give way to a fact-value dichotomy as well as a conventionalist view of truth.

Bertrand de Jouvenel also analyses power and authority¹⁶ in totalitarianism's context.. (DeJouvenel, 1957: Chs. 13&14) and brings society and thought into discourse. He is one of the few thinkers engaged here who brings Christian belief into discourse with political theory and practice, showing it conserving social influence, one to which

¹⁵ NISBET, R. 1953. *The Search for Community*, New York, Oxford University Press.p 187-191 The American sociologist held that totalitarianism is an affair of mass attitudes being incorporated into power structures that play upon that which has the widest appeal of the population .

¹⁶ DEJOUVENEL, B. 1945. On Power: Its Nature and History of Its Growth, Boston, Beacon Press.; DEJOUVENEL, B. 1957. Sovereignty: An Inquiry Into the Political Good, London, Cambridge University Press.Sovereignty. Descartes and Hobbes are linked by epistemic methodology to the decline of authority and increase of power. Polanyi notes the latter confirms many of his own views POLANYI, M. 1962. Personal Knowledge: Towards a Post-critical Philosophy, Chicago, University of Chicago Press.213. Polanyi and de Jouvenel met at the 1938 Lippmann symposium.

Polanyi shows awareness. To his mind, power is restrained by authoritative belief (DeJouvenel, 1945:Ch. 11) which, following a divine Law, is subject to positive interpretation and thereby allows for social evolution (DeJouvenel, 1945: 202.)

It is now helpful to locate Polanyi's social theory and its totalitarianism in the previously discussed Austrian school of traditional liberalism, i.e. Hayek, von Mises and Popper. All traverse into social theory but with an epistemological tool in hand. Yet, as R.T. Allen shows, the Austrians present an individualistic, negative freedom; their utilitarianism and empiricism destroy the sources of moral order which society and social freedom require; their modified traditional liberalism yields nihilism (Allen, 1998). Hence the methodological gulf divides Polanyi from the Austrians.

Numerous Polanyi scholars¹⁷ have considered his defence of social freedom within the context of totalitarianism and created a discourse with other thinkers contemporary to him. However, I need to press on with the task at hand, restating Polanyi's totalitarianism.

Polanyi's totalitarianism primarily imagines the relationship of thought and society; the relation is the point upon which his free and totalitarian societies turn. It becomes the axis for two kinds of intellectual freedom, a distorted and a truer one, considered in Chapter 3.

¹⁷ See.ALLEN, R. T. 1998. *Beyond Liberalism: The Political Thought of F. A. Hayek and Michael Polanyi,* New Brunswick and London, Transaction Books. Allen dialogues Polanyi with traditional liberal political theorists the Austrian school figures Von Mises, Hayek, and Popper, as well as Berlin, all working in the context of totalitarianism ; MITCHELL, M. T. 2006b. *Michael Polanyi: The Art of Knowing,* Wilmington, Intercollegiate Studies Institute.Relates him to Eric Voegelin (144-154) and Michael Oakeeshott (137-144). HAGNER, M. 2012. Perception, knowledge and freedom in the age of extremes: on the historical epistemology of Ludwik Fleck and Michael Polanyi. *Studies in East European Thought,* 64, 107-120. dialogs Polanyi with Ludwik Fleck (who played a key role in Thomas Kuhn development) and their experience with totalitarianism;

Totalitarianism makes thought the product of society or social process (Polanyi, 1940a:10, 1962:213). It denies the independent status of the life of thought from society's life (1962:213). Fundamentally totalitarianism denies the creative power of thought (Polanyi, 1964b) and thereby denies the intuitive powers (1962:131), the intuitive anticipation, content and approval in thought (1962:188) Totalitarianism finds political justification when there is no higher value than social stability (1997b:91). It finds those grounds in the utilitarian principle of the greatest happiness of the greatest number (1997b:113). The absolute power of the sovereign over society can thereby establish what is in the best interest of social welfare (1997b:204).

Totalitarianism is posited upon a mechanistic notion of man and society (1962:10, 214). First, it presupposes a LaPlacean Universal Mind (1951:10) capable of rationally directing and controlling every aspect of thought and society Therefore, there not only is no independent status of thought but, by necessity, there can be no independent power of thought. All thought is therefore subordinated to the State which centrally plans all activities of society. Totalitarianism denies "all independent standing to religious faith, to justice, science, rights of property, etc. [hence must] redirect the activities of churches, law courts, universities, etc. [thus assimilating] all branches of mental activity" (1940b:11, cf:, 1962:214).

Therefore, unlike the free society with its many relatively autonomous "established spheres" arising from "established principles", the totalitarian society is a monolith in which the State assumes complete responsibility for the thought and welfare of its citizens (1997b:122). The totalitarian society's order is based upon the authority of a "corporate order" (1940a:27-40, 1951:139,140) which aspires to and must control all details of a widely expanded public life. Indeed a totalitarian regime takes in "the whole

life of the people, who live by it and live for it entirely" (1997b:122). Therefore, the totalitarian society opposes all dynamic systems (established spheres) and attacks their independent standards and ideals (1941:442).

Progress, in these conditions, can only be conceived of in materialistic terms and ordered by mechanistic, rationalistic principles. Progress is then thought of only in terms of social improvement, and achieved by the deliberate contriving of unlimited social improvement (1997b:79). Finally, since moral thought has been subsumed, then politics leading to social progress can only be shaped by force and motivated by greed and fear (1962:62). Here are the rational grounds for Gulags and gas chambers.

This, of course, affects society-to-thought relation for, given the foregoing, truth is subservient to public authority, or truth is Party truth. Because totalitarianism finds its grounds in an impersonal knowledge, then it must deny individual capacity for thought (Polanyi, 1962)and the creative power of thought (Polanyi, 1964a: 17). Indeed, on the grounds of this impersonal knowledge and its repudiation of metaphysics, it denies the invisible things which guide men's creative impulses and consciences and the spiritual foundations of all freely dedicated human activities) (Polanyi, 1951:57); it rejects all metaphysical grounds for tacitly held beliefs (Polanyi and Prosch, 1977: 188). Hence intellectual freedom is eliminated.

Therefore, if a society abandons its pursuit of truth, it cuts off the source of independent thought which leads to the destruction of social freedom (1962:214). Society can then only exist "by submission to a single centre of unlimited secular power" (1964b:79). Moreover, its citizens – facing the absence of belief in spiritual realities – lose grounds by means of which conscience can summon them to take a stand — to raise objections to or comprise authority against to state control (1964b:79). (Polanyi, 1940a:10).

Lacking those grounds, the citizens' love of truth and justice is converted into a love of state power (1964b:79).

This is the problem of moral inversion I examine in Chapter 3. On the other hand, if some members of a totalitarian society recover the belief in truth and independent power of thought, they can begin to recover the free society by their practice, the hopeful theme of Chapter 5. For now, I must consider how Polanyi's recourse to the practice of science opens vistas on the relationship of truth, social freedom and by my inference, intellectual freedom.

2.2.6 Polanyi's Social Theory of Science

Polanyi's social theory of science marks his shift from social to epistemic concerns and covers roughly the 1940's decade. They should be set in the context of Polanyi's fight for the freedom of science against the central planning of science movement which made urgent the epistemic character of the social crisis. Polanyi's position within science positioned him uniquely to speak to the crisis of truth behind the crisis of social freedom.

Helmut Kuhn claims Polanyi's comprehensive vision of reality starts from scientific practice and reflection on the premises of these practices (1968:111); I agree. From scientific practice comes his social freedom and society. As said, this social vision has its roots in his concern to protect the independence of science from central planning of the state. This raises the questions associated with science as an independent social reality and the grounds for that independence.

We tacitly live in and by social institutions and practices – science is no exception. For that reason, most of us do not consider science to be "an invented cultural institution, an

institution not present in all societies and not one that may be counted upon to arise from human instinct" (Pearcey and Thaxton, 1994:17). It is a practice which entails its own community, authority and traditions. It requires a certain cultural soil to strike roots and thrive.

The original soil of science was the early modern Western world (Jaki, 1980:Chap 1, 2, Pearcey and Thaxton, 1994:Chap 1), where Judeo-Christian belief coexisted with Greek thought; such a relation did not exist at another time elsewhere. Polanyi, by my reading, stresses Greek thought at this juncture. Further, as he states: "The appreciation of science is of recent origin and its tradition is rooted in a limited area" (1962:181).

Science touches upon a most fundamental aspect of life – our tacit beliefs concerning the structures of reality and how we attain knowledge of reality. The liberal order is founded on the premises of and shaped by science. Further, it was essential for the rise of a liberal order and, in sum, it embodies the latter's epistemic authority. Hence, much hangs upon rightly understanding science and its task; a wrong understanding of the nature of its knowledge and how science functions is consequential to society. I will now extract his understanding of scientific practice, scientific freedom and truth from his early texts as the dialog between social reality and scientific thought.

'The Rights and Duties of Science' is Polanyi's initial response to the planning of science movement which proposed to harness science to social aim at the cost of scientific freedom (1940a:Ch. 1.) Polanyi is more concerned here with the preservation of a domain, the spontaneous order of science, rather than the individual scientist's freedom. The essay maintains that the distinction between pure and applied science divides scientific freedom from its central planning (1940a:2-10). Centrally planned science follows Marx's principle of economic determinism (1940a:10). Truth, in this

outlook, is determined by the mode of production (Polanyi, 1940a:10). Since pure science postures truth's pursuit, pure science can only be a pretence to power (1940a:3). A true science, by a Marxist purview, can only be one harnessed towards the material or social ends of humankind.

Pure science, in Polanyi's liberal view (1940a:16), is a search for truth for its own sake; the search and the nature of its object justifies pure science (1940a:2, 20) and are the grounds of its freedom. Liberal science is "a body of valid ideas" (1940a:4) which grows by addition to this body (1940a:4); a valid addition enlarges this organism of ideas (1940a) and should "confirm, revise or strengthen its guiding principle" (Polanyi, 1940a). Its guiding principles ever more approximate truth (1940a:5); truth unfolds.

Truth then is "an ordered framework of ideas in which each single part is borne out by the cohesion of the whole [and] has a supreme attraction for the mind" (1940a:5). Science finds its place both socially and epistemically in the search for truth thus becoming an embodiment of "a love of knowledge... a joy of discovery... a delight in extending the realm of law and order towards an unattainable goal... an ethical spirit and body of ideas" (quote Thomas Huxley 1940a:12, 13).

Finally, the pursuit of truth touches on the freedom of science. Scientific discovery at the heart of this process cannot be planned; rather, it is spontaneous and notoriously unpredictable (1940a:18, 19). Thus science must be so socially constituted within itself and with society to enable it to achieve these ends, hence the freedom of science. So far, however, Polanyi has defended primarily the role of science as an established sphere but not given a full account of the scientist's individual freedom. He does so in GT.

'The Growth of Thought in Society' (GT) "analyses the part played in society by the ideals] of truth" (1941:429). It is Polanyi's initial use of the practice of science as a source for society's freedom and governance. Yet the question of the nature and origins of a beneficent social freedom frames his inquiry.

GT assumes that thought aims at truth and that it grows in society. The growth of thought leads to society's progress (1941:448). It rests on society's belief in and respect of truth (1941:454) and on the role of freedom in disclosing truth (1941:448). What is more, the growth of thought requires a social organization "appropriate for the service of these ideals and through [which] the intellectual and moral order of society is established and developed further" (1941:429). Hence, society and social freedom have an epistemic function.

What then is the nature of a beneficent social freedom? Classical Liberalism, for one, sets forth a negative, private, social freedom without regard to moral progress and society, while socialism sets forth a positive, public social freedom dominated by society and progress. As classical liberalism leads to nihilism, socialism triumphs morally. Yet socialism leads to totalitarianism, the destruction of freedom. Both types of social freedom are deficient.

Drawing from scientific practice, GT proposes to reform social freedom and society, transposing a negative, private liberal freedom into a positive, public, social freedom and liberal society into a network of independent, mutually-adjusting, dynamic orders. Both transpositions are in the service of transcendent ideals (1941:441). Positive public freedom and a spontaneous-order - enmeshed in a broader free society interact in the service of truth - constitutes Polanyi's reform of social freedom.

The problem of social freedom consists in the interaction of or dynamic tension between two aspects: on the one hand, it involves order (or authority) and on the other freedom. As to the order, two mutually excluding possibilities exist: a corporate type or a spontaneous one (1941:439). A corporate order resolves itself in a total control by the central planning; its authority is totalitarian. It opposes all dynamic systems (1941:442) their standards and ideals (1941:442) and a cultural life and production system based on individual initiatives (1941:443).

A spontaneous or dynamic order, on the other hand, takes into account risk-laden results of human performance. It functions by permitting a mutual adjustment of every member to the actions of others (1941:439) which nonetheless gives order in that individual actions are guided by shared standards and ideals/goals. With interaction comes latitude, a space for the exercise of initiative and responsibility – this is social freedom. The order's dynamism (freedom) is limited only by the social interaction of its members.

Social freedom is divided into private and public forms (in contrast to negativepositive.) Public freedom is exercised by individuals but "benefits the community" (1941:438), or "performs a social function" (1951:194) and combines privilege and duty (1941:238). Private freedom, on the other hand, is solely individual (1951:xviii, 194), it is negative, even nihilistic (1951:194) and sets the stage for totalitarianism (1951:194). Public freedom recognizes private freedom as a condition of originality but "responsible public freedom sets a limit upon irresponsible private freedom" (1941:440); the weight of value falls on the side of public freedom.

"Science, Faith and Society" (1964b) (SFS) is an account of "the nature and justification of science [which] includes the whole life of thought in society" (1964b:9) and Polanyi's turn to epistemology. Scientific practice is his source for scientific

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freedom and analogy to social freedom as well as his way to understand scientific knowledge as a paradigm of all knowledge. Scientific practice connects freedom and truth. Scientific practice exists for discovery, the search for truth for its own sake; this is the heart of science.

According to Polanyi, discovery involves the interaction of our general view of things (basic beliefs) (1964b:9) with intuition (1964b:10). Discovery proceeds (a) from general view of things (1964b:10)); (b) by knower's intuition (1964b:10); (c) to truth as contact with reality (1964b:10). The three, (a), (b) and (c), are the "tacit process" (1964b:13) (and prefigure the triad of tacit knowing discussed in chapter 4).

Accordingly, Polanyi seeks an account for intuition, the act of perception (1964b:10), the discernment of hidden patterns of realty and the intuitive powers at work in thought (1964b:14). His concerns are "the role of decision and personal judgment" and how we can acknowledge "their comprehensive powers" (1964b:13).

Polanyi has now moved into the tacit knowledge project. Within it, another more fundamental issue comes into view. Its lines are made clearer in the first six essays under Part I of *The Logic of Liberty* (Polanyi, 1951) and includes the "Foundations of Academic Freedom." Polanyi's concern is now:

[T]he fiduciary presuppositions of science [by which] "freedom in science appears as the Natural Law of a community committed to certain beliefs....[F]reedom of thought is justified in general to the extent to which we believe in the power of thought and recognize our obligation to cultivate the things of the mind. (1951:xviii)

As social freedom and order find their mutual relation in the pursuit of truth, I now imagine a parallel structure bringing together intellectual freedom and order.

2.2.7 Four Signposts toward Intellectual Freedom

First, the tacit coefficient - interaction between a general view of things and intuition is fiduciary (involves commitment and belief.) Second, any reference to the exercise of the power of thought, to the workings of intuition or the tacit coefficient, points to what I contend is intellectual freedom, that is, a responsible and risk-laden movement to truth. Third, while Polanyi speaks from within a context of scientific practice and genius (exceptional powers of intuition or creativity), all knowing has the same structure as ascribed to scientific discovery.

Finally, all knowing is social because intuition draws from social roots. Knowing is an art; to learn an art is to enter its practice and accept its traditions (1964b:15). Any art is acquired by submission to authority (1964b:15) and can only be perpetuated in the life of a community (1964b:16, 17). Extending Polanyi, I summarize the social conditions of knowing and thus intellectual freedom in Community, Authority and Tradition (CAT) which are social, tacit, epistemic and fiduciary. CAT is the context from which intuition, what I infer to be intellectual freedom, is called forth. Therefore, tacit knowing (or intuition) and CAT interact and both are epistemic and social.

I now go back to the question with which I started: How can social order and freedom mutually interrelate in society? Going to Polanyi's analogy of science, it is in scientific judgment (1964b:39-41), "a matter of conscience" (1964b:39). Conscience, rooted in common beliefs, governs science on the level of individual (1964b:41) and community (1964b:56), giving both cohesion and independence. But conscience is exercised not so much in the space of the society-individual bond but in the space of the spontaneous order-public freedom bond. Extended to society, conscience, which draws reference from things that "bear on eternity" (1977:216), is then for Polanyi the source of

freedom. Freedom derives from the demand of service to a higher master, to truth or things of intrinsic excellence (1951:57), which is to say transcendent ideals are a source of a higher order and the source of freedom. From the foregoing, then, individual conscience dedicated to truth gives freedom.

Conscience, I claim, is the source of Polanyi's intellectual freedom and authority. If Polanyi's "free society" has a distinctly conservative hue, which he himself admits, it lies in its uniting authority and freedom (Brownhill,1977,2005) by service to transcendent ideals. Therefore, "a general respect for truth is all that is needed for society to be free" (1964b:19). Having put conscience front and centre in science, it appears to me he brings forward his agenda as set out in SMS "to redeem the conscience of humanity" (Polanyi, 1940b:13).

The solution to Polanyi's original problem, totalitarianism, lies not in the conflict between an individual and the State but rather:

[S]ocial freedom is demanded by the individual on the grounds to which he is dedicated...the true antithesis is between the State and the invisible things which guide men's creative impulses and in which men's consciences are naturally rooted. (1951:57)

Here I extend from Polanyi to say social freedom gives way to intellectual freedom for the introduction of truth into freedom alters it. Moreover, truth makes society also an epistemic category through Community, Authority and Tradition (CAT). The two new categories, intellectual freedom and CAT, might indicate that the problem of social freedom actually lies in intellectual freedom and its relation to the epistemic aspect of society. But for now, I must consider how Polanyi scholars treat his relationship of society and social freedom and if amongst them, the question of intellectual freedom has arisen.

2.2.8 Contemporary Polanyian Social-Political Discourse

The late 20th century saw major shifts in both philosophical and socio-political discourse, going from modernism to post-modernism (world view), from modernity to post-modernity (society), from totalitarian to post-totalitarian even post-liberal society. This new context is one to which the followers of Polanyi relate his project(s). I am here concerned if and how Polanyians treat, if at all, the interface between social and intellectual freedom in the new context.

I chart the discourse of those relating Polanyi to social political thought into five categories: communitarian; conservative; traditional liberal; strong social construction post-modern; and "early" Polanyi theorists. Because the first four treat Polanyi as a unity (no early-late distinction), they are a section. But because my concern here is the "early" Polanyi, I especially focus on three scholars (Mullin, Jacob and Nagy) who treat his early thought as such in a subsequent section.

2.2.8.1 Communitarians, Conservatives, Traditional Liberals and Post-moderns

Communitarianism is one response to liberalism's failure to order its theoretical home. Broadly speaking, communitarianism involves "methodological claims about the importance of tradition and social context for moral and political reasoning, ontological or metaphysical claims about the social nature of the self, and normative claims about the value of community"(Bell, 2016). Naturally, the problem of social freedom finds a central place in communitarianism's critique of contemporary liberalism¹⁸ (Mulhall and Swift, 1997:vii).

¹⁸ MULHALL, S. & SWIFT, A. 1997. Liberals and Communitarians, Oxford, Blackwell Publishing. Engages A. MacIntyre, M. Walzer, C. Taylor and M. Sandel critique of J. Rawls, R. Rorty and J. Raz.

This has not gone unnoticed by the followers of Polanyi. Mark Mitchell (2006a), John Flett (1999-2000) and Murray Jardine (1998:Ch. 5) relate Alastair MacIntryre's tradition- or narrative-based approach to moral inquiry with Polanyi's epistemology to show the latter's continued relevance. Jardine especially paints the landscape of contemporary postmodern political thought and the risks of nihilism. Polanyi's philosophy, all argue, is more consistent than MacIntyre's. John Apczynski (2014-2015) and Terrence Kennedy (2008) explore the projects of Charles Taylor and Polanyi in what promises to be a fruitful discussion.

On the other hand, Daniel Mahoney (2010:23, 24), Paul Mitchell (2006b), Druscilla Scott (1996), Richard T. Allen (1998) and R. J. Brownhill (1977, 2005) contend for a conservative political vision, and its retention of Christian belief. Naturally, they use Polanyi to advance their argument. Especially Allen's consideration of traditional liberalism and its shortcomings, and with a view to Polanyi's reform of liberalism, helps to place him vis-a-vis traditional liberalism.

Both communitarians and conservatives maintain that the modernist and postmodernist divorcing of social freedom from truth and a moral content gives nihilism. For neither is going back to a pre-scientific stage an option; instead, they call for a respect of our traditional roots to recover social freedom. Both agree with Polanyi's vision of liberal society having traditional roots – humans "need a purpose that bears upon eternity" (Polanyi and Prosch, 1977:214). However, while upholding tradition, no-one from either position extracts intellectual freedom in the configuration to tradition and society.

The critique centres on (1) the rationalist concept of person detached from historical and social context (pp. 10-13); (2) asocial individual (pp. 13-19); (3) (moral) universalism (pp. 19-21); (4) objectivist epistemology which renders values subjective (pp. 21-24); (5) anti-perfectionist moral stance (p. 32).

(It is outside the scope of my research to delve into the issues which divide them.) None of the above scholars specifically addresses intellectual freedom.

Stefanie Jha, a traditional liberal, places Polanyi in an ongoing Enlightenment reform project (2002: 3); I agree. However, I hold Jha reads Polanyi in a secular, even antireligious light, which, I maintain, goes against Polanyi's object to recover space for religion (1964b:84, 1962:405, 1977:215). Jha's comparison of John Dewey, in the socialist tradition of liberalism, and Polanyi, in the laissez-faire classical liberal tradition marks out their social and philosophical differences (2002:Ch. 6) and is of relevance today. Jha approaches my position on intellectual freedom by stressing the relations of authority and tradition to the creative freedom of tacit knowing (2002:162).

Frank Fisher and Alan Mandell detract from Polanyi by pointing to what they suppose is a dichotomy in what they assume is his social conservatism and postmodern epistemology (Fisher and Mandell, 2009b). Their own strict social construction of thought on Polanyi comes back on them and makes intellectual freedom redundant. Charles Thorpe sees an irresolvable tension in Polanyi's advocacy of a free market of ideas and his adherence to a feudal guild structure, social cooperation and competition (2001:59) or by inference, social freedom and society. I maintain Thorpe fails to see that in Polanyi's scheme, these are not at odds but complimentary because his view of freedom is primarily positive. He questions if Polanyi has relevance today. I hold Thorpe has a strong social construction of knowledge position and disagree on all points. I claim Polanyi and these detractors part ways on the epistemic issue. Polanyi's position on this is clear in a 1944 letter to Karl Mannheim:

I reject all social analysis of history which makes social conditions anything more than *opportunities* for development of thought. You believ[e] that thought is not merely conditioned but determined by social or technical situations. I cannot tell you how strongly I reject such a view (cited by Jha, 2002:5).

In other words, thought cannot be simultaneously free and absolutely determined.

The foregoing Polanyi scholars treat him as single body of thought rather than as two distinct phases: "early" and "late". Correspondingly, they do not establish the mutual relation between social and intellectual freedom which I seek. There are, however, three essays which focus on an early Polanyi and the concern with social freedom's relation to society. It is to those that I now turn my attention.

2.2.8.2 Early Polanyi theorists: Mullins, Jacobs and Nagy

I early on proposed Polanyi's work can be divided into two periods which correspond with his social and epistemic concerns. I will now show that an early period has been identified by other Polanyi scholars and consider them briefly. I thereby demonstrate that these scholars fail to follow up the implications of intellectual freedom in Polanyi.

Phil Mullins' essay, "Michael Polanyi's Early Liberal Vision: Society as a Network of Dynamic Orders Reliant on Public Liberty" (2013) sees such an early period in Polanyi. Mullins follows Polanyi's concern with totalitarianism but does not connect social freedom to intellectual freedom when Polanyi introduces truth to their relations.

For Mullins, Polanyi's social theory derives from a "belief that society must be properly organized and governed if thought is to be nurtured" (2013:162). Since thought has a life of its own, it requires freedom (2013:165). Mullins restates the early Polanyi to show how the social order is brought into relation with social freedom by the pursuit of truth. He does not follow up how this pursuit brings in a specifically epistemic aspect to social freedom and social order as concerns my query.

What is critical to Polanyi, in Mullins' view, is that neither private liberal social freedom nor a collectivist social order provides the conditions for the growth of thought. The growth of thought would involve the intellectual freedom (in the sense I suggested) yet Mullins focuses only upon how Polanyi reforms social freedom and society by transforming social freedom into public freedom and liberal society into a network of spontaneous orders dedicated to the service of truth. The solution to totalitarianism, public freedom and spontaneous order, remain in Mullins largely on the social plane or in relation to the growth of thought but not intellectual freedom. Further, by not taking note of intellectual freedom's role in the growth of thought and society's progress, he fails to link totalitarianism to moral inversion, a distorted intellectual freedom, as I stress.

For his part, Struan Jacobs analyses Polanyi's core concepts of "spontaneous order" and public freedom in the period termed as "early Polanyi" (1997-98, 1999). His "Michael Polanyi and Spontaneous Order, 1941-1951" (1997-98) is intellectual history while "Michael Polanyi's Theory of Spontaneous Order" (1999) is a social history and analysis. Substantively, Jacobs traces the spontaneous order back to the medieval social order with its self-governing bodies (Jacobs, 1999). By inference, the spontaneous social order has been around for a long time and predates the liberal era and its sceptical doubt by several centuries. Within it, there was the expression of social freedom within the activity of a social body.

"Public freedom" is granted on grounds of a "belief in the validity and power of the things of the mind" (1999:121) (truth, justice and other ideals). Public freedom is fiduciary by nature (1999:121) and it is transmitted in tradition (1999:122), a hint to my

theme of the interrelation of intellectual freedom to tradition. Public freedom is a precondition of a spontaneous order and vice versa, so he agrees with Mullins.

Jacobs raises a critical question related to public freedom: Does it operate only in a spontaneous order or in a whole society? The answer one gives points to where one sees the source of freedom to be. From Polanyi's texts, Jacobs leans to the former (1999:122); Mullins has taken it to apply to the whole society. Jacobs and Mullins (as well as Polanyi) portray spontaneous orders as organic communities mediating between the individual and wider society. I would offer from "Conviviality" (1962:Ch. 7) that a plethora of spontaneous orders creates the free society, the former organic, the latter mechanical by necessity of a civil government with coercive power.

For Jacobs, the theory of a spontaneous order appears to be a modified theory of civil society; by my reading it is a federal order. Jacobs suggests its sources might be in the thought of Lord Acton or Gilbert K. Chesterton (1999:121) Mullins's inspiration for his idea of a network of spontaneous orders may have been theologian Charles McCoy, a federal theology scholar acquainted with the federalism of Johannes Althusius. In any case, the spontaneous order and public freedom are symbiotic. Jacobs, like Mullins, remains primarily on the social plane and links the elimination of social freedom to totalitarianism rather than the elimination of intellectual freedom by moral inversion.

Endre Nagy uses Polanyi's concept of a "free society" to interpret the political concept of "civil society" as it emerged in late 20th century dissident thought in Eastern Europe. He claims that the dissidents' concept of civil society parallels Polanyi's concept of a free society and its relation to truth (Nagy, 1992), as they both have a moral content (1992:8). Nagy maintains that anti-totalitarianism is the fulcrum of Polanyi's thought

(1992:149) and thus can be used to analyse the dissident's discussion of civil society. I hold he misses Polanyi's connection of totalitarianism to moral inversion.

Nagy examines Polanyi's early social thought and argues much is carried over into Polanyi's epistemological project especially into the concept of conviviality. Nagy's examination of SMS contributes a new insight into the origins, evolution and fundamental unity of Polanyi's social and epistemic thought. Key social notions like spontaneous order and public freedom appear in a nascent form but go on to take a mature form in "Conviviality" (1962:Ch. 7).

While Mullins places Polanyi's social and epistemic projects in their embryonic form in GT, Nagy sees SMS as their actual starting point. Since SMS was envisioned as a book, I take Polanyi used some of its material for GT as they are written in the same time period. Although Nagy notes moral inversion, the weight of his argument rests on totalitarianism, so he fails to link moral inversion and intellectual freedom.

2.3 Conclusion

As we saw, Polanyi was confronted by the elimination of social freedom in post-WWI totalitarianism. In considering totalitarianism, the early Polanyi's social theory detected an underlying tension between social freedom and society (social order). He argued their mutual relation could be re-established by recovering the lost category of transcendent truth.

According to Polanyi, the relations of social freedom to society are re-established by (1) re-forging each so as to create public freedom and spontaneous order correlation; and (2) the introduction of truth. I extend Polanyi, in his introduction of truth, to transpose social freedom into intellectual freedom. This begins to set up the intellectual freedom –

CAT correlation in the relation of social freedom and society. Hence, I propose to use Polanyi's thought to give an account of intellectual freedom.

I here first set out to locate Polanyi's place in the broader discussion of social freedom by reference to Berlin's notion of two concepts of freedom. I ascertained Berlin's negative freedom, grounded in empiricism, fails to anticipate its inherent nihilism and even Hayek's and Arendt's modification of social freedom fails to address the concern. On the other hand, Marx's notion of positive social freedom, grounded in rationalism, leads to totalitarianism. Neither positive nor negative freedom leads to social freedom.

Polanyi, too, found both negative and positive freedom problematic, for the same reasons as I just gave. To overcome the dilemma, he goes to the practice of science to restructure the relations of social freedom and social order. He finds here a means to unite the two notions of freedom. The freedom of science comes into being as a unique epistemic blending of originality and rigour which finds social expression in the mutual adjustment of individuals to the actions of others in the joint quest for truth.

The justification of science and its freedom lies in our belief that it represents a consistent expansion of truth and its expanding coherence confirms the achievement of its appointed task, the pursuit of truth. The pursuit of transcendent truth as mediated by the traditions of science gives both the spontaneity which impels and the constraint which guides the social process of the discovery of scientific truth. The practice of science is Polanyi's analogy of a free society: the common service to truth and other ideals constitutes the order and freedom of society

In reading Polanyi, I came to see that the introduction of truth changes the nature of social freedom, society and their relation. I put forward social freedom now is public

and primarily intellectual, that is, it serves an epistemic function in the pursuit of truth; society is now mediated by spontaneous orders, an anticipation of CAT and its epistemic service of truth. I see the possibility in Polanyi's scientific judgment, conscience and intuition an intellectual freedom which arises only in a social context in which tradition, authority and community implicitly function. What implications this has, we shall see.

In light of this transposition, I inquired if anyone had extracted intellectual freedom from Polanyi's early social thought. However, I found no evidence of scholarship that explicitly focused on the role of intellectual freedom in Polanyi's social thought. I especially sought out if those who had treated the early Polanyi raised the possibility of dividing his freedom into intellectual and social freedoms. The scholars who saw an early period remained fixed on social freedom as public freedom in spontaneous orders while those who do not differentiate an early-late Polanyi also did not identify an intellectual freedom but rather focused on his theory of tacit knowing as epistemology or used this theory to justify social freedom.

This leads me to believe that the problematic social order - to - freedom relation of liberal society may point to a more fundamental question of the relation between intellectual order and intellectual freedom. However this presupposes the mutual relations between the life of thought and life of society as was established here. I will now establish the interrelation of social freedom and intellectual freedom and, to that end, I propose Polanyi's theory of moral inversion is a way to conceptualize the relation.

3 On the Intellectual Grounds for Social Freedom

3.1 Introduction

Polanyi recognized that by far the greatest number of traitorous intellectuals have abandoned the independent search for truth in order to further the revolutionary goals of Marxism. They offered not only their intellectual freedom but also their moral principles as a ransom for a world made perfect; they sacrificed morality for moral reasons. (Congdon, 1987:369)

Intellectual freedom justifies social freedom and finds its grounds in the pursuit of truth. Intellectual freedom is the creative exercise of Polanyian tacit knowing. Tacit knowledge leads to truth; it presupposes CAT on the <u>from</u> side of its <u>to - from</u> notation *and* tacit knowing overcomes CAT in going <u>to</u> truth. Finally, truth is understood in terms of contact with indeterminate manifestations of reality.

In Chapter 2, I followed the early Polanyi to show a dichotomous liberal social freedom. I noted that its negative, private, individualistic variant self-destructs into nihilism while its positive, public, collective variant destructs into totalitarianism. Polanyi overcomes the discrepancy by putting forward the free society, that is, the interrelation of a public freedom contributing to society and a spontaneous social order, both arising out of a common pursuit of truth.

Following and extending Polanyi, I argue here that injecting the pursuit of truth into the dynamics of social freedom and society transforms social freedom into a more fundamental intellectual freedom. Intellectual freedom belongs to the life of thought, to fundamental beliefs, about which the life of society coheres. Thus the elimination of social freedom points to an elimination of the more fundamental intellectual freedom.

Critically, I reconsider Polanyi's theory of moral inversion to show a dichotomous intellectual freedom paralleling social freedom's dichotomy. A private, negative,

individualistic intellectual freedom gives nihilism -- the elimination of intellectual freedom. On the other hand, a positive, public, collective intellectual freedom gives total revolution (totalitarianism) -- the elimination of intellectual freedom. Putting the two freedoms' negation side-by-side, I establish the relation and order between social and intellectual freedom.

According to Polanyi, the elimination of social freedom by either social nihilism or totalitarianism actually points something deeper -- modern nihilism. By his account, moreover, modern nihilism is something more than moral scepticism: It is in fact moral inversion, the improbable mix of moral scepticism and moral passions. Moreover, Polanyi shows that both modern moral scepticism and moral passions share roots in critical doubt; critical doubt eliminates belief in transcendent realities and the social-epistemic preconditions out of which moral order springs. Thus critical doubt as liberal intellectual freedom eliminates intellectual freedom.

Thus I see that moral inversion, the fusion of moral scepticism and moral passions, stems from the loss of the transcendent sources of order to which intellectual freedom aims. Private moral inversion overemphasizes critical doubt and leads to nihilism; public moral inversion overemphasizes community, authority and tradition (CAT) and leads to totalitarianism. Both express the loss of transcendent sources of order and are expressions of modern nihilism which lead to the elimination of intellectual freedom.

I take Polanyi's theory of moral inversion as a way to imagine the relations between intellectual freedom, social freedom and truth. I extend Polanyi to argue that moral inversion originates in a wrong understanding of intellectual freedom as critical doubt; moral inversion is a wrong understanding of truth or how it is pursued. From Polanyi I take it that if the right understanding of intellectual freedom is established, then social freedom can be re-established; for this, I use his academic freedom.

Constructively, I re-forge Polanyi's academic freedom to argue that a right pursuit of truth proper gives intellectual freedom. A correct academic freedom joins the life of its community to its life of thought - its social coordination to its intellectual coherence – by the pursuit of truth proper. Academic freedom gives both coordination (constraint) and originality (freedom) in the behest of truth. Again, I show the relations between social and intellectual freedom, between society and thought while truth is their ordering principle.

Thought does not rise in a vacuum, hence, it is worthwhile considering the social context in which the theory of moral inversion arose. "Moral inversion", as a critique of modern nihilism, originated out of the broad social and intellectual crises of the post-WWI era that led to totalitarianism but was preceded by a pervasive cultural nihilism. Indeed Polanyi is not alone in seeking to come to intellectual terms with these phenomena.¹

However, it is his unique take on modern nihilism which lends its usefulness for my present purposes to establish the linkage of (1) liberalism's misguided notion intellectual freedom to the loss of social freedom; (2) an improper intellectual freedom, that is, a misunderstanding of truth and how it is pursued, the epistemological question,

¹ See KOLNAI, A. 1938. *The War Against the West*, London: Gollancz, KOLNAI, A. 1995. *The Utopian Mind and other papers*, London, Athlone Press, LIPPMANN 2004. The Good Society. New Brunswick: Transaction Publishers, VOEGELIN, E. 1952. *The New Science of Politics: An Introduction*, Chicago, The University of Chicago Press, VOEGELIN, E. 1948. The Origins of Scientism. *Social Research* [Online], 15.[Accessed 2016-01-08], POPPER, K. 1957. *The Poverty of Historicism*, Boston, The Beacon Press, POPPER, K. 2013. *The Open Society and Its Enemies* Princeton,: Princeton University Press, JONAS, H. 1952. Gnosticism and Modern Nihilism. Social *Research*, 19, 430-452.

to objectivism (to which the theory of tacit knowledge responds in Chapter 4); and finally (3) how moral inversion, once established in a totalitarian society (a false CAT) can be overcome by re-establishing intellectual freedom as the creative exercise of tacit knowing (which my re-forged TTK demonstrates in Chapter 5 by reference to the Hungarian Revolution of 1956.)

Behind the theory of moral inversion stands a puzzling phenomenon, the betrayal of liberal social freedom by those whom one would expect to be it staunchest defenders: liberal intellectuals to whom the opening quote by Congdon speaks. Polanyi's earliest writings, even prior to 1920, reveal his struggles to come to terms with their betrayal (1997b:Ch. 2): "moral inversion" is the outcome of an existential struggle with betrayal. Indeed, I am not alone when I put forward the problem of moral inversion lies behind Polanyi's critique of contemporary epistemology(Mitchell, 2006b:52, Gelwick, 1977:3-14, Gill, 2000:102,103, Prosch, 1972:91).

I shall first denote nihilism then denote and restate Polanyi's "moral inversion" as a way to shed light on the contradictions and dynamics at work in liberal intellectual freedom and show why they led to moral inversion or, as I extend from Polanyi, the elimination of intellectual freedom. Next, I will dialogue with Najder and Yeager, Polanyian scholars who engage the concepts of moral inversion and consider if and how they relate moral inversion to intellectual freedom. I then re-engage moral inversion and academic freedom as a way to reconstruct Polanyi's intellectual freedom. Finally, I will introduce the question if "moral inversion" can be overcome and if yes, upon what conditions.

Being Polanyian in character, my present quest assumes: (1) the indivisibility of the independence of thought from its obligation to pursue truth (transcendent realities); (2)

the symbiotic interrelation of thought and society; (3) tacit knowledge – we know more than we can tell; and (4) their interaction. I now turn to his theory of moral inversion to give an account of the negation of intellectual freedom.

3.2 The Theory of Moral Inversion

The theory of moral inversion is ethics or moral philosophy. It raises questions of convictions and values which impel both intellectual and social action and determine their quality of virtue or vice, of good or evil. It specifically enquires into the nature of modern nihilism and its origins. Yet nihilism, while primarily an ethical concept, has further epistemic and social meanings. I envision "moral inversion" as a way to bridge Polanyi's early social theory, and Polanyi's later epistemology and from this, to set up intellectual freedom.

Nihilism is:

1a: a viewpoint that traditional values and beliefs are unfounded and that existence is senseless and useless; b: a doctrine that denies any objective ground of truth and especially of moral truths; 2a: a doctrine or belief that conditions in the social organization are so bad as to make destruction desirable for its own sake independent of any constructive program or possibility. (Merriam-Webster).

In philosophy, nihilism is "the belief that all values are baseless and that nothing can be known or communicated. It is often associated with extreme pessimism and a radical scepticism that condemns existence" (Pratt). While the idea of nihilism can be traced back to the Greek sceptics (Polanyi, 1965:13) modern nihilism dates back to the early 19th century (Polanyi, 1969:14). For Polanyi, "nihilism" is primarily the denial of values

and beliefs on epistemic grounds (1951:128) and he identifies Marx, Nietzsche and Dostoyevsky as key figures in modern nihilism².

The core of nihilism is a radical moral scepticism. Both Nietzsche and Dostoyevsky agreed that "modern scepticism destroys the grounds of all accepted values and obliges man to assume total self-determination" (Polanyi, 1997b:112). Moral scepticism produces absolute self-determination (1997b:114), or radical contingency, the loss of human finitude and responsibility, which we now identify with the postmodern era (Jardine, 1998:1).

Moral scepticism is present at the birth of modern science (1965:12). But its radically contingent variety follows on the failure of the Enlightenment project to establish grounds for an exact, exhaustively specifiable, impersonal and certain moral knowledge (MacIntyre, 1999). Polanyi sees the widespread outbreak of moral inversion or radical contingency coinciding with WWI (1997b:108). By extension, Polanyi's tacit knowing project should be read as an attempt to deal with nihilism, that is, Enlightenment's inability to (re)establish moral ideals on the grounds of its epistemology (Prosch, 1972:91).

The theory of moral inversion is Polanyi's unique contribution to the discourse of modern nihilism. Most accounts of modern nihilism focus only on moral scepticism; Polanyi did not believe scepticism adequately explained the dynamic, violent nature of modern nihilism. In his eyes, modern nihilism is unique because it fuses moral

² See POLANYI, M. 1951. *The Logic of Liberty*, Indianopolis, Liberty Fund.pp. 120, 128, POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul.pp. 15-18. POLANYI, M. E. B. R. T. A. 1997b. *Society, Economics and Philosophy: Selected Papers* New Brunswick, Transaction Publishers.p. 117.

scepticism and moral passions into a dynamic, potent force bent on the destruction of all existence in the belief that from it perfection would arise (Polanyi, 1997b: 158).

As to moral inversion and its conceptual genesis, Polanyi was aware of the phenomenon years prior to actually denoting it in the 1951 "Perils of Inconsistency" (henceforth PI). As early as 1919, he speaks of "shak[ing] off of the rule of reason [and embellishing] our fellow men with ...illusions (1997b:30). There are hints of it in RDS (1940a:1), GTS (1941:455) and SFS (1964b:77, 78).

The theory of moral inversion is an analytical composite of philosophical, psychological and social notions, a complex theory of a complex phenomenon. Intellectually, as noted, it analyses the unlikely fusion of moral scepticism and moral passions. Socially, "moral inversion" considers tension between individual and society, the old and new society. Psychologically, it renders both a process and a conversion, an event.

Totalitarianism is for Polanyi symptomatic of a deeper moral malaise which follows the assumption that "social reality can be understood without reference to any moral values whatsoever" (Gill, 2000:102). Indeed, "[m]odern totalitarianism is the consummation of the conflict between religion and scepticism" (Polanyi, 1951:135). For my purposes, "moral inversion" is a way to understand why liberal intellectual freedom, established on the epistemic principles of critical doubt and anti-authoritarianism, self-destructed and led to social freedom's destruction. Conversely, it is a way to imagine the proper relations of intellectual freedom, social freedom and truth.

Two final remarks regarding moral inversion before I consider and respond to Najder's and Yeager's treatment of it. First the theory of moral inversion arises out of a deeply personal experience of nihilism's sweeping through Western intellectual circles, especially Polanyi's own social milieu. As noted, Polanyi's earliest writings, even prior to 1920, reveal his struggles to come to terms with their betrayal (1997b:Ch. 2): "moral inversion" is the outcome of an existential struggle with betrayal.

To what extent Polanyi was influenced by nihilism is open to question. Certainly, Dostoyevsky's The Brothers Karamazov profoundly impacted him (Scott, 1996: 128) and his milieu (Gluck, 1985: 92, Loader, 1985: 64). Likewise, the thought of Nietzsche was at work amongst Hungary's intellectuals in his coming of age (Egyed, 1998). But the study of these is outside the scope of my quest.

Secondly, and once again taking the Austrian school as foil, Polanyi shares their aversion to totalitarianism, their linking it to physics as paradigm of scientific knowledge³ and consequential reduction of all truth to the same ontological order⁴. Their social and political thought opposes holism and historicism⁵; their historical indeterminism being linked to their methodological fallibilism.⁶ All ascribe in some form to social individualism⁷ and recognize the limits and fallibility of reason.⁸ All take

⁶ Ibid.

³ See POPPER, K. 1957. *The Poverty of Historicism*, Boston, Beacon Press.; POPPER, K. 2013. *The Open Society and Its Enemies* Princeton, Princeton University Press.; HAYEK, F. A. 1952. *The Counter-revolution of Science: Studies on the Abuse of Reason*, Glencoe, Free Press.

⁴ ERFOURTH, M. C. 2014. The Voegelin Enigma. *The American Interest* [Online], 10. [Accessed 2017/04/16].

⁵ THORNTON, S. 2017. Karl Popper. *In:* SALAT, E. (ed.) *Stanford Encyclopedia of Philosophy.*-holism is the view that social grouping is greater than the sum of its parts and its extension, historicism, sees history developing inexorably and necessarily according to certain principles and towards determinate ends.

⁷ See ibid.,;HAYEK, F. A. 1960. *The Constitution of Liberty*, Chicago, University of Chicago Press.pp. 78-80;POLANYI, M. E. B. R. T. A. 1997b. *Society, Economics and Philosophy: Selected Papers* New Brunswick, Transaction Publishers.p.183.

⁸ VINTI, C. 2005. Polanyi and the "Austrian School.'. *In:* JACOBS, S. & ALLEN, R. T. (eds.) *Emotion, reason and tradition.* Aldershot: Ashgate. p. 138.

it that problem-solving is a definitive human activity from which the social and political organization arises and which requires freedom of thought to go forward⁹

Polanyi, nonetheless, parts from them on methodological individualism¹⁰ (over-reliance on critical doubt) and consequent over-emphasis on rights¹¹ or negative, private social freedom. Polanyi stresses public freedom serves a social function, chiefly, the pursuit of transcendent ideals that constitute the public good. What ultimately befalls the Austrians is that their critical doubt undercuts the transcendent sources of moral order thereby creating the conditions of nihilism from which totalitarianism springs.¹²

Again, the theory of moral inversion goes further than the Austrians in coming to grips with totalitarianism; it addresses the underlying nihilism of the former. Indeed, for my purposes, Polanyi's quest for the roots of nihilism, and finding it in an overemphasis of critical doubt, shows a wrong understanding of intellectual freedom which self-destructs and eliminates social freedom.

⁹ THORNTON, S. 2017. Karl Popper. *In:* SALAT, E. (ed.) *Stanford Encyclopedia of Philosophy.*, HAYEK, F. A. 1960. *The Constitution of Liberty*, Chicago, University of Chicago Press.pp. 22-28, POLANYI, M. 1941. The Growth of thought in Society. *Economica*, 8, 428-456.

¹⁰ VINTI, C. 2005. Polanyi and the "Austrian School.'. *In:* JACOBS, S. & ALLEN, R. T. (eds.) *Emotion, reason and tradition.* Hampshire: Ashgate. 140-Especially von Mises and Popper follow a modern critical tradition which rejects traditional beliefs, their authority and prejudices while accepting the impersonal mechanism of deductive logic, division of psychology and logic as well as a facts and values.

¹¹ Ibid.p. 138.

¹²ALLEN, R. T. 1998. Beyond Liberalism: The Political Thought of F. A. Hayek and Michael Polanyi, New Brunswick and London, Transaction Books. The Austrians set up nihilism's conditions. For example, Ch. 5 von Mises' sceptical utilitarianism, drawn out of a mechanistic cosmology, divides value from fact rendering morality subjective ; Ch. 6 Popper falls into a critical dualist position where good ultimately is what one decides it is and moreover, truth is never attainable leaving nihilism; Ch. 7 Hayek, too, falls into the trap of utilitarianism and moral relativism which lead to nihilism but (Ch. 8) starts to extract himself by making law reliant upon justice (as opposed to positive law), priority to common law and upholds a positive belief in the dignity and duties of the person.

TTK, as a constructive response, aims to re-establish the transcendent sources of moral order toward which Polanyian intellectual freedom strives and by extension, re-establishes their bearing on the social-political arrangement. Moral inversion signifies Polanyi's awareness that Enlightenment, left bereft of transcendent ideals by critical doubt, is unable to find abiding sources of moral order; the consequence escaped the Austrians, leaving them decidedly in modernism's grasp and unable to discern its nihilism.

Moral inversion sets up Polanyi's post-critical against critical philosophy. Indeed, while Polanyi remains committed to Enlightenment's original ideals (Sanders, 1991-1992, Jha, 2002), I suggest his awareness of the consequences of its want of transcendent sources of those ordering ideals positions him for fruitful engagement with post-modern thought. The latter leads some to conclude he is postmodern;¹³ but with Sanders, I hold that Polanyi tacks between modernism and post-modernism (Sanders, 1991-1992).

To recapitulate, I focus on moral inversion's relation to an epistemology rooted in critical doubt as the equivalent or grounds of liberal intellectual freedom, one that eliminates the epistemic functions of belief, and the personal responsibility for holding those beliefs, as well as eliminating community, authority and tradition (CAT), epistemic functions in tacit knowing but ends in the elimination of intellectual freedom. Constructively, I return to FAF as a way to structure a positive Polanyian intellectual freedom. These indicators prepare Chapter 4's review of tacit knowing and the recasting of TTK in terms of CAT's relationship to intellectual freedom.

¹³ GILL, J. 2000. *The tacit mode: Michael Polanyi's post-modern philosophy*, Albany, State University of New York, FISHER, F. & MANDELL, A. 2009a. Die verborgene Politik des impliziten Wissens: Michael Polanyis Republik der Wissenschaft. *Leviathan*, 37, 533-557.

3.2.1 Moral Inversions: Najder vs. Yeager

Nihilism's presence has preoccupied modernism¹⁴ since the late19th century and has brought on the denouement of modernity.¹⁵ For Polanyi, nihilism goes back to the scepticism generated by the scientific revolution (a social-cultural phenomenon) and an intellectual response to it- methodological reliance on critical doubt.¹⁶ I am arguing that nihilism is the reaping from liberalism's wrong notion of intellectual freedom as the over-emphasis of critical doubt, a wrong way to pursue truth.

Most scholars who engage with Polanyi in the political or cultural context of his and our times pick up on moral inversion.¹⁷ D. M. Yeager's extensive work of the theme

¹⁴ See DIGGINS, J. P. 1994. *The Promise of Pragmatism: Modernism and the Crisis of Knowledge and Authority*, Chicago, University of Chicago Press. Interprets pragmatism as a response to modernism, seeking to overcome its nihilism and its historicist-objectivist divide (Ch.1 p. 8). [M] odernism "is a series of felt absences: knowledge without truth, power without authority, society without spirit, self without identity, politics without virtue, existence without purpose, history without meaning." See also BERNSTEIN, R. 1983. *Beyond Objectivism and Relativism: Science, Hermeneutics and Praxis*, Philadelphia, University of Pennsylvania Press.dialogues with T. Kuhn, H.G. Gadamer, J. Habermas, Hannah Arendt and Richard Rorty to overcome the objectivism- relativism division..

¹⁵ WALSH, D. 1990. *After Ideology: Recovering the Spiritual Foundations of Freedom*, San Francisco, Harper and Collins. Ch. 1 Modernity, as cultural norm, appropriates the authority of science, ends with power beyond good and evil, the collapse of moral response and crisis of nihilism.

¹⁶ For similar analysis of modern nihilism and its origins, see TAYLOR, C. 1995. Overcoming Epistemology. Available: www.marxists.org/reference/subject/philosophy/works/us/taylor.htm. which goes back to Descartes and critical doubt; MACINTYRE, A. 1999. *After Virtue:A Study In Moral Theory*, London, Duckworth.which takes nihilism to be the outworking of the Enlightenment's failure to establish the grounds of ethics; JONAS, H. 1952. Gnosticism and Modern Nihilism. *Social Research*, 19, 430-452. which connects modern nihilism , especially the existentialism of Nietzsche, Heidegger and Sartre, to the loss of place that follows the birth of modern science; he finds its counterpart in the Gnosticism of the early Christian era; and VOEGELIN, E. 1948. The Origins of Scientism. Ibid., p. 15. [Accessed 2016-01-08].p. 462 scientism is a dogma assuming: (1) mathematized science of natural phenomena is model for all science; (2) all realms are open to sciences of phenomena; (3) those realms not open to sciences of phenomena are either irrelevant or illusory; thus the denial of transcendent reality. Scientism is "the transfer of pathos of science to the existence of the man engaged in it" (pp. 490-491) creating thereby a cultural outlook with "far-reaching civilizational destruction", a structure echoing Polanyi's doctrines of moral passions and moral inversion.

¹⁷ See GELWICK, R. 1977. *The Way of Discovery: An Introduction to the thought of Michael Polanyi,* New York, Oxford University Press. p 6-15,GILL, J. 2000. *The tacit mode: Michael Polanyi's postmodern philosophy,* Albany, State University of New York. MITCHELL, M. T. 2006b. *Michael Polanyi: The Art of Knowing,* Wilmington, Intercollegiate Studies Institute, NAGY, P. 1996. Philosophy in a Different Voice:Michael Polanyi on Liberty and Liberalism. *Tradition and Discovery,* 22, 7-27. p 52-58, MITCHELL, M. T. 2005. Personal Participation: Michael Polanyi, Eric Voeglin and the Indespensibility

particularly stands out¹⁸ in this regard. (Two Polanyi scholars published on moral inversion¹⁹ after the writing of the dissertation and could not be considered.) Most Polanyians do not relate moral inversion to intellectual freedom. However, Zdzisław Najder's and Dianne Yeager's more thorough treatment of moral inversion does bear on this relationship. I will now consider how each engages moral inversion and extract from them intellectual freedom.

The notion of moral inversion was seriously challenged by Zdzisław Najder in 1968. Given its critical role in both Polanyi's social thought and epistemology, it is surprising it had not been given serious scholarly treatment beforehand. Just as puzzling, Najder received no rebuttal for over three decades until Dianne Yeager's robust defence of "moral inversion." While neither addresses intellectual freedom, their engagement of "moral inversion" gives some light on the crucial role of intellectual freedom in Polanyi's wider thought. Their work helps establish the bridge between his social and intellectual theories.

Najder argues that "moral inversion" is a philosophical concept and a historical-socialpolitical theory (1968:365). It has psychological, sociological, historical and axiological

of Faith. *Journal of Religious Ethics*, 33, 65-89.65-70 SCOTT, D. 1996. *Michael Polanyi*, SPCK., PROSCH, H. 1986. Michael Polanyi: a critical exposition. Albany: State University of New York. Ch. 2, PROSCH, H. 1972. Polanyi's Ethics *Ethics*, 82. KENNEDY, T. C. S. R. 2008. Michael Polanyi and 'Modern Moral Rationalism'. *Polanyiana 2008*, 17, 59-72.

¹⁸ YEAGER, D. M. 2002-2003. Confronting the Minotaur: Moral Inversion and Polanyi's Moral Philosophy. *Tradition and Discovery*, 29, 22-46. YEAGER, D. M. 2014. Polanyi and Taylor: On Moral Sources and Social Systems. Available: https://www.missouriwestern.edu/orgs/polanyi/2014pprs/Yeager-Moral%20Sources_2014Oct22.pdf [Accessed 2017-04-22], YEAGER, D. M. 2013. Exploring the Underground: Silent Assumptions and Social Pathologies. *Tradition and Discovery*, 40, 14-25.

¹⁹ GENG, V. 2016. On Moral Inversion. *In:* ALLEN, E. B. R. (ed.) *Freedom, Authority and Economics: Essays on Michael Polanyi's Politics and Economics* Wilmington: Vernon Press, MARGITAY, T. Ibid.Moral inversion: A social diagnosis.

aspects which Polanyi strives to integrate (1968:367). Given its complexity, Najder concludes it is incoherent.

Najder charges Polanyi with using imprecise, inconsistent or inadequately defined language: moral (1968:369), conscience (1968:369), liberty (freedom) (1968:369). Second, he is inconsistent as far as the social implications of his theory of knowledge are concerned, lapsing back to traditional, individualistic and universalist liberal modes of thought about morals (1968:371). Finally, by not disclosing his ontological assumptions, he produces axiological confusion (Najder, 1968:372). As to Polanyi's imprecise use of language, Najder is right. I dispute the second and third points.

Najder rejects Polanyi's assertion that morality plays a primary role in human affairs (1968:367). He maintains that Polanyi never comes to grips with the problems of "individual consciousness versus social ramifications, thought versus socio-economic conditions, personal versus environmental factors in man's spiritual life" (1968:383), all objections that I hold show traces of Marxist influence. Najder wishes to move beyond Polanyi's "strongly evaluative" (1968:383) connotations of "moral inversion" to a more "descriptive" approach, a "moral re-evaluation" (1968:384), to achieve a "meta-language of moral philosophy" (1968:372).

I contend that behind Najder's sophistry lies objectivism and moral relativism stemming from a strong social construction of knowledge. Central to Polanyi's epistemology is how to escape the dilemma of social determinism and (by implication) moral relativism while paying due to society's epistemic role. An absolute social construction of knowledge, the central issue dividing Polanyi from Najder, would, by extension, eliminate intellectual freedom.

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D. M. Yeager's "Confronting the Minotaur: Moral Inversion and Michael Polanyi's Moral Philosophy" (2002-2003:22-46) offers a vigorous rejoinder to Najder. Like him, she perceives the centrality of "moral inversion" in Polanyi' thought: "[D]iagnosing this pathology, analyzing its causes, and devising a remedy constitute the social objective to which his philosophical work is ordered" (2002-2003:23). Foremost, Yeager constructs her work around Polanyi's basic premise concerning the power of thought (Yeager, 2002-2003:24, 44, 46) and its need for a transcendent order embodied in society to keep its bearing true.

Yeager grapples with the meaning of Polanyi's "moral", the function of passion in his epistemic theory and finally shows how thought and society are not really at conflict but uphold one another. "Moral" covers any realm of human activity expressing intentionality, that is, it aims at or to something (the good) beyond the self (2002-2003:35). "Moral" involves agency (2002-2003:36) and by my extension, encompasses intellectual freedom. Thus, implicitly, all human activity, including thought, is moral. To examine the idea of "passion", Yeager merges Polanyi's notion of moral passions with mental passions in general and then considers the interrelationship between agency, passions and appetites (2002-2003:13-17).

While Yeager brings in moral scepticism's contribution to moral inversion, her emphasis is on the role of passions and this is what makes her work unique. Most surveys of moral inversion focus on the sources and function of moral scepticism and skim over passions. A moral passion is a mental passion and the latter:

[[]B]elongs to the tacit dimension of my being...at its proximate root, it is a communally engendered emotion or motive, that is, a directed longing or desire, a power of acting towards achievement impelling my person towards an anticipated but as yet unreal state of affairs...Moral and intellectual passions alike can be misbegotten or misdirected. (2002-2003:36)

Mental passions are risky because their object is indeterminate; the risk involves the possibility of misdirecting. I understand it means self-deception and its weighty consequences.

Mental passions have to do with and are structured by:

[T]he layer of reality that is essentially a social construction...which comes into being only insofar as our complex symbol systems enable us to enact into being institutions and practices-an entire convivial order, that while being contingent upon materiality cannot be reduced to material conditions. (2002-2003:38)

Mental passions either direct our thought to transcendent matters or make them selfreferential. Kennedy terms the latter "aversion", the turning away from good to self (Kennedy, 2008:68). For Yeager, "[n]ihilism is not the absence of values; it is the reduction or stricture of values to the immediate (usually material) interests of the selfreferencing agent" (2002-2003:41).

Yeager puts forward that if we are to come to terms with the moral passions aspect of moral inversion, we shall have to come to terms with its source in a Christian eschatology, deeply embedded in our intellectual heritage (2002-2003:41). Otherwise, moral inversion will plague liberalism. This would seem to move us closer to theology or Christian revelation. Yeager's exposition of moral passions endorses Polanyi's views, a call for a traditional Anglo-American liberal practice: "Its program was to let everyone state his beliefs and to allow others to listen and form their own opinions; the ideas which would prevail in a free and open battle of wits would be as close an approximation to the truth as can be humanly achieved" (Polanyi and Prosch, 1977: 7).

Yeager's attention to the intrinsic power of thought brings into view my Polanyian intellectual freedom. The power does not exist apart from society or moral structures yet, while never being totally loosed from them, it does have the capacity self-

transcendence. Her location in moral philosophy did not pursue its mutual relation to and implications for social freedom such as I undertake here. However, the process of self-transcendence in the pursuit of truth does have relevance to moral inversion and escaping its grip on the mind

3.2.2 Moral Inversion and the Destruction of Intellectual Freedom: An Exposition

I stated at the onset that intellectual freedom justifies social freedom and is justified in the pursuit of truth. If intellectual freedom is the creative exercise of Polanyian tacit knowing, then Polanyi's moral inversion shows by inverse how a wrong understanding of truth and how it is pursued (a wrong intellectual freedom) leads to the elimination of intellectual freedom and by it, social freedom.

As an ethical critique, "moral inversion" is a way to correlate intellectual to social freedom. To achieve this, I use moral inversion to exposit intellectual freedom in terms of an over-emphasized critical doubt which distorted truth and how it is pursued and thereby led to moral inversion. I consider critical doubt, then moral scepticism, moral passions and their fusion, how moral inversion came to be socially embodied, the relationship of the moral-cultural order to society and thought and finally, how Polanyi came to perceive moral inversion was rooted in a false outlook or world view, objectivism. My extraction of intellectual freedom sets up my consideration of objectivism in Chapter 4.

As noted, the concept of moral inversion is complex as Polanyi approaches it from different perspectives. To show its complexity, let me list and summarize the primary works engaged: 'Perils of Inconsistency ' (1951: Ch. 7) (PI) is an intellectual and social overview which considers how liberal intellectual freedom stressing critical doubt led to

moral scepticism and negated social freedom. 'Beyond Nihilism' (1969: Ch. 1) (BN) is moral philosophy and considers primarily secular moral passions and their contribution to moral inversion. 'Conviviality' (1962: Ch. 7) (C) brings together thought and society as well as their freedom and their moral sources of order. 'History and Hope' (1997b: Chap. 6) reflects upon the moral and political consequences of an unrestrained moral notion of progress. 'Science and the Modern Mind' considers how Galileo's teaching on matter affected Hobbes' political theory and led to the rise of a scientific materialism which still retained the moral impulses of the Christian faith it replaced, thereby ultimately giving rise "to the chisel of nihilism driven by the hammer of social conscience" Finally, 'Science and the Modern Crisis' (Polanyi, 1945), 'On the Modern Mind' (Polanyi, 1965); 'Science and Man' (Polanyi, 1970); and 'Why Did We Destroy Europe?' (1997b: Ch. 8) read "moral inversion" with "worldview" in mind thereby grappling with the fundamental issue behind moral inversion - objectivism. As we shall see in Chapter 4, tacit knowledge is Polanyi's rejoinder to a false world view.

My reading of the foregoing has in view understanding Polanyi's idea of intellectual freedom with reference to its elimination by moral inversion. Critical doubt's leading to moral scepticism and the latter's role in moral inversion comes to fore in 'Perils of Inconsistency' (PI) (1951: Ch. 7); the essay considers the rise and fall of liberalism in Europe which Polanyi takes to originate in a discrepant intellectual freedom (1951:115). Polanyi argues a contradictory intellectual freedom, based on critical doubt and anti-authoritarianism, is at fault in the fall of social freedom. Modern doubt is traced here to Locke's application of Greek doubt to the field of political theory - in matters of religion, no imposition of our views can be imposed upon others - as a way to overcome the religious strife dividing the political realm (1951:117).

However, Polanyi seems elsewhere to indicate another order in the genesis and relation of critical doubt and moral scepticism, this time, the latter preceding the former. Modern scepticism, of the Humean variety, traces back to the ancient Greeks (1965:13) specifically Pyrhonnism (1962:238). 'On the Modern Mind' seems to argue that it was modern science's destruction of the medieval cosmos at the birth of the modern era by the systematic application of scepticism which produced not just modern science but modern scepticism (Polanyi, 1965: 13, Taylor, 1995).

Going back to critical doubt: if consistently applied, it reaches to all realms of belief including ethical principles and traditional ideals (Polanyi, 1951:120, 121). It then becomes moral scepticism and leads to nihilism. Critical doubt applied to ethics eliminates ideals by which to comprise either intellectual or social life. Doubt extended to the realm of traditional ideals then eliminates reason and intellectual freedom (1951:120-121). "[M]an was to be recognized henceforth as the maker and master, and no longer the servant of his ideals... If thought and reason are nothing, it is meaningless to demand thought be set free" (1951:126). Hence we have the destruction of intellectual freedom and advent of modern nihilism.

Critical doubt is critiqued in PK (1962: Ch. 9) which finds universal doubt impossible (1962:294-295); thought can only begin in belief . Descartes' and Kant's contribution are especially singled out in what Polanyi terms the critical period of philosophy (1962:269) which has stripped us of moral capacities. Further, while critical doubt can be traced back to antiquity, and the influence of Socratic thought is evident in the nihilistic Thirty Tyrants (1977:20), yet its nihilism is not the same as modern nihilism for reasons we shall shortly see. Critical doubt is one root of moral scepticism but

should, to my mind, be placed in the context of a broader philosophical scepticism associated with the rise of modern science.

Polanyi traces the another root of moral scepticism back to the advent of modern science and its use of Greek atomism and mechanism which led to materialistic reductionism (1970:369, 1962:8). He never tired of warning of the destructive influence of this branch of moral scepticism as exemplified in the reductive, mechanistic rationalism of Laplace (1962:139-145, 1970:369-370). Through it, "law is no more than what the courts will decide, art but an emollient of nerves, morality but a convention, tradition but an inertia, God but a psychological necessity" (1962:380). These are the broad lines of Polanyi's case against moral scepticism and its contribution to the destruction of intellectual freedom and advent of moral inversion.

Polanyi, as said, does not see moral scepticism as the sole source of the unrivalled violence in modern nihilism. It stems, instead, from the culmination of the tensions between Greek doubt and Christian belief in Western thought (1951:135). In "Beyond Nihilism" (1969:Chap1), he puts forward an unusual argument: modern nihilism is a moral excess rather than deprivation (1969:3), its violent character being the result of the secularization of originally Christian moral passions (1969:6-8). Hence, modern nihilism is moral inversion, the fusion of moral scepticism and moral passions (Polanyi, 1969:10).

Polanyi points to a second master idea present at the birth of the modern era-a new brotherly feeling-alongside moral scepticism. This feeling, while standing opposite scepticism, stems from scepticism's attack on Christian churches that "released the moral ideals of Christianity from a striving for individual salvation and directed our moral conscience instead to the betterment of man and society" (Polanyi, 1965: 13) "Fellow feeling" (1) is progenitor of or equivalent to moral passions; (2) borrows on Christian belief; and (3) makes the individual (or self) axis of modern social and political theory and practice.²⁰ Elsewhere, moral passions originate with awakened moral expectations finding their source in Jewish and Christian millennial hopes (1969:4). With the secularization of Europe, the normal theoretical restraints placed on moral passions by the Christian doctrines of the Fall and the future Kingdom of God are removed but moral passions remain to take on a new secular existence. Polanyi points out:

Christianity is a religion of moral passions...the critical movement destroyed the communion between Christian conscience and the person of Christ and in so doing pent up a vast accumulated moral desire. Barred from their opening to eternity, the hopes and passions of Christianity overflowed into the secular world, transforming themselves into a belief in historical progress and generating unlimited demands for political and social reform. (Polanyi 1943: 43)

Polanyi uses different vocabulary to speak of or relate to moral passions: deliberate contriving for unlimited social improvement (1997b:79), the ideals of human progress (1997b:81), moral perfectionism (1965:18, 19), amongst others.

On a social level, Polanyi identifies Rousseau as the one who saw the moral demand for absolute social freedom could only be fulfilled by the absolute renewal of a degenerate society (1969:5-8). Left to our secular selves, the only way forward is to employ messianic violence (1969:14), or "modern immoralism" (Polanyi, 1969:8), to annihilate the old society and its moral order – this is the modern revolution. The logic of revolution is straightforward and follows the secularization of society:

²⁰ See TAYLOR, C. 1989. *Sources of the Self: The Making of the Modern Identity*, Cambridge, Harvard University Press, SIEDENTOP, L. 2014. *Invention of Individual: The Origins of Western Liberalism*, New York, Basic Books. MACINTYRE, A. 1999. *After Virtue: A Study In Moral Theory*, London, Duckworth.

If society is not a divine institution, it is made by man, and man is free to do with society what he likes. There is then no excuse for having a bad society, and we must make a good one without delay. For this reason you must take power and you can take power over a bad society only by a revolution; so you must go ahead make a revolution. Moreover, to achieve comprehensive improvement of society you need comprehensive powers; so you must regard all resistance to yourself as high treason and must put it down mercilessly. (1969:13)

Polanyi recognizes in this the logic of Dostoyevsky: "If there is no God, then everything is permitted" (1997b:111). One sees in moral inversion a failure to come to terms with the expulsion of God. As long as God was present, we could anchor transcendent ideals. In his absence, transcendent ideals and intellectual freedom are difficult to maintain. Nihilism is self and society without moral resources to constitute order or freedom.

But modern immoralism or nihilism is not yet moral inversion. Moral inversion appears when modern immoralism changes from a means to a better society to an end: destruction (of society) for its own sake (1969:14). Speaking of Lenin and the Russian revolutionaries, he says, "They detested everything in existence and were convinced therefore that the total destruction of existing society and the establishment of their own absolute power on its ruins would bring total happiness to humanity" (1997b:158).

We now need to show how Polanyi brings together what seem two opposites, scepticism and passions. First of all, he gives an intellectual mechanism to explain the fusion—the dynamo-objective coupling. It would seem that it is precisely their opposite character that gives moral inversion its power. The coupling:

Moral passions in this setting then undergo a change where they no longer are accessible to moral considerations, becoming instead fanatical (1962:231). Marxism is

Enables the modern mind tortured by moral self-doubt, to indulge its moral passions in terms which also satisfy its passion for ruthless objectivity...it conjures away the contradiction between the high moral dynamism of our age and our stern critical passion which demands we see human affairs objectively... the more inordinate our moral aspirations and the more completely amoral our objectivist outlook, the more powerful is a combination in which these contradictory principles reinforce one another. (1962:228)

especially appealing because it most precisely formulates this moral force of immorality (1962:227).

Until now, I have primarily described moral inversion intellectually and how it led to the elimination of transcendent ideals and intellectual freedom but not as a social reality by the practice of nihilism. Polanyi still should show how these notions are socially embodied and lead to social change. Or, as he states, "[i]f ideas cause revolutions, they can only do so because people act upon them" (1951:127).

People act upon nihilism's principles in two ways, by private or public nihilism (1951:129,130, 1969:16,17). The first nihilism involves a self-centred, solitary, romantic, individualism bereft of all beliefs, obligations or restrictions, the bohemian (1951:129). However, private nihilism is unstable and leaves an individual starved of social responsibility and therefore she readily yields to public nihilism (1951:129). The shift to public nihilism involves a radical conversion to violent revolutionary action (1951:129).

The fusion of moral scepticism and passions, as should by now be surmised, eliminates moral thought, renders morality baseless but not moral aspirations. As a consequence, the traditional liberal approach to political practice is overturned and the relationship between power and thought is reversed (1962:376). If consistently applied to human affairs, then, "[reductionism] entails the idea that political action is necessarily shaped by force, motivated by greed and fear, with morality used as a screen to delude its victims" (1962:141). It also leads to the political notion "that material welfare and the establishment of unlimited power for imposing the conditions of material welfare are the supreme good" (1962:142) and hence justifies totalitarian violence.

The mutual relation between thought and society, between morality and power, divides the totalitarian and free societies; a free society grants the life of thought as the quest for truth an independent status within the life of society; the totalitarian State denies both the obligation to truth and the independent, creative power of thought (1962:213, 214, 1964b:17). The status of thought, then, determines what is taken to constitute authority, determining the relations between morality and power in society's constitution. Due to their role in the destruction or construction of intellectual freedom, it is of great importance that moral passions and moral scepticism be brought on leash.

In laying his case for personal knowledge, Polanyi takes what he has garnered from reflections on scientific discovery to formulate personal knowledge and tacit knowing. In PK, he begins at the individual level then extends it to a social and moral-cultural theory which appears in "Conviviality" (1962: Ch. 7). He has already shown the personal and tacit component of thought in the art of knowing (Polanyi, 1962) and lays out his case for the role of intellectual passions in obtaining of new truth (Polanyi, 1962: Ch. 6). He insists that intellectual passions are central to discovery and any innovative intellectual achievement.

As they are, intellectual passions become a way for Polanyi to ameliorate moral scepticism and put a leash on inordinate moral passions. Passions, whether scientific or moral, have a mental existence, reveal a craving and are believed to have an object which will satisfy their desire (1962:172-174). But moral passions are weightier than other mental passions because they affect how others weigh us in a more comprehensive manner than other mental passions (1962:215). Moral passions are rooted in morality (standards and obligations) immune to deliberate change; our

allegiance to such standards tells they are not of our making (Hart cited in Polanyi, :262).

Hence, without going into its argument, I believe that Polanyi holds to moral objectivity. Further, moral knowledge is primarily a lived-in knowledge, knowledge of practice and is therefore transmitted tacitly and socially. It is, therefore, subject to same triadic structure as all knowledge; it goes from skills and beliefs by the creative act of tacit knowing to moral truth.

Conviviality opens with the following passage:

Articulate systems which foster and satisfy intellectual passions can survive only with the support of a society which respects the values affirmed by these passions and a society which has a cultural life only to the extent to which it acknowledges and fulfils the obligation to lend its hand to support the cultivation of these passions. (1962:203)

Hence, thought and society interrelate. Then, apropos the totalitarian and free societies, Polanyi writes, "The recognition of the symbiosis between thought and society brings us closer to the Marxist position and at the same time makes our difference from it clear. Marxism denies intrinsic creative powers of thought" (1964b:17). Polanyi addresses not only conviviality within society but, by extension, conviviality between society and thought.

Polanyi, however, faces an epistemic dilemma which the social, tacit components of speech and intellectual passions present: is not knowledge then socially determined, hence negating intellectual freedom and truth (as in Marxism)? To overcome the difficulty, he must re-establish grounds for holding beliefs in truth, which by extension, are the grounds of intellectual freedom and establish social freedom; re-establishing the grounds for holding beliefs is the object to which he is aiming in the following chapter, (1962:Ch. 8) where critical doubt leading to moral scepticism is taken on.

The dilemma of personal knowledge may be stated as follows: if we hold our convictions with universal intent (1962:203) but at the same time acknowledge they are acquired by our particular upbringing (1962:203) then are not our convictions a result of (a) our participation in the shaping of truth (1962:204) and (b) the shaping of our beliefs by society (1962:204)? If (a) and (b) are true, then our convictions appear to be both arbitrary and the product of society; hence, truth and intellectual freedom fall.

The question, which then confronts not just Polanyi, but a Western civilization suffused in an objectivism which renounces belief, is whether there are grounds for holding our beliefs concerning transcendent realities which are the sources of both intellectual and social order? Or stated otherwise, are the fiduciary foundations of both thought and society, being circular in nature, sufficient to risk the creative exercise of tacit knowing, in quest for greater contact with realty? This question is at the centre of *Personal Knowledge*.

In this context, does not the moral-cultural order of society, in the interest of maintaining itself and society, create conditions which preserve the existing status of the social order? In preserving the existing order, is not society then obligated to exercise arbitrary power with the result of subjecting others and depriving them of freedom? Society, on the strength of its moral order, appears to ask the individual to submit to "authority" only to serve vested interests of a corrupt society. In this light, both society and its moral-cultural order appear to be hypocritical and morally vulnerable to Marxism's charges of perpetrating injustice, cruelty and subjugation.

Let me restate Polanyi on the phenomenon of thought and its relation to society to answer this charge. Tacit knowing, or intellectual freedom, is an activity normatively embedded in practices and is thus socially constituted. Further, tacit knowing aims (or should) at transcendent ideals which themselves are socially and tacitly transmitted; thought is governed by tacit and socially embodied convictions concerning the transcendent ideals towards which it aims

Thought, generated by the activity of tacit knowing, is motile and intentional, and has a life and power of its own constrained by normative standards. It is moved by passions which have a real force (1962:234). Because of their effect on the whole person, moral passions have more force than intellectual passions (1962:215). Extended, moral striving defines a person and society. Finally, thought, while needing passions, needs a certain moral-cultural order if it is to be cultivated (to grow, acquire new knowledge and reproduce itself.)

The cultivation of thought springs from an appreciation of and passion for transcendent ideals (truth, justice, compassion, God, etc.) for their own sake. By their nature, ideals are never fully apprehended but society should foster the pursuit of these ideals. The life of thought requires a society which appreciates the ideals it pursues and which confers a sphere of social sovereignty to pursue individual ideals. Finally, the life of thought depends upon society for the material resources and legal protection necessary to foster and conserve the pursuit of ideals.

Logically, the life of thought cannot exist in an isolated individual mind. It exists by the exercise of an individual capacity for symbol creation within convivial, cultural institutions fostering, mediating and transmitting symbol production. Hence, the life of thought and society exist in symbiosis, in their mutually beneficent relationship in the service of truth.

Society provides the context for conviviality (sharing or communication) of every kind. Polanyi argues knowledge is transmitted in conviviality, the sharing from one person to another which entails authority, trust and a slight modification of knowledge (1962:206); by extension, conviviality is social and epistemic. This one-off event can be exponentially multiplied by the number of everyday interactions between persons which involve, to some degree, trust and authority as each negotiates their way in life (1962:208). Society and thought are constantly interacting.

Conviviality is broad: it can be pure, a sharing for its own sake, a sharing of joint experiences to maintain the continuity of the group or arise out of the joint achieving of a task (1962:209-211). By implication, first, conviviality entails both intellectual and social freedom and order and second, the state of a society is ascertainable by the health of its conviviality. Third, it is society's responsibility to organize itself to maximize the conviviality between its members. Finally, it is in conviviality that the life of thought takes on its own life; likewise, the life of thought gives to society its life; society and thought are symbiotic.

Modern society is dynamic or characterized by a drive for its own renewal (1962:213). A free society accepts the obligation to cultivate thought by its own inherent standards (1962:213) and upholds a belief in the power of free thought (1962:223). Its dynamism is reformist (1962:213) for truth unfolds incrementally. According to Polanyi, the free society's obligation to truth renews its social order simply by the faithful cultivation of moral principles (1962:224)

On the other hand, a totalitarian society is revolutionary (1962:213). It demands a sudden complete renewal of society and must, by nature of the undertaking, subordinate thought to social welfare (1962:213). Indeed, such a demand is justified since a

totalitarian society denies truth and the independent power of thought to apprehend truth (1962:213). For Polanyi, the denial of the intrinsic creative power of individual thought to apprehend reality (intellectual freedom) is the essence of totalitarianism.

3.2.3 On the Relations between Power, Society and Thought

At this point, I explore Polanyi and others to establish power's relations to thought, society and authority. To consider power, I invite Arendt, DeJouvenel, Manent, Sandoz, Polanyi and Guardini. In their discussion, at times, power is the central state and at others, power issues from something prior to the state.

First, the necessity of power: if the life of society and thought is to be, there must be power (Polanyi, 1964b: 63, Polanyi, 1962: 24); power permits existence (Sandoz, 2000: 249). Second, power must be paramount to suppress lawlessness (Polanyi, 1964b: 63) hence it must be endowed with the final coercive force (Polanyi, 1962: 224); force alone can establish power (DeJouvenel, 1945: 25). Hence, since coercion and freedom are contradictory, then power inevitably suppresses both social and intellectual freedom (Polanyi, 1964b: 63).

Power accompanies and reveals superiority in making itself recognized and obeyed (Manent, 1994:98); superiority is the origin of power (Manent, 1994: 98). Power always comes from men acting together (Arendt, 1968a: 172, Polanyi, 1964b) power, in this sense, is public. But the real power always begins in secrecy (Arendt, 1968a: 22,101); in this sense, it is occultic (Billington, 1980: Ch. 4).

Power can be described as a "standing corporation which is obeyed from habit, has a means of compulsion and is kept in being partly by the view taken of its strength, partly by the faith of right (legitimacy) and partly by hope of its beneficence (DeJouvenel,

1945:25.) Power grows through generating belief in its sole and unique role in producing the Common Good (DeJouvenel, 1945:25) and in this sense, relies upon legitimacy or moral authority (Polanyi, 1962:226). If a society defines the Common Good in terms of transcendent realities, authority by appeal to these has priority over power. But if society defines the Common Good materially, then power prevails. Power readily reverses its proper relation to authority by resorting to deception and coercion. Total power, resorts to the Big Lie and total terror.

Total power begins in bringing and binding together individuals in a firm and sincere belief in the omnipotence of man and in moral cynicism therefore everything is permitted (Arendt, 1968a:85). Total power demands a renunciation, at least, subjugation of all other social ties to the Party (Arendt, 1968a). Total power makes the state the instrument of power (Arendt, 1968a:102), aims at total destruction which it achieves by total terror (Arendt, 1968a: 164-168); total terror is the essence of totalitarianism.

Four corollaries follow: Power must (1) be united or act in accord; (2) be mysterious (3) like any organism, grow by generating more power (which may be mitigated if it meets a superior force, but, by the conditions stated, this power cannot be ultimately coercive) (4) do all in its grasp to prevent or suppress sources of opposition from coming together; and (5) isolate (real, potential or imaginary) oppositional individuals for then they are powerless (Arendt, 1968a:172). Given these conditions, power grows and freedom declines. I shall only suggest at this point the most effective means of such power is the creation of a social and epistemic reality which I call totalitarian CAT which creates a false social reality and thought (the life of the Lie.)

Total power originates and perpetuates itself only by destruction, a war of all against all, even amongst its own children, hence a minotaur. "It substitutes for the normal boundaries and channels of communication a band of iron which holds them so tightly together that it is though their plurality had disappeared into One Man of gigantic proportions" (Arendt, 1968a:163-4)

How can total power maintain itself? As Polanyi pointed out, if in a group of men each believes the others will obey the commands of a person claiming to be their common superior, all will obey their superior"(Polanyi, 1962:224). Hence it is in the interests of power to keep subjects in ignorance of its plans, intentions and of their true individual standing in the eyes of the superior. Conceived in secrecy, totalitarianism can only exist by intrigue and the suppression of the human urge to trust.

Total power can only be imagined if its subjects are isolated for then they are powerless. By isolating its subjects, it creates loneliness, something different than isolation. Loneliness is the loss of self, self-deprived of space created by social intercourse through the medium of trust, and engenders the sense of not belonging to the world at all (Arendt, 1968a:172-174). Loneliness is nihilism or meaningless existence. Total power is conceived in and perpetuates itself by nihilism.

Again, concerning power: First, there is a tendency to view power as sinful and corrupt which I find even Polanyi falls into. Indeed, all are familiar with the adage of Lord Acton:" Power corrupts and absolute power corrupts absolutely."

Yet, following Guardini, the essence of power as a human phenomenon is the human ability to give purpose to things (Guardini, 1961:121) hence power arises in the exercise of intentionality. Power awaits direction not through necessity but the intervention of an agent (Guardini, 1961: 121). An element of free choice enters the relationship of power (Guardini, 196:122).

Yet there is also an element of responsibility in power as there is in exercise of any freedom; someone must answer for it. It is therefore is subject to both the judgment of agent and public who observes its performance, both judging by the same normative standards. The exercise of power, of creative freedom, within its normative obligations, becomes authority. Conversely, power cut off from obligation becomes nihilistic and coercive or servile. Equally, when there is no one to answer to and when no-one assumes responsibility for its exercise, power becomes demonic.

Furthermore, if the performance of power's exercise by agent is subject to personal judgment both by its agent and those upon whom the judgment has bearing; then both are responsible to exercise personal judgment in determining the virtue or baseness of a judgment. However, if personal judgment is undercut by ideology, then the conditions of naked power and the law of the jungle are in place.

In Polanyi, the ontological relationship between society and thought as well as power and morality is crucial. Thought, being on the higher ontological plane, presupposes society but thought can transcend society if, and only if, thought binds itself in the obligation to pursue transcendent realities, things of intrinsic excellence. Similarly, a morality presupposes power on the lower ontological level but transcends its limits by the obligation to truth in the creative exercise of tacit knowing. (I pick up the ontological levels in Chapters 4 and 5.) It points out why modern totalitarian rulers fear the independent power of thought, generated by the creative exercise of tacit knowing; aimed at truth: because man living in thought, always can generate an alternative CAT over which rulers have no power.

Both nihilism and totalitarianism reverse the order of both relationships by eliminating the sources of moral order resident which the dynamic relations between CAT, truth and the intrinsic power of thought as expressed in tacit knowing produce and perpetuate Then power is over morality and society over thought.

However, reality being what it is, thought over society and morality over power, then even naked power must acquiesce to moral reality and establish legitimacy and appeal to moral grounds (Polanyi, 1962, 225-6). Because the possibility of truth always exists by the exercise of tacit knowing, no power can overcome its exercise. These are the lessons which Solzhenitsyn and Havel taught.

As already said, the political order embodies fundamental assumptions concerning the structure of reality and how humans may attain knowledge of reality; these are ultimate sources of authority. The structure of reality in totalitarianism is materialistic and mechanistic, knowable by objective reason, whether empirical or rational (Polanyi, 1962: 265)and cut off from transcendent obligations. Society is either under the law or authority of naturalism and culminates in Darwinian racism (Nazism) or historicism and culminates in Marxist Communism (Arendt, 1968a:161-3).

Under the Newtonian notion of motion and the assumption of progress, nature or history as law must be left untrammelled, free from any spontaneous human action, to run through society. Spontaneous human action is eliminated by the lawfulness of terror (Arendt, 1968a:163-165). Since human spontaneity originates in the life of thought, then thought, too, must be brought into subjection by means of terror, the destruction of self by loneliness. This is the elimination of intellectual freedom.

For his part. Polanyi confronts the relation between power and morality in both the free and totalitarian societies. The authority in a free society is two-fold. Within individual culture (domains or realms of spontaneous order), authority is sovereign and relies on a consensus of the members, arrived at by submitting to the values guiding the domain. It is "sovereignty atomized among individuals who are severally rooted in a common ground of transcendent obligations" (Polanyi, 1966:72). For example, scientific values guide science in the pursuit of scientific truth (1962:216-221). Society's civic culture is guided by the belief in the power of free thought (1962:222) to apprehend transcendent ideals. Society's beliefs are tacit but guide its citizens to a general moral consensus, the voice of public conscience (1962:223) enacted in public policy.

However, any society needs coercion to maintain order (1962:224), and thus requires civil government. In a free society, morality guides power (coercion). Yet the relation of authority or morality to power is not altogether clear even in a free society (1962:226). Indeed, morality is compromised by its relation to power and is suspect.

Here, moral inversion enters. Naked power, engendered and guided by modern scepticism, calls public morality into question (1962:226). Yet morality cannot just be rendered suspect for power must tap into the force generated by morality (1962:226). There must be a mechanism by which the power of moral passions is hitched to the very sources by which morality is rendered suspect.

This mechanism is Polanyi's "dynamo-objective coupling" (1962:230-232), "the moral force of immorality" (1962:27) which " enables the mind, tortured by moral self-doubt, to indulge its moral passions in terms which also satisfy its passion for ruthless objectivity" (1962: 228) and with it a fierce fanaticism "inaccessible to moral considerations" (1962:231). According to Polanyi, this is the power of moral inversion.

Although "Conviviality" hardly mentions moral passions, one is aware of their presence in the presentation of moral inversion in this chapter. Polanyi's solution to avoid the temptation of moral perfectionism to which moral inversion appeals is to ever remind ourselves that society and individuals must live with imperfection (1962:245, 1977:215) while still holding firm to the belief that, by the cultivation of moral principles rooted in transcendent ideals, a continuous improvement of society will result (1962:224).

I infer by this that Polanyi attempts to come to grips with the political and moral consequences of secular elimination of the Christian doctrines of original sin and deferral of perfection. This is his solution to avoid the great evil of moral inversion. The bigger part of his task, however, is to show how we can justify holding beliefs that might be conceivably doubted which the theory of personal knowledge picks up in Part 3, "The Justification of Personal Knowledge." (1962)

Coming back to moral inversion, whether a private or a political moral inversion, the roots are the same: the false scientific outlook (1970:12, 1962:vii, 1997b:97, 115, 1965:12). By extension, both inversions are an elimination of intellectual freedom originating in critical doubt, a wrong conception of truth and how it is pursued, which is how liberalism understood intellectual freedom.

Polanyi confronts his audience with the likelihood that things will only get worse "unless we radically change and re-establish the grounds of human knowledge and thus make sense once more of man's life and of the kind of universe which is our home" (1997b:115). Yet he never leaves off hope: reality beckons and can break through even the encrustations of totalitarianism. This, as will be seen, is the message of the Hungarian Revolution.

3.2.4 Restating the Liberal Negative and Positive Polanyian Intellectual Freedoms

If I am to restate a Polanyian intellectual freedom, I must begin where Polanyi begins in both theory and practice. Theoretically, his intellectual freedom departs from: "intellectual freedom is based the acceptance of the universal obligation to the truth" (Polanyi, 1964b:74). Practically, his intellectual freedom develops out of his practice of science.

Before doing so, I shall first give examples of what he and I argue is a wrong understanding of intellectual freedom. Thus let me begin with two definitions which I take are the wrong understanding, followed by a third denotation which points us in another direction but which still is inadequate.

By the first definition: intellectual freedom encompasses the freedom to hold, receive and disseminate ideas without restriction. Going further, Article 19 of the United Nations Declaration of Universal Human Rights defines intellectual rights as, "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers." I would argue that, as defined, intellectual freedom is primarily a negative freedom, one presuming opposition to a social context.

According to Polanyi, modern intellectual freedom was formulated as (1) freedom <u>from</u> authority so truth could be discovered (Milton) (1951:117); and (2) philosophical doubt - in matters where certainty cannot be established - tolerance should reign (Locke) (Polanyi, 1951:117) hence liberal intellectual freedom is wed to truth <u>and</u> philosophical doubt. Indeed, Polanyi traces liberal intellectual freedom back to the 6th century Ionians

(Polanyi, 1951: 132), its rescucitation by the Renaissance and then its finding full lease of life in the ciritical philosophy spanning Descartes to Kant. While Locke's formulation of doubt set up tolerance in a religiously imbued context, when extended to ethics as was logically necessitated, obligation ceased to have meaning (1951:120). Intellectual freedom rooted in philosophical doubt is then inconsistent because it is severed from its obligation to truth and therefore eliminates itself (1951:121).

Polanyi stresses the two different outcomes of this intellectual freedom. In the Anglo-American sphere, the inconsistent intellectual freedom was used to preserve religious belief in a context already embodying the principles of a free society, thereby holding the two-fold negative formulation of intellectual freedom in check (1951:122). On the Continent, however, intellectual freedom as intellectual doubt was more consistently applied, rapidly became anti-religious and set against an intransigent feudal society resisting the moral principles of a free society (1951:123).

Further the Continental stream now struggled to find sources of virtue by which to establish the social order. Three options came forward: (1) Romanticism (individualism) (1951:123, 124); (2) Hegelianism (historicism) (1951:124); and (3) Marxism (socialism) (1951:124). In all three, man now was the "master and maker and no longer servant of his ideals" (1951:126). Even reason and thought then become superfluous and intellectual freedom was eliminated (1951:126).

These substitutes for transcendent moral sources of social order were real in that they tapped into moral passions (Polanyi, 1951). But, rooted in moral scepticism, they inverted to become fired by a passion for the destruction of liberal society, whether by a private, anti-social or public, revolutionary nihilism (1951:127-137).

3.2.5 A Polanyian Intellectual Freedom: Re-crafting Academic Freedom

So far, I have laid out a negative intellectual freedom by Polanyi's moral inversion terminology. Having demonstrated how an improper understanding of intellectual freedom as largely critical doubt led to the elimination of intellectual freedom by nihilism, I now follow Polanyi to construct a new understanding of intellectual freedom.

Intellectual freedom, I propose, should be defined in positive, Polanyian terms, which should embody the principle that intellectual freedom is based on the acceptance of the universal obligation to truth. This takes us, by his analogy, to the practice of science, that is, the pursuit of scientific truth, in and from which academic freedom takes being. The pursuit of scientific truth takes in the whole process of scientific discovery: what is necessary before scientific discovery can occur, what actually transpires when a discovery is made and to what does a discovery point.

I make scientific discovery analogous to intellectual freedom. What's more, at the very centre of scientific discovery lies the creative act of tacit knowing which leads to new truth and which has parallels to a wider range of thought. It is this creative act of knowing which I take to constitute a fitting intellectual freedom.

By his account, scientific discovery is a long process which is culminated by another, almost instantaneous process of spontaneous mental organization uncontrolled by conscious effort (Polanyi, 1964b: 34). All features of this process, its preconditions, the spontaneous act and the outcome of such an act of tacit knowing, should be accounted for. This is undertaken in the theory of tacit knowing.

Polanyi early on relates the discovery act to perception (1962:38, 96-100) but later on, it is denoted as tacit integration (1969:76,7,138-140, 143-144, 1966:21, 90). However,

this act must be seen in light of the overall process entailed in scientific discovery but, by extension through the theory of tacit knowledge, as said, to all thought. From the analysis of scientific discovery arises then the triadic <u>from</u> – <u>knower's integrative act</u> – <u>to</u> structure. All of this is further developed in the first part of Chapter 4 but I shall give some few signposts to where we are going.

First, is the fact that to pursue truth, one must first believe in truth, that is, possess an intuitive conception of the general nature of things (1964b:10). A discovery cannot be made if someone does not believe something can be discovered. A prior belief in truth is a precondition to discovery of scientific truth. Second, one must believe in the power of thought to apprehend truth or, in Polanyi's terms, establish contact with reality.

Second, I note some other principles regarding discovery from the practice of science. Our intuitive conception of reality is only transmitted and shared tacitly. Thus, extending Polanyi, I propose the means of their tacit transmission is by tacit social embodiment in social structures. Hence, the practice of science, like any practice, is a tradition embodying beliefs and skills needed to pursue scientific truth. The passing on of a tradition involves authority as well as a community committed to its maintenance. Without the three, no significant scientific discovery will occur. Thus the three, community, authority and tradition (CAT), are both epistemic and social.

Gleaning further from Polanyi on scientific freedom, we extract the relations of thought and society, intellectual and social freedoms, by drawing on two essays concerned with academic freedom, "Scientific Convictions"²¹ (SC) (Polanyi, 1951: Ch. 2) and "Foundations of Academic Freedom" (FAF) (Polanyi, 1951). SC stresses the role of convictions in science while FAF stresses the social nature of scientific discovery. In both essays, thought and society interrelate and thereby give a structure to join intellectual and social freedom. While Polanyi presents the essays to justify social freedom, I use them to set up the relations between intellectual and social freedom.

First, "[academic freedom] is for the cultivation of certain beliefs about the nature of things" (1951:33). Second, since the nature of scientific knowledge concerns a transcendent reality, the cultivation of certain beliefs related to this transcendent reality requires a community for by its nature, the object exceeds the capacities of any one person. Third, "a certain group of people are granted independence and official support" (1951:33) so that they can dedicate themselves to that pursuit. In other words, science is a culture, a social-epistemic medium, in which the cultivation of thought and the creative exercise of tacit knowing (intellectual freedom) can occur.

These scientists are motivated by convictions and their relations to one another are dictated by the claims of conscience concerning these beliefs. The assumption is that "man is amenable to reason and susceptible to the claims of his conscience" (1951:33). Thus, I take it from Polanyi that academic freedom establishes and is established by the reign of individual conscience.

²¹ POLANYI, M. 1951. *The Logic of Liberty*, Indianopolis, Liberty Fund. Considers the role of scientific beliefs, arguing against positivism in science, its depreciation of belief and link to Marxist totalitarianism while upholding the central role of scientific convictions and its relation to a free society.

Moreover, academic freedom means an individual scientist of the scientific community can choose his own problems, conduct research free from outside control, and teach one's subject in the light of one's opinions or dictates of conscience (1951:41). Yet, its task requires science be a joint social endeavour; it needs a coordinative principle (1951:32) by which individual actions achieve a coherent result. Here we meet spontaneous or mutual adjustment, which unites spontaneity (freedom) and constraint (authority) (1951:48), all the while producing ever more coherence.

FAF presents and overcomes the dilemma of social freedom but becomes for my purposes a way to extract and reconstruct intellectual freedom. Functionally, academic freedom is neither primarily negative (promoting personal happiness) (1951:41) or positive (fulfilling obligation) (1951:41). Rather, its principle of spontaneous adjustment gives an efficient form of organization (1951:41) and, as such, functions as a stereoscope to bring together the positive and negative functions of freedom (1951:41,48).

Academic freedom is a space for originality (1951:48) the play of personal mental passions (1951:63) and the personal exercise of intuitive judgment (Polanyi, 1951). Paradoxically, the space presupposes, is delimited or morally constrained by the authority of a traditionally constituted community or CAT. Hence academic freedom is both epistemic and social.

Since the achievement of any joint task is judged by its members by way of normative standards which evaluate the coherence of its joint activities, so too are the joint activities of science judged whether they contribute something original to the coherence of scientific truth. Thus, the practice of science operates within a social and epistemic framework in which freedom and constraint unite in their dedication to truth.

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These are the conditions of Polanyi's academic or scientific freedom and, by my extension of Polanyi, the social-epistemic foundations of intellectual freedom. A Polanyian intellectual freedom is both act and process and cannot be separated from that which it necessarily presupposes nor can it be separated from that towards which it aims. As we can see, it is not the same intellectual freedom as formulated by traditional liberalism under the auspices of critical doubt and anti-authoritarianism which ended in objectivism and moral inversion.

3.2.6 Response to "Moral inversion"

As discussed so far, moral inversion is a historical process spanning over four centuries, an epistemic process involving critical doubt and anti-authoritarianism corroding existing beliefs and authority, the contradiction of moral scepticism and moral passions and a messianic social process employing violence against the existing social order to establish a new perfected order. It has an epistemic, a moral and social dimension.

Polanyi's account of moral inversion points to "objectivism" which comprises the epistemic grounds of a "worldview". A world-view is viable because it is coherent and because, as an intellectual framework, it gives meaning to one's experience of the world. The Enlightenment worldview, or objectivism, failed on both counts and its failure led to the 19th century crisis of philosophy. This is the answer to his question as to why Western intellectuals are vulnerable to moral inversion. Moral inversion leads to the elimination of intellectual freedom.

From Polanyi's analysis, moral inversion takes two social expressions — personal and political. The first is anti-social but unstable, the nihilist being then vulnerable to the second — political nihilism. I take it from Polanyi that the tension between modern moral scepticism and moral passions reaches the point where the mind can no longer

sustains their tension. Striving for intellectual control, a person instead faces the abyss of nihilism; this is personal nihilism.

To save himself, that is, to re-establish intellectual control or moral order over his world, he undergoes a conversion by which he parts with intellectual freedom as the exercise of responsible tacit knowing, to gain an immanent moral order or security which public nihilism offers. Dostoyevsky's Grand Inquisitor describes its dynamics: "[M]an is tormented by no greater anxiety than to find someone quickly to whom he can hand over the gift of freedom with which the ill-fated creature has been born. But only one who can appease their conscience can take over their freedom" (Dostoyevsky, 2013:279).

Let me bring in three points which I take from Polanyi before proceeding: freedom is yoked to obligation or responsibility, freedom involves risk and freedom involves judgment or conscience (1964b:39). Moral inversion hangs upon an ideology's ability to appease or divert moral conscience which does away with risk and obligation.

Objectivism, in promising an impersonal, certain knowledge, ultimately eliminates all three conditions of intellectual freedom. By escaping the conditions of freedom, a person becomes susceptible to the immense power of self-deception at work in moral inversion (1962:162). Objectivism creates conditions for appeasing the conscience to carry out acts of brutality; by falsely appeasing conscience, it destroys the grounds for intellectual freedom.

Whoever or whatever, then, commands our conscience is in a place to demand action for from morality springs human action. Moral inversion not only justifies but demands what, by previous standards of conscience would have been totally objectionable, should be carried out. It is a moral destruction at whose hands over hundred million died as 20th century totalitarian regimes unleashed moral inversion's horrible power.

As said, I maintain the theory of moral inversion sets out to disclose sources of this selfdeception and to give an account of it power. Polanyi holds it stems in objectivism but I extend this to say that it lies in a deeply flawed understanding of intellectual freedom. Conversely, Polanyi retained hope in the power of truth (1969:24, 28), the craving for truth (1969:26) and the possibility of a reawakened conscience (1964b:82) which might lead to a conversion from this outlook (1964b:82, 1969:36) and thereby undo the force of moral inversion. I propose it explains his fascination in the Hungarian Revolution.

3.2.7 On Overcoming Moral Inversion: A Paradigm

My concern is to now point towards how Polanyi reasons moral inversion can be reversed which is the theme of Chapter 5. Moral inversion, after all, seems immune to reason or moral considerations. The answer to the question lies in the creative power of thought and its appeal of truth. Here are the grounds for recovering intellectual freedom. Let me first restate Polanyi's reasons for arguing moral inversion could be overcome.

For one, moral inversion is itself unstable. "Totalitarianism has never been fully established anywhere" (Polanyi, 1964b:80); no society can exist without a minimal acknowledgement of "spiritual reality" (1964b:80). Indeed, it is "quite impracticable even to approach the complete subordination of all thought...to the service of power" (1962:243); a trace of intellectual freedom remains. Further, the human sentiments giving rise to intellectual freedom remain tacitly embedded in language, morality and tradition, (1962:243). Humans being what they are, an intellectual passion, a craving for truth, for contact with reality, will remain to compel the individual creative exercise of tacit knowing in search of truth (1969:24).

Moreover, any regime which "claims to embody, besides morality, the ideals of justice, of the arts and sciences – in short, all manner of truth…overreaches itself" (1964b:18). All claims of this nature set off a demand for truth, the contact with reality Thus, totalitarianism in its defiance of reality will either be ground down by the force of reality or else it will give space to the exercise of the power of thought and passion for truth which then eliminates the conditions of a totalitarian society.

To contend for intellectual freedom and against moral inversion, Polanyi assumes that a craving for truth will lead to the exercise of creative power of tacit thought and truth, as contact with reality, will be established. In these conditions even the totalitarian CAT can be overcome. The theory of tacit knowing basis gives grounds for the recovery of the traditional principles of intellectual freedom's practice: Truth (1) exists independently of one's knowledge of it; (2) is accessible to all men; and (3) no-one is able to compel anyone to see it (1964b:81).

Finally, a metaphysical believer cannot convince the unbeliever; they do not share common grounds for argument (1964b:81). Yet a believer can strive to convert "by conveying to him the intimation of mental satisfaction which he is lacking" (1964b:81). We strive to restore coherence or meaning to the unbeliever as a way to foster the respect for truth. Extending Polanyi, just as respect for truth is all that is needed for a society to be free(1964b:19), then restoring the respect for truth is all that is necessary to emerge from moral inversion. All of this points to my analysis in Chapter 5 of Polanyi's take on the Hungarian Revolution

The seeds of this moral reconstitution in and by society which I suggest are present in Polanyi's theory of tacit knowing but remain undeveloped. This also leads me to contend it is in a social context of the practice of truth that intellectual freedom takes being.

3.3 Conclusion

I set out here to imagine the relations of Polanyi's social freedom and what I take is an undisclosed intellectual freedom in his theories. The question of intellectual freedom arose in my mind after Polanyi insisted that the pursuit of truth is essential to a free society. Further, the relation between the two freedoms raised the question if the elimination of social freedom by totalitarianism does not point to the elimination of the more fundamental intellectual freedom.

From the early Polanyi, social freedom depends on belief in intrinsic creative power of individual thought (tacit knowing) and society's obligation to transcendent reality (truth, justice, God, beauty, etc.) He maintains that the independence of thought and dedication to truth are the grounds of social freedom. The independence of thought assumes the intrinsic creative power of individual thought. Thus, the pursuit of truth connects intellectual and social freedom as my use of FAF demonstrated.

Conversely, I extracted from Polanyi's theory of moral inversion that traditional liberalism's view of social freedom as a private and negative freedom, as freedom from society, stems from an overemphasis on individual critical doubt and antiauthoritarianism which is believed to lead to truth. Instead, private freedom and individual critical doubt lead to private nihilism, the elimination of intellectual freedom,

On the other hand, progressive liberalism takes it that social freedom is primarily a positive obligation to society, an overemphasis on CAT, stemming from the corporate exercise of critical doubt, a positive intellectual freedom positing truth in CAT, which

leads to public nihilism, that is, totalitarianism, or the elimination of intellectual freedom.

Both ways, critical doubt gives moral scepticism leading to nihilism. But, what's more, it unhinges moral passions from any transcendent reality which could constrain them and thereby gives moral inversion its fury. Critical doubt disconnects personal belief in the intrinsic power of thought from obligation to transcendent ideals - the conditions of a true intellectual freedom.

Critical doubt is a wrong understanding of intellectual freedom, of truth and how it is pursued. This, however, raises the question of the interaction between intellectual freedom and truth. To deal with the question, I now turn to the theory of tacit knowing as a way to think of the social-epistemic conditions of intellectual freedom, of CAT, which I preliminarily indicated tacit knowing presupposes.

4 The Theory of Tacit Knowing (TTK) and its Social Theory

[F]reedom of thought is justified in general to the extent to which we believe in the power of thought and recognize our obligations to cultivate the things of the mind. (1951:xviii)

Part I: Tacit Knowing

4.1 Introduction

According to Michael Polanyi, modern nihilism as moral inversion leads to the destruction of intellectual freedom, then social freedom (nihilism or totalitarianism). He maintained moral inversion stems from an over-emphasis upon critical doubt; I extended Polanyi to say moral inversion originates in a wrong notion of intellectual freedom -- using 'moral inversion' -- then from his academic freedom, constructed a positive, Polanyian intellectual freedom. From these, I established in Chapter 3 the interrelation of the two freedoms: intellectual freedom justifies social freedom.

However, moral inversion as the elimination of intellectual freedom points to at an even more basic concern: a misunderstanding of truth and how it is pursued. Polanyi argues that critical doubt eliminates belief in the independent and intrinsic power of thought and moral obligation to truth. Critical doubt unhinges moral passions from transcendent realities that could constrain moral passions' self-immolation.

According to Polanyi, tacit knowledge leads to truth. I extend Polanyi here to say tacit knowledge leads to intellectual freedom, the creative exercise of tacit knowing. Further, I argue that intellectual freedom can be theorized within the structure of the theory of tacit knowledge. By a re-forged TTK, I shall here show how the creative exercise of tacit knowing presupposes community, authority and tradition (CAT.) In Chapter 5, I show how the exercise of creative exercise of tacit knowing transcends the constraints

of CAT. Thus the quest to understand the relation between intellectual freedom and truth falls into epistemology but develops into a social theory as it unfolds.

To be human is to live in thought; thought shapes our perception of self, world and our place in the world. Polanyi remarks, "Whoever speaks of man will therefore have to speak at some stage of human knowledge" (1959:11). To bring up knowledge or knowing is to broach truth and reality and, finally, I argue, point to intellectual freedom as the exercise of tacit knowing to apprehend an aspect of reality.

The theory of tacit knowing (TTK) speaks of knowledge at this basic level, of knowledge as personal, of knowing as tacit, of beliefs or convictions concerning the structures of reality and how we attain reality. TTK involves a triad which can be summed up as: "All knowing consists of the [skilful] integration of subsidiary and tacitly sensed particulars into a focal and articulate whole" (Mitchell, 2006b:70) (See Fig 4.1).

TTK ends with the principle that "we can know more than we can tell" (Polanyi, 1966:4). Knowing is (1) tacit or tacitly rooted (1969:133); (2) is personal—involves the knower's participation (1977:40) and (3) establishes contact with an aspect of reality promising to reveal itself further (1964b:10). My concern here is to extract intellectual freedom and its preconditions from TTK. I modify TTK to include its social component and then draw out the dual social-epistemic roles of community, authority and tradition thereby inferring intellectual freedom presupposes CAT.

I briefly introduce tacit knowledge, restate Polanyi's case against objectivism, then set up tacit knowledge. I next restate TTK by its structure and the individual notions of its composite. I then come to the turning point of my quest; I recast tacit knowing as intellectual freedom and establish its relation to social-epistemic functions of community, authority and tradition (CAT). By re-establishing truth in Polanyian terms, I can show the grounds for an ordered intellectual freedom. This is a quest into epistemology.

4.2 **Re-considering the Theory of Tacit Knowing (TTK)**

Intellectual freedom is the creative exercise of tacit knowing in the pursuit of truth. TTK critiques objectivism, a wrong understanding of truth and how it is pursued. TTK establishes the structure of knowledge by the <u>from</u> -- <u>knower's tacit integration</u> -- <u>to</u> triadic formulation. I re-forge the triad into the <u>CAT-intellectual freedom-truth</u> triad.

TTK is a response to an errant world view, objectivism, which leads to moral inversion and had led to the cultural and political disasters of the 20th century (Polanyi, 1997b:107). Objectivism calls for the discovery and propagation of a "more true world view" (Polanyi, 1997b:107). TTK aims "to radically change and re-establish the grounds of human knowledge and thus make sense once more of man's life and of the kind of universe which is our home" (Polanyi, 1997b:115).

How are we to understand the nature, scope and thrust of TTK? TTK is a comprehensive philosophical endeavour to understand and reshape the civilization's world view¹. How then are we understand world view and its relationship to the task of philosophy?

¹ From Polanyi's own words: SCOTT, D. 1996. *Michael Polanyi*, SPCK."I believe I came into my true vocation when I set out on the pursuit of a new philosophy to the meet the needs of our age.";POLANYI, M. 1966. *The tacit dimension*, Garden City, N.Y, Doubleday.[It] seemed to me our age was pervaded by a dissonance of extreme critical lucidity and an intense moral conscience and this combination had generated our tight-lipped modern revolution and the tormented self-doubt of modern man outside revolutions. So I resolved to inquire into the roots of this situation"; POLANYI, M. 1997a. Why Did We

Everyone has a world view, a philosophy of life, which is a matter of wisdom and common sense². A world view is a matter of the shared everyday experience of humankind, an inescapable component of all knowing, pre-scientific in nature and belonging to an order of cognition more basic than that of science or theory. Philosophy gives a scientific or theoretical elaboration of a world view.

Tacit knowing is "Polanyi's unique contribution to philosophy" (Grene, 1977:19) and "at the heart of Polanyi's doctrine of personal knowledge" (Sanders, 1988:1). TTK attends to what it takes to be a wrong understanding of knowing embodied in a world view - objectivism - and offers what it takes to be a more truthful account of knowing, one more consonant with our experience of ourselves and our world. TTK aims to reestablish the pursuit and respect of transcendent truth. TTK originates in Polanyi's philosophical reflections to bring to light his own basic beliefs (1962:267) and the beliefs of those with whom he disagrees, chiefly objectivists.

TTK is primarily the outcome of reflection on the practice of science set against objectivism's ideal of scientific knowledge; it brings practice against theory. Polanyi uses an intimate acquaintance with the practice of scientific research to full advantage. By reference to scientific practice, TTK establishes "a better foundation for holding our beliefs than we possess today" (Polanyi, 1951:xvii). .Hence TTK is a philosophy of

Destroy Europe? In: ALLEN, R. T. (ed.) *Science, Economics and Philisophy: Selected Papers*. New Brunswick: Transaction Publishers. "We can hardly hope to discover and spread a truer world view unless we can demonstrate a truer world view will restore the kind of sanity which stop the progress of disintegration in our times."

² See WOLTERS, A. 1989b. On the Idea of Worldview and Its Relation to Philosophy. *In:* MARSHALL, P., GRIFFIOEN, S. & MOUW, R. J. (eds.) *Stained Glass: Worldviews and Social Science*. Langham: University Press of America., WOLTERS, A. 1989a. *Creation Regained: Biblicaal Basics For A Reformational Worldview*, Grand Rapids, Eerdmans., NAUGLE, D. 2002. *Worldview: The History of a Concept*, Grand Rapids, Eerdmans.for a historical analysis of world view with a theological view in mind.

science or better, epistemology³ proper by virtue of its source It does, as will be seen, aspire to much more.

Bird (Bird, 2010) sketches the discourse of philosophy of science (epistemology), Polanyi initially appears particularist, Whewellian⁴, inclined to use history and internalist as over and against generalist, Millian, naturalized and external. Assigning Kuhn and Popper to opposite poles⁵, Polanyi seems more similar to T. Kuhn and idealism/historicism⁶ than K. Popper and his moderate kinship to logical positivism⁷. Yet, the divergence of Popper's and Polanyi's theories of science is perhaps not as great

³ BIRD, A. 2010. Philosophy of Science qua Epistemology Available:

http://eis.bris.ac.uk/~plajb/research/papers/Philosophy_of_Science_qua_Epistemology.pdf [Accessed 2010/06/07]. Discusses the relations between philosophy of science and epistemology. The philosophy of science divides into particularist and generalist tendencies, W.Whewell representing the former and J. S. Mills the latter. The former views scientific knowledge as differentiated, relies on history and bears resemblance to the historicist stream of philosophy of science; the latter accommodates positivism.

⁴ See POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul.pp. 140,143, 157 for similarities in Polanyi's and Whewell's understanding of scientific discovery.

⁵ See FULLER, S. 2003. *Kuhn vs. Popper: The Stuggle for the Soul of Science*, Cambridge, Icon Books.as "social epistemologist" frames the debate and helps to locate other major interlocutors by reference to the debate, one which he rightly maintains was critical for science and regrettably tipped the philosophy of science towards the relativism and idealism of Kuhn.

⁶ See POLANYI, M. 1964b.*Science, Faith and Society,* Chicago, University of Chicago.p. 12 notes his similarities to T. Kuhn, N.R Hanson and S. Toulmin. G. Holton and Ch Perelman. POIRIER, M. W. 2006-2007. The Polanyi-Kuhn Issue. *Tradition and Discovery,* 34, 56-65. p. 62 n.5 connects Kuhn to relativism. NYE, M. J. 2011. *Michael Polanyi and His Generation: Origins of the social construction of science,* Chicago, University of Chicago Press.pp. 249-257locates Polanyi in the19 60s' history and philosophy of science discourse which includes, amongst others, Kuhn, Feyerabend and Lakatos. The Epilogue connects these to a second generation of social constructionists (Polanyi and Popper being of the first) then notes the radical relativism of a third group including S. Shapin, H Collins and B. Latour. FULLER, S. 2003. *Kuhn vs. Popper: The Stuggle for the Soul of Science,* Cambridge, Icon Books. p. 43. Kuhn ascribled to a position that science should primarily support human ends and not a pursuit for its own sake as does Popper (and Polanyi). JHA, S. R. 2006. The Bid to Transcend Popper, and the Lakatos-Polanyi Connection. *Perspectiives on Science-historical, philosophical and social,* p. 14. Argues that while Lakatos began as a protégé of Popper's (as was Feuerabend), over time, he departed from Popper to take a epistemological position more akin to Polanyi's.

⁷BIRD, A. 2010. Philosophy of Science qua Epistemology Available:

http://eis.bris.ac.uk/~plajb/research/papers/Philosophy_of_Science_qua_Epistemology.pdf [Accessed 2010/06/07].p 3FULLER, S. 2003. *Kuhn vs. Popper: The Stuggle for the Soul of Science*, Cambridge, Icon Books. p. 39.

as stressed by their respective followers⁸ and the convergence of Polanyi with Kuhn is not as much as suggested.⁹

TTK marks the shift from the early Polanyi to late Polanyi, a shift evident in the1946 work *Science, Faith and Society* in which he seeks the grounds on which science is pursued (1964b). He argues that science rests upon an intuitive sense of the nature of things rooted in beliefs (1964b:31-38) which guides intuition in making contact with reality (discovery.) The function of belief in intuition and knowing is then developed in *Personal Knowledge:* "We must now recognize belief once more as the source of all knowledge" (1962:266), "truth is something that can only be thought of by believing in it" (1962:305) and "to avoid believing one must stop thinking (1962:314). Belief functions tacitly in knowing yet makes cognitive claims.

Polanyi later forges the triadic structure of tacit knowing to address issues related to commitment found in <u>PK.</u> (1966:xviii). *The Tacit Dimension* develops this structure (1966:10-13) and it is further expounded in four essays in Grene's compilation of Polanyi's essays (1969:Chap 9-12) and other pertinent essays on TTK's themes (1997b: Part 4 & 5). Overall, TTK should be seen as an effort to skirt the currents of objectivism, while staying clear of an equally troublesome subjectivism.

⁸ For example SANDERS, A. 1988. *Michael Polanyi's Post-Critical Epistemology: A Reconstruction of Some Aspects of 'Tacit Knowing'*, Amsterdam, Rodopi. Chs. 5 & 6 stress divergence, JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburg, University of Pittsburg Press. p. 275 n.5 &pp. 33-37 138, quoting Popper and Hempel, note some convergence arising from common roots related to Kant but also serious divergence, especially with epistemic reliance upon critical doubt.

⁹ See MOLEWSKI, M. X. 2006-2007. Polanyi vs Kuhn: World-views apart. *Tradition and Discovery*, 33, 8-25.; Kuhn's idealism and relativism in contrast to Polanyi's realism and objectivity; POIRIER, M. W. Ibid.The Polanyi-Kuhn Issue. 34, 56-65. Agrees with Milowski and maintains Polanyi was personally, not theoretically, motivated in his too-positive assessment of Kuhn; and, JACOBS, S. 2007-2008. Michael Polanyi and Thomas Kuhn: Priority and Credit. Ibid.pp. 33, 25-36.who believes that history should give priority to Polanyi and not Kuhn on shared insights.

Referencing TTK to an even wider philosophical context, let me briefly revisit the late-19th century crisis of philosophy referred to in Chapter 1. Philosophy's traditional synoptic function had, from the scientific revolution on, been overtaken by the empirical natural sciences. The process reduced the role of metaphysics, ethics and teleology but established epistemology, philosophy's last redoubt, as arbiter of scientific knowledge. By the late 19th century, even epistemology was shown inconstant and stood at a crossroads. Crisis evoked various early 20th century responses, each endeavouring to overcome epistemology.¹⁰

Polanyi's philosophizing or TTK departs from the early 20th century juncture where multiple, even related turns of philosophy meet, interact and part; among them are the linguistic¹¹, hermeneutical¹², existential-phenomenological¹³ and pragmatic.¹⁴ Excepting

¹⁰ TAYLOR, C. 1995. Overcoming Epistemology. Available:

www.marxists.org/reference/subject/philosophy/works/us/taylor.htm. BERNSTEIN, R. 1983. *Beyond* Objectivism and Relativism: Science, Hermeneutics and Praxis, Philadelphia, University of Pennsylvania Press. MCCARTHY, M. 1990. The Crisis of Philosophy, Albany, SUNY.

^{WOLF, M. P. Philosophy of Language. Internet Encyclopedia of Philosophy, ibid., WITTGENSTEIN, L. 1958.} *Philosophical Investigations*, New York, Macmillan. Focuses on the relationship between philosophy and language, originates in late 19th century analytical philosophy, then is developed by logical positivism and finally takes a radical change of course in the later Wittgenstein. Wittgenstein influenced a wide swath of thinkers: Eric Voegelin, Hannah Arendt, Richard Rorty, John Searle, Jurgen Habermas, and Alistair MacIntyre. DALY, C. B. 1968. Polanyi and Wittgenstein. *In:* LANGFORD, T. & POTEAT, W. (eds.) *Intellect and Hope: Essays in the Thought of Michael Polanyi*. Durham: Duke University Press.,RAMSEY, I. 1969. Polanyi and J. L. Austin ibid., JARDINE, M. 1998. *Speech and Political Practice: Recovering the Place of Human Responsibility*, Albany, State University of New York. Discusses Polanyi with the late Wittgenstein.

¹² FEHER, I. M. 1998. Heidegger and the Hermeutic Turn of Philosophy [Accessed 2017-04-26].Heidegger is the key figure here. SIMMS, K. 2015. *Hans-Georg Gadamer*, London, Routledge. GADAMER, H.-G. 1979. *Truth and Method*, London, Sheed and Ward Stagbooks. While Heidegger is the key figure in the hermeneutical turn, H.G. Gadamer features prominently in its recent development. See also SIMMS, K. 2015. *Hans-Georg Gadamer*, London, Routledge, MUHLERIN, C. 2008. A Rose by Any Other Name? Personal Knowledge and Hermeneutics. Available:

https://www.academia.edu/6744774/A_rose_by_any_other_name_Personal_knowledge_and_hermeneuti cs [Accessed 2015-03-11], BERNSTEIN, R. 1983. *Beyond Objectivism and Relativism: Science, Hermeneutics and Praxis*, Philadelphia, University of Pennsylvania Press.

¹³JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburgh, University of Pittsburgh Press, DILTHEY, W. 1978. *Dilthey's Philosophy of Existence: Introduction to Weltanschauunglehre*, Westport, Greenwood Press. ibid., JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*,

pragmatism and its reliance upon naturalism and positivism,¹⁵ the others are a form of historicism (and reject naturalism); pragmatism is in the Anglo-American and the others rather in the Continental traditions. The Continental tradition is aware of and pays attention to "world view" ¹⁶ in the Kantian sense which Polanyi uses.

Polanyi remarks on some similarity of aspects of TTK to these turns¹⁷ (Polanyi and

Prosch, 1977:4) but claims his work is original and only in retrospect does he note

¹⁴DEWEY, T. 1954. *The Quest for Certainty: A Study of the Relation of Knowledge and Action*, New York, Minton, Balch. DIGGINS, J. P. 1994. *The Promise of Pragmatism: Modernism and the Crisis of Knowledge and Authority*, Chicago, University of Chicago Press. Sets pragmatism in its late 19th early 20th century context, its recent renaissance. BERNSTEIN, R. J. 2010. *The Pragmatic Turn:*, Cambridge, Polity Press.; and, as a reaction to Cartesianism and rationalism. See also JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburg, University of Pittsburgh Press, Chapter 6 Polanyi's View on the Pragmatism of Dewey, and p. 268 Polanyi's indebtedness to Dewey "we shape all knowledge in the way we know it; p. 61. His debt to Pearce for the triad of TTK, and p. 268. James for examples of perception and conception. Fennell, 2013 #5861.

¹⁵ See DIGGINS, J. P. 1994. *The Promise of Pragmatism: Modernism and the Crisis of Knowledge and Authority*, Chicago, University of Chicago Press.p. 396.

¹⁶ NAUGLE, D. 2002. *Worldview: The History of a Concept*, Grand Rapids, William Eerdmans Publishing Co. on worldview as post-Kantian phenomenon see, Kant and worldview pp. 56-67; relation to Dilthey pp. 82-98; Husserl pp. 108-121; Heidegger pp. 126-146,and; Wittgenstein pp. 144-162. Naugle points out its relativisitic implications See also WOLTERS, A. 1989b. On the Idea of Worldview and Its Relation to Philosophy. *In:* MARSHALL, P., GRIFFIOEN, S. & MOUW, R. J. (eds.) *Stained Glass: Worldviews and Social Science*. Langham: University Press of America.-a worldview is pre-theorectical, a matter of shared everyday experience, belonging to an order of cognition more basic than science; philosophy gives a scientific elaboration of worldview.

¹⁷ See, for example, POLANYI, M. & PROSCH, H. 1977. *Meaning*, Chicago, University of Chicago Press.p. 4. Existentialism is the only modern philosophy respecting intellectual freedom yet ultimately subverts it ibid., ibid. p. 162. His realism parts him from Husserlian (and Kantian) phenomenology in its transcendental turn KUHN, H. 1968. Personal Knowledge and the crisis of philosophical tradition. *In:* LANGFORD, T. & POTEAT, W. (eds.) *Intellect and Hope: Essays in the Thought of Michael Polanyi*.

^{Pittsburgh, University of Pittsburgh Press. pp. 81-20 On the relations between Polanyi and Merleau-Ponty's phenomenology and pp. 80-85 on Polanyi's roots in Dilthey's existentialism. MERLEAU-PONTY, M. 1962.} *Phenomenology of Perception*, London, Routledge & Kegan Paul. See also
GELWICK, R. 1977. *The Way of Discovery: An Introduction to the thought of Michael Polanyi*, New York, Oxford University Press. pp.118-120 NAGY, E. 2010. "The phenomenology of conversion: the conversions of Karl and Michael Polanyi". *Appraisal* [Online], 8. [Accessed 2015-03-27]. on Polanyi's relation to the existentialists Sartre or Camus; MAI, H. 2009. *Michael Polanyis Fundamental-philosophie: Studien zu den Bedingungen des modernen Bewusstseins*, Munchen, Karl Alber Freiburg., MEEK, E. L. 1983a. Ch. 11: Merleau-Ponty. Philadelphia: Temple University. and MEEK, E. L. 1983b.
Ch. 12: Polanyi in the Light of Merleau-Ponty of unpublished dissertation. Philadelphia: Temple University. Chapter 10 on the relationship to existentialism and phenomenology to Polanyi and Merleau-Ponty; GRENE, M. 1968. Tacit Knowing and the Pre-reflective Cogito. *In:* LANGFORD, T. & POTEAT, W. (eds.) *Intellect and Hope: Essays in the Thought of Michael Polanyi*. Durham: Duke University Press. on Sartre's existentialism and TTK.

similarity; Polanyians have further explored the kinships. Beyond the footnotes here, I interact with these acknowledged sources and interlocutors to TTK as they emerge in the text and relate to specific notions brought up there. Offhand, S. Jha¹⁸ and H. Mai¹⁹ give TTK a distinctly Continental reading²⁰ and Andy Sanders renders a more Anglo-American interpretation²¹ by casting an analytical structure which relates TTK to epistemology's wider dialogue.

Phenomenology, existentialism and hermeneutics are the outcome of a remarkable social nexus. Dilthey "begat" Husserl, who in turn was mentor of Heidegger, who in turn begat H.G. Gadamer and Merleau-Ponty. Heidegger was also a strong influence upon J.P. Sartre and Ricouer. Husserl may also be seen in the line of Brentano, creator of the theory of intentional consciousness to whom Polanyi goes in considering

Durham: Duke University Press. p. 114. However, phenomenology, via Husserl and Merleau-Ponty, links with Polanyi's notion of perception, the bridging of mind-body gulf POLANYI, M. E. B. R. T. A. 1997b. *Society, Economics and Philosophy: Selected Papers* New Brunswick, Transaction Publishers.p. 319, intentionality POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul.p. 141 and consciousness ibid., pp. 155,221, Ch. 13.

¹⁸ JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburgh, University of Pittsburgh Press.Locates Polanyi by reference to especially Kant as well as Merleau-Ponty and Dilthey.

¹⁹ MAI, H. 2009. *Michael Polanyis Fundamental-philosophie: Studien zu den Bedingungen des modernen Bewusstseins*, Munchen, Karl Alber Freiburg .Places Polanyi's philosophy in relation to the existentialism of Heidegger and phenomenology of Husserl.

²⁰ JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburgh, University of Pittsburgh Press. Focuses, in part, on TTK's relation to Gestalt psychology, Dilthey, MerleauPonty and Rothschild. Ch. 2. As to the TTK triad, and taking intellectual passions as integrator (synonymous to my intellectual freedom) and common feature, 3 triadic models of tacit knowledge emerge: (1) Gestalt perception or parts-whole; (2) phenomenological/existential action guiding structure, the <u>from-to vector; and (3)</u> Semiotic where integration becomes inference owes to Polanyi's drawing from C. S. Pearce semiotic model.. In regard to TTK's triadic structure, see also MITCHELL, M. T. 2006b. *Michael Polanyi: The Art of Knowing*, Wilmington, Intercollegiate Studies Institute. where recognition of an entity independent of and external to us comprises a model with ontological aspect. MAI, H. 2009. *Michael Polanyis Fundamental-philosophie: Studien zu den Bedingungen des modernen Bewusstseins*, Munchen, Karl Alber Freiburg.

²¹ SANDERS, A. 1988. *Michael Polanyi's Post-Critical Epistemology: A Reconstruction of Some Aspects of 'Tacit Knowing'*, Amsterdam, Rodopi.If Jha takes a more Continental speculative tack, Sanders' analytical tack interacts TTK primarily with Popperian objectivism (Musgrave and Lakato) and other Anglo-American interlocutors such as J. Searle on intentionality,

consciousness (Polanyi and Prosch, 1977:41), (Polanyi, 1969:141,157). His relationship to these philosophers is sketched in various passages,²² I bring in Polanyians' interaction with them in my text.

Since the foregoing thinkers are linked by Polanyi to his thought, it helps to place him at this stage to their philosophical constellation, as opposed to, say, the neo-liberal constellation by which I located the early Polanyi. While Continental thinkers share Polanyi's antipathy toward objectivism and his speculative rather than critical approach, Polanyi is a metaphysical realist²³ opposed to the idealism toward which they turn. How this is achieved is worked out in TTK. But first, we must consider his critique of objectivism.

4.2.1 TTK's Case against Objectivism

The work of Polanyi in his late period is directed against objectivism because of its role in moral inversion. Indeed, by 1947, he had already begun to call out the noxious consequences of empiricism or positivism.²⁴ *Personal Knowledge* is his most comprehensive argument against "objectivism" and its effect on thought and society

²² POLANYI, M. 1964a. Duke Lecture #3: Commitment to Science. for his most extensive discussion of his relations to post-Kantian thought. See also POLANYI, M. 1964b. *Science, Faith and Society,* Chicago, University of Chicago. p. 12, POLANYI, M. 1966. *The tacit dimension,* Garden City, N.Y, Doubleday.11POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi,* London, Routledge & Kegan Paul.pp.155,156,221.

²³ See POLANYI, M. E. B. R. T. A. 1997b. *Society, Economics and Philosophy: Selected Papers* New Brunswick, USA, Transaction Publishers. Ch. 16 on the metaphysical foundations of science.

²⁴ See POLANYI, M. 1951. *The Logic of Liberty*, Indianopolis, Liberty Fund., Chs. 1 & 2; POLANYI, M. E. B. R. T. A. 1997b. *Society, Economics and Philosophy: Selected Papers* New Brunswick, Transaction Publishers. Ch. 15: ibid. Ch. 15, "Observation and Belief" (1947)POLANYI, M. 1974. *Scientific Thought and Social Reality: Essays by Michael Polanyi*, New York, Internation Universities Press. Ch. 5, "Scientific Beliefs" (1947), "On the Introduction of Science into Moral Subjects" (1954). Empiricism, positivism and objectivism are equivalent.

(1962:vii); the notion remained a foil against which TTK developed.²⁵ Polanyi argues against objectivism's ideal of scientific knowledge for its ideal contradicts practice. The practice of science is his medium to do epistemology.

Polanyi denotes objectivism as a theory of the nature and justification of scientific knowledge (1962:vii) as a promotion of the ideal of scientific detachment (1966:20) and a fusion of critical doubt and mechanism. It separates reason from experience (1962:9), subjectivity from objectivity (1962:15). He also relates objectivism to positivism (1962:9, 11) and mechanism (1962:7-9, 139-142).

Objectivism is "a modern myth...a profound misunderstanding of what science and knowledge are and what they require" (1977:181). It presupposes scientific factuality (1962:134) and demands knowledge be based on observation alone (1962:16), absolutely impersonal (1962:214), explicit, permanent (Grene, 1974:17) and certain (Polanyi, 1962:141). It denies the intuition of rationality in nature (1962:16), the power of thought (1962: 9, 17) denies mind, intellectual freedom, truth and removes the grounds of ethics. Polanyi maintains objectivism sets up totalitarianism on the calculus of materialism and utilitarianism (1962:232).

"Objectivism" is a worldview, an outlook, a set of beliefs, an ideal of knowledge which Polanyi opposes because it destroys reality and coherence. "It falsifies our whole outlook" (1962:vii) and damages our intellectual (and moral) life" (1962:vii), indeed, it eliminates the grounds for ethics (1977:27). Richard Gelwick, surveying the cultural

²⁵ See POLANYI, M. 1966. *The Tacit Dimension*, Garden City, N.Y, Doubleday.pp. 23-27, 56, 74, 75. POLANYI, M. & PROSCH, H. 1977. *Meaning*, Chicago, University of Chicago Press. pp. 26-27, 44-45. 181.

chaos of Western civilization, too, similarly concludes "a false objectivity has taken over the modern mind" (1977:xvii) as does Harry Prosch, (1986:Part 1).

Objectivism divides mind from world, rendering knower and known without meaning and coherence²⁶ (1962:236), "[O]bjectivism requires a specifically functioning mindless knower" (1962:264) and creates an unbridgeable chasm between knower and known (Grene, 1974:14, Polanyi and Prosch, 1977:27). Stafania Jha (2002:Ch. 4)and Marjorie Grene (1974:Ch. 5), taking a Kantian tack towards Polanyi, show that objectivism eliminates the knower from knowledge; TTK re-establishes the personal elements of science with the aim of restoring the knower's central role in knowing (2002:92).

Critical doubt follows modern rationalism, that is, reason alone can establish true knowledge²⁷ (Polanyi, 1961: 238). Critical doubt is a corollary of objectivism (1962:269) which demands freedom from the established authority of tradition and belief (Polanyi, 1951:117) to establish the authority of reason and experience (1962:265). Critical doubt renders knowing a mechanical process and knower an automaton (Polanyi, 1962: 264). It reduces knower and known to physical-chemical properties thereby eliminating intellectual freedom and truth.

²⁷ See MACINTYRE, A. 1988. *Whose Justice?Whose Rationality?* London, Duckworth. p. 6 "It was a central aspiration of the Enlightenment...to provide for public realm standards and methods of rational justification by which alternative courses of action in every sphere of life could be adjudged just or unjust, rational or irrational, enlightened or unenlightened. So it was hoped reason would replace authority and tradition." On foundationalism's rise and collapse (as adjunct of objectivism) see MCCARTHY, M. 1990. *The Crisis of Philosophy*, Albany, SUNY. pp. 31-35, Ch. 6, and BERNSTEIN, R. 1983. *Beyond Objectivism and Relativism: Science, Hermeneutics and Praxis*, Philadelphia, University of Pennsylvania Press.

²⁶ "Man lives in the meanings he is able to discern and extends himself into that which he finds coherent and is at home there." Polanyi,M. & Prosch, H., 1977, p. 66.

W. Scott sets out to establish the character of Polanyi's rationality which he contrasts to objectivism's. The latter uses deductive thinking built on axioms and mathematical certainties (1995:206) and yields deductivism (1995:207); determinism (1995:207); positivism (detachment) (1995:207) and reductionism (1995:208). It renders human life and culture completely subjective (1995:207). Polanyi's rationality, on the other hand, is holistic and encompasses all realms in a hierarchy of being.

The point I draw from Scott is that there are different traditions of rationality which came to us from the classical Greek world. Scott does not mention that these forms of rationality took on new expression and meaning at the birth of modern science by interacting with Christian belief²⁸ nor does Polanyi speak of it.

I would distinguish Scott's from Polanyi's holism in that with Polanyi, the whole is greater than the sum of its parts (as Scott implies.) Rather, it involves the dynamism between part and whole. Dynamism calls us to see things in the light of their natural patterns, cohesions and coherence; particularity retains significance within the whole²⁹. Only in such an arrangement of the natural order can freedom and order find their mutual relation and find parallel in the epistemic realm.

²⁸ PEARCEY, N. R. & THAXTON, C. B. 1994. *The Soul of Science: Christian Faith and Natural Philosophy*, Wheaton, Crossway Books. Ch. 6. Maintains that early modern science was shaped by three dialogues of classical Greek philosophy with Christian belief: (1) Aristotelian organism emphasized rational Forms (the Padua school, Vesailius and Harvey and affecting particularly early biology) and focuses upon God's transcendence; (2) neo-Platonic organism, emphasized God's indwelling, immanent Spirit and relied more on mystical insight or intuition (Bologna,Florence and Cambridge schools, astronomers Copernicus, Kepler and chemists Parcelus and Van Helmont), and: (3) mechanism of Greek atomists and Archimedes; Gods transcendence and empiricism are primary (Galileo and Descartes are its pioneers.) Pearcey and Thaxton argue that Newton bridged the Platonic and mechanistic traditions while Polanyi seems, by my reading, to place him in the mechanist tradition.

²⁹ TORRANCE, T. 1984. *Transformation and Convergence in the Frame of Knowledge: Explorations in the Interrelatons of Scientific and Theological Enterprise*, Ottawa Christian Journals Unlimited. Ch. 3 discusses the role of Einstein upon Polanyi's epistemology as well as the relation of Bohr, Goedel and Popper to Polanyi. See also Gunton, 1993 #5852. Gunton, a student of Torrance, interacts on the reciprocity of particularity and universality.

For Polanyi, medieval Western civilization was the result of an ongoing discourse between the cognitive faculties of faith and reason (Polanyi, 1961). Ockham's exclusion of faith as cognitive power marks the dawn of modern rationalism (Polanyi, 1961: 238). Polanyi's post-critical project brings back belief as cognitive power to liberate us from objectivism (Polanyi, 1962: 265-267).

Of the foregoing Polanyians who considers objectivism's effect on epistemology, only Jha links tacit knowing to creative and responsible intellectual freedom (2002:149-150, 180-182). None of our scholars engages the social-epistemic duality of CAT as part of their analysis as I do in this chapter.

For Polanyi, the primary source of trouble from objectivism does not come from its application to the exact sciences (where its principles are in fact disregarded in practice) but its extension to the life and social sciences and even to domains beyond science (1962:vii,139-142 233, 234, 380, 1966:74. 85). It was this extension which saw domains requiring value judgment crippled by the fact/value divide. Objectivism sets up moral inversion and totalitarianism.

As Polanyi stated:

[M]echanical reductionism...is at heart of the matter...the origin of the whole system of scientific obscurantism under which we suffer today...the cause of our corruption of the conception of man, reducing him either to an sentient automaton or to bundle of appetites...science denies...personal responsibility [therefore] can so easily be invoked in support of totalitarian violence. (1977:25)

Polanyi understood the implications of objectivism to both life and mind as shown in a number of his works (or sections) which rejoinder objectivism (1997b: Chs. 21, 22, Polanyi, 1962: 261-264, Ch. 12, 1969: Chs. 13, 14). Biologists such as Sir Francis Walshe (1968) and Ute Deichmann (2011) have gleaned from Polanyi to also argue against reductionism in biology.

Polanyi was particularly concerned with the danger posed by objectivism's abandonment of traditional ideals in the theory and practice of the social sciences for here objectivism prepared the way for moral inversion as it "impaired man's moral consciousness" (1962:153). It was objectivism's insistence on the factual, certain character of knowledge which brought a wedge between fact and value. Polanyi noted:

Objectivism had totally falsified our concept of truth, exalting what we can know and prove while covering up with ambiguous utterances all that we can know but not prove even though the latter knowledge underlies and sets its seal to all that we can know and prove. (Polanyi,1962:286)

Marjorie Grene, too, convincingly argues that values precede fact (1974:159). Objectification, evaluation and freedom are inseparable, binding the knower under the self-imposed standard of the truth's value (1974:176). Indeed, evaluation forms the very basis of how humans constitute a society (1974:177). It is this epistemic interrelation between value and fact which objectivism eliminates.

Objectivism renders those who practice the social sciences incapable of making sound moral judgments in fields which, by the predominantly tacit nature of their knowledge, require such judgments. This was the case of Western observers of the Hungarian Revolution which Polanyi criticized so strongly (1969 Chap. 2). For him, Western academicians, operating from the same philosophical presuppositions as Marxists, weakened the cause of freedom and truth.

Social scientists who follow Polanyi sense the danger resulting from the loss of traditional ideals which objectivism entails and, use Polanyi to advance arguments against objectivism in the social sciences. Eugene Miller (1972), for one, points to the positivism/ historicism divide which renders political theory useless in its role with Polanyi bridging the divide.

Marben Poirier (2011) similarly notes social sciences' struggle to overcome Continental positivism (objectivism) and its expulsion of value from the social sciences. He vouches for an approach which positively takes into account tacit knowledge in society and its study. He points out that objectivism's denial of traditional metaphysical assumptions takes away the sources of meaning, order or reality and leaves us in a self-referencing flux (2011:213) or nihilism. Persons are then obligated to gain absolute control over the natural and human order (2011:214), which, in short, is totalitarianism.

It is at this juncture that technology and ideology (objectivism) meet with devastating results, not just in totalitarian violence, but in the way persons are construed and treated as objects and not persons. Positivism, separating facts from values (2011:216), leaves social science morally incapacitated and a deceptive guide in social matters. The recovery of belief in traditional ideals is essential.

Richard Allen argues objectivism's value and fact divide leaves society without moral resources to constitute a political order and looks to Polanyi (Allen, 1998). Murray Jardine uses Polanyi to explain why objectivism failed (1998: Ch. 2), then reckons with the nihilism with which late modernity is left. While the foregoing look to Polanyi to ground the moral order of social freedom, none of these directly draw inference to its implications for intellectual freedom, only to general, or presumably, social freedom.

Besides the damage it does to our moral ideals, objectivism is an intellectually untenable position, the contradiction of (a) holding to an ideal of detachment while renouncing ideals; (b) being a belief system while negating beliefs; (c) removing epistemic and moral sources of community, authority and tradition (CAT) even while establishing for itself a community, authority and tradition; and (d) censuring narrative even as it narrates. Moreover, critical doubt by means of language aspires to certain and explicit knowledge free of belief and authority while glossing over the fact it relies on language acquired a-critically (1962:295) and language acquisition involves belief and authority (1962: Ch. 5).

The conditions of knowing cannot be denied without denying knowledge. Objectivism brings our intellectual commitments against reality and sets thought against the "what-is-ness of what is", theory against practice. It is the Viennese Circle reducing music to the mathematical frequency of notes and the scraping of horsetails on the intestines of cats, all the while ardently attending music concerts (Jaki, 1980:222). Objectivism ultimately is rebellion against reality, the essence of nihilism. In sum, objectivism has led to the "destruction of all meaning" (Polanyi, 1962: 236), (Polanyi, 1960, Lecture 1), (Polanyi and Prosch, 1977, 22-28).

TTK, on the other hand, creates truth as contact with reality, not only as a new way of relating to the world but a new way of being in the world, a new self. Under compulsion of contact with reality, a new or modified self becomes a new source of authority from which a reformed tradition and community can arise. Contact with reality by the creative act of tacit knowing is both epistemic and social, holding promise of social transformation. Moreover, in a case study of Polanyi's reading of the Hungarian Revolution, he fails to follow up his own thought to show how the revolutionaries' creative exercise of tacit knowing led to a reformed CAT and social transformation.

Hence, I anticipate that my re-forged CAT-tacit knowing-truth triad is structurally parallel not only to the late Polanyi's TTK's triad but also to the spontaneous orderpubic freedom-truth triad extracted from the early Polanyi. My re-forged structure of intellectual freedom gives the philosophical grounds to the social freedom-society relation. I thus envision this intellectual freedom as a way to bring together the early Polanyi and late Polanyi. Hence, a solution to the problem of liberalism's selfdestruction emerges.

4.2.2 An Analysis of Tacit Knowing

This analysis focuses primarily on the knower's integration, which is intellectual freedom, the creative exercise of tacit knowing; I reconstruct from Polanyi's TTK the CAT-intellectual freedom-truth triad. We have referred to the triad <u>from-knower-to</u> triad. As laid out by Polanyi, the triad involves two kinds of awareness charted on Figure 4.1; awareness is to have knowledge, perception or consciousness of something.

The two kinds of awareness³⁰ of tacit knowing are "not degrees of attention but kinds of attention given to the same particular" (1969:128); they are two kinds of knowing (1966:7) entailing two kinds of knowledge, tacit and focal. The subsidiary is not unconscious (Mitchell, 2006b:74) or lesser. Moreover, all focal awareness depends upon the subsidiary. While all knowledge or coherence is shaped by the person, integration is not an arbitrary (1959:36) but responsible act involving an obligation to conform to reality (1962:309). Tacit knowing by integration is ultimately the source of all knowledge (1966:6).

³⁰ The two kinds of awareness are further grouped into four binary modes: subsidiary/focal; parts/whole; from/to; or proximate/distal.

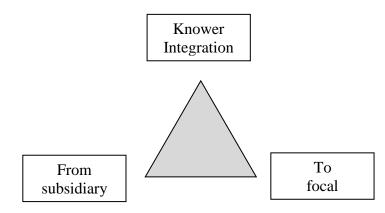


Figure 4.1 TTK Triad

Integration's centrality has earned TTK the designation of "integrative philosophy" (Jha, 2002:Chap 5). Integration accounts for tacit knowing and, so far as can determined, the power operating in tacit knowing. The tacit powers are decisive in tacit knowing and it is from them that I extract intellectual freedom. Yet, structurally, integration does not stand on its own; it takes being in action, in the interaction with the from, subsidiary, proximate awareness_even while directing attention to the to, focal, or distal awareness of TTK's triad.

4.2.3 TTK's Key Concepts

Having introduced the triadic structure of knowing, my exposition links either the <u>from</u> or <u>to</u> side of tacit knowing with the knower. I discuss the following notions of TTK: belief, skills, discovery, integration-perception, indwelling/interiorization, problem, intuition, intellectual passions and truth/reality. My aim is to set up from TTK's triad the relation of CAT (Community, Authority and Tradition) and intellectual freedom in knowing and truth. As stated, my emphasis now is on the knower's central role in knowing (as intellectual freedom) but later I shift the discussion to CAT when I show that intellectual freedom presupposes CAT.

4.2.3.1 Belief

Beliefs are on the <u>knower-from</u> side of TTK triad. Polanyi's fiduciary programme³¹ indicates ultimate or fundamental belief which can be discovered only if it presupposes its own conclusions (Polanyi, 1962: 299) and admits its circularity (Polanyi, 1962:288-92). Basic beliefs form a general belief about things, a fiduciary framework (Polanyi, 1962: 266-268) and the practices which these beliefs authorize (Polanyi, 1962: 299).

PK's fiduciary programme sets out to re-establish the correlation of belief to knowledge, to re-discover the nature and grounds of belief and to thereby rehabilitate its incumbent personal responsibility. Belief as implicit fiduciary frameworks are on the <u>from</u> side of TTK's triad hence function tacitly in the pursuit of truth. Finally, TTK shows that belief is an epistemic necessity yet one requiring modification if we are to escape subjectivism (Polanyi, 1962: 299).

At the turning point of PK (Polanyi, 1962:265, 266), we are told that a rupture in cognition occurred at the dawn of the modern era when the "critical mind repudiated one of its cognitive faculties to rely completely on the remainder" (1962:266). Hence, we are called upon to again recognize and recover the role of belief in knowing (1962:266). Polanyi is a metaphysical believer (1964b:81) and insists that the grounds of science (1966:70) and all knowledge is grounded in metaphysical beliefs (1966:82, Jha, 2002:45). Polanyi's "belief", although referring to St. Augustine, is general and not religious (Sanders, 1988: 266).

³¹ POLANYI, M. 1962. *Personal Knowledge: Towards a Post-critical Philosophy*, Chicago, University of Chicago Press. p. 299 "I believe that in spite of the hazards involved, I am called upon to search for the truth and state my findings" [italics in original].

Belief must be recognized as the source of all knowledge (Polanyi, 1962:266). We are called upon to acknowledge the role of "tacit assent and intellectual passions, the sharing of an idiom, of a cultural heritage: such are the impulses which shape our vision of the nature of things on which we rely for the mastery of things" (1962:266). This quote is crucial because it touches on basic beliefs or a vision of the nature of things, the preconditions to any knowing (mastery of things).

Further, a general view of things must be stable and able to encompass the entire experience of man (1964b:10). A general view is a "framework of anticipation" (1962:103), a "guide for the interpretation of future experience" (1962:135), "a scale of interest and plausibility" (1962:135). It is "a loose system of intuitions" which is "as much emotional as it is intellectual" (1951:51). Such systems of beliefs seem to be a universal feature of the human race (1951:70).A "general view of things" is a fiduciary framework which comprises the tacit coefficient or dimension of Polanyi. As said, such systems of belief operate implicitly (1962:287, 288) or tacitly. But these beliefs are also subject to inevitable modification (1964b:11). Finally, in contradistinction to doubt, belief is a heuristic principle while doubt is not (1962:Chap 9); all thought must begin with some assumptions or beliefs which critical doubt seeks to go around but only by carrying, embodying in or advocating , its own presuppositions or beliefs (Polanyi, 1962:297).

The beliefs of a fiduciary framework are by nature basic beliefs (Polanyi, 1962:299-300). An ultimate or basic belief is by nature irrefutable and unprovable (1962:271, see also Torrance, 1984:194). A basic belief "expresses the commitment of the mind to reality which rational knowledge presupposes and on which reason relies (Torrance, 1984:194). Furthermore, to believe is simultaneously a free and obligatory act (1984:197) which has a normative character (1984:199), that is, which the believer holds to be universally valid and binding (1984:199). In short, a belief is authoritative. Finally, belief works on the <u>from - knower</u> side of tacit knowing. To extend Polanyi, a knower is a believer participating in his beliefs hence knowledge is personal.

A fiduciary framework is a world view³²; TTK discloses the nature, structure, function and purpose of a world view in knowing³³, that is, its place on the <u>from</u> side of TTK. As mentioned, TTK attends to the issue of relativism to which PK had drawn criticism. Simultaneously, it draws attention to the phenomenon of world view or fiduciary framework in all knowledge thereby disclosing objectivism's self-contradictory ideal of detached, certain knowledge purged of belief.

Polanyi's emphasis on the role of belief in knowledge or knowing makes him vulnerable to charges of fideism, dogmatism, subjectivism, solipsism and relativism. These are important issues and beyond my scope, except to say that have been addressed by Sanders (1988:Chs. 5&6).

³³ BLUM, P. 2010. Michael Polanyi: the anthropology of intellectual history. Studies in East European Thought, 62, 197-216. p 204. The nature and function of world view in Polanyi is summed in "Our vision of the general nature of things is our guide for the interpretation of all future experience" POLANYI, M. 1962. Personal Knowledge: Towards a Post-critical Philosophy, Chicago, University of Chicago Press. p. 135 which Blum interprets: (1) it is possible to have a general view of the nature of things; (2) this view assumes that there is a unifying theory of reality; (3) the assumption of a common nature of things guides further research; it operates like a regulative idea; (4) this view serves as a framework for interpreting experience" i.e., it is an interpretive device; (5) the interpretive guidance works for experience yet to come; (6) therefore the guiding world is the same time closed and open.

³² WOLTERS, A. 1989a. *Creation Regained: Biblicaal Basics For A Reformational Worldview*, Grand Rapids, Eerdmans Publishing Company.p 2. Defines worldview as "the comprehensive framework of basic beliefs about things." See also NAUGLE, D. 2002. *Worldview: The History of a Concept*, Grand Rapids, Eerdmans. For a thorough historical survey of the notion which covers, amongst others, the contribution of Kant, Hegel, Marx, Dilthey, Husserl, Heidegger, Nietzsche, Polanyi, Kuhn, Mannheim and Freud and its latent relativism present in the notion.

4.2.3.2 Skill and Practice

Skills and practice are on the <u>knower-from side of TTK triad.</u> Too much stress cannot be put upon the central role of skills in TTK. Polanyi's discussion of skills introduces for the first time the basic triadic structure of tacit knowing (1962:57-63). Skills also bring out the interaction between tacit knowing and the social realm (1962:53-57).

A skill is an ability, a power to do, perform or achieve, a practical "knowing how" knowledge, the performance of which is capable of being publicly judged and personally evaluated by its own tacit normative standards. Knowledge of a skill is lived experience, an indwelling, "a pouring of ourselves into subsidiary awareness of clues" (1962:64) involving going from subsidiary clues to focal object. Polanyi's now classic example is using a hammer where our subsidiary awareness is in our hands while the focal is on the nail.

A belief authorizes a practice and its exercise entails tacitly acquired skills. A skill functions (is exercised) in the mode of TTK's triad-tacitly embodied bodily clues integrated to achieve or perform a task; its performance requires the agent/knower's participation (Polanyi, 1962: 49) and is therefore personal. Knowledge entails the skilful act of tacit knowing and all external knowledge has roots in the body (Polanyi, 1966, 14)The practical knowledge of a skill is unspecified or tacit (Polanyi, 1962:53) and learned only by following the example of its practice or its art (1964b:15). To learn a practice is to follow in a tradition (1962:53). Indeed, to learn by example is to submit to authority and to submit to authority entails trust. Further, a tradition persists only within a community. Thus, a skill involves belief and is socially transmitted and embodied. A skill is both epistemic and social. We also have signposts to the centrality of community, authority and tradition in tacit knowing.

4.2.3.3 Discovery

Discovery is found on the knower-to side of TTK triad. The discovery of knowledge is science's raison d'etre. To discover is to uncover something there but hidden. Gelwick argues discovery is the key to TTK (1977:84). Marjorie Grene maintains discovery, or *heuristics*, how to account for new knowledge, is the root problem of epistemology (1974:23). Discovery for Polanyi raises the question of the power of thought which, to his mind, is epistemology's fundamental problem (1964b:13).

TTK analyses scientific discovery from the view of practice. In its context, it was an important original contribution to epistemology's discourse. TTK correlates scientific discovery, which leads to new scientific knowledge, to our everyday experience of perception³⁴. Over about three decades, Polanyi indicates previous and contemporary philosophers of science who, independently of him, made scientific discovery the nub of the knowledge enterprise which had similar outcomes as his.³⁵

³⁴ POLANYI, M. 1964b. *Science, Faith and Society,* Chicago, University of Chicago.p. 12. Notes he draws on Gestalt's findings on perception and his kinship to Merleau-Ponty's and Husserl's work on perception, POLANYI, M. & PROSCH, H. 1977. *Meaning,* Chicago, University of Chicago Press.p. 56. On the relations between perception and scientific discovery, Polanyi cites reliance upon the work of Polya, Poincare and Hadamard. HAGNER, M. 2012. Perception, knowledge and freedom in the age of extremes: on the historical epistemology of Ludwik Fleck and Michael Polanyi. *Studies in East European Thought,* 64, 107-120. Argues perception links Polanyi and L. Fleck, the latter influencing T Kuhn.

³⁵ POLANYI, M. & PROSCH, H. 1977. *Meaning*, Chicago, University of Chicago Press. p. 57. Found TTK's assumption of science as an insight into the nature of reality had been anticipated by the 19th century polymath W. Whewell's <u>The Philosophy of Discovery (1860)</u>; POLANYI, M. 1964b. Science, Faith and Society, Chicago, University of Chicago. p. 12. Mentions his link to the contemporary A. D. Ritchie, W. I. Beaveridge, J. D. Bronowski, Stephen Toulmin, N. R. Hanson, Konrad Lorenz, Thomas Kuhn, Gerald Holton, C. H. Perelman and A. I. Wittenberg; POLANYI, M. & PROSCH, H. 1977. Meaning, Chicago, University of Chicago Press. pp. 56, 5. Finds his own views confirmed by L. K. Nash in The Nature of the Natural Sciences (1963). See also SCOTT, W. T. 1995. On Polanyi's Notion of Rationality. In: MISIEK, J. (ed.) The Problem of Rationality in Science and Its Philosophy. Dordrecht, The Netherlands: Kluwer Academic. Holds that Polanyi's views of natural science and its origins derive from E. Schroedinger. See also SCHROEDINGER, E. 2014. *Nature and the Greeks and Science and Humanism*, Cambridge, Cambridge University Press. It is noteworthy that Polanyi nowhere mentions K.. Popper and The Logic of Scientific Discovery except in mentioning or alluding to his methodological opposition of its falsification thesis POLANYI, M. 1962. Personal Knowledge: Towards a Post-critical

TTK lays forth the case that scientific discovery (1) presupposing metaphysical beliefs concerning the nature of reality and tacitly transmitted practical skills; (2) leads to new knowledge of truth or contact with a new aspect of reality holding promise of indeterminate future manifestations); by means of (3) the knower's creative exercise of tacit knowing or tacit integration (1) joins (2) by (3) giving TTK's triadic structure.

One of the first principles of scientific discovery, is that thought is under an obligation to seek truth (1969:134). Truth is transcendent and is beyond the scope of any one person. Knowledge can and should grow by discovery. Furthermore because knowledge of truth can only grow by the creative exercise of tacit knowing (or intellectual freedom), then space should be made in the social and epistemic enterprise of science for its exercise.

TTK, as a theory of discovery, puts the discoverer (knower) and her creative exercise of tacit knowing at the centre of the growth of scientific thought or knowledge and by extension to all knowledge. All knowledge then is ultimately personal and has tacit roots; the scientific ideal of objectivism has been debunked. This holds because integration entailed in perception is common to all knowledge, including perception occurring in scientific discovery. Scientific knowledge then should acknowledge the validity of other equal forms of knowledge.

However, we should be aware that the knower's centrality has brought charges of psychologism against Polanyi, charges which to my mind, are again adequately addressed by Sanders (1988:212-224) and beyond my scope. For my purposes, the

Philosophy, Chicago, University of Chicago Press. pp. 46, 64, 167 POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul .p. 27

creative exercise of tacit knowing is intellectual freedom which leads to discovery. Tacit knowing, the knower's integration, presupposes tacit beliefs and skills but transcends these to achieve contact with reality, a discovery. By the very nature of discovery and truth, there are implications for society. Society should cultivate the desire for truth or things of intrinsic excellence, the pursuit of truth for its own sake and also give space for personal judgment or thought will not grow. Yet society must attend to the risks of deception entailed by thought as the pursuit of truth and this is the matrix of a Polanyian free society.

4.2.3.4 Problem as Foreknowledge

A problem involves the knower-to side of TTK triad hence is tacit and personal. Science is about problem-solving (Polanyi, 1964b:14, 21-24 Polanyi, 1962:120-131). Problem solving encompasses the process ranging from the sighting of a problem to claiming its discovery (Polanyi, 1969:40). To understand problem-solving Polanyi went to Gestalt psychology, Polya, Hadamard and Poincaire (Polanyi, 1964b:14). Still, to his mind, the question of the problem was unanswered, leaving scientific discovery in obscurity, thereby rendering the grounds of science uncertain.

Indeed, Polanyi wrestles with a question which goes back to the Meno paradox³⁶ and, to his view, is the root problem of epistemology (Grene, 1974: 23) and, finally, to which tacit knowledge answer (Polanyi, 1962: 22). TTK by tacit knowing brings together "seeing something that is hidden" and "originality" (seeing something of which the rest of humanity has no inkling) (Polanyi, 1966:21); both are personal and tacit. Their link

³⁶ See SANDERS, A. 1988. *Michael Polanyi's Post-Critical Epistemology: A Reconstruction of Some Aspects of 'Tacit Knowing'*, Amsterdam, Rodopi. pp. 27-34, GRENE, M. E. 1974. *The Knower and the Known*, Lantham, University Press of America Ch. 1.

forms the normative conditions of successful scientific research: a good and original problem.

Discovery starts with a problem. To be aware of a problem is to sense something unusual (Polanyi, 1964b:23), feeling of perplexity (1962:120). The urge for resolution hints that a tacit belief anticipates a solution exists and impels the search for it (1962:120). Further, a problem is only a problem if is puzzles someone (1966:122) Finally, no discovery was ever made without a problem.

"[A] problem can only be known tacitly" (Polanyi, 1966:87); a problem points to an undisclosed aspect of reality (Polanyi, 1966:87, 89), to what perhaps no-one else has seen. While one does not know what to search for, yet awareness of problem is a <u>foreknowledge</u> (1997b:256, Polanyi, 1964b:14,32, Polanyi, 1966:22), a hunch of where to look (1964b:14).

We should note problem-solving is structured by the tacit knowing triad: any theory or hypothesis tacitly assumes (belief) in a real entity, the <u>from</u> side; involves intuitively sorting through clues, the <u>knower (3)</u> while keeping the problem ever in focus, <u>to side</u>.

Indeed, the recognition of a problem is already new knowledge (1962:120) and points to a dynamic power which originates in a person. A problem is personal: "Nothing is a problem in itself; it can only be a problem if it puzzles or worries somebody and a discovery only if it relieves somebody from the burden of the problem" (1962:122). I infer a problem which yields new knowledge cannot be assigned. If a person does not perceive a problem, then it will not be solved.

4.2.3.5 Intuition

Intuition plays on both the knower-<u>from or subsidiary</u> and <u>knower-to</u> or <u>focal</u> side of TTK triad and, since unspecifiable and intentional, is tacit and personal. Intuition is the faculty of knowing without conscious reasoning, one which Polanyi takes to be the integrative power of the mind (Sanders, 1988:48). A problem overlaps with intuition. "[A] good problem is to surmise the presence of something hidden" (Polanyi, 1997b:237) yet lying in a certain direction (1997b:238). Intuition is an awareness of and guide to a not-yet-disclosed aspect of reality (1964b:23-32). Intuition interrelates to a loose system of intuitions (basic beliefs) on the <u>from</u> side (1964b:11) but aims <u>to</u> unknown truth of a thing never before seen .

Intuition, according to Polanyi, is a skill³⁷ whose structure in scientific endeavour is the same as common perception (Polanyi, 1969:118). It lies behind originality (Polanyi, 1969:118,119). Intuition is tacit knowing, the fundamental, integrative power of the mind (Polanyi, 1969:156).

Intuition ranges widely, encompassing the integrative acts of scientific inquiry (Polanyi, 1969:201-205). It is first manifested in surmising the likelihood of a hidden coherence in nature present at the inquiry's start (Polanyi, 1969:201). Intuition then continues to manifest itself as it guides all the acts of integration which ultimately culminate in a discovery (Polanyi, 1969:202).

³⁷ POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul.p. 144. "[I]ntuition is not the supreme immediate knowledge...of Leibniz, Spinoza or Husserl but a work-a-day skill for scientific guessing with a chance of guessing right."

Moreover, Polanyi differentiates between two species of intuition. The first is denoted as "anticipatory intuition" (Polanyi, 1969: 202), described as "the faculty for integrating signs of potentialities" (Polanyi, 1969: 202) and a series of surmises (Polanyi, 1969: 202); it shows intuition's arduous face (Polanyi, 1997b: 268). The second intuition, also a surmise, is the "final intuition"³⁸ (Polanyi, 1969: 202) but occurs spontaneously (Polanyi, 1997b:268), without effort (Polanyi, 1969)202 and is a claim of a discovery (Polanyi, 1969: 202). The former is difficult to explain to others, hence more tacit, while the latter, having more tangible grounds, can be communicated and its persuasive powers transmitted to others (Polanyi, 1969:202-3). All exercise of intuition, whether anticipatory or final, are acts of tacit knowing and by extension, show the creative exercise of tacit knowing.

"Intuition" is central to TTK yet its explanation is not straightforward due to its tacit nature. Sanders defines it as "[t]he faculty for surmising with a fair degree of probability the presence of a hidden coherence in nature" (1988:13 see also, Polanyi, 1969:210, 1997b:253). Polanyi refers to intuition as an "[empirical] groping for the meaning of facts" (1962:150). It operates as (1) <u>foreknowledge</u> (1997b:256).; <u>hunch</u> (1964b:14); and even <u>guesswork</u> (1964b:31,32,). It guides imagination (1997b:260). Elsewhere it is "an ultimate agency which, unfettered by any explicit rules, decides on whether a particular instance shall be included under any general rule.." (1969:105). Further, since intuition points to something indeterminate in its meaning, one can never tell exactly what one means when intuiting (1962:150). By extending Polanyi, intuition

³⁸ Ibid. p. 202. Final intuition is linked to Poincare's illumination. I take it that anticipatory intuition involves preparation and incubation stages of Poincare's stages of discovery; Poincare's verification occurs after illumination or final intuition has taken place.

is the exercise of a positive intellectual freedom \underline{to} apprehend reality but which is nonetheless from a general view of things.

Einstein refers to intuition as 'ein intutives Heranfuehlen an die Tatsachen" (which I render "intuitive groping or feeling to reality"³⁹) (quote in Polanyi, 1962:150). Polanyi relates it to Kant's "mother-wit" (1969:105, 106), the faculty or agency of judgment and to Poincaire's concept of illumination (Polanyi, 1969:201). Grene (1974:24) and Meek (1983b, 1983a) link intuition to Merleau-Ponty.

To venture to know the unknown, if it is to have a chance of succeeding, is not haphazard but to be guided through intuition's signalling degrees of proximity to the solution (contact with reality). It is like detective work. Intuition calls for a stream of judgments as we respond to unfolding indeterminate clues reaching us. Exercising judgment goes in tandem with exercising intellectual freedom with the latter dominating when contact with reality occurs.

Two parties battle in a knower's mind: (1) creative intuitive speculations (1964b:41); and (2) caution springing from existing critical standards of the field (1964b:41); conscience finally arbitrates (1964b:41). The vector of (1) aims towards truth while (2) derives from CAT. The tussle between them decides if contact with a new aspect of reality has actually occurred. Conscience decides and is supreme (1964b:41). By extension, conscience assumes truth and intellectual freedom.

³⁹ See also GRENE, M. E. 1974. *The Knower and the Known*, Lantham, University Press of America p. 24. "[We] must admit as essential to the very notion of mind the kind of groping that constitutes the recognition of a problem."

However, the cool reception of "intuition" and "commitment" forced Polanyi to query further. Kuhn, for example, saw in intuition "a kind of mysticism or 'extra-sensory perception" (Nye, 2011:247). Popper and his school (Sanders, 1988:Ch. 5) spurned *Personal Knowledge*'s "invitation to dogmatism" (Polanyi, 1962:268). TTK clarifies intuition by integration. Integration marks a shift from the <u>from - knower</u> side of tacit knowing to the <u>knower - to</u> side and is the knower's contribution.

4.2.3.6 Perception/Integration

Perception/integration is found on the <u>knower</u> - <u>to</u> or <u>focal</u> side of TTK triad and is therefore personal and tacit as well as unspecifiable and intentional. To perceive is to attain awareness or become aware of through the senses; perception is the act of perceiving. Perception is the recognition or awareness of a pattern, gestalt or form (Grene, 1974). Perception presupposes (ontological) order as opposed to randomness (Polanyi, 1962: 33-4), yet, as epistemic entity, relies on unspecifiable criteria and probability⁴⁰. Both Grene (Grene, 1974: Ch. 8) and Polanyi (Polanyi, 1962: Ch. 3) attribute the recognition of order or pattern to the aesthetic element⁴¹ entailed in knowing (and anticipates intellectual passions.)

⁴⁰ See POLANYI, M. 1962. *Personal Knowledge: Towards a Post-critical Philosophy*, Chicago, University of Chicago Press. Ch. 3. POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul and GRENE, M. E. 1974. *The Knower and the Known*, Lantham, University Press of America, Ch. 8 for perception as a bridge between objective and subjective statements as well as logic and psychology. See HAGNER, M. 2012. Perception, knowledge and freedom in the age of extremes: on the historical epistemology of Ludwik Fleck and Michael Polanyi. *Studies in East European Thought*, 64, 107-120.On the nature of scientific perception in Polanyi and Fleck and how perception plays in their theories of social freedom.

⁴¹ See JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburg, University of Pittsburgh Press.Ch. 2 considers three TTK models; the Action-Guiding model (pp. 55-60) gives the active mode of intentional knowing; and the Semiotic model (pp. 60-61) gives a vectorial quality to knowing; from which a principle of motility can be extracted. Ch. 4 lays out the relations of TTK, especially integration and intellectual passions, to Kant's critique of moral and aesthetic judgment once Polanyi moved on from Gestalt.

Polanyi tells us that perception was the basic assumption which led him to tacit knowing (1969:138) and that Gestalt psychology had pointed him to its significance (1969:115,119,139). Perception is comprehension, an activity (1962:96) a personal act that cannot be replaced by formal operations (1959:49). Perception is the starting point of "we know more than we can tell" (1966:4, Jha, 2002:53). Perception involves an integrative act and appears to be more akin to final than anticipatory intuition, although the act is subsumed into the workings of the latter.

As much as Polanyi looked to Gestalt psychology, it did not account for the intentional, active role or powers of knower in knowing (1966:6) and the problem led to Polanyi's discovery of two kinds of awareness at work (1962:55-66, 1969:144). Reflection on perception pointed him to the integrating powers (1969:114)and led Polanyi to the structure of tacit knowing, a mechanism to explain scientific discovery (1969:143). It is these active tacit and personal powers which are at work in bringing together the two awareness which culminate in the act of integration or tacit knowing (1969:140), and of which Gestalt fails to give an account, that Polanyi seeks.

In using integration, TTK departs from reliance on Gestalt and begins to incorporate elements from phenomenology especially intentionality⁴² and consciousness⁴³ as well as

⁴² See POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul.p. 141 intentionality's role in thought goes back to Bretano p. 141, its correlation to consciousness. POLANYI, M. & PROSCH, H. 1977. *Meaning*, Chicago, University of Chicago Press. p. ⁴¹ POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul.p. 32 Intentionality as conscious act of mind; POLANYI, M. & PROSCH, H. 1977. *Meaning*, Chicago, University of Chicago Press.p. 41. TTK as amplification of intentionality as consciousness by reference to its tacit roots. See also SANDERS, A. 1988. Michael Polanyi's Post-Critical Epistemology: A Reconstruction of Some Aspects of 'Tacit Knowing', Amsterdam, Rodopi. Ch. 2 "The Intentionality of Perception" especially his exposition of TTK's intentionality in light of Searle's. See also SEARLE, J. 1983. *Intentionality: An Essay in the Philosophy of Mind*, Cambridge, Cambridge University Press.

⁴³ POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul.p. 141. On indebtedness to Brentano; similarity of TTK's structure to consciousness in Merleau-

semiotics/speech act theory⁴⁴. Through these, Polanyi extracts the active mode or principle to account for the mind's motility. Integration, or tacit inference, links the personal and objective poles of knowing (Jha, 2002:210) and is akin to Peirce's abduction (Sanders, 1988: 155). Integration establishes (1) the independent reality of the mind; (2) the mind's place in his ontological hierarchy; (3) the relations of mind, body and world; and (4) how the mind can know other minds.

Integration emphasizes intentionality in perception. Integration occurs in a performance of knowing when unconnected clues converge into a coherent whole. An example would be learning a piece on the piano when each note is played on its own with little connection or coherence to the other notes. When integration occurs, a cohesion results by which the individual notes still are significant but contribute to the whole.

Integration is spontaneous (Polanyi, 1997b:268), indeterminate (1997b:251) (cannot be controlled or planned) (1997b:268) and connected to originality. Finally, integration is not achieved by volition or mind alone but engages the whole person, especially personal judgment, and is by nature a personal achievement.

Ponty, Husserl, Rothschild and Ryle ibid. pp. 221,222; objectivism's denial of consciousness and its rehabilitation by TTK POLANYI, M. 1965. On the Modern Mind. *Encounter* [Online]. Available: http://www.unz.org/Pub/Encounter-1965may [Accessed 2015-06-25]. (18-22). See also JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburg, University of Pittsburgh Press. pp.70-80 on the relations of Merleau-Ponty's perception, consciousness and intentionality to TTK.

⁴⁴ POLANYI, M. 1969. *Knowing and Being: Essays by Michael Polanyi*, London, Routledge & Kegan Paul.pp. 181-2. When Polanyi first denotes the TTK triad, he mentions its kinship to Charles S. Peirce's logical-semiotic triad; ibid.Ch. 12 the semiotic model relates to Polanyi's notion of sense giving or meaning making; ibid.Ch. 12 integration here is the logic of tacit inference. See also JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburgh, University of Pittsburgh Press.pp. 53, 61 and pp. 158-159.

4.2.4 Indwelling/Interiorization

Indwelling is on the <u>knower</u> - <u>from</u> or <u>subsidiary</u> side of TTK and is a tacit, personal form of or means to knowledge (Polanyi, 1997b:337). Indwelling is an unspecifiable and intentional mode of being. To indwell is to inhabit or to abide within. At one point, Polanyi tells us that tacit knowing is an act of indwelling (Polanyi, 1969:160), at another, a form of mental existence (1969:134). Following Sanders, indwelling is an existential, personal participation in or contemplation of the object of focus (Sanders, 1988: 231). Jha indicates indwelling a mode of understanding by existential experience (Jha, 2002: 70).

Indwelling's place in TTK cannot be overstated. Indwelling (1) grounds knowing in one's body (Polanyi, 1966: 29); (Polanyi, 1968:34-5) (2) bridges mind-body as well as mind-world (Polanyi, 1969: 159-161) (3) establishes the knowledge of other minds (Polanyi, 1968 pp. 34-42); (4) points to relations between the structure of knowledge and structure of being with degree of indwelling increasing as we go up the hierarchy of complexity of being (Polanyi, 1969: Ch. 13).

As I understand it, indwelling differs from integration in terms of nature and sequence. Integration is a one-off event or achievement, the act of creative exercise of tacit knowing, which, while relying subsidiary clues, vectors to the focus and is related to "breaking out"; indwelling is living by the event's trustworthiness while still maintaining an appraising attitude to it. Integration vectors on the <u>to</u> side of TTK's notation while indwelling on the <u>knower – from side.</u>

Indwelling marks out for Polanyi a mode of being which is equivalent to Heidegger's *being in the world* (Preface to 1964 edition of PK). Indwelling, as a form of understanding is indebted to Dilthey's existentialism (Jha, 2002:79-85), "lived

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experience" (Jha, 2002: 80) and "Einfuellung" (empathy) (Sanders, 1988:231). Indwelling as a mode of knowing also corresponds to Merleau-Ponty's "presence of the moment" (Jha, 2002:80). We thus can thus establish TTK's relations to existentialism.⁴⁵

Polanyi ties indwelling to Dilthey and existentialism but he differs in that he makes it epistemically universal unlike Dilthey's social/natural divide (1969:156). Polanyi's knowing act has the knower participating in all live knowledge in a moral manner like the moral person of Kant's critique (1969:156). Jha also links it to Merleau-Ponty (2002:71) as does Meek (1983b). Indwelling is for Gelwick a revolutionary concept of TTK (1977:70) setting apart humans as creatures who live and know by indwelling (1977:98) that establishes the unity of knower and world (1977:139). Mitchell (2006b:73) and D. Scott (Scott, 1996) stress indwelling is an extension of our bodies by means of intellectual frameworks, skills, tools, probes, and language, thereby uniting body to mind. Moreover, the growth of a conscious self means the growth of indwelling entailing a nurturing by society and growing by the knower's activity.

Polanyi first mentions indwelling in <u>PK</u> in speaking of indwelling tools and frameworks (1966:59). We are said to (1) rely on a subsidiary awareness of body processes (1962:59) and (2) pour ourselves into "the subsidiary awareness of particulars" (1962:64). Elsewhere, "pouring our minds and emotions into that which we indwell (1962:173). Indwelling occurs in (1) contemplation (1962:195-202); (2) sharing of fellowship (1962:212); (3) the use of articulate frameworks; and (4) our participating in

⁴⁵ See also GRENE, M. 1968. Tacit Knowing and the Pre-reflective Cogito. *In:* LANGFORD, T. & POTEAT, W. (eds.) *Intellect and Hope: Essays in the Thought of Michael Polanyi*. Durham: Duke University Press.pp. 19-57 which relates tacit knowing and pre-reflective cogito of Polanyi to Sartre; Sartre does not escape Cartesian categories that TTK does. *MILLHOLAND, D. 1966. Beyond Nihilism: A Study of the Thought of Albert Camus and Michael Polanyi* Duke University discourses Polanyi with Camus to show that both ultimately escape existentialism's despair.

a cultural firmament of truth (1962:380). Behind indwelling is a tacit belief that a contact with un-accessed reality is achievable. Indwelling involves trust or belief in the things which we indwell.

Moreover, because all thought is incarnated, it (tacitly) lives in our bodies and by the approval of society (1969:134). Hence all thought originates in our bodies (1969:134) (negating the Cartesian mind/body divide.) However, to qualify as thought, thought must strive for truth (1969:134), a condition of its freedom (1969:134).

To indwell is to interiorize (1969:148) where the difference is the direction of vector. To interiorize is to bestow meaning (1969:148) or to comprehend (1969). Indwelling occurs when we trust commit ourselves to our integration. Indwelling also causes us to participate in what we understand (1969:148, 149). What we indwell we incorporate into our intellectual frameworks.

There are levels of indwelling which correspond to levels of ontology; the highest or richest level of meaning is between persons (1969:150-1). I infer that the sharing of life between persons is where intellectual freedom and social freedom meet. At the same time, a disruption of the sharing disrupts the activity of freedom. The knowing of life occurs by the sharing of life and we share life by indwelling (1969:150-1). This is important for the life of society to establish its values. Indwelling is a form of knowing and a precondition of intellectual freedom.

Acts of integration and indwelling are acts of consciousness that involves intentionality (1969:141). Intentionality not only moves <u>to</u> something, it must move <u>from</u> something (1969:214) according to knowing's triadic <u>from-to</u> structure. It also implies knowing's

historical character; as there is no timeless privileged view from where we observe the world.

Indwelling and integration is an activity of knower in knowing that cannot be prescribed by rules or planned. Hence, both are indeterminate, spontaneous acts of imagination involving a whole person's participation in problem solving (1997b: Chap. 17). I extend Polanyi by arguing that integration and indwelling are means of intellectual freedom at work in mastering any problem since TTK is also theory of creativity (1997b:268).

4.2.4.1 Theory of Intellectual Passions

Intellectual passions are on the <u>knower</u> – <u>to</u> side of TTK, that is, they bear intentionality to reality, but look to personal, fiduciary roots on the <u>from</u> side of TTK. "Intellectual passions" appear in three texts, "Growth of Thought" (1941:445), *Personal Knowledge* (1962:Chap 6) and *The Study of Man* (Polanyi, 1959). *Science, Faith and Society* (1964b) used intuition as do later works (Sanders, 1988:48).

As Sanders suggests, passions have a guiding role in scientific discovery and do so out of an emotional response to intellectual beauty (Sanders, 1988:44-5). Intellectual beauty, in turn, is a token of reality, guide to discovery and a mark of truth (Polanyi, 1962: 300, Sanders, 1988:45) However, the structure, function and purpose of intellectual passions is not totally clear to Sanders or myself. Sanders believes that the cognitive powers of imagination and intuition cannot be activated or directed without the passions (Sanders, 1988:50). In other words, they seem to account for the motility associated with life. Jha connects intellectual passions to Kant's notion of moral person by way of Polanyi's universal intent which entails a moral judgment (Jha, 2002: 94-96). Intellectual passions also relate to Kant's notion of aesthetic judgment (Jha, 2002:93-112). The key word here is judgment⁴⁶ which cannot be specifiable but is tacit, personal and indeterminant, thereby giving space for free play⁴⁷ requiring judgment guided by intellectual passions (Jha, 2002: Ch. 4).

Intellectual passions are not just emotional but serve a logical function in knowing (Sanders, 1988:44, Polanyi, 1962:134). A passion is either a strong emotion of repulsion or love (1962:134) or an emotion is a motive (Sanders, 1988:46).

Intellectual passions are crucial to Polanyi's case against objectivism. If, as he argues, the scientific venture is suffused with the presence of intellectual passions, then objectivism's ideal of detachment is invalidated (Polanyi, 1959:38, 134). Intellectual passions are indispensable in science, they have a selective (1962:134-139), heuristic (1962:142-145) and persuasive mode and function (1962:150-160) in discovery.

Another facet of his theory of mental passions, which I infer to link to his battle against objectivism, is that science is an endeavour driven by a passion for intellectual beauty and accounts for theory generation (1962:154-155). Further, while being a personal

⁴⁶ See YEAGER, D. M. 2008. "The Deliberate Holding of Unproven Beliefs": Judgment Post-Critically Considered. p. 37. Available:

http://www.firstprinciplesjournal.com/print.aspx?article=1521&loc=b&type=cbtp [Accessed 2107/04/03]. for an account on the faculty of judgment and exposition of its role in Polanyi's notion of personal knowledge and tacit knowing.

⁴⁷ See BERNSTEIN, R. 1983. *Beyond Objectivism and Relativism: Science, Hermeneutics and Praxis,* Philadelphia, University of Pennsylvania Press. Parts 3 & 4 on related notions and roles of play and prejudice in Gadamer and judgment in Arendt. Also SIMMS, K. 2015. *Hans-Georg Gadamer,* London, Routledge. Ch. 3 "Play: prejudice, and tradition; situation and horizon" especially in regards to aesthetic judgment.

force, they can and should have proper objects to which they aim and are not just subjective. If passions lack a proper aim, they readily become destructive as moral passions. The doctrine of passions fuses morality, aesthetics and reason. Jha argues that the doctrine has a relation to Kant (2002:99-122)

TTK advances the case that (1) "certain emotions are right"(1962:134); (2) intellectual passions are a proper motive of comprehension (1962:38); and (3) the survival of our entire cultural heritage hangs on their justification (1962:134).

A passion relates to motive or motivation (Polanyi, 1941:445). A passion is a strong drive, feeling or love; intellectual passion in Einstein is "based on something like an intellectual love" (quote in Scott, 1996:34). Intellectual passions (1) are a craving for understanding (Polanyi, 1959:34); (2) they impel us to make contact with reality (1959:27); (3) and are the drive for coherence (1969:120. 138-140). Whereas passions seek satisfaction, intellectual passions seek intellectual joy (1959:37). Intellectual passions evoke intellectual admiration and appreciation (1959:34), even reverence (Scott, 1996:174).

According to Yeager, intellectual passions are: (1) personal; (2) motivations; (3) evaluative; (4) mental; (5) fiduciary; (6) distinctly human; (7) powers of love and devotion; (8) a product of society, language and culture; and (9) never satiated (2002-2003:38, 39). Furthermore, intellectual passions require their proper object (2002-2003:41). Proper objects of mental passion are transcendent ideals: truth, beauty, good (or right), justice, equality, freedom and brotherhood (Yeager, 2002-2003). The object's appreciation arises from its cultivation in and by society (2002-2003:39). Finally, I argue that intellectual passions relate to intellectual freedom.

4.2.4.2 Truth and Reality

If knowledge is personal and fiduciary, and, if tacit knowing puts the knower's integration at the centre, then "truth" and "reality" shall also be reformed. According to Polanyi, "truth lies in the achievement of contact with reality" (1962:147). Truth is one⁴⁸ ("though every person believed something to be different, there is only one truth") (1962:315). It is objective in the sense it exists by itself (1962:305). "[T]ruth is something that can only be thought about by believing in it" (1962:305); it is fiduciary. Further, truth involves a personal appraisal so establishing that truth depends on personal, tacit criteria which are not definable (Polanyi, 1962) or it has a personal and tacit component.

In its Polanyian sense, truth is the rightness of an action (1962:320) involving a fusion of the coherence of one's conceptual frameworks with confident claim that what we recognize is objective reality (Jha, 2002:133). Regarding rightness of action, any truth claim is an assertion (a fiduciary act involving a commitment) which authorizes the claim (Polanyi, 1962:320). (For now, it does make truth relative to language.) Ultimately, though, the truth of a proposition lies in its bearing on reality (Polanyi, 1969:172).

Yet, if the first paragraph's "truth" is compared with the second paragraph's, a tension appears; truth appears contradictory, both objective and subjective. In PK, Polanyi works to overcome the tension by the notion of commitment which joins personal (as opposed to subjective) pole to objective pole of universal intent (Polanyi, 1962:311).

⁴⁸ SCOTT, D. 1996. *Michael Polanyi*, SPCK. p. 108. Truth in the sense that it cannot be ultimately self-contradictory.

TTK further explores, reworks and restructures the link between objective and personal poles into the TTK triad and thereby clarifies truth, i.e., its structure, function and purpose. Polanyi's concept of truth presupposes reality is inexhaustible hence truth is a transcendent ideal towards which seekers of truth should strive or are obligated. Moreover, such a quest can only arise in a community which acknowledges (1) "there is a such a thing as truth; that (2) all members love it; (3) they feel obliged to pursue it; and (4) are in fact capable of pursuing it" (Polanyi, 1964b:71). Finally, the community effectively practices or embodies the art of free discussion⁴⁹ (Polanyi, 1964b:71). Polanyi's truth is therefore a regulative principle⁵⁰ predicated upon the belief in truth⁵¹ and, by implication, as upheld and practiced in the life of a community.

Truth brings up the many debates of epistemology⁵². Assuming Polanyi is a realist, I go to Sanders⁵³, Jha⁵⁴ and Meek⁵⁵ to locate him in regards to correspondence and

⁴⁹ POLANYI, M. & PROSCH, H. 1977. *Meaning*, Chicago, University of Chicago Press. p. 7 "[Natural science's] program was to let everyone state his beliefs and to allow others to listen and form their own opinions; the ideas which would prevail in a free and open battle of wits would be as close an approximation of the truth as is humanly possible." See also POLANYI, M. 1964b. *Science, Faith and Society*, Chicago, University of Chicago. p. 6. "Can we find, as in the case of the premises of science, a practical art which embodies them; a tradition by which this art is transmitted; institutions in which it finds shelter and expression. Yes, shall find them underlying the art of free discussion."

⁵⁰JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburgh, University of Pittsburgh Press. p. 5 regulative ideas cannot be proven but serve to guide our thought and actions. Ibid. p. 18 (quoting Polanyi), "The scope of valid truth lies in the range of more permanent convictions guiding wider forms of life."

⁵¹ SANDERS, A. 1988. *Michael Polanyi's Post-Critical Epistemology: A Reconstruction of Some Aspects of 'Tacit Knowing'*, Amsterdam, Rodopi. P. 150, and JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburgh, University of Pittsburgh Press. p.5 the principle of truth in Polanyi's sense is inseparable from belief.

⁵² MEEK, E. L. 2011. *Loving to Know: Covenant Epistemology*, Eugene, Cascade Books. p. 54 as examples: subjectivism vs objectivism; foundationalism vs antifoundationalism; correspondence vs coherence vs conventionalists; realism vs idealism; internalism vs externalism; epistemic naturalists vs a human non-physical dimension as well as the formative role of historical, sociological, linguistic and hermeneutical.

⁵³ SANDERS, A. 1988. *Michael Polanyi's Post-Critical Epistemology: A Reconstruction of Some Aspects of 'Tacit Knowing'*, Amsterdam, Rodopi. pp. 150-158 concludes Polanyi uses an isomorphic correspondence.

coherence theories of truth. TTK's tacit knowing, on one hand, assumes some correspondence between knowing and being, between the structure of knowing and the structure of its object, the object being a comprehensive entity (Sanders, 1988:150).

But comprehension of comprehensive entities, signifying contact with reality has been achieved, implies coherence, an awareness of the way things hang together (Polanyi,1969:120) and one which manifests itself indeterminately in the future (Polanyi, 1964b: 29). Indeed, coherence is *sine qua none* of a scientific discovery of scientific truth (Polanyi, 1951:46-51) and, by extension, all truth. Yet if coherence admits that knowledge is shaped by the knower's personal action in tacit knowing (Polanyi, 1959:18, Polanyi, 1969:132, Polanyi, 1966:6) is not truth then rendered subjective?

In the case of my three interlocutors, Polanyi's notion of truth reconciles the tension: TTK's truth blends both correspondence and coherence. Truth, say in a scientific proposition, does not refer definitely to any observable fact but rather describes something real which may manifest itself in many indefinite ways in the future (Polanyi, 1964b: 29). Because of the nature of reality, as understood by Polanyi, we can have only a tacit grasp of truth which entails emphasizing coherence but not at the cost of correspondence.

⁵⁴ JHA, S. R. 2002. *Reconsidering Michael Polanyi's Philosophy*, Pittsburgh, University of Pittsburgh Press. pp. 115-118. 'Polanyi's theory of truth is interpreted as 'an "open" version of coherence theory of truth even, a blend of coherence-correspondence theories, with coherence strongly emphasized.' Jha compares Polanyi's version of correspondence to Russell's and uses Banshard's comparison of the two theories.

⁵⁵ MEEK, E. L. 2011. *Loving to Know: Covenant Epistemology*, Eugene, Cascade Books. p.54. Polanyi is an epistemic realist (knowledge being of an objective reality) and TTK a viable way to overcome epistemology's dichotomies, coherence-correspondence included.

Again, the truth of a scientific proposition lies in its bearing on a reality which may reveal itself in many indefinite ways, or indeterminately, in the future; it points to a real feature of nature which exists beyond our control (Polanyi, 1964b: 10). As defined by Polanyi:

Reality is something that attracts our attention by clues which harass and beguile our minds into getting ever closer to it, and that, since it owes this attractive power to its independent existence, can always manifest itself in still unexpected ways...If we have grasped a true, deep-seated aspect of reality, then its future manifestations will be unexpected confirmations of our present knowledge of it. (Polanyi, 1969, 119, 120)

Polanyi thus advances a version of metaphysical realism (Jha, 2002: 45, 118, Sanders, 1988 #5710).

Thus, in light of this understanding of reality and although all knowing is tacit, meaning we know more than we can tell, on the other hand, we can say or mean more than we know because of the tacit nature of reality. This would mean that truth, while presupposing language, ultimately is not relative to language but to contact with reality. Tacit knowing emerges as the decisive factor in denoting truth for reasons I shall go into in Chapter 5.

Most Polanyians⁵⁶ argue Polanyi holds to a form of scientific realism, meaning reality exists independent of our knowing it (Jha, 2002:69, Sanders, 1988:112, Meek, 1999). Scientific realism holds knowledge of truth is fallible, probabilistic, aspectual,

⁵⁶ SANDERS, A. 1999-2000. Polanyians on Realism: an Introduction. *Tradition and Discovery*, 26, 6-14. Sanders introduces and summarizes a special Tradition and Discovery discussion of Polanyi's realism which included contributions by Jha, Gulick, Mullins, Cannon, Puddefoot, Meek and Sanders. All agree that Polanyi advocated a scientific realism hanging on the theses that reality is independent of human conceptualizations and that it is partially and fallibly knowable. Major differences concern its scope. All agree that it is comprehensive, pertaining not only to common sense and science but to intrinsic and ultimate values, and perhaps the divine realities as well. Whereas Jha and Gulick argue a more limited scope, others defend a Polanyian position by drawing in various ways on the personal (Cannon) and social (Mullins, Sanders, Puddefoot) coefficients of the practice of inquiry. The debates show clearly that the relationship between Polanyi's epistemology, axiology and hermeneutics deserve further scrutiny.

indeterminate and provisional. Fallibilism is the belief our claims to knowledge may be mistaken (Sanders, 1988:184) and a characteristic of all objective knowledge (Jha, 2002:29, Polanyi, 1962:vii-viii). Polanyi's theory of truth (TTK) is a probability theory in the sense of "degree of confirmation" (Jha, 2002:67); validation and verification figure in confirmation. Contact with reality is aspectual for truth is never fully attainable and is indeterminate (not specifiable) (Meek, 1999:75). Knowledge is provisional because reality unfolds.

According to Polanyi, "reality is something capable of largely indeterminate, future manifestations" (1997b:240, 1964b:10). "Real is that which is expected to reveal itself indeterminately in the future" (1964b:10). Reality is known tacitly (1964b:10).

According to Meek, we are aware of contact with reality by the "indeterminate future manifestations effect" (IFM effect) (1999:74) or what Polanyi describes as a new vision that is not yet knowledge but more than knowledge (Polanyi, 1962:135). IFM effect occurs when one integrates and indwells the known (1999:75). Dilthey denotes it as "lived experience" (Jha, 2002:81) and it relates to Merleau-Ponty's "presence of the moment" (Jha, 2002:80). This experience links the personal pole of knowledge to the objective pole of knowledge (Polanyi, 1962:300-303). The IFM effect produces coherence and intellectual beauty (Meek, 1999:76). It has its own moral constraint: a knower is not free to do as she pleases but must act as she believes she must (1999:73).

Indeed, by tacit knowing's account of contact with reality, the intangibles are more real than the tangibles, minds and problems are more real than cobblestones (Polanyi, 1966:33). While the particulars of tacit knowing may be tangible, integration produces a phenomenological, semantic and ontological change which is a new meaning or coherence which is intangible. Mitchell tells us that the particulars become more than the sum of their parts (2006b:84) but Torrance argues Polanyi attempts to understand things in light of their natural cohesions (1984:176). Finally, because the mind creates a whole new range of indeterminacy (IFM effect), in the scale of things, the mind is more real, more substantial than the tangible (Polanyi, 1969:151). This is the reformed understanding of reality toward which Polanyi's reformed notion of knowing aspires.

The relation between knowing and being, between structures of knowing and structure of known object are, to my mind, the lynchpin of TTK. Indeed, their parallel structures do point to a meaningful universe which is open to manifold exploration by the exercise of tacit knowing. As I later show, the relation establishes the structure of intellectual freedom (creative exercise of tacit knowing) and becomes a way to link the early and late Polanyi.

TTK, as said earlier, departs with the Einsteinian⁵⁷ and the 2nd Scientific Revolution in physics⁵⁸. Nature after Einstein is no longer a mechanism but understood in light of its intrinsic, creative coherences and patterns (spontaneous order) while scientific discovery occurs through a creative integration correlated to that emergent orderliness (Torrance, 1984:176). Indeed, in TTK, knowing and being are re-

⁵⁷ TORRANCE, T. 1984. *Transformation and Convergence in the Frame of Knowledge: Explorations in the Interrelatons of Scientific and Theological Enterprise*, Ottawa Christian Journals Unlimited p.110. Relativty rejects Newtonian dualism, its mechanistic universe and gives a coherent outlook of nature by its matter energy equation.

⁵⁸ See PEARCEY, N. R. & THAXTON, C. B. 1994. *The Soul of Science: Christian Faith and Natural Philosophy*, Wheaton, Crossway Books. Ch. 9 reconstructs the development of quantum theory, i.e., the wave-particle dilemma, indeterminacy, probability and uncertainty principle, observer created reality, and follows their ontological and epistemological implications. See POLANYI, M. 1962. *Personal Knowledge: Towards a Post-critical Philosophy*, Chicago, University of Chicago Press. Chs. 1-3. The reader can see how Polanyi is tacking between the objectivism following the Newtonian picture and subjectivism which some seem to take it to imply. See also Polanyi picks up Einstein's notions of scientific reality and knowledge: scientific concepts are freely invented concepts that arise in our minds under the compulsion of the objective structure of reality but extends it by TTK to explain how our ideas are related to our experience.

connected, the indeterminate nature of being is correlated to indeterminate or tacit nature of knowing, their union giving the grounds of intellectual freedom and meaning.

4.2.5 Bridging the Theory of Tacit Knowing to Social-epistemic Theory of Community, Authority and Tradition

I now come to the turning point of my inquiry concerning the origin, nature and justification of intellectual freedom and its relation to social freedom and truth. To reiterate, I put forward that intellectual freedom justifies social freedom and is justified as the pursuit of truth. I will begin to set the case that intellectual freedom is best understood as the creative exercise of tacit knowing.

In Chapter 2, I followed the early Polanyi's social theory to establish the mutual relation between social order and social freedom in society by creating a triad from their relations to truth, the network of spontaneous orders of society, the exercise of individual public freedom, both in mutual pursuit of truth. This then raised the prospect that liberalism's problem of social freedom was actually a more fundamental issue having to do intellectual freedom.

Hence, in Chapter 3, I established the interrelation of social freedom and intellectual freedom by Polanyi's theory of moral inversion. From moral inversion, I took it that the problem of intellectual freedom had to do with objectivism, a fundamental misunderstanding of truth and how it is to be pursued, the epistemic issue of critical doubt and anti-CAT.

The problem of objectivism was discussed here in the opening of Chapter 4. Accepting the late Polanyi and that tacit knowledge leads to truth, I have just restated TTK as the <u>from - knower's integration - to</u> triad. So we have two triads, one from the early and the second from the late Polanyi.

What I will now do is to transpose the two triads into a third triad, a CAT.-.intellectual freedom - truth, the transposition enabling me to work with intellectual freedom within the structure of tacit knowledge as a way to get at intellectual freedom. I can do this because intellectual freedom and social freedom correlate and because truth is a constant in both the early and late Polanyi. I also take it that intellectual freedom is the creative exercise of tacit knowing in pursuit of truth.

On the <u>from</u> side of my transposed triad, I put Community, Authority and Tradition (CAT). Tacit knowledge presupposes CAT and this relationship I now pursue by individually analysing each social-epistemic component of CAT in the light of Polanyi's inquiry into scientific discovery, his paradigm of the process of coming into new truth. As we shall see, my transposition of the triads enables me to create a sociology which TTK presupposes which I propose can attend to original problem of liberalism's self-destruction.

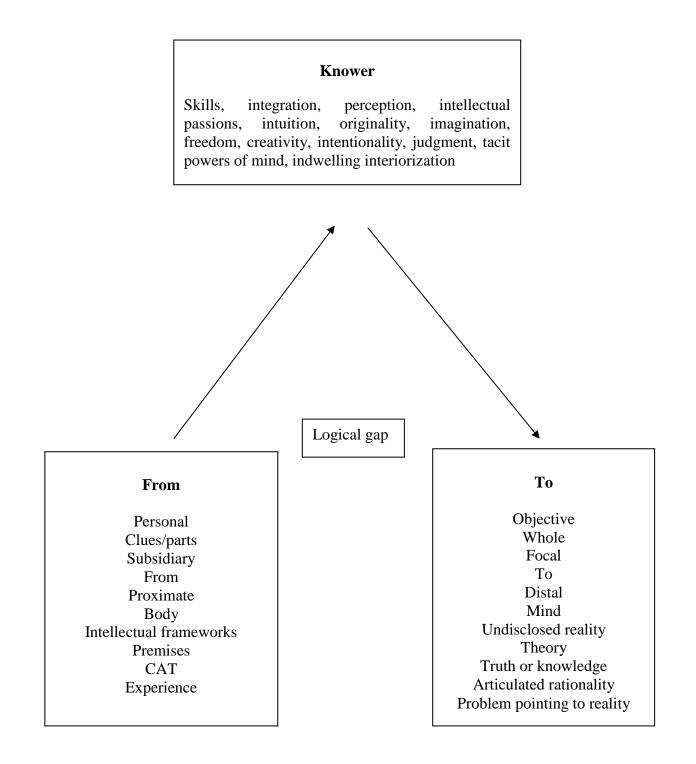


Figure 4.2 TTK Triad Components

Part II: TTK's Social Theory

4.3 Introduction

While following TTK, I now begin, as alluded, to take a path which marks new territory for using tacit knowledge. TTK repudiates the absolute intellectual self-determination of the Enlightenment. Instead, tacit knowledge, presupposing the social-epistemic categories of CAT and the creative exercise of tacit knowing, leads to truth. Tacit knowing is intellectual freedom.

Tacit knowledge presupposes practical knowledge involving skills and beliefs embodied and transmitted socially. Tacit knowledge lives by its social practice, that is, is embodied in an authoritative, dynamic tradition which is sustained by a community committed to its perpetuation. Tacit knowledge lives by Community, Authority and Tradition (CAT).

CAT is epistemic <u>and</u> social. Tacit knowing and, by my extension, intellectual freedom, presupposes CAT. Therefore, the epistemology of tacit knowledge needs a counterpart Polanyian sociology of CAT and intellectual freedom. I propose to recast the theory of tacit knowing into such a social theory as a way to re-formulate intellectual freedom.

To consider knowledge, Polanyi went to the context in which he was most at home scientific practice - and his reflections brought to light CAT. His reflections are set against the background of objectivism. Polanyi shows objectivism and the practice of science are at odds.

Objectivism puts forward critical doubt and anti-authoritarianism as intellectual freedom. It is decidedly anti-traditional and socially insensitive, putting forward instead

progress and the autonomy of individual and thought. Objectivism leads to moral inversion, the destruction of intellectual and, consequently, social freedom.

In response, Polanyi reflected on the practice of science and these reflections gave the theory of tacit knowing. TTK shows science is rooted in an intuitive conception of the nature of things which is a precondition of its knowledge <u>and</u> this conception is socially embodied in the practice of science leading to scientific discovery. By extension, all knowledge has personal, fiduciary and social roots.

Polanyi draws reference from perception to understand knowing. Perception involves two level of awareness, subsidiary (clues) and focal (whole), the <u>from</u> - <u>to</u> relation, mutually related by a knower's integration in the triad of tacit knowing. Further, knowing, or integration, is an acquired skill, a practical knowing-how, that links to knowledge-knowing what. Knowing, on the <u>from</u> side, is preceded by skills and beliefs embodied in community, authority and tradition (CAT).

Moreover, basic beliefs form and guide CAT whereas paradoxically, CAT shapes and embodies belief. Hence, we have the mutual relation of CAT and belief. Indeed, CAT and belief are tacit; they function and are known implicitly, that is, in their practice or lived experience. To summarize CAT, is tacit, fiduciary, epistemic and social.

I recast the TTK Structure of Knowing triad of Figure 4.3 into the CAT-intellectual freedom truth triad of Figure 4.4. The pursuit of truth is constant.

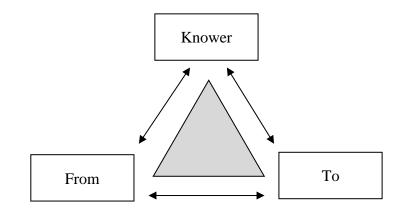


Figure 4.3 TTK Structure of Knowing

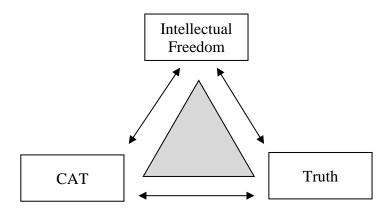


Figure 4.4 Intellectual Freedom, CAT, Truth Triad

My extension of TTK into a theory of CAT addresses the question: how can tacit knowledge be transmitted? For the relationship of CAT to intellectual freedom, I isolate and analyse each component on its own standing. I especially draw attention to their (1) dual epistemic-social character; (2) interaction with the other components; (3) contribution to intellectual freedom. I begin each section of CAT by denoting the general term, then extract from Polanyi's texts how the above concepts play out in scientific practice. Polanyi scholars are engaged in a similar way with an eye to establish its relation to intellectual freedom. Two caveats: While I could change the acronym CAT to ACT or to TAC, I chose to stay with my original "CAT" but I begin with authority. Second, I assign to each aspect equal value and priority.

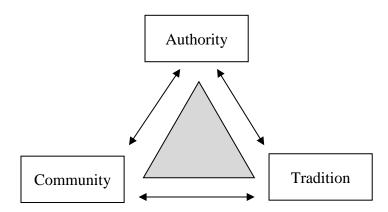


Figure 4.5 CAT Triad

4.4 Polanyian Authority

The question of intellectual freedom brings up the question of its order, the question of authority. What then is the nature of authority, its structure, function and purpose? How is authority known or recognized? Further, how shall we understand authority in relation to other ethical and political notions: legitimacy⁵⁹, sovereignty⁶⁰ and power.⁶¹

"Authority" derives from the Latin *auctor* meaning originator or promoter. As used by Polanyi, it is close to "the power to influence thought and behaviour" (Webster-Merriam). Polanyi, as far as I can ascertain, does not denote authority.

Except for Austin, the scholars engaged here⁶² in framing Polanyi's authority do not differentiate between social and epistemic authority yet in all accounts, authority is

⁵⁹ CHRISTIANO, T. 2013. Authority. *Stanford Encyclopedia of Philosophy* [Online]. Available: https://plato.stanford.edu/archives/spr2013/entries/authority/ [Accessed 2017-05-16]. Divides authority into its legitimate (normative) and de facto notions.

⁶⁰ DEJOUVENEL, B. 1957. *Sovereignty: An Inquiry Into the Political Good*, London, Cambridge University Press.p. 3. Sovereignty ask the question who decides and what can they decide.

⁶¹ CHRISTIANO, T. 2013. Authority. *Stanford Encyclopedia of Philosophy* [Online]. Available: https://plato.stanford.edu/archives/spr2013/entries/authority/ [Accessed 2017-05-16]. Power is concerned with the state's or any agent's ability to get others to act in ways that they desire even when the subject does not want to do what the agent wants him to do by operating in the realm of threats and offers.

⁶² My discourse with authority is limited to either Polanyi scholars or those learned persons with whom he was acquainted and who had theoretically addressed the subject. For theory of authority: see KOYEVE, A. 2014. *The Notion of Authority: A Brief Presentation* London, Verso Books. Authority is

implicitly both epistemic and social according to its nature or function. Victor Austin's views on social authority (2012:Ch. 2) and epistemic authority (2012Chap 3) are respectively shaped by Yves - Simon and Polanyi. Austin puts forward several kinds of authority because there are several corresponding freedoms.

Austin argues that authority, to exist, involves an exchange of trust between a trustee and one who trusts involving an act of consent (2012:9). However, if it is not blind, consent is preceded by something else: "what the mind sees, or may see, when it understands" (Van Doren in Austin: 9). Hence, there is an epistemic aspect to consent or authority.

Yet any understanding or knowledge presupposes authority of some kind (2012:10) and this is authority's paradox. Before a mind understands, it needs a society and a society needs authority.

Authority is personal and performative (2012:21) and is in the exercise of human agency (2012:20); being performative, it is by extension normative. It is the ability or right to perform an action (2012:19). An authority is someone authorized by someone or something beyond oneself (2012:19). To have authority (act authoritatively), one must

[&]quot;the free and conscious assent of one person to the command of another.... [It] requires that consciousness and freedom of will be present but, as it were, muted."; he identifies four types: Father, Master, Judge and Leader; SIMON, E. 1948. *Nature and Functions of Authority: The Aquinas Lecture, 1940 Under the Auspices of the Aristotelian Society of Marquette University*, Milwaukee, Marquette University Press.p. 6. Defines authority as "an active power, residing in a person and exercised through a command, that is through a practical judgment to be taken as a rule of conduct by the free will of another person." p. 28. Authority's essential function "is the everlastingly good principle of the social unity in the pursuit of the common good." p. 45. Authority and autonomy are correlated by (1) Principle of authority- "Whenever the welfare of a community requires common action, the unity of that common action must be assured by the higher organs of that community. (2) Principle of autonomy; Whenever a task can be satisfactorily achieved by the initiative of the individual or that of small units, the fulfilment of that task must be left to the initiative of the individual or to that of the small social units. pp. 20-28. Simon develops a theory of prudence to explain the practical knowledge embodied by authority; and RAZ, J. 1988. *The Morality of Freedom*, Oxford: Clarendon Press.

be under authority (2012:19) allowing one to authorize the actions of others (2012:19). Further, authority enhances our capacity to act, to transcend, to create (2012:22) and links to positive freedom.

As to its justification, humans need authority to flourish. Humans are social and therefore need society. A society needs authority to constitute itself (2012:9). Yet, the constitution of society needs to be such that it secures individual freedom (2012:29) for persons are more than their functions. Hence authority exists so that individuals may thrive as self-governed members of society (2012:29). "[The] function of authority is to will the common good so that the various agents and associations of society can will the matter of particular goods." (2012:31). Hence, social authority and freedom are not opposites but are complementary.

According to Theodore Brown⁶³, authority is the ability to wield power, make things happen or establish and change beliefs (2009:25). It is de jure or normative (2009:25) which by extension, entails freedom and responsibility. Finally, authority acquires legitimacy through tradition, in accordance with society's premises, rules, popular acceptance or by exceptional endowment (authority of genius) the parallels to Polanyi's authority.

Bertrand DeJouvenel notes that authority is "the faculty of gaining another man's assent...the efficient cause of voluntary associations" (1957:29) and "[a]n authority is

⁶³ Theodore L. Brown, (1928-) Professor Emeritus of Chemistry at the University of Illinois, is a highly respected research chemist, university administrator and author, who served many board and committee activities including as President of the National Committee of Sciences. His current interests are cognitive, philosophical and social aspects of the scientific enterprise. In 2003, he authored *Making Truth: Metaphor in Science* and, in 2009, *Imperfect Oracle: The Authority and Moral Authority of Science in Society*. See http://www.chemistry.illinois.edu/faculty/Theodore_Brown.html (date accessed 2017-05-17).

the father of actions freely undertaken whose source is in him though their seat is in others" (DeJouvenel, 1957:30). Hannah Arendt speaks to authority's political nature but her thought applies to authority in general. Authority demands obedience yet precludes coercion for coercion bespeaks authority's failure (Arendt, 1968b:92,93). It is not persuasion for the latter is egalitarian and authority is hierarchical (1968b:93). Authority's obedience implies freedom's retention (1968b:106). Authority rests on a foundation lying in the past and conveyed to present by tradition (1968b:95). It is the decisive factor of community (1968b:104). The foregoing thinkers speak to authority's social or general nature. I now turn to epistemic, or scientific, authority and its relation to tacit knowing.

4.4.1 A Polanyian Discourse of Epistemic Authority

According to Polanyi, tacit knowledge is communicated by its tacit embodiment in social structures and practices, meaning tacit thought indwells a social world, one constituted by authority. Extending Polanyi, I maintain that the social structures which embody tacit knowledge and order both society and thought are community, authority and tradition - CAT. Hence, by extension, epistemic authority is by nature social and is known only tacitly, by its lived experience, that is, it is found on the <u>from</u> side of the TTK triad.

According to Brown, epistemic authority arises in situations where persons lack background, ability and insights to make decisions on their own (2009:19) (in other words, a problem) and look to others, hence, authority is social and involves trust (2009:20). Its other side is a perception of competence. Epistemic authority "is to be an expert for the reliability of particular information" (2009:19).

Epistemic authority in Brown is called theoretical authority, an authority about what to believe, a reliable guide as to how things are. Brown's definition is limited to "knowing what" and does not include "knowing how" knowledge. How he makes room for tacit knowledge is difficult to understand. Scientific authority is theoretical or epistemic authority, that is, it makes claims which purport to describe reality <u>as it is</u> (2009:23). Brown's emphasis on claims and information sounds objectivist and diminishes the tacit dimension of knowledge and authority. Without pursuing it, I would only propose this reflects Brown's reliance on Raz's moral philosophy and legal positivism which are at epistemic odds with TTK.

Austin agrees that an epistemic authority addresses "how things are" (2012:45). Austin maintains Simon (who we meet shortly in Cochran's consideration of social authority) errs in dividing social and epistemic authority. Simon asserts social authority entails social action and a leader whereas epistemic authority calls for a witness to truth (2012:46). He argues that social action requires a leader but this is not the case for a witness to truth because once we have knowledge, we may forego authority. Simon assumes an objective, impersonal and explicit knowledge hence authority is deemed substitutionary, waiting for real knowledge to arrive (2012:45). Austin disagrees with Simon and we both stress that epistemic authority is requisite in all knowing as set by the transcendent nature of truth.

Austin then picks up Polanyi's epistemic argument: if all knowing has tacit roots, then it ultimately involves trusting someone deemed an authority (2012:50). Moreover, authority is necessary not only when we lack skills or knowledge (apprentice-master) (2012:52), but also we need to trust others when their competence impinges upon our area of competence (2012:52) where authority is essential not substitutionary. As social authority is for social freedom, so epistemic authority is necessary for knowing (2012:54) or, by my extension of Polanyi, for intellectual freedom. Since knowing and authority are social, I infer authority is both social and epistemic.

Ute Deichmann gives us a way to locate Polanyi's scientific authority vis-a-vis two spokesmen for objectivism's anti-authoritarianism, Bertrand Russell and Karl Popper (2011). Both Russell and Popper see authority as obstacles to knowledge and antithetical to an intellectual freedom presupposed in true knowledge (rid of belief.) Deichmann argues using Polanyi that scientific authority is (1) necessary to keep science safe "from adulteration by cranks and dabblers" (2011:6,7); (2) critical yet fallible (2011:7); and (3) competent but not supreme (cf Polanyi, 1962:164, Deichmann, 2011:7). However, Deichmann never makes clear the social process wherein competence is established (2011:7). Nor does she make clear the distinction between epistemic and social aspects of authority which might have given some light on tacit operations of authority.

Deichmann proposes Polanyi overcomes the dichotomy between freedom (critical attitude) and authority by a triad of authority, criticism and observation (2011:10). She ignores that epistemic freedom is not primarily criticism (negative freedom) but the positive intellectual freedom transcending a logical gap. Hence her scientific freedom is more negative than positive.

Stefanie Jha's secular reinterpretation of Polanyi is located in post-Kantian discourse. Her Polanyian scientific authority is "a living, continuous and open-ended process" (2002:67) which, by implication, links progress and tradition. Scientific authority is a premise of knowledge guided by values and principles yet open to the creative freedom of tacit knowing (2002:161, 162); Authority is essentially peer authority linked to science's tradition and premises which judge whether a knowledge claim is justified (2002:230). Jha's emphasis on creativity and imagination broaches my theme of tacit knowing as intellectual freedom.

Andy Sanders discusses Polanyi and Lakatos' vis-a-vis authority helping us to place the discourse of epistemic authority within the philosophy of science. Lakatos takes exception with Polanyi's scientific authority, calling it "elitism" (1988:141-143). "Elitism" holds that elitists remove formal criteria to determine good from bad science and leave science dependent upon the arbitrary judgments of a small elite (1988:141-143). The problem with Lakatos' egalitarian view is that he must move back to objectivism and its contradictions. I agree with Sanders that authority is by nature elitist. However, Sanders does not explore epistemic authority in its social dimension or link it to intellectual freedom.

Regarding the social aspect of authority, Clarke Cochran seeks to recover authority as its loss undermines the social community by referring to Friedrich, Simon and Polanyi (Cochran, 1977). Cochran maintains social or political authority is ultimately an issue of its interrelationship to moral values (Cochran, 1977: 546). Further, authority exists only in a community, that is, a group of persons who share basic human values and are aware they share these values (1977:547).

For Cochran, authority, growing out of the shared values of a community, transforms power into the consent of individuals: authority imbues power with morality (Cochran, 1977, pp.:546, 548). How this happens and the process' correlation to truth are themes Cochran pursues. For Friedrich, authority exists by reasoned elaboration, the issuing of communications (Cochran, 1977: 548-9); for Simon, authority, while a witness to truth, is substitutional of and not essential for truth (Cochran, 1977: 554) (echoing Austin).

Both fail to give an adequate account of authority because it is in TTK's understanding tacit, fiduciary and essential for truth while their notions of it are not.

Cochran thus finds that Polanyi's notion of authority more consistent to its normative character (Cochran, 1977:555): authority is necessary to keep a community together and directed towards its proper ends (Cochran, 1977: 555); it is dynamic (Cochran, 1977: 555); it is a joint celebration of the convivial order and its transcendent aims (Cochran, 1977:555). By its acceptance, the community and individual signify that what appears meaningless actually has meaning which is apprehended by the indwelling of a convivial order dedicated to a transcendent purpose (Cochran, 1977: 555). Yet, to my mind, Cochran's tradition-community-truth triad structure authority, does not adequately account for individual authority. The CAT-creative exercise of tacit knowing-truth I construct would attend to this; the creative exercise of tacit knowing presupposes authority, transcends it in going to truth and thereby constitutes a new authority embodied in the individual-knower.

Authority, to my mind, takes an individual's or a community's latent power and gives it purpose. Authority comes into being when intention, or consciousness, directs power toward specific goals. In other words, authority comes into being by its exercise. Moreover, an authentic authority is guided by pursuit of truth or transcendent end. In this way, authority finds its place on the <u>from</u> side of TTK's triad: from personally and tacitly embodied beliefs, values and skills of community to the object of intentionality by the individual exercise of tacit knowing.

From the viewpoint of TTK, values, which a scientific discovery of truth presupposes and which constitute its community, lie in the tacit realm on the <u>from</u> side of TTK triad. If there is to be authority, there must be shared values thus authority is normative. In

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other words, authority's claim to legitimacy in a community embodies a claim to truth but its claim rests on shared beliefs and values tacitly embodied in the community's life.

Authority depends upon truth but paradoxically, truth is accessible only by commitment to authority (1977:555) which entails the values of authoritative community. Cochran, as said, endorses the authority of TTK except that he constructs a triad of authority which entails truth-community-tradition, the three generating authority where truth is primary (1977:556).

R. J. Brownhill uses TTK to reconcile freedom and authority, focusing on their mutual link to the realm of moral ideals (1977:153, 2005). To Brownhill, the question hanging over Polanyi's project is if science's practice can be analogical to a free society. He argues that Polanyi's move is valid since he brings together (1) personal knowledge under the constraint of interpersonal knowledge; and (2) personal morality under the constraint of interpersonal morality (1977:155). In Brownhill's view, Polanyi's epistemic and moral authorities merge. Although I agree with Brownhill who maintains that Polanyi lays the moral foundations of social freedom, he does not explain what the counterpart of free research and discovery embodying free scientific practice of an individual is in a free society and how these individual freedoms can bring about and foster social freedom. To explain them I will invoke intellectual freedom.

Most of our scholars do not divide either authority or freedom into an epistemic and social aspect but rather, they focus on one aspect or the other. Hence they do not relate epistemic authority and TTK to social authority and social freedom. My project puts this relationship to the fore and analyses it by means of intellectual freedom.

4.4.2 A Re-Interpretation of Polanyi's Epistemic or Scientific Authority

Polanyi discusses authority from the context of scientific practice, and by analogy from it develops the interrelations of thought and society as well as intellectual freedom and truth in his primary texts.

Science, Faith and Society (SFS) (1964b) marks Polanyi's shift to epistemology and contains his most extensive treatment of the relations of authority and conscience, or intellectual freedom. First, Polanyi argues for the interrelations of our intuitive conception of things (1964b:10), second, our intuition (1964b:31-38) and third the intuition's response to nature seeking realization in our minds (1964b:35) At the heart of this process is scientific judgment or conscience grounded in the common premises of science (1964b:42). I extend Polanyi to argue that from scientific conscience arises scientific authority and freedom.

On its epistemic side, scientific authority relates to (i) scientific values (1964b:49) (ii) premises concerning reality (1964b:42, 51) (iii) intuition (1964b:30-38); (iv) creativity (1964b:34, 35) and conscience (1964b:39-41, Ch. 2). On its social side, it relates to (v) scientific community (1964b:16, 17,54, 56); (vi) tradition (Polanyi, 1964b:, 15, 56); and (vii) individuals. The interrelation of the social and epistemic aspects generates coherence (1964b:49) (epistemic) and scientific consensus (social) (1964b:50) , that is, the two sides of science's authority.

Conscience is taken by Polanyi to be the ultimate source of authority in SFS. Conscience is the source of scientific judgment at the individual (Polanyi, 1964b: 37) and community (1964b:56) levels. Conscience exists on the grounds of that to which we dedicate ourselves; men live morally by what they sacrifice to their conscience (1951:36); conscience thus has a moral force. Science pursues the transcendent reality of truth, hence its conscience is shaped by the quest. It is this transcendent realm "[which] guides our creative impulses and in which men's consciences are naturally rooted" (1951:57).

To broach reality, we first believe reality exists and, second, we can, in some small but appreciable way, apprehend aspects of reality by exercising the power of mind (intellectual freedom.) By extension, basic beliefs concerning transcendent realties are a source of conscience and authority. Moreover, beliefs and conscience are amenable to new disclosures of reality. However, Polanyi ceased to use conscience after 1950 and, instead, used "responsible judgment."

'Conviviality' (1962:Chap 7) links intellectual and social orders. Polanyi had earlier in PK introduced the tacit component but "Conviviality" extends his findings to social and cultural life. Hence "Conviviality" helps to address the question how tacit knowledge can be transmitted by its embodiment in social structures and practices. Again, we see the interrelation of thought and society at its fundamental tacit level.

According to Polanyi, learning unites a society and learning entails authority (1962:206-208). Moreover, learning has the same structure as tacit knowing (1962:208). The learner must believe before she can know (1962:208) and in this situation, she trusts others to guide her to help establish contact with reality. Trusting them, she tacitly enters into the values and beliefs about the general nature of things. It is in such a tacit setting that both knowledge and society remain coherent and grow.

Conviviality (community) rests on the mutual relation of authority and trust which precede and underlie all articulate thought (1962:206, 207). If a community exists, it exists because it shares authoritative values and general beliefs originating in some form

of social authority. Moreover, these shared values and beliefs are tacitly incarnated in its traditions. Hence epistemic authority is dynamic because it involves the thought-to-society interrelation (1962:208).

'The Growth of Science in Society' (1969: Ch. 5) Polanyi modified his earlier view of PK which had a strong emphasis upon the role of belief. In the ensuing decade, the philosophy of science had encountered proposals which would reduce scientific truth to being solely based upon that which scientists believe and not the aim of that belief. Whereas objectivism had earlier threatened science, the disjunction of the objective-subjective components of knowledge now appears to fall on the other side (1969:73).

Briefly stated, Polanyi maintained it is not that scientists believe which counts but what they believe about science actually revealing some aspect of reality under the guidance of scientific values (1969:83) By inference, scientific values are authoritative.

The belief that science offers an aspect of reality is socially incarnated in CAT. CAT acts as science's gatekeeper (authority) to prevent its dissolution into fraud and self-deception (1964b:50) and yet insures originality in the pursuit of truth (1969:82). Discipline and originality maintain the integrity and growth of science by upholding its moral obligation, an obligation which ultimately constitutes its drive.

TTK gives two social principles whereby tacit knowing is responsibly transmitted: (1) self-coordination by mutual adjustment (1969:84); and (2) discipline under mutual authority (1969:84).

Finally, the premises of science, its ordering principles, are embedded in a dynamically unfolding authoritative tradition of science to which each member is adheres and which requires an ongoing responsible reinterpretation by its members (1969:66-68). TTK gives a necessarily tacit means to transmit tacit knowledge as manifested in the dual epistemic-social roles of CAT. Yet throughout the process, the scientist's judgments interact with the scientific community's authority on the basis of their common rootedness in tacit scientific values.

Polanyi sees moral standards, rooted in authoritative basic beliefs concerning reality being justified by their requisite role in tacit knowing's <u>from</u> side. He argues in TD that "confidence in authority is indispensable for the transmission of human culture" (Polanyi, 1966:62), a transmission which Polanyi argues is by tacit means, a tacit knowledge which I extend to mean embodied in CAT (1966:62).

It is on the basis of metaphysical beliefs that both discipline (authority) is assured and originality bearing on reality is fostered (1966:70). TD reveals again the two themes of Polanyi's work: the interrelation of (a) order and intellectual freedom; and (b) thought and society. Epistemic authority and freedom should be framed within the moral obligation to pursue truth which gives the exercise of responsible judgment. It is the working out of responsible judgment which leads to the social principle of mutual control (1966:72) and mutual adjustment.

Polanyi puts forward in TTK a model of authority which opposes objectivism's antiauthoritarianism and its underlying critical doubt. Indeed, Polanyi's intent to reestablish traditional philosophy's metaphysical mode of thought makes TTK's authority a vital component of his bringing epistemology and ontology into functional interaction. By my reading, as a part of CAT, authority being both epistemic and social becomes a way to join the early social and late epistemological Polanyi projects. My re-forging of TTK's framework gives us a handle on authority and reveals that authority, springing from the <u>from</u> side of tacit knowing is epistemic <u>and</u> social. Authority, hence, embodies socially the epistemic, fiduciary, personal and tacit aspects. Its source lies in our basic beliefs, our general view of things, those things shaping our commitments and values yet simultaneously is rooted in the reality of our social being. In my discussion of authority were references to the communal and traditional nature of authority of a free society and between the elements of CAT are also mutual relations or community.

4.5 Polanyian Community

Traditional liberalism negates the epistemic function of community by putting forth the absolute self-determination of man and thought only to eliminate intellectual freedom and truth. The absolute self-determination of man and thought eliminates the epistemic role of community. TTK re-establishes the creative exercise of tacit knowing and truth by re-establishing community as a pre-condition of knowing.

Polanyi argues, "to accept the validity of science – or any other domain of the mind – is to express a faith which can only be upheld in a community" (1964b:73) The practice of science in pursuit of truth presupposes community thus its community is both epistemic and social in function.

We just saw that the authority of science resides in the consensus of the scientific community whose individuals work together in the pursuit of truth. As important, the community rests on shared beliefs concerning the general nature of things, the power of thought and the obligation to cultivate things of the mind, the things that make for a common pursuit of truth for its own sake. Community is both epistemic and social. My quest departs from: (1) all knowledge is either tacit or rooted in tacit knowledge (1969:195); (2) all thought, by virtue of language, is rooted in society (1959:60); and (3) the transmission of knowledge is predominantly tacit (1966:61). I first establish a working understanding of "community" and then consider "community" within the framework of TTK. Using TTK, I extract community's essential epistemic role and social nature then show how the epistemic and social functions interrelate. As with authority, I use Polanyi to isolate community in its epistemic aspect but, from the outset, acknowledge community is both epistemic and social. Yet, by attempting its isolation, it clarifies the nature of community and its correlation to intellectual freedom and knowing. I then consider Polanyi scholars to see if any have established a similar link of community to intellectual freedom.

4.5.1 Defining Community

Let me first state the social-epistemic problem of community. Since the rise of modernity, we do not think in terms of community but society, individuals and the mediating State. To reiterate, any vision of society embodies certain basic beliefs about the structures of reality and how humans attain knowledge of it.

Having risen alongside of modern science, objectivism and its critical doubt is a vision of reality and how knowledge of it is reached; it is the epistemic authority of modernity. Objectivism eliminates the community in the quest for truth, or rather, scientific fact. Applied to society, objectivism views and treats both individuals and society in materialistic and mechanistic terms, giving the masses of atomized individuals and a comprehensive regulatory State.

However, TTK observes that the doctrine of objectivism contradicts the very practice of science to which it appeals. Science, as a most effective and successful means to truth

(contact with transcendent reality) can only function within a community. Science in practice presupposes community in achieving contact with reality.

Indeed this is a parallel structure met in Chapter 2 where social freedom does not so much arise in society but in the individual exercise of public freedom within a spontaneous order. A spontaneous order is here the equivalent of a community. A spontaneous order is a sovereign entity in society exercising public freedom in the service of society especially the cultivation of realms pursuing transcendent ideals such as truth, justice beauty and compassion, those things necessary for the progress of a good society. Community is thus both epistemic and social.

Arthur. J. Dyck, who engages Polanyi, offers a start for thinking about community:

A community is an affiliated and mutually beneficial network of interdependent human beings who, as human beings, share what is requisite for forming and sustaining that network. A network of individual or groups can be connected or affiliated in a variety of ways, including ties created or sustained by procreation, nurture, affection, culture, religion, politics or economic exchange or a combination of these. These affiliations are characteristically mediated by language, symbols and artefacts. (2005:95)

Cochrane⁶⁴ also draws reference to Polanyi but makes more explicit an essential feature

of community:

[A] community is a group of persons who share a basic human value and who, at least to some extent, are aware that they share it. This sharing and awareness create an internal bond among them, making them fellows in the same community, setting them apart from others, and conferring an individual and collective identity which is special and unique. (1977:547)

⁶⁴ COCHRAN, C. E. 1977. Authority & Community: The contributions of Carl Friedrich, Yves R. Simon and Michael Polanyi. *The American Political Science Review* [Online], 71. Available at:

http://www.jstor.org/stable/1978348?seq=6 [Accessed 26/09/2011].p. 548 quotes R. Nisbet, "[Community] encompasses all forms of relationship which are characterized by a high degree of personal intimacy, emotional depth, moral commitment, social cohesion and continuity in time. [It] is founded on man conceived in his wholeness rather than one or another of the roles, taken separately, that he may hold in a social order. It draws its psychological strength from levels of motivation deeper than those of mere volition or interest and it achieves its fulfilment in a submergence of the individual will that is not possible in unions of mere convenience or rational assent. Community is a fusion of feeling and thought, of tradition and commitment, of membership and volition. It may be found in, or given symbolic expression by locality, religion, nation, race, occupation or crusade."

Values are at the core of community. At the same time, they are the presuppositions of our reason; they have social and epistemic function.

Similarly, Buytendijk writes, "Human society is constituted through normative obligations" (quoted in Grene:177). By inference, it is the ongoing, dynamic, intellectual activity of evaluation which comprises a human community and this activity distinguishes it from the animal herd (1974:177) All knowing and all speech (which a community shares) is doing, thus bound by norms (1974:179). Therefore, by extension, a community is the sum of the evaluative activity of its members and this comprises the meaning of the community. Community is thus constituted by the intellectual activity of evaluation which is primarily tacit in character.

Community means to share common understanding (and can include language, manners, laws, traditions). All of these are epistemic categories and, from, Polanyi's analysis, fit on TTK's <u>from</u> side. Community is what we share together, a context for sharing of meaning, a place of indwelling and belonging. Another related word is communion, a sharing of something with others or intimate fellowship. Polanyi uses conviviality which means to enjoy companionship or share in feasting (1962:Ch. 7). Another related word is association, to join in companionship or partnership or a group of related persons forming a society.

Polanyi uses society and community interchangeably but since his starting point is science and the basis of TTK, then its community is his paradigm of society, thought and their mutual relation. His "society" is based upon a modern contractual understanding of voluntary association structured by legal framework (1997b: Ch. 13) in which "contract" replaces "status" (Allen, 1998:176-7). This is crucial to his understanding of freedom: "political and cultural freedom is incompatible with the

existence of fixed social relations" (1997b:201). Allen argues that Polanyi follows Tonnies' differentiation of *Gesellschaft* (formal association) and *Gemeinschaft* (shared experience, life community) (Allen, 1998:176-7). While Polanyi does not bring the two into opposition (Thorpe, 2001:69), the former (explicit) rests upon the latter (tacit).

To my mind, a Polanyian community may be understood, from Chapter 2, as a spontaneous social order from which an individual draws a sense of belonging and in which she exercises public freedom. Applied to my present inquiry, intellectual freedom presupposes community.

Polanyi's "community" comes from his analysis of science's practice. Science is a joint epistemic undertaking, a partnership with common roots in tacit beliefs and consequent obligations. However, since the task relates to truth (transcendent ideal), its scope cannot be defined or predetermined given its tacit character. Contact with reality is indeterminate, incrementally achievable and beyond the scope of one person. Science is thus tacit, fiduciary and requires a community (is social.)

But I have begged the question and need to first state what I take are Polanyi's claim on community. Human thriving occurs in the growth of thought in the pursuit of truth which presumes community. Our well-being is socially and epistemically constituted. This goes against the grain of rights as claimed by liberal individualism which posits a theoretically asocial individual (Mulhall and Swift, 1997:13-14).

4.5.2 Tacit Knowledge, Language and Community

Scientific practice gives Polanyi the theory of tacit knowledge. TTK, of course, sheds light upon the ubiquitous social aspect of all knowing by reference to scientific practice. Science is an epistemic venture ultimately dependent upon social structures and processes. I infer from TTK that human knowing is ultimately fiduciary, tacit and social.

Thought grows only within language hence all thought has social roots (Polanyi, 1959: 60). Language is a social skill mastered within tacit knowing's triadic structure. Language learning is a skill or art framed by a two-way dialogue of trust (by would-be speaker) and authority (of one who commands language) (1962:206). But language presupposes a meaning, coherence or reality towards which it points its participants.

To summarize Polanyi, language (speech) relies on tacitly-held clues and premises, involves personal judgment, intuition and integration (thus intellectual freedom is at play) and it points to an indeterminate reality. Speech is in all aspects permeated by the tacit dimension and may be structured in TTK's <u>from – knower - to</u> triad (Polanyi, 1969: Chap. 12). Community, likewise knowing, rests on trust, confidence, belief or convictions and conversely beliefs, convictions and trust originate in community. Knowing and sharing are fiduciary acts entailing value or moral judgments. Paradoxically, the capacity to evaluate or judge is called into being within community, by social interaction.

Authority and trust (Polanyi, 1962:206-7) are the currencies of social exchange or relationships. Social exchange, by which social relationships are created, is communicative or involves "conviviality" (1962: Ch. 7). Communication (sharing) occur in a social context only if the joint assumptions of trust and authority are warranted (1962:206). We could say these form the moral bonds of society but these bonds rely upon the credibility and enforcement given by society to its moral ideals.

We can infer where verbal or symbolic communications exist, it means something and points to something beyond itself. It rests upon a belief in an achievable contact with a reality. This holds for mastery of the most basic of skills such as a child learning the rudimentary skills of language (1964b:44) through highly complex and abstract arts such as the practice of physics or psychology (Polanyi, 1964b: 44). All learning and mastery of skills upon which knowledge depends relies upon tacit knowledge. It can thus be subsumed into the structure of tacit knowing. As all knowledge rests on the tacit dimension, by extension, its context is a community.

Knowing, sharing and community are indeterminate, fraught with responsibility, risk and promise. The three can and do sometimes go wrong as they originate in belief, confidence or trust. Knowing, sharing and community all have a tacit, ineffable character, "a knowing more than we can tell" (1966:4) character. Thought is tacit, primarily social (Polanyi, 1959:60). Tacit knowledge requires a community and a community requires tacit knowledge.

Following Polanyi, I infer formal, explicit social relationships, characteristic of the modern world, are preceded by the experience of "life-community", that *Gemeinschaft* goes before *Gesellschaft* (Allen, 1998:176). Community rests upon mutual trust⁶⁵ or confidence as well as shared purposes, premises and values, all being tacitly embodied in the procedures and structures of a social institution. On the other hand, beliefs are sustained by community (Mitchell, 2006b) (Polanyi, 1964b).

⁶⁵ On the role of trust in society, see FUKUYAMA, F. 1995. *Trust: The Social Virtues and the Creation of Prosperity*, New York: Free Press. SZTOMPKA, P. 1999. *Trust: A Sociological Theory*, Cambridge: Cambridge University Press.

4.5.3 TTK and the Community of Science

TTK begins with natural science and discovery. Discovery is epistemic, it adds to knowledge by disclosing aspects of reality previously hidden. Science's task is the growth of knowledge concerning truth; it extends our contact with reality.

Science is, on one hand, an intellectual framework of premises (1964b:10,11). On the other hand, it is a framework of (social) institutions comprising the scientific community (1951:64). Science is both thought and social institution (1940b:24).

The scientific community (social) embodies the "consensus" (1964b:50), convictions (1951:Chap 2), beliefs (1951:27), or premises (all epistemic) shared by scientists. Science is a community of consciences rooted in the same ideals and a social embodiment of these ideals (1964b:56). There is a play between the epistemic and social aspects of community and in this play social and intellectual freedom are manifested.

The premises shared by the scientific community are subscribed to individually by an act of devotion (1964b:54). The premises guide not only intuition but the faculty of conscience (1964b:54). Hence, the premises of science are not only indicative but normative (Polanyi, 1964b:54). Being normative, they claim universal validity (1951:27).

Norms can be violated and leave a good deal to the resourcefulness and responsible imagination of the person implementing them (Wolters, 1989a:15). They frame the space of intellectual freedom just as society frames the space of social freedom. From Polanyi's analysis of science's practice, the premises grounding norms are (1) socially

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cultivated, not inborn (Polanyi, 1964b:42); and (2) tacitly indwelt rather than explicitly expressed (1964b:42).

Hence, scientific truth becomes the consensus of the scientific community at a given moment in history (Polanyi, 1969:73) or scientific truth is essentially what scientists as a community affirm and believe (1969:73). Scientific truth is what its authority says it is at a given point of time and scientific authority is equivalent to scientific community's consensus or opinion (1964b:60).

The growth of knowledge needs community since reality has an infinite character. Moreover, knowledge requires validation by the community or we become overwhelmed by fanciful, contradictory whims (1964b:49-50). Such is the role of scientific consensus or authority and it is by nature communal, a product of the social interaction of scientists.

Scientific consensus or judgment evaluates what passes or does not pass for truthful acts of knowing. By rendering such judgment, the community acts as gatekeepers to scientific knowledge. In rendering scientific judgment, the community embodies the combined intuitive judgments of science and judgment is pervasively tacit (1969:76).

Scientific valuation (judgment) centres on (1) validity (accuracy); (2) profundity; and (3) intrinsic interest (Polanyi, 1969:54), all of which entail perception (1969:79). Contributions to science are weighed by (a) plausibility; (b) scientific valuation; and (c) originality (1969:53-4). Whereas (a) and (b) are gatekeeping responsibilities of the community, (c) is individual (Polanyi, 1969:54, 55). Whereas (a) and (b) are forces of constraint (order), (c) is a force of spontaneity (1951:48). Every aspect of the foregoing

entails individual perception, or tacit integration and, by inference, indicates the presence of intellectual freedom.

Moreover, the judgment of the scientific community is not infallible for such is the indeterminate nature of tacit knowledge (1969:77-8, 1964b:61); that risk is inherent in the quest. Yet the social dynamics of scientific practice come as close as is humanly achievable (1977:7) in giving some measure of assurance that an ongoing and ever expansive contact with reality occurs.

From their mutual relation, the scientific community and thought each take on a life of their own. The coherent thought which science achieves validates it as an epistemic venture which actually does establish contact with reality (1951:47-8, 1969:82). However, because the process which has produced such coherence depends on the overlapping of expertise among scientists (1977:181), it relies upon community . On one hand, coherence certifies the community's performance of its task as well as that of its members (1951:46-48). On the other hand, coherence is a product of the interactions of the community. Thus scientific research is a coherent seamless act of tacit integration through time and space (1969:82) as individuals relate by tacit means to one another in the scientific community, both past and present.

The scientific community, as it adheres to its values and beliefs (1964b:42), creates a remarkable and persuasive coherence (1951:48) that is authoritative over the community and in the wider society. The community is bound by shared beliefs and values concerning the nature of reality which constitute the social bonds of the scientific community. Without trust in one another, in the other's commitment to truthful witness of research results, in the other's devotion to scientific values, the scientific community

upon which science depends would dissolve and science would be finished. Thus both coherence and community are a result of tacit belief and values, the taproot of science.

On one hand, scientific value, which the community guards jealously, urges constraint and discipline (1951:48, 1969:82-3). On the other, the community prizes originality for it gives the growth of scientific knowledge (1969:82, 1951:48). Thus, as a guardian of scientific values, the scientific community is the source of originality for it creates the conditions in which originality, as intellectual freedom, may be exercised.

The epistemic role of community has been a prominent theme in the liberalcommunitarian debate (Mulhall and Swift, 1997, Jardine, 1998:13, Buchanon, 1989). The communitarian critique of liberalism⁶⁶ says it neglects the indispensable role of community in human rationality or knowing especially in moral discourse. The role of community in thought has also been brought into other postmodern discussions.

Relating TTK to communitarian thinkers has proven a rich field for exploration amongst scholars of Polanyi as they recognize strong parallels in various projects of communitarians to attend to problems left by the Enlightenment. Flett (1999-2000) and Mitchell (2006a) bring Polanyi together with Alisdair MacIntyre. Each argues that Polanyi prefigures MacIntyre's project to bridge ethics and rationality. Flett and Mitchell see both searching between the shortcomings of modernity's objectivism and post-modernity's subjectivity to find grounds for moral discourse from which a robust community may emerge. They argue that Polanyi has a more sound case than

⁶⁶ MULHALL, S. & SWIFT, A. 1997. Liberals and Communitarians, Oxford, Blackwell Publishing. BUCHANON, A. E. 1989. Assessing the Communitarian Critique of Liberalism. *Ethics*, 99, 852-882, REINHARDT, M. 1997. *The Art of Being Free: Taking Liberties with Tocqueville, Marx and Arendt*, Ithaca, Cornell University Press.

MacIntyre, because MacIntyre still insists on rationality divorced from wider aspects of knowledge included in tacit knowledge.

David Rutledge claims that the individual-community relationship of Polanyi's epistemology overcomes contradictions in both the liberal Enlightenment and postmodernism (2008). He too makes use of a template which interacts community with authority and tradition (2008:5) which is similar to my CAT triad. Rutledge links "conviviality" to Geertz (2008:15) which coincides with my earlier suggestion that Polanyi's theory of conviviality is a sociology of culture He also extends Polanyi's thought towards the speech act (2008:12, 13). Finally, by using Reinhold Niebuhr, Rutledge sheds light on the centrality of trust in community (2008, 14), to which I have pointed to in reference to the works by Fukuyama (1995) and Sztompka (1999). However, Rutledge is not concerned to pursue the connection between community, intellectual freedom and truth.

Michael Overington maintains Polanyi's community of science is primarily a rhetorical community (Overington, 1977). However, he misses the point of scientific practice as the pursuit of truth by scientific discovery. Here community's role is primarily tacit, i.e., the tacit transmission of traditional beliefs and skills, the tacit generation of intellectual passions, etc. Rhetoric is not about discovery but validation of the heuristic act. Finally, even the rhetorical aspect relies on tacit roots because language is structured parallel to TTK's <u>from – knower -- to</u> triad.

4.5.4 Summary of Community

The practice of science, Polanyi's ideal, embodies intellectual freedom, truth and community. It presupposes the obligation to truth and the reality of the creative exercise of tacit knowing perpetuated in the scientific community. Additionally, the scientific

community embodies scientific authority, the standard of scientific truth. The scientific community perpetuates the traditions of science by which its fundamental beliefs, values and practices are tacitly transmitted. Thus the community is both epistemic and social and CAT relates to both scientific thought and social reality.

4.6 Polanyian Tradition

The nature, function and end of tradition in both the enterprise of knowledge and society constitutes a critical front dividing the pre-modern and modern outlooks as well as the early modern and late-modern ones. Modernity views tradition as an obstruction to knowing, and, unessential and hindrance to human well-being while pre-modern and versions of late-modernity view it as essential to our knowing⁶⁷ and well-being.⁶⁸ The fresh emphasis upon tradition comes with a growing historic consciousness entailed in the epistemic task⁶⁹. Polanyi's epistemic inquiry contributes to this discourse of tradition.

Polanyi's reflections on scientific practice re-establish the necessity and priority of tradition in the epistemic quest. He challenges the objectivist outlook which saw tradition as impediment to true scientific knowledge and, by implication, progress. My

⁶⁷ The rehabilitation of tradition is a basic feature of hermeneutical turn. See GADAMER, H.-G. 1979. *Truth and Method*, London, Sheed and Ward.; BERNSTEIN, R. 1983. *Beyond Objectivism and Relativism: Science, Hermeneutics and Praxis*, Philadelphia, University of Pennsylvania Press.; SIMMS, K. 2015. *Hans-Georg Gadamer*, London, Routledge..

⁶⁸ MACINTYRE, A. 1999. *After Virtue: A Study In Moral Theory*, London, Duckworth, esp. Ch. 15 where the self is one constituted by narrative in which the self <u>becomes</u> through storytelling aspiring to truth. MACINTYRE, A. 1988. *Whose Justice? Whose Rationality?* London, Duckworth. follows up the insights. *After Virtue* opened to argue that practical rationality arises out of a particular socially embodied tradition.

⁶⁹ MCCARTHY, M. 1990. *The Crisis of Philosophy*, Albany, SUNY.pp. 6-19. On the transition from classical to historical consciousness.

aim in using Polanyi is to establish the relation between tradition and intellectual freedom by my re-crafted the TTK triad.

I briefly denote tradition, first generally, then primarily by engaging Polanyi and E. Shils in dialogue, then move on to interact with Polanyi's scientific tradition and finally look to a wider Polanyian discourse of tradition. I especially have in view to establish the relations between tradition and intellectual freedom by reference to TTK.

What then is tradition, its role and to what end is it? As departure point, M. H. McCarthy writes, "Tradition is the willed inheritance of the past that illumines the present and future" (McCarthy, 1990:170). Here, we gather a tradition is historical and epistemic in character and ubiquitously the object of intentionality.

Tradition is a uniquely human phenomenon. Animals are bound together by instinct, humans by their traditions. Traditions transmit over time values, beliefs and guidelines for conduct (Gross, 1992: 3) which our actions presuppose. From TTK we learn traditions are tacit, instrumental and lie on the <u>from</u> side of its triad. Hence, it is surmised that the creative act of tacit knowing, of the exercise of intellectual freedom, presupposes tradition.

Traditions form a meaning-begetting and -imparting narrative; humans are shaped and bound together by the stories they create, share and indwell. Their stories are embodied in the cultural artefact they create and share, by meanings transmitted by sign begetting and sign reading, all of which inevitably takes reference to the past. Humans and their knowledge are sign bound or semiotic in nature and therefore inescapably traditional.

Tradition is the basis of continuity in human time (McCarthy, 1990:170). Likewise, tradition provides a sense of place (Gross, 1992: 83). Thus tradition has an ontological

aspect. Teleologically, it is a way to direct oneself to otherness (Gross, 1992). Axiologically, as noted, it transmits values, beliefs and guidelines for conduct and is the locus of a wealth, non-renewable, non-repeatable, obtained only by inheritance.

Thus when tradition breaks down, that is, loses its authority, its power to convince and illuminate, it leaves the mind wandering in obscurity (McCarthy, 1990:170). Likewise, it leaves humans without the resources to constitute community. Tradition has both an epistemic and social function.

Finally, I anticipate that if tradition is a willed-inheritance of past, thus intentional, it does so by the ongoing creative exercise of tacit knowing's interpretation of the past in the light of the present; the viability of traditions is hermeneutically constituted. To sum, tradition is sustained by the dynamic activity of intellectual freedom while intellectual freedom exists only in the presence of an ongoing tradition.

In summary, tradition is the effect of the sign-begetting and sign-bound symbolic activity of humans, constituted by our hermeneutical or interpretative actions, by which we bring the meanings of the past to bear upon present circumstances and thereby make sense of our present circumstances. Being meaningful, they are cognitive and authoritative, being communicative, they are social.. Tradition is thus ultimately the result of individual and corporate human judgment through time.

Scientific practice in the quest of discovery is Polanyi's template of knowing. A practice is practical knowledge embodied in a tradition. Scientific discovery presupposes a scientific tradition. A tradition is a social process or institution which transmits tacitly held beliefs and skills - the <u>from</u> side of tacit knowledge.

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Polanyi's account of scientific discovery is at odds with the dominant understanding of how science works, one which discredits tradition. This distorted concept of scientific knowledge eliminates belief in the independent power of thought and the obligation to pursue truth, a belief tacitly transmitted by tradition.

In the following section, I discuss Polanyi and Shils to bring out the interaction of the social and epistemic sides of tradition. I then extract tradition's relation to tacit knowledge from the Polanyi TTK texts. Finally, I engage Polanyians on tradition's relationship to knowing in a postmodern context. Throughout, I interrupt the discussion to transpose (1) TTK's knower to intellectual freedom; and (2) tacit knowing's <u>from to</u> CAT and thereby draw out the relationship of tradition to intellectual freedom.

4.6.1 Tradition in Tacit Knowledge

Edward Shils (1910-1995), a scholar of tradition, was influenced by Polanyi in his concern with objectivism's detrimental effect on tradition's social role. Shils, as a social philosopher, emphasizes society rather than knowing in the society-thought equation.

Tradition means "handed down" from past to present (Shils, 1981: 11); it is the past in the present (1981:34). By inference, it both claims knowledge of the past, is grounded in the past and is epistemic. Yet, as communication it is social.

Traditions are beliefs with a particular social structure; they are consensus through time (Shils, 1971:126). A tradition involves filiation or handing down (authority) and reception (trust) (1971:127). Tradition carries a sense of "sacred" (1971:139) which accounts for its authority.

A tradition is normative and presents itself for affirmation and acceptance (1981:23) and is fiduciary (entails personal convictions.) A tradition presents an imitable guiding

pattern (1981:32) and therefore, relates to intuition and intellectual freedom. TTK tells us a knower judges, intuits, integrates, understands, so she interprets <u>from</u> clues garnered in the past to achieve new coherence in the present.

Furthermore:

[It] falls finally to him who tells their story, to endorse or revise all previous assessments of their outcome-while simultaneously responding to contemporary issues unthought-of before...Traditions are transmitted from the past but they are our own interpretations of the past, at which we have arrived within the context of our own immediate problems. (Polanyi, 1962:160)

Yet not all tradition is verbalized. Rituals, for example, are traditional re-enactments which re-constitute a group's identity and value (1962:212). Any living tradition is authoritative and, whether articulate or tacit, it embodies tacit beliefs which are authoritative.

Tradition's social transmission modifies meanings and beliefs (Shils, 1981: 13, Polanyi, 1962: 160) but a tradition must retain certain essential elements of the primordial beliefs and meanings because if it loses these, the tradition is lost (1981:14). On the other hand, if a tradition fails to connect or articulate with the present, it also dies. One way or the other, it collapses because it ceases to have meaning in a social context. Tradition is in a state of dynamic tension between the past, present and anticipated future.

Struan Jacobs divides Polanyi's tradition into, first, articulate lore or culture (2005:69) and second, an art of creative practice (2005:69). The latter dominates Polanyi's "tradition" (2005:69). I follow Jacobs' division and begin here with creative practice. Polanyi first draws attention to the epistemic role of tradition in scientific discovery as he shifts from social thought to epistemology, from early-to-late Polanyi The shift occurs with the 1945 Riddell lectures printed as <u>SFS</u> (1964b). Tradition's epistemic

function comes to the fore here and in two essays from the same time period (Polanyi, 1951: Chs. 2, 3).

Scientific discovery involves an art (1964b:12), a practice (1964b:14, 15) embodied in a tradition (1964b:15). It entails a knowledge of doing, a practical wisdom (1962:54, 57). Further, a scientific community is rooted in tradition (Polanyi, 1964b:52) and the general beliefs of science which constitute science are transmitted and upheld by tradition (1964b:52). Tradition is the foundation simultaneously of science's authority (1969:66) <u>and</u> freedom (1966:82, 83, 1977:182, 183), of its discipline <u>and</u> originality (1977:182, 183). Tradition is the means by which tacit values, beliefs and intellectual frameworks are embodied (1962:182), appreciated (1969:67,67) and transmitted (1966:61), hence it is epistemic. A tradition and its tacit beliefs can only be sustained by a community (Mitchell, 2006b:68); "[o]ur believing is conditioned by our belonging" (Polanyi, 1962: 322), hence tradition is social.

If the analysis of scientific practice stresses more the skills aspect of tacit knowledge, then tradition as social lore is found in "Conviviality" (1962: Ch. 7) and stresses the epistemic role of belief in the power of thought and obligation to pursue truth. Lore tacitly constitutes and communicates a group's convictions and values (1962:207).

A society's lore maintains society's order and is a form of moral authority (1962:204) for its norms and values constitute society. Hence a society nurtures its lore for civic moral purposes (1962:204). A civic lore creates a civic home (1962:215) and conditions our beliefs (1962:322).

When Polanyi speaks of the transmission of social lore, he speaks about the transmission of tacit knowledge by the passing on of intellectual artefacts to succeeding

generations (1962:204), bringing the past into the present, of passing down beliefs and values by tradition. Such a passing down of tradition involves authority and trust (1962:208) thus tradition is authoritative. Tradition is social, epistemic and fiduciary and thereby pertains to the <u>from</u> side of tacit knowledge. Tacit knowledge presupposes tradition.

"Conviviality" (1966: Chap 7) represents Polanyi's most complete account of lore and falls into his wider discussion of the mutual relation between society and thought. "Conviviality" sets the "individuated culture" of modern society (the cultural or intellectual spheres of society) into social realms and attributes to each its own lore embodying the beliefs of its individual culture (1962:216-222), i.e., art, religion, courts, and science.

It helps to consider the place of "Conviviality" and its theme of society's and thought's interaction in the wider context of Part Two, "The Tacit Component", of <u>PK</u> (1962). This part opens with a speech theory (1962:Ch. 5) which relates tacit knowledge to speech (language.) Language operates subsidiarily or instrumentally (1962:88,90) and involves the speaker's powers of appraisal (1962:91), and conceptual decisions (1962:100-102), on the <u>from</u> side of tacit knowing's triad. Hence the interpretation of language can be structured within the triad of tacit knowledge, the <u>to</u> side.

A language, to mean anything, must be rooted in the past yet its use in the present involves interpretation (1962:110) as it strives towards meaning or making sense. Language by nature involves the speaker and the listener (1969:Chap 12). Thus language has the <u>from - knower - to</u> structure of tacit knowledge.

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Language structures our interpretative framework by which we assimilate and interpret our experiences (1962:105); "[n]o intelligence, no matter how critical or original, can operate outside such a fiduciary framework" (1962:266). Moreover, because all human thought grows in language and since language exists only in a society, all thought is rooted in society (1959:60). Therefore, since both thought and society are bound by language, they are traditional.

The growth of thought makes society dynamic. But how can we account for the dynamism of thought? TTK answers with its doctrine of intellectual passions. Mental passions are forces compelling thought (1962:Ch. 6). Mental passions are a desire for truth (objects of intrinsic excellence) (1959:62).

However, intellectual passions are not "just there"; they must be cultivated within articulate frameworks (Polanyi, 1962:173, 195) that embody the convictions and values we indwell (1962:195).

4.6.2 Tradition and Progress

I must briefly reconsider how Polanyi overcomes the dichotomy between tradition and social progress. Liberalism pits the absolute autonomy of thought against traditional belief whereby critical doubt overcame the static traditional society. Yet critical doubt as intellectual freedom divides social freedom from society and social freedom from social progress. On one side, critical doubt leads to the absolutely autonomous individual (negative social freedom.) On the other side, critical doubt leads to the principle of unlimited social progress of an absolutely autonomous society (positive social freedom.) Both, in one way or another, lead to moral inversion and intellectual freedom's destruction (Polanyi, 1997b: Ch. 6).

Polanyi argues that tacit knowledge, using scientific discovery and practice as paradigms, overcomes the division of tradition and progress by referencing them to truth. In science, the opposition between tradition and progress is the epistemic issue of constraint and originality in science. Discovery calls for the continual re-interpretation of scientific consensus or tradition. Hence, scientific tradition must be dynamic because it undergoes unremitting interpretation (Mitchell, 2006b:67).

Science's dynamism relies on a tension between its originality (intellectual freedom) and its constraint (tradition.) The tension is constructively maintained by the overriding principle of scientific coherence (1951:48) or unfolding unity of truth. Originality overcomes traditional constraint by submitting to a higher law which it accepts (1951:49). The social process is presided over by scientific judgment (epistemic) appraising if a discovery contributes to coherence. Thereby, originality and constraint are in the service of truth (coherent vision of reality). Hence truth is the regulative principle.

Today's scientific consensus - tradition - will be modified by new discoveries, transforming what is now to that which it <u>ought</u> to be (1951:48, 49). The tradition growing out of this belief expects and encourages change (1964b:52, 1966:82). Otherwise, on one hand, if the traditions of science were discarded, then it would require constantly starting over again (Jha, 2002: 175). On the other hand, if its tradition was not open to interpretation, science could not take in new truth and would cease. Scientific work is most productive (original) in those places where it has deep traditional roots and struggles in places where those roots are lacking (1962:182).

Extending tradition and its interpretation to the political realm, Burke's "imaginative judgment [which] unites political, aesthetic and social reality" (Ritchie, 2010: 171) by

reference to the past but acheiving new insights in light of current problems; political wisdom is imaginative judgment (2010:171), rooted in practice or tradition, hence by extension, is tacit and fiduciary). From the vantage point of our CAT triad, "imaginative judgment" or "taste" (Burke's words) is intellectual freedom. Burke was keen to establish the traditional epistemic grounds of social freedom. Behind his social freedom is (1) deference to the epistemic role of tradition; and (2) an exercise of intellectual freedom in imaginative judgment or taste.

Polanyi's relationship to Burke is well established⁷⁰ as he brings together Paine's radical individualism and Burke's traditionalism.⁷¹ Polanyi draws on Burke to urge social freedom is established on practice and not maxims (1969:67-8), a practice presupposing metaphysical premises worked out within a tradition, "a partnership of those living, those who are dead and those who are to be born" (Burke in Polanyi, 1997b:204)

For Burke, politics is a matter of prudence (epistemic) and political prudence finds its roots in tradition (Allen, 1998:68); rationalism can never achieve the ongoing modification which political life demands (Allen, 1998:68). Social freedom is an art of

⁷⁰ For example MITCHELL, M. T. 2006b. *Michael Polanyi: The Art of Knowing*, Wilmington, Intercollegiate Studies Institute. pp. 63-70, ALLEN, R. T. 1998. *Beyond Liberalism: The Political Thought of F. A. Hayek and Michael Polanyi*, New Brunswick and London, Transaction Books. SCOTT, D. 1996. *Michael Polanyi*, SPCK. p. 84, FISCHER, F. & MANDELL, A. 2009. Die verborgene Politik des impliziten Wissens: Michael Polanyis Republik der Wissenschaft. *Leviathan*, 37, 533-557, MIROWSKI, P. 1998-1999. Economics, Science and Knowledge:Polanyi vs. Hayek. *Tradition and Discovery*, 25, 29-42. JACOBS, S. Classical and Conservative Liberalism: Burke, Hayek, Polanyi and Others. Ibid., 5-15. JACOBS, S. 2005. Polanyi on Tradition in liberal modernity. *In: JACOBS*, S. & ALLEN, R. T. (eds.) *Emotion, Reason and Tradition: Essays on the Social Political and Economic thought of Michael Polanyi*. Aldershot: Ashgate, ALLEN, R. T. 2008. Some Implications Of The Political Aspects Of Personal Knowledge. *Tradition and Discovery*, 34, 8-18.

⁷¹ See POLANYI, M. E. B. R. T. A. 1997b. *Society, Economics and Philosophy: Selected Papers* New Brunswick, Transaction Publishers. p. 204, POLANYI, M. 1966. *The tacit dimension*, Garden City, N.Y, Doubleday. p. 62, pp. 67-8.

living involving imaginative judgment or prudence drawn from lived experience of an indwelt practiced tradition (Polanyi, 1997b:202-205). Burke's "prudence" comes from accepting one's historical setting (Ritchie, 2010:175) and thereby one's historical, political and aesthetic traditions that form a-critical "prejudices" (fore-judgments) (2010:171).

Ritchie (2010) refers to Gadamer who seeks a handle to "understanding" in the human sciences and arts. The central character of Gadamer's epistemic quest is the interpreter who gains new knowledge by the play of text, tradition and "foreunderstanding." This play culminates in a "fusion of horizons", of past-to-present, a moment of "true understanding" (2010:180), of properly relating the part to the whole. Gadamer's hermeneutic philosophy has a correspondence to tacit knowing.

Muhlerin creates a Gadamer-Polanyi discourse by comparing Polanyi's personal knowledge and Gadamer's hermeneutics (Muhlerin, 2008). Both critique and reject Enlightenment epistemology (2008:168), Polanyi from natural science, Gadamer from the human sciences (2008:168). Both reject "objectivism" yet are alert to the attendant risks of subjectivism and relativism (2008:168) and are anxious to preserve truth (2008:169, 170). Gadamer's fusion of horizons is akin to Polanyi's integration. Muhlerin derives a common triadic structure of tradition, authority and prejudice as truth's conditions.

Another contemporary scholar linking knowing to tradition is MacIntyre, this time in ethics. He sets forth (1) "a moral philosophy presupposes a sociology" (1999:23, 225); (2) "man is a story-telling animal [who] becomes through his history a teller of stories that aspire to truth" (1999:216), and a self constituted by tradition. John Flett and Mark Mitchell discuss Polanyi and MacIntyre on the epistemic side of tradition.

Flett proposes MacIntyre's tradition-constituted moral enquiry is complimented if not completed by Polanyi's epistemology (1999-2000:6). MacIntyre seeks to bridge the moral/intellectual divide of the Enlightenment as we move from modern foundationalism to anti-foundationalism (postmodernism) and rationality gives way to radical contingency (1999-2000:6). MacIntyre's moral rationality is the dialectic of tradition and progress (1999-2000:8,9), where "truth" is both relative (contingent and particular) and where universal/ correspondence (realism) interacts in history (Flett, 1999-2000:9). Rational inquiry drives the process. The key to progress (1999-2000:10, 11) is a "tradition-constituted inquiry" transcending the tradition-progress dichotomy.

Flett sees MacIntyre's "craft-constituted inquiry" and Polanyi's "skills in intellectual feats" as sharing common ground. Both approaches involve (1) tradition and authority in knowing (1999-2000:12, 13) (2) an existential commitment to embody or indwell, a performance (1999-2000:14); and (3) crossing a logical gap to achieve new coherence.

As to divergences, Flett maintains that MacIntyre's epistemology retains rationalism (1999-2000:14), while Polanyi connects the rational to passion, beauty and intellectual fellowship (1999-2000:15). So, from the perspective of our inquiry for intellectual freedom, TTK (Polanyi) yields grounds for intellectual freedom unlike MacIntyre.

TTK's assigned epistemic role for tradition raises a question. Polanyi sees tradition as a transmitter of tacit beliefs. A tradition presumes an origin in substantive principles or beliefs born out communications of some kind whose social-epistemic character is both freed and constrained by its context. Being aware that no text, reason included. is directly available to us but subject to interpretation, how do reason, tradition, self-disclosure (as communication) and our experience of the world integrate in a way so that the basic principles behind tradition are kept alive and relevant?

4.7 Summary

Starting with my conclusion from Chapter 3 that liberal intellectual freedom grounded in critical doubt leads to its own elimination by nihilism or totalitarianism, I first reconsidered Polanyi's case against the objectivist world view to which critical doubt is its primary epistemic component; I equate critical doubt to a negative intellectual freedom. I then went on to recapitulate the various elements of his rejoinder to objectivism as found in TTK's triadic from – <u>knower's integration</u> – to formulation. At this point, I recrafted a CAT- intellectual freedom- truth - triad. CAT is both epistemic and social, and since intellectual and social freedom are correlated, then I take it my triad shows itself to be both epistemic and social. I only proffer now that this offers a remarkable stereoscopic view to social and intellectual reality.

For purpose of my present inquiry, I have shown that belief and skills are embodied and transmitted in social structures (CAT). Polanyi is concerned with the <u>from</u> side of tacit knowledge but I have transposed this side to the CAT-intellectual freedom side, because CAT is the primary generator, depository and transmitter of beliefs and skills upon which the creative exercise of tacit knowing leading to truth depends.

However, acknowledging CAT's role in tacit knowledge opens the door to CAT, that is a positive intellectual freedom, becoming totalitarian. If knowing presupposes CAT, how are we to escape CAT? I will in Chapter 5 show how the creative exercise of tacit knowing, a Polanyian intellectual freedom, overcomes the constraints of CAT by breaking out to achieve new truth and becomes a means for the rehabilitation of CAT. We are now faced with the question of how intellectual freedom as tacit knowing can transcend CAT.

5 Intellectual Freedom and CAT

5.1 Introduction

The intellectual freedom presented here is the creative exercise of tacit knowing in the pursuit of truth. Therefore I propose it has a parallel structure to TTK's triad as well as the social freedom's negative - positive, $\underline{\text{from}} - \underline{\text{to}}$, formulation. It is instrumental in function -- it is a precondition of truth. Intellectual freedom is tacit, personal as well as social and epistemic.

TTK opposes an intellectual freedom thought of in terms of primarily critical doubt. Chapter 4 showed that tacit knowledge presupposes CAT on the <u>from</u> side of its <u>from</u> – <u>to</u> notation. Here I show how tacit knowing transcends CAT's limits by going <u>to</u> truth.

The act of or exercise of tacit knowing involves two awareness vectoring from the knower to (1) subsidiary, proximate, parts or clues; and simultaneously, to (2) focal, distal, whole or coherence. (1) involves the knower's indwelling; and (2) culminates in breaking out; both are features of intellectual freedom. Since 1 & 2 are a lived experience, TTK broaches existentialism and phenomenology but holds to objectivity.

Breaking-out as the creative exercise of tacit knowing involves self-modification. In my extension of TTK, self-modification opens the prospect for a modification of CAT. Hence, on CAT's status as a social-epistemic entity, CAT as a spontaneous order gives the preconditions of social freedom but CAT, in its totalitarian version, may still be overcome by the creative exercise of tacit knowing.

According to Michael Polanyi, the fall of liberal social freedom to totalitarianism is rooted in a wrongly stated intellectual freedom (1951:115). As it was discussed above,

he put forward that this wrong intellectual freedom is prone to lead to modern nihilism producing moral inversion. Polanyi's analysis of moral inversion led him to believe the origins of 20th century's nihilism lay in the scientific outlook, its overemphasis on critical doubt and it ideal of impersonal knowledge and detached knower.

In response to objectivism, Polanyi proposes that tacit knowledge leads to truth. He argues all knowledge is either tacit or rooted in tacit knowledge; tacit knowledge is structured in the <u>from - knower's integration - to</u> triad. Tacit knowledge is personal, fiduciary and social. I use TTK (theory of tacit knowledge) to account for a new understanding of intellectual freedom; a Polanyian intellectual freedom is the creative exercise of tacit knowing. I propose this new version of intellectual freedom can reestablish social freedom.

"Intellectual freedom" is usually thought of as encompassing the freedom to hold, receive and disseminate ideas without restriction. I argue that this negative formulation remains one-sided and fails to grasp the positive side – and a socially constructive aspect – of intellectual freedom since it does not require thought to have a bearing upon realty. Equally, as we shall soon see, to place intellectual freedom in CAT is to eliminate it. I ascribe to a traditional, positive and Polanyian intellectual freedom, the creative exercise of tacit knowing disclosing a reality bearing indeterminate future manifestations. I take intellectual freedom to be embodied in tacit knowledge.

In raising the question of intellectual freedom, we bring up what Polanyi considers the fundamental problem of epistemology: what is the role of decision and personal judgment, to what extent does knowledge depend upon this personal contribution to knowing, and if so, to then acknowledge their comprehensive powers (Polanyi, 1964b:13). Indeed, to deny this personal contribution and their comprehensive powers,

that is intellectual freedom, is to pave the way to both the mindless servility of totalitarianism and the incoherence of nihilism.

The intellectual freedom crafted here from TTK, acknowledges the knower's contribution to knowledge (Jha, 2002:41). Our tacit powers reorganize our experience as a way to gain control over it, to understand or to make sense of it (Polanyi, 1959: :20). Tacit knowing is therefore a creative act by the knower producing a contribution to the sum of human knowledge- the life of thought.

To acknowledge our creative contribution to knowledge relates Polanyi to Dewey and existentialism. But while Dewey would liberate humankind from metaphysical beliefs and commend self to reason and progress, thereby setting up the distortion of truth, Polanyi reasserts the role of metaphysical beliefs (Jha, 2002:41) and, by inference, rehabilitates CAT as their transmitter in the venture to pursue truth. Similarly, just as existentialism recognizes human powers to shape knowledge by indwelling, so does TTK. But whereas existentialism jeopardizes truth (Jha, 2002:41), TTK establishes and is established upon the primacy of truth. Just as much, I believe that Polanyi comes to terms with the the linguistics turn of Wittgenstein which sought to make meaning the primordial philosophical category.¹

Epistemology and its intellectual freedom, bears on life and living. If one cannot penetrate to the structures of reality, then how to make sense of life? Practically, for

¹ On Wittgenstein's place and seminal influence, NAUGLE, D. 2002. *Worldview: The History of a Concept,* Grand Rapids, Eerdmans. pp. 148-162. Places him in *Lebensphilosophie* alongside of Heidegger, Husserl and Merleau-Ponty; MCCARTHY, M. 1990. *The Crisis of Philosophy,* Albany, SUNY.His effect on Richard Rorty; SIMMS, K. 2015. *Hans-Georg Gadamer,* London, Routledge.on H. G. Gadamer; HABERMAS, J. 1981. *The Theory of Communicative Action: Reason and Rationalizaton of Society,* Boston, Beacon Press.l See also DALEY, C. B. 1968. Polanyi and Wittgenstein. *In:* LANGFORD, T. & POTEAT, W. (eds.) *Intellect and Hope.* Durham: Duke Univerity Press.

example, when and how does one know when it is time to accept the dictates of civil authority and when is it right to resist? As Parker Palmer notes:

The patterns of epistemology can help us to decipher the pattern of our lives. Its images of the knower, the known, and their relationship are formative of the way an educated person not only thinks but acts. The shape of our knowledge becomes the shape our living; the relation of the knower to the world becomes the relation of the living self to the world. (Meek, 2011: 5)

Again, intellectual freedom is the creative exercise of tacit knowing. Tacit knowing or integration is an activity or process of knowing (1969:132) presuming agent. What's more, this activity is authorized in striving for truth and this striving leaves it free to act on its own responsibility with universal intent (1969:134). From this point on I will use intellectual freedom only in this new sense meaning the creative exercise of tacit knowing.

I re-forged TTK in Chapter 4 to account for CAT. Tacit knowledge presupposes the knower's tacit indwelling on the <u>from</u> side of the TTK triad. Extending Polanyi, tacit knowledge on the <u>from</u> side of tacit knowledge's triadic notation presupposes the knower's indwelling of the dual social-epistemic function of community, authority and tradition or CAT. Intellectual freedom presupposes indwelling CAT.

However, the bond between CAT and intellectual freedom now appears problematic; CAT constrains intellectual freedom on the <u>from</u> side of the TTK triad. Earlier, we noted that epistemology needs a counterpart in sociology; the threat now is that TTK's sociology threatens its epistemology. The question now is how does TTK overcome their tension?

Hence, following TTK, I propose tacit knowledge overcomes the tension between CAT and intellectual freedom by going to the <u>to</u> side of tacit knowledge, by the advance to truth, that is to the contact with indeterminate reality. Tacit knowing is intellectual

freedom by breaking out of existing intellectual frameworks when it produces new knowledge, i.e., when something new is discovered. Worth only noting at this stage, we have in the CAT-intellectual freedom-truth structure a parallel one to the society-social freedom-truth structure of Polanyi's early social theory; both can be seen as analogous to the tacit knowledge's <u>from - knower's integration - to</u> triad in which truth is regulative.

Tacit knowledge puts forth the pursuit of truth for its own sake, that is intuition seeks for truth even while acknowledging the ability to appreciate intimations of reality rests on its indwelling tacit clues on the <u>from</u> side or its reliance on the CAT.

Thus intellectual freedom, by necessity of its existence in tacit knowledge, is tethered to CAT by indwelling in approaching its object (truth). Yet intellectual freedom is loosed from CAT by the integrative act of knowing new truth, by "breaking out", as it apprehends an indeterminate reality. Hence, though intellectual freedom can never be fully free from tacit roots in CAT (for it is always necessarily draws from its fund of tacit knowledge), it can appreciably escape CAT's tacit limits by tacit integration's grasping to an indeterminate reality, by "breaking out." By breaking out, intellectual freedom can transcend CAT and its limitations.

Finally, this being crucial, any apprehension of truth bears upon the knower. Knowing changes a person as, to whatever measure of profundity truth has been revealed, the knower adjusts her intellectual frameworks as a way of relating to the world and to self. So in upholding TTK, I also maintain that tacit knowledge is a way of transcending self while acknowledging its social world as a boundary condition to knowing. A changed self becomes an agent of social change.

Indwelling is a form of existence and breaking-out a change of existence; they set up the knower's relations to her world. Here epistemology and ontology meet. At this junction, Polanyi puts forth the theory of boundary control as a way to account for the increased ontological complexity in the world and the knower's participation in the world through commensurate increases of indwelling. He establishes here a way to reconstruct a meaningful, multi-levelled world and the place of intellectual freedom in discovering this world in the face of meaning's deconstruction and loss of intellectual freedom which objectivism's mechanistic, materialistic world leaves.

Finally, by TTK's doctrine of personal judgment, Polanyi gives a way to establish the true grounds of freedom which come only by accepting the responsibility of holding unproven beliefs in exercising judgement in the pursuit of truth and other transcendent ideals which make for a life worth living. I put forward tacit knowledge is not only a way to recover individual intellectual freedom by the pursuit of truth, but also a way to set up or re-establish social freedom. For it is in the exercise of TTK in the pursuit of new truth that the self, having poured itself into a discovery, transcends CAT by creating a new mental existence for itself by entering into a commitment with a new aspect of reality. A transformed self, who has transcended CAT, invites others by its more fulfilling new knowledge, new mental existence to follow him/her, and by the follower they can change the social structures, that is, they can change CAT.

Thus the pursuit of truth, the responsible exercise of intellectual freedom, gives a solution to the original problem, the destruction of liberal social freedom by totalitarianism or nihilism.

Tacit knowledge, in respect of the principles of freedom and truth, becomes a way to transform society by the power of thought's achievement of truth even as self transformed by truth crafts change in CAT. Therefore my extension of the theory of tacit knowing into a theory of intellectual freedom becomes a way to complete TTK triad's third side, the truth – CAT side of my restructured TTK, a way to overcome the constraints of CAT by introducing new truth to change CAT. I have succeeded in joining the early and late Polanyi and thereby can carry forward the early Polanyi's project to recover social freedom.

In Polanyi's concept of indwelling and breaking out, there is a dialectic which I shall here explore to establish the relations between CAT, intellectual freedom and truth. I do this by first reviewing indwelling and intuition and then denoting breaking out. I then consider the relations between TTK's "indwelling" and "breaking out" in both Polanyi and Polanyi scholars.

Moreover, Polanyi's epistemology requires a parallel ontology for it joins knowing and being. His ontology gives rise to theory of boundary controls which creates space in the world for the creative action of freedom. Finally, the place of personal judgment is crucial in Polanyi's scheme; it is the capstone joining together the personal and objective sides of tacit knowledge. Hence I take it plays a vital role in the creative exercise of tacit knowing or intellectual freedom as I understand it.

I then propose revisit to Polanyi's interpretation of the Hungarian revolution to show how a recovered pursuit of truth (intellectual freedom) led to social freedom and yet to show he failed to follow through the implications of CAT present in TTK by his interpretation of the Revolution. Hence, I propose to show how a re-established truth as put forth in TTK, together with the rehabilitation of CAT as in my CAT theory, leads to intellectual freedom and thus the recovery of social freedom.

5.2 Framing TTK's Intellectual Freedom in Its Wider Discourse

Modernity and liberalism understood intellectual freedom to be the exercise of critical doubt against belief embodied in community, authority and tradition. Their origins coincide with the birth of modern science. Thus, modern science and cultural practice were brought forth under the aegis of reason as set forth by Descartes, set under the objective/subject dichotomy, and were liberated from traditional ecclesiastical and philosophic authority.

Three centuries later, the Cartesian project had run its course. Empirical science, liberated from philosophy, had generated a new culture but epistemology, the last redoubt of philosophy, bound to critical doubt, was giving way to its own inconsistencies leading to a crisis of philosophy and culture. The process eventuated in moral inversion, the destruction of intellectual freedom.

PK's subtitle, 'Towards a Post-Critical Philosophy', signals a vision beyond critical epistemology². Indeed, TTK seeks not only to overcome critical philosophy but to offer a new comprehensive philosophy to meet the needs of the age. It rehabilitates CAT even as it sets up a new intellectual freedom: the creative exercise of tacit knowing in the pursuit of truth. Polanyi's epistemology puts the responsible and free knower at the centre of the knowledge enterprise.

At the same time, TTK tacks a course in relation to other philosophical responses generated by cultural and philosophical crisis: existentialism, phenomenology,

² MCCARTHY, M. 1990. *The Crisis of Philosophy*, Albany, SUNY. Notes Polanyi along with Richard Bernstein, Stanley Cavell, Hubert Dreyfuss, Alistair MacIntyre, Bernard Lonergan share this departure point. I would add Hans-Georg Gadamer and Juergen Habermas to the list. All incorporate some insights of the various early 20th century turns of philosophy. Polanyi appears to have been among the trailblazers of this line of thought.

linguistic, pragmatism, amongst others. Overall and above all, in this regard, TTK navigates to avoid the Scylla of objectivism and the Charybydis of subjectivism³.

In turn, we, who would appropriate TTK should take measure of present philosophical discourse to establish a workable and more truthful intellectual freedom. For that reason, I have taken stock here of Polanyians who have created a discourse between him and more recent discussion of a problematic epistemology and the recent turns of philosophy. I surmise the attempt to liberate ourselves from a discredited (but still culturally binding) modern epistemology drives late modernism but divides it into two streams⁴.

These currents, one reformist, the other revolutionist, take in individual thinkers coming to terms with "the end of epistemology"; generally, Polanyians have related him to the reformist-constructivist stream; the temper of TTK lies more here. Individually, each participant answers out of their understanding of the nature and value of the philosophical tradition from which modern epistemology derives, giving the discourse its depth. For some, as previously noted, what is needed is a critical appropriation of liberalism and modernity, a reflective assessment of its achievements and limitations; for others, there is a call for a radical break with the past⁵.

³ Ibid. p xii-xiii. Separates the two into naturalist-idealist (or historicist) groupings. GILL, J. 2000. *The tacit mode: Michael Polanyi's post-modern philosophy*, Albany, State University of New York.p. 4. Demarcates them by logical positivism, logical empiricism or analytic philosophy and existentialism/phenomenology. The former group is represented by B. Russell, Rudolph Carnap and the early Wittgenstein while the latter one represented by J.P. Sartre, A. Camus, E. Husserl and M. Heidegger.

⁴ For example, GILL, J. 2000. *The tacit mode: Michael Polanyi's post-modern philosophy*, Albany, State University of New York. Divides post-modernism into constructive and deconstructive camps.

⁵ MCCARTHY, M. 1990. *The Crisis of Philosophy*, Albany, SUNY. p. 171. Richard Rorty, for example, not only challenges the tradition of epistemology but aims to permanently destroy it; and GILL, J. 2000. *The tacit mode: Michael Polanyi's post-modern philosophy*, Albany, State University of New York. Poins

The questions of epistemology continue to play in the discussion: can we know, what can we know, what is the relationship of knower to known. Finally, both streams engage the consequences of the existential-phenomenological, pragmatic, hermeneutic and linguistic turns of the earlier generation.

In this mix, my concern is intellectual freedom, its relation to truth and social freedom. I propose to follow Polanyi by determining, to the extent possible, what the role of , breaking out, decision and the capacity of personal powers of judgment are in grasping truth (Polanyi, 1964b: 13). If intellectual freedom, proper, is understood, its function and aim established, then, intellectual freedom can be re-established and valued. Thus, my turn to TTK.

5.3 A Reconstruction of TTK's Intellectual Freedom

Polanyi creates an epistemic tandem between indwelling and breaking out (1962:195-202) which can be structured by TTK's <u>from-to</u> notation and by the knower's intuition. My recast CAT-intellectual freedom-truth triad has a parallel structure. Tacit knowledge presupposes CAT on the <u>from</u> side and tacit knowledge (as tacit knowing or intellectual freedom) overcomes CAT on the <u>to</u> side, going <u>to</u> truth.

I want to now establish the relation between indwelling and breaking out, as well as their relationship to intuition, by first discussing each individually.

But, from the start, both indwelling and breaking out should be understood as an achievement of the knower's intuition. Both are forms of existence, tacitly achieved by

to a similar project put forward by the French deconstructionists. Crucially both continue to rely on radical critical doubt. Both stress the limits of cognition, take seriously the late Wittgenstein's linguistic turn and admit to being nihilistic.

knower's intuition and not separable from knower. Indeed, the TTK project centres on giving an account of intuition as the power of thought integrating <u>from</u> clues, subsidiaries, parts <u>to</u> focal or whole coherences.

Indwelling is on the <u>from</u>, <u>parts</u> or <u>subsidiary</u> side of the TTK triad and is a subsidiary, particular, lived-in knowledge (1997b:337, 1966:64) which is tacit, social and fiduciary. Indwelling skills and beliefs (or CAT) precedes and is a pre-condition to breaking out. "Breaking out" or comprehension is on the <u>to</u>, <u>focal</u>, or <u>whole</u> side of TTK's notation (1997b:337-8) and its knowledge is intuitive or contemplative (never fully explicit.) Both indwelling and breaking out are forms of tacit knowing which embody tacit knowledge in the sense of "knowing more than we can tell."

5.3.1 Indwelling

I previously discussed indwelling but expand the discussion. To indwell is to inhabit or abide within. As noted, Polanyi's indwelling has kinship to Dilthey and existentialism as well as to Kant (1969:156) but also differs significantly. Jha (2002:71) and Meek (1983b) see it akin to Merleau-Ponty. Indwelling also has affinity to Heidegger's "being in the world" (Sanders, 1988:230, Meek, 1983b:7-9, Polanyi, 1962:x). Indwelling describes the <u>from - knower</u> relation or for us, the <u>CAT-intellectual freedom</u> link; it vectors from knower to the <u>from vertex of TTK's triad</u>.

Polanyi first mentions indwelling when he discusses the role of skills and tools in personal knowledge (1962:Ch. 4); a clear initial outline of TTK also takes shape in this passage. He holds that we pour our whole beings into tools and skills and assimilate them into our existence (1962:59, 173); knowledge of them is existential or lived in (1962:58), unspecifiable (1962:62,63) and involves commitment in our use of them (1962:59-61). Skills involve tradition and authority in their transmission (1962:53).

Further, indwelling encompasses intellectual frameworks as tools, that is, we use them within the same structure to attend <u>to</u> our focal object (1962:58, 59).

As I read Polanyi, indwelling describes a lived-in experience or an awareness by which the knower's intuition relates to clues, parts <u>from</u> which he attends. Indwelling is a form of mental existence (1969:134) that unites knowing and being. There is an ontological hierarchy of being which corresponds to the way we epistemically relate or indwell with that level (1969:136); the higher up the hierarchy, the greater the tacit dimension or indwelling that is involved (1969:136). Since all thought is incarnated, it originates, lives in or indwells our bodies and by approval of society (1969:134), i.e., tacit knowledge is indwelt in body and society. Because indwelling is a form of tacit awareness or experience <u>from</u> which the mind attends <u>to</u>; consciousness involves intentionality, indwelling is intentional (1969:141).

Indwelling has import for human relationships, that is, social life for learning and therefore the practice of social science and psychology. For one, humans are creatures who know in the sharing of life (1969;151), we experience our fellows by indwelling them (1969:152) and it is in our appreciation of our fellow as a meaningful comprehensive whole that we enter into fellowship with them (1959:66). Furthermore, the moral knowledge we have and by which we judge ourselves and our fellows is indwelt (1966:17, Dyck, 2005:Chs. 7&8).

Richard Gelwick tells us that we are creatures who live and know by indwelling (1977:78); indwelling unites the knower and the known (1977:139). Jerry Gill offers this insight to indwelling and pedagogy:

The key to indwelling is to allow ourselves to participate in these particulars as if we already knew what they mean. We do this by imitating the meaningful behaviour of those around us even though we do not understand them fully, but expect to do so. Moreover, such imitation is accomplished

through our embodiment, through putting ourselves in the place of others and behaving as we see them doing. (Gill, 2000:46)

From Gill, we see indwelling (and the implicit trust entailed) is prior to understanding thus indwelling precedes learning. Using the example of infant language acquisition, the sounds and actions which surround a child are meaningless. However, in the effort to relate to the community around them, an infant mimics the sounds it hears in the belief they have meaning until the sounds become meaningful. The infant indwells the sounds as a way of making sense of and entering the community.

To recap, tacit knowledge on the <u>from</u> side is tacitly indwelt or experiential, subsidiary, personal and social; this is the realm of CAT. I now briefly consider the place of intuition, the power of thought, in Polanyi's scheme.

5.3.2 Intuition

Intuition is a skill rooted in our natural sensibility to hidden patterns, guided by innate sensibility to coherence and developed to effectiveness by a process of learning (1969:118). It is a form of foreseeing (1964b:10), of foreknowledge (1964b:32), a guided conjecture (1964b:32). It is connected to the tacit powers by which we reorganize our experience so as to gain intellectual control over it (1959:20) Intuition is performative (1959:24) hence subject to norms. It is an anticipatory power (1969:59), is associated with the act of perception (1964b:10) or integration (1969:201). It also bound together with the mental passions' functions in the drive for things of intrinsic value or excellence (1962:Ch. 6). Intuition guides the creative exercise of tacit knowing.

As I read Polanyi, contemplation (as focused attention) relates to intuition and indwelling. Contemplation occurs when the self consciously experiences an indwelt articulate framework and its intellectual powers it indwells (1962:195). It can

momentarily overcome the theoretical screen or intellectual frameworks and pours us straight into experience (1962:197). For Polanyi, contemplative experience is a self-surrender which is used to apprehend meaning in higher skills like the arts, science, etc. (1962:199). However, as I read him, Polanyi does not attribute to this visionary state any necessary objectivity until a claim of truth is brought forth for verification or validation (1962:201, 202) but it existentially affects the knower.

Any practice requires its practitioner be able to engage in contemplative experience if she is to appreciate what the practice aims towards (1962:195). Therefore, contemplation supersedes our intellectual frameworks and causes a novel kind of indwelling where, using my own words, one is in direct communion with reality. Contemplation produces a vision opening or extending horizons of uncharted territory still to be explored (1962:135). However, the vision is very much the achievement of the knower rather than a happening to him.

Araminta S. Johnston points out the original Greek understanding of contemplation as theory did not have the sense of "disengaged reason" as modern objectivism does (1993-94:17). Instead:

The primary sense of *theoria* is simply "a looking at, a viewing, a beholding, an observing"...*theoria eineken* [means] "for the purpose of seeing the world" and this is what a theory...actually is. Theory, in this original sense is as broad as human existence (since we all have a "view") and its manifestations include such diverse forms as narrative...music, painting or even language itself. (1993-94:17)

This appears to be the way Polanyi looks at contemplation.

Moreover, contemplation is an activity of the mind which involves the back and forth between the tendencies of indwelling and breaking out. As I read Polanyi, the "dance" of indwelling, the lower level, and breaking out, the higher level, is an ongoing process in which the knower participates. The knower holds computation and intuition together

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by shifting back and forth (1962:131), a fusion of analysis and synthesis, divergence and convergence.

5.3.3 Breaking out

A rich understanding of "indwelling" exists amongst Polanyian scholars but not so with breaking out. Even with Polanyi himself, the concept seems undeveloped yet I maintain that it is a pregnant concept in his thought. As far as I can determine, "breaking out" appears four times and only in the section 'Dwelling In and Breaking Out' of PK's Chapter 6 (Polanyi, 1962: 195-202). However, the notion itself relates to other notions fitting around what I take to be a Polanyian "intellectual freedom" among these being creative imagination, tacit integration and intuition.

I surmise breaking out is analogous to integration, the creative exercise of tacit knowing from my intellectual freedom springs. Indwelling and breaking out go side- by-side, have ontological import and are forms of experience (Polanyi, 1962:195-202). Breaking out starts from an indwelling but in problem solving leaps across a logical gap by knower's integration into (what might be) a new comprehension of reality, or truth. The act of breaking out creates a modified relation to the world and modified self.

Breaking out is under the compulsion of gaining intellectual control of the world (the known) even while gaining control over ourselves (Polanyi, 1962:196). Breaking-out entails the self-destruction of an existent intellectual framework. It bursts the bonds of disciplined thought in a moment of transcient heuristic vision (Polanyi, 1962:135), The mind at this point is overwhelmed by its own passionate activity (Polanyi, 1962:196).

Scientific discovery is but one example of breaking out; one must also include breaking out in the experience of the arts (Polanyi, 1962:199) and the experience is even part of

mastering mathematics (Polanyi, 1962:199). However, because religious breaking out involves the knower most comprehensively, I take it from Polanyi that breaking at this level entails the most profound and comprehensive modification of self and relation to the world (Polanyi, 1962: 197.198).

Endre Nagy, whose interest is conversion, argues that "conversion" is a form of "breaking out" (Nagy, 2010). However, he, of the scholars who touch it, gives "breaking out" its most extensive treatment but from this angle (Nagy, 2010). By his reckoning, only Richard Allen refers to breaking out and this only obliquely while, from my research, Sanders and Gulick relate to it indirectly (2010:9); I found reference to it in Stefania Jha (2002:44), Mark Mitchell (2006b:123-4), Druscilla Scott (1996:151) and Walter Mead (2013). However, even as I have discovered, Nagy finds its tandem notion, indwelling, is given much more extensive treatment by Polanyi scholars.

Nagy relates "breaking out" as "conversion" to existentialist concepts of Sartre and Heidegger (2010:34-38) and maintains "breaking out" comes closest to Heideggerian *Lichtung* or "clearing" (2010:36, 43). To Nagy's mind, "breaking out" is best understood as "conversion" (Nagy, 2010). He follows the notion's genesis as a <u>concept</u> and its manifestations (2010:9) in Polanyi's analysis of great scientific discoveries, art, mathematics and religion. Furthermore, Nagy sees its strong kinship to the "transnatural formations" of <u>Meaning</u> (2010:11). As Nagy ascertains it, breaking out is to be substantively seen as the culmination of an effort to escape our traditional intellectual frameworks (2010:38). "Breaking out" theoretically should be seen as counterpart to "indwelling" (2010:38)

To summarize Nagy, "breaking out" (1) is a means to transcend the indwelt world (2010:44); (2) takes most vigorous form in mystic vision which transcends our thoughts

(Nagy, 2010:44); (3) has a strong similarity to Heidegger's ek-sistence (2005:44); (4) while not a normal experience, can still occur in the life of anyone yet requires an artistic or scientific achievement (2005:45); and (5) is an intellectual illumination but realized by an inner self-transformation which makes the conversion complete (2010:45).

Nagy's account of breaking out carries a strong existential dimension which I do not necessarily see in Polanyi. From the overall bearing of Polanyi's thought, while breaking out is not exceptional, it would be safe to say that the greater the intrinsic interest of the subject matter, the greater its effect upon breaking out's manifestation. Thus a conversion to Polanyi involves life and death issues just as in Nagy.

I found it necessary to remind myself that Nagy is after "conversion" and not "breaking out." But, if one bears this in mind, Nagy's investigation of "breaking out" has served to better understand the notion of breaking out on its own standing, as an aspect of intuition transcending existent intellectual frameworks and the ensuing movement towards an undisclosed aspect of reality, the <u>to</u> side of tacit knowledge. Thus, breaking out is a manifestation of the intellectual freedom, at work.

There is, in Polanyi's view, a normal human urge to increase the capacity of our theory or intellectual framework's ability to exercise control over our experience of the world (1962:106). Bear in mind that this intellectual framework is primarily the product of CAT. Thus, any intellectual framework is innately historically limited and confronts a need to adapt in light of ongoing experience.

Intellectual framework - just like all life - is dynamic. Ideas are living and all that lives adapts to its environment in which it must exist and to which it must adapt. Given the

shifting world, the mind seeks an ordered framework of ideas in which each single part is borne out by the cohesion of that whole which the mind finds supremely attractive (1940a:5). Such an ongoing adaptation is the back and forth of indwelling and breaking out and bears on self who indwells the framework.

To modify a framework modifies self (1962:106). The modification of intellectual frameworks and self is part of the woof and web of life. However, there are some beliefs which are fundamental, that is, they hold together the framework and decisively shape the mind and life. These touch on our outlook or world view. For a mind to have stability requires an ordered framework built on these fundamental commitments. When these by force of circumstance are brought to light and found wanting, an existential crisis follows. We see this in the discussion of the Hungarian Revolution.

The urge to expand our framework's capacity is brought on by a problem, an awareness part of our experience is not under intellectual control. Hence to increase of the framework's capacity to control experience of the world, there are ongoing phases of self-destruction (1962:196), by inference, a destruction involving both framework and of self. This self-destruction, as I construe Polanyi, precedes breaking out and enables the knower to experience the content of her experience momentarily without a theoretical screen as contemplation dissolves the screen (1962:196-7). As I read Polanyi, the back and forth between the indwelling and breaking out is held together by the knower's intuition, indwelling being on the <u>from</u> side of tacit knowing and breaking out on the <u>to</u> side. Breaking out is to truth and is intellectual freedom at work.

The three aspects of TTK, <u>from—knower's integration—to</u>, are involved in breaking out. The process is impelled forwards by the principle of breaking the existent CAT (lower law) in the name of truth (the higher law) as the knower believes it should be in the light of an intensely personal vision of reality which, by his purview, everyone should recognize (1962:48-9). The onus of persuasion, however, will later be upon him to convince others if it is to bear on truth.

The dilemma we seek to overcome here, again, is how can there be intellectual freedom if thought presupposes CAT's necessity and, by inference, the world view (basic beliefs) behind thought. This is the dilemma about which I spoke at the onset. It appears to me this can be done by the back and forth of indwelling and breaking out, computation and intuition, held together by the knower bringing about a transformative breaking out in which integration or perception occurs. Knowing as breaking out <u>to</u> new truth is intellectual freedom. Therefore, since CAT and the world view are inextricably woven together, tacit knowing responding to an intuition of reality can overcome world view.

5.3.4 Boundary Conditions

I will briefly show how TTK gives an ontology of intellectual freedom and reconnects ontology and epistemology. Since intellectual freedom, that is, the knower's creative exercise of tacit knowing is the decisive feature of TTK, then its epistemic structure should reflect or represent to some measure a commensurate structure in nature. Freedom, dynamism and spontaneity together with order are essential in both thought and nature.

As Torrance says of Polanyi:

The interrelation of freedom and order is thus a persistent theme in hisscience, philosophy and society. Order without freedom is the destruction of order and freedom without order is the destruction of freedom...Nature must be understood in the light of its intrinsic creative coherences and patterns, and correspondingly scientific discovery takes place through a creative integration in human thought correlated to the emergent orderliness in nature and not imposed from some extraneous stance. (Torrance, 1984: 176)

Principle one: intuition detects or senses an innate coherence, or order in nature, which really is there. Torrance argues that the Einsteinian revolution and the more dynamic picture of nature it gives, stands behind all of Polanyi's thought (1984:110). Einstein, however, could not bridge the gap between structure of scientific theory and the objective structure of the real world (Torrance, 1984: 112), for how our ideas relate to our experience (Torrance, 1984); Polanyi by TTK and its principle of we know more than we can tell establishes the link.

In Torrance's paraphrasing of Polanyi:

Science...operates with something irreducibly given, over which we have no control, 'a transcendent reality' Polanyi calls it, reaching out beyond us in an indeterminate range of intelligibility but which through its intimations of hidden dimensions of meaning and order beckon us on in unceasing inquiry...of which we are inescapably committed as rational beings. (Torrance, 1984:108)

Polanyi insists that in knowing the mind actually makes contact with the structures of reality (1984:112). Discovery is not just the activity of the mind but an aspect of reality seeking realization in our minds (1964b:35).

Principle two: The universe is one in which spontaneity or freedom is present in the order of nature. There is space for freedom or indeterminacy as crystallography (1962:43), the law of chemical proportions (1962:41) and other examples show. (Mahoney, 2001:33) Freedom is real. Further, if we are to unceasingly attain to aspects of the indeterminate transcendent reality, then science and society needs to be spontaneously ordered to enable individual scientist and science to their task.

In principle three, I pick up and extend Polanyi's notion of boundary conditions and dual control (1969:Ch. 14) to CAT, intellectual freedom and truth. Polanyi here tries to create an ontology out of his epistemology. The principle of boundary conditions and dual control assumes a multi-level hierarchical ontological structure of reality extending

from physical-chemical properties up to the realm of thought (1969:233-235). Each level of reality operates by principles made possible through, first, physical and chemical laws, then extending on up to their particular level in the hierarchy (1969:234) and, second, by a principle of boundary conditions (1969:235). At each level, two controls, a lower and higher are at work. He then transposes these into the <u>from-to</u> structure of tacit knowledge, <u>from</u> being lower and <u>to</u> higher (1969:235).

Our experience of the world has various levels of richness and meaning. Polanyi's hierarchical ontological structure is set up to reflect this variety of experience and reestablish a meaningful basis for our experience of the world which objectivism has eliminated. The world of objectivism is, for its part, mechanistic, atomistic, a reductionistic, flat and bereft of meaning. TTK's world is organic, a congealing of parts and wholes, emergent, hierarchical and pregnant with meaning as one ascends the structure. For my purposes, the principle of boundary conditions and dual control shows us how freedom mobilized by intentionality transcends the lower level to achieve a previously non-existent entity at the upper level.

A caveat: Polanyi's effort to create an architectonic ontology by starting from his epistemology is problematic (Jha, 2002: Ch. 9) We should, however, keep TTK's primary objective clear: he sets out to show the creation of a new idea (Jha, 2002:237) and to show that this idea may be valid (Jha, 2002:236). The difficulty, as I read Jha, is that he brings together several strands of philosophy (ontology, epistemology, teleology and ethics), each with their own particular aim and then confuses them.

However, since my purpose is to establish how the creative exercise of tacit knowing leads to truth, then the admixture of epistemology, ontology, ethic and teleology work loosely to my ends. Moreover, as will be seen in my upcoming discussion of the place, function and purpose of personal judgment in TTK's epistemic enterprise, then it is not so easy to separate the ethical and epistemic realms.

Returning to dual control and boundary conditions, at each level, the higher level of dual control is not determined by the preceding level(s) but harnesses the possibilities of the lower level by applying laws or inanimate principles to the spaces left open by the lower level, hence dual control and boundary condition. The higher, inanimate principle creates from the lower level a tool, a machine which is explained in terms of the device's purpose, that is, as a way of grasping or coping with higher level reality. Each higher level depends on the lower level(s) in order that its inanimate principle may function but the higher principle is not determined by it. Biology transcends the chemical and physical, animal transcends the plant, humans transcend the animal, etc., all the way, to the principle of human thought.

To use Druscilla Scott's (1996:120) example, a watermill functions by harnessing the physical properties of water and gravity but it takes a miller to contrive the mill. Hence, there are two answers to the question of why the wheel turns: (1) because water runs downhill; and (2) because a miller had planned to grind corn. The first limits the second but does not determine the second. We have necessity and contingency impinging. The second transcends the boundary conditions of the first by giving it a purpose and uses the "play" that is available in the operations of the lower law to inject a new principle as determined by human intention and contrivance. In this sense, the reality of the second is of higher order than the first. What is decisive is the intentional operations of the miller's thought in "seeing" what was always there but not disclosed and then giving it a purpose. This I take to be a manifestation of intellectual freedom or the power of mind. We see operating here the triadic structure of TTK's of from - knower - to.

Polanyi uses the principle of dual control and boundary conditions to create an ontology which parallels his TTK epistemology. The lower level of clues (from, subsidiary, parts) is necessary for the upper level (to, focal, whole) but the lower does not determine the higher. Moreover, the role of tacit knowledge present at each level correspondingly increases as the ontological complexity increases, starting from the knowledge of the physical and ending in knowing our fellows, the latter is the richest in terms of indwelling or tacit knowledge.

One can infer from Polanyi's ontology a hierarchy going <u>from</u> the lower or subsidiary society - <u>to</u> thought in service of transcendent ideals; society is necessary to thought but does not determine thought; thought grows by individual creative exercise of tacit knowing which leads to truth. If we transpose the TTK triad into the <u>CAT - intellectual</u> <u>freedom - truth</u> triad, the order of CAT rules thought as long as thought remains embodied in CAT, that is, is not harnessed by the exercise of intellectual freedom in the pursuit of truth just as water runs its natural course. However if intuition is drawn to a sense of a beckoning reality and harnesses CAT, thought can achieve contact with a new aspect of reality, thereby enriching her and her fellows lives; this is intellectual freedom at work.

The higher inanimate principle of intellectual freedom uses the necessary tacit knowledge of CAT to "contrive" (apprehend) truth. Just as imagination and intuition (intellectual freedom) are employed to go to <u>from</u> physical laws to principles of grinding corn, so, too, are imagination and intuition exercised to rise above the social and attain to the structures of reality. The decisive factor in transcending CAT is the power of thought when it intuitively senses a hidden reality believed to be there.

Intellectual freedom must accept the limitations of CAT just as the miller accepts the physical properties of water and gravity. But equally, intellectual freedom can play with the possibilities left open by CAT with the intention to establish contact with a beckoning yet not seen aspect of realty just as the miller imagines a corn mill grinding corn. CAT functions on the lower level as indwelling and truth or reality on the higher. Intellectual freedom is obliged to indwell CAT but it transcends CAT by breaking out. The social then comes under the sovereignty of the independent power of thought in the pursuit of truth.

Polanyi maintains that a world view, an intellectual framework of basic beliefs, being socially constituted, can be transformed by breaking out and this constitutes the basis of intellectual freedom. I argue he does not go far enough. Rather only when breaking out leads to the re-formation of a tradition, of a community and of authority, can truth be given its most profound expression or embodiment, that is, as tacit knowledge embodied in CAT as the belief in the independent power of mind and the obligation to pursue truth.

Therefore as put forward at the onset, in the light of tacit knowledge, if intellectual freedom, even if eliminated, finds its proper grounds, that is, if the respect and pursuit of truth are re-established, then intellectual freedom can reconstitute itself and social freedom and overcome the original problem of liberalism's self-destruction. I shall come to this in the case study of the Hungarian Revolution. However, I must first address an essential aspect of intellectual freedom, personal judgment for if I left off with just breaking out, it would misrepresent Polanyi.

5.4 On the Cognitive Function of Personal Judgment

Breaking out transcends CAT and its prior intellectual frameworks. While breaking out, the creative act of tacit knowing, leads to truth's discovery, not every experience of breaking out necessarily leads to truth. Yet, how, on the knower -- to side of TTK's triad (my intellectual freedom – truth side), given human fallibility, does tacit knowing, as much as possible, transcend or limit deception? The question brings up personal judgment.

So far, my reading of TTK is problematic; it gives the upper hand to the conative aspect of TTK over its cognitive. Yet, as Jha argues, and I agree, an overemphasis upon the conative aspect distorts TTK (Jha, 2002: 204. 205). This lends itself to his being misunderstood by his modern contemporaries and co-opted by today's post-modernists (Jha, 2002: 205). But following Sanders⁶, Polanyi transcends the modern – post-modern distinction, tacking between them.

The misunderstandings do TTK injustice thus need redressing. I propose to re-consider Polanyi's concept of personal judgment as a way re-establish the balance of cognitive and conative features of knowing. Personal judgment is the keystone of TTK; it joins freedom to responsibility, the personal pole to objective pole, reason to will.

⁶ SANDERS, A. 1991-1992. Tacity Knowledge-Between Modernism and Post-Modernism: A Problem of Coherence. *Tradition and Discovery*, p. 18. Modernism is primarily characterized by (1) epistemic foundationalism; (2) ontological reductionism; (3) representational theory of language. Post-modernism, on the other hand, involves (1) epistemological holism; (2) its communal understanding of language; and (3) in its ethics, involves a communal or organic view to support common good as way to reject modernism's emotivism (a la MacIntyre.)

I go to Jha, Yeager, Grene, Mahoney and finally Polanyi to consider the notion of personal judgment. Judgment as used by Polanyi is a personally and tacitly constituted act or process impinging on epistemology, metaphysics and ethics.

Going to Polanyi's habitual analogy, scientific judgments are decisions which are ubiquitous throughout the entire research process. They are guided by the premises of science but determined ultimately by "personal judgment" (Jha, 2002:55). A scientific judgment is an assessment of scientific plausibility (Polanyi, 1969:77) as guided by interacting with scientific values: (1) exactitude; (2) systematic importance; and (3) intrinsic interest of subject matter (Polanyi, 1969:83).

By extension, each sphere of thought operates by its own set of values reflecting its subject matter (for example, judicial, aesthetic, educational or religious) and embodies the collective personal judgments of its actors over time but subject to present interpretation by the individual. The roots of personal judgment are authoritative, communal and traditional. Personal judgments are normatively constituted and derive from metaphysical assumptions (Jha, 2002:171). Hence, there is the play of freedom but the responsibility of judgments falls upon the knower-actor and judgments are subjected to normative standards of CAT.

Jha notes that insight is tied to judgment, a link which the early Polanyi established but which fell from sight in the later Polanyi (Jha, 2002:204)and then led to the dominance of the conative over cognitive (Jha, 2002:204). Further, the link is not explored by Polanyians (Jha, 2002:204). Jha maintains that its re-establishment would correct the misreading of Polanyi mentioned at the start here.

Polanyi's personal judgment is tied to the judicial attitude (Jha, 2002:204) an attitude whose abdication Polanyi believed had led to the destruction of freedom (Jha, 2002:6, 18). The judicial attitude is an ability which presupposes an element of freedom and would appear to arise in the blending of will and reason (Jha, 2002:206).

The judicial attitude is a cognitive act of judgment guided by principles joined to an act of the will whose effort is not overshadowed by affect (Jha, 2002:206). It is the ability to judge correctly in particular situations (Jha, 2002:208) and related to connoisseurship – expert knowledge and keen discrimination (Jha, 2002:208). It is nurtured in the person through submission to a mentor while being fully immersed into the situation requiring its exercise (Jha, 2002: 208). It is a regulative idea (Jha, 2002:207) ultimately guided by his living principle of truth toward which one strives (Jha, 2002:210).

Jha reckons that, in part, Polanyi judgment uses Kant's critique of practical reason and moral philosophy (Jha, 2002:212). From them, he garners the notion that closing the heuristic gap is possible by the action of practical reason as opposed to tools of theoretical reason (Jha, 2002:212). For my purposes, a judicial attitude is one nurtured and sustained by CAT, predisposing responsible personal judgment toward the pursuit of truth. This leads us to Yeager's contribution.

Yeager begins her analysis of personal judgment by pointing out (from Arendt) that judging is a human faculty, an activity distinct from knowing and willing but integrating them (Yeager, 2008); it transcends them. In Polanyi, judging is a fundamental power of the person and constitutive of personhood (Yeager, 2008); indeed, persons are recognized as centres of intelligent judgment (Yeager, 2008). Judging is an interpretive activity which seeks to satisfy self-set standard and which has its beginnings in the capacity to learn from experience (Yeager, 2008)

Like Jha, Yeager points to Kant's notion of "mother-wit", a power of action which cannot be separated from a system of judgments (Yeager, 2008); again I take systems to be a sphere of thought like science that embodies in its CAT the tacitly prevailing beliefs and values operative in it. Judgment, then, in Yeager's view is practical wisdom (Yeager, 2014) whose subject matter is indeterminate

Personal judgment is entailed in both validation and verification. Risk and responsibility are ubiquitous in judgment but are preconditions to intellectual freedom as the creative exercise of tacit knowing. Finally, while Yeager went to the index of PK as reference for (personal) judgment and found only three references to it, my textual survey of the notion finds it repeatedly shows up in PK and later work of Polanyi. It is central to TTK and the higher allegiances to which it is committed.

Polanyi's philosophy mentor, Marjorie Grene, contra objectivism, argues value precedes fact, evaluation -- knowing (Grene, 1974:159). Humans, in distinction from animals are innately evaluative (Grene, 1974:172-179)and indwell evaluative structures (Grene, 1974:159). Indeed our social life (Polanyi, 1969:176-7), language (Grene, 1974:175) and discourse (Grene, 1974:172), all of which distinguish us from animals, are constituted by evaluation, therefore, by extension, are interrelated to CAT.

The uniquely human capacity to be binary in and to the world, to participate (indwell) and withdraw (objectify), creates space for freedom. The evaluative, interrogative attitude lifts us above natural environment and creates a world (Grene, 1974:174-5). Our experience of the world is brought under a system of values; we take experience, make them objects, then give them meaning. Thereby, following Buijtendyk, the world becomes a gift and a task. By ambivalence's back and forth, done in the uniquely human interrogative mood, the self responds to the world, judges experience, knows the

world and takes her place in it. To judge an experience, we tacitly submit to standards and their discipline.

The sociologist Raymond Aron⁷ also considers the role of judgment in the same context of totalitarianism's rise as Polanyi. Surprisingly, despite the similar trajectories of their philosophical projects, their shared secular Jewish backgrounds and common circles of interest, I am not aware of any extensive comparison of their work. I go to Mahoney's essay 'Raymond Aron and the Morality of Prudence' (Mahoney, 2001).

Charged as existentialist, Aron does not succumb to its nihilism or despair but rather, seeks a way "beyond relativism" (Mahoney, 2001:244) to abiding sources of order, value and meaning. Like Polanyi Aron is deeply aware of the spiritual deficits of liberalism which leave it open to political and intellectual attack (Mahoney, 2001:243). Thus, his analysis of the situation of his times is much like that of Polanyi's "moral inversion."

Aron is convinced that neither historicism or existentialism gave "salutatory place for the partial but genuine insights of science, the moral and political choices of acting men and the philosophical reflection that allows human beings to gain critical distance from their historical situation or cultural milieu (Mahoney, 2001:245). Instead, he turned to "a morality of prudence" (Mahoney, 2001:246) whose judgment is in ways similar to Polanyi's in tacit knowing. His 'prudence' revolves around responsibility (Mahoney, 2001:246) and, as such, rejects absolutely free choice as the grounds of human dignity

⁷ See ARON, R. 1957. The Opiate of the Intellectuals. New York W.W. Norton and Company, ARON, R. 1939. Democratic States and Totalitarian States. *Salmagund* [Online]. Available:

http://www.jstor.org/stable/40547669?seq=1#page_scan_tab_contents [Accessed 2017-04-01].

and political responsibility (Mahoney, 2001: 248). Again, as with Polanyi, he "returns to the classical recognition that common sense and ordinary experience provide the necessary starting point for both human action and theoretical reflection" (Mahoney, 2001:249). Aron develops further political judgment in the context of competing goods (Mahoney, 2001), something which Polanyi does not do. It thus might make it easier to accommodate Aron into our multi-cultural, pluralistic societies.

Going now to primary Polanyi texts, the scientist in pursuit of research has "incessantly to make decisions whether to take new....sense impressions as signifying a new fact or else reject it as having no significance at all. These decisions are guided by the premises of science but ultimately by personal judgment" (Jha, 2002:54). Parallel, "[thought] in pursuit of a scientific discovery projects over a sequence of stages of tacit knowing" (Polanyi, 1964a:13); personal judgment and tacit knowing are correlate or interrelated. Finally, a scientist's judgment is a matter of conscience, involving convictions and faithfulness to an ideal, of regulating caution and originality(Polanyi, 1964b:32).

The knower-agent's personal judgments are grounded in her worldly relationships (or indwelling) out of which she generates self-set standards guiding her performance; she is ultimate judge in what she accepts as true (Polanyi, 1964b: 38) These self-set standards are at work in performing skills (Polanyi, 1962: 63), learning (Polanyi, 1962: 95), articulation (Polanyi, 1962: 91-100) and acts of interpretation (Polanyi, 1962:91). Indeed, the whole of the life of thought and society relies on these self-set standards (Polanyi, 1962:222).

Personal judgment is entailed in our capacity to appraise, a capacity which is fallible but still one which may be competently exercised (Polanyi, 1962:91). All personal knowing appraises what it knows by a standard set to itself (Polanyi, 1962:63) thereby it accredits our capacity to make valid appraisals of universal intent or bearing (Polanyi, 1962:48). All thought must therefore acknowledge it ultimately remains within a framework of personal judgments (Polanyi, 1962:158).

In following our judgments, we accredit them as supreme arbiter of intellectual performances, our judgments claiming we declare ourselves "competent to pursue intellectual excellence as a token of hidden reality" (Polanyi, 1962:265). Furthermore, the exercise of responsible personal judgment is paramount in achieving responsible personhood (Polanyi, 1962:388);personal judgment modifies self and brings her more fully into the "noosphere" (Polanyi, 1962:388).

Objectivity, as defined by Polanyi, can only be attained by the active exercise of personal judgment. In exercising personal judgment, we enter into convictions and beliefs to which we devote ourselves (Polanyi, 1962:308). Conversely, to fail to exercise personal judgment, to give way to passive mental states is to give way to pure subjectivity (Polanyi, 1962:318). Such mental passivity, whether induced by drugs, cultic religious practices, or totalitarian ideology spells the end of intellectual freedom. It follows, in the words of Dostoyevsky's Grand Inquisitor, "the no more pressing need than to find somebody to whom he can surrender as quickly as possible that gift of freedom with which he, unfortunate creature, was born."

Personhood is thus understood as an "active, responsible, personal centre committed to ideals which determines the standards to which he holds himself responsible" (Polanyi, 1962:334). In contrast, "[o]bjectivism seeks to relieve us of the responsibility for holding our beliefs" (Polanyi, 1962:323) and gives totalitarianism; nihilism, on the other, gives an absolute freedom of action (Polanyi, 1962:324); responsibility fails in

both. An all-pervasive personal responsibility, even for self-setting standards for one's beliefs and commitments, runs through TTK and is a corollary to intellectual freedom.

This is as much as to say that the creative exercise of personal judgment, of practical wisdom, is a corollary to the responsible, creative exercise of tacit knowing in pursuit of truth. Personal judgment charges the knower-agent with ultimate responsibility for holding her beliefs and simultaneously creates public space for pursuing and responding to truth, that is, manifestations of reality which summon the knower.

So far, though, I have only a described personal judgment but not set forth its necessity within the structure of knowing: any new discovery entails a crossing of logical gap (Polanyi, 1962:123). Existent knowledge exists in an interpretative, tacit framework which structures its rationality. Negatively, a problem, when appearing in that framework, reveals knowledge's limitations. Positively, though, a problem is already a partial comprehension of a coherence striving for consummation in a mind (Polanyi, 1964a:13). Now, because rationality is limited by what we know, the only way to "get over" to coherence is to cross the logical gap between what we until unsatisfactorily know and what appears to beckon us. Crossing the logical gap, though, entails an act of judgment, not blind faith (as existentialism implies.)

Crossing the logical gap means to deviate from the commonly accepted process of reasoning to achieve surprising results and is thus an act of originality (Polanyi, 1962:123); by extension, it transcends CAT. In science, crossing the gap is discovery, in art, an artistic achievement or performance, in technology, a contrivance, in jurisprudence, reaching a verdict, etc. In science and math, when the logical gap is crossed, one has a vision of a solution which *looks* right and one is confident will *prove* right (Polanyi, 1962:130).

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To cross the logical gap, whether as discover or learner, changes the world as we see it; our self is thereby modified (Polanyi, 1962:143). To cross the logical gap is to embrace personal responsibility in the light of one's calling as framed by one's belonging and then exercise personal judgment (Polanyi, 1962:322-3). For my purposes, in the case study of the Hungarian revolution, we see how the creative exercise of tacit knowing adjudicated by personal judgment, leads to the constitution of a new authority, then CAT and therefore has social implications.

As may be seen by reference to Chapter 3, abandoning the judicial attitude, the exercise of personal judgment and the regulative principle of truth, led to destruction of intellectual freedom. It set up the totalitarian CAT of mass society, expedited by the demands of material progress on the principle of power. I shall now make a case study of Polanyi's rendition of the Hungarian Revolution to show how re-establishing the principle of truth led to the recovery of intellectual freedom, the rehabilitation of CAT and social freedom.

5.5 Application: On the Rehabilitation of CAT

I have so far considered the theoretical relation of social freedom, intellectual freedom and truth. Social freedom (liberalism) is untenable and yields nihilism or totalitarianism. Its dichotomy is overcome by Polanyi in a positive public freedom set in a spontaneous order, both given to the pursuit of truth. Here, social freedom is transposed into intellectual freedom.

A misunderstood intellectual freedom gives nihilism or totalitarianism. A workable intellectual freedom which strives to attain to the structures of reality is found by Polanyi in academic freedom; individual scientific originality exercised in the constraints of CAT leads to truth, an emergent coherence pointing to yet undisclosed aspects of reality. The relation of intellectual freedom and truth is now paramount.

Objectivism distorts intellectual freedom; its intellectual freedom overemphasizes critical doubt and misunderstands truth (a distorted concept of reality); it gives nihilism or totalitarianism, an overemphasized CAT; either way, intellectual freedom is eliminated. TTK's <u>from</u> – knower's integration <u>– to</u> triadic structure leads to truth. I reconstruct TTK into the <u>CAT</u>- intellectual freedom (<u>the creative exercise of tacit</u> <u>knowing</u>) – <u>truth triad</u>; intellectual freedom presupposes CAT on the from side but transcends CAT in going to truth. I now reconsider Polanyi's Hungarian Revolution in its light.

I argue that Polanyi's account of the Hungarian Revolution overemphasizes the epistemic side of the triad at the cost of the social. He thus fails to show how the creative exercise of tacit knowing (intellectual freedom) not only re-establishes truth but, in rectifying the being of the knower-agent, opens the possibility for the rehabilitation of social-epistemic CAT of TTK's from side, of the spontaneous social order. Since social freedom presupposes the spontaneous order in the pursuit of truth, and the spontaneous order presupposes CAT, the conditions of social freedom exist. Therefore, my triad has brought together the early and late projects of Polanyi, his social and intellectual freedoms.

However, before proceeding, I must establish whether TTK as epistemology, is a suitable analytical tool for considering the Hungarian Revolution which is ultimately an ethical discourse judging human action, TTK derives from the study of practice and discovery in the natural sciences while the subject matter of his Hungarian Revolution falls properly into the realm of ethics. Does the analogy hold?

I hold that his epistemic analogy of natural science brought into the ethical realm holds because no act of knowing, no creative exercise of tacit knowing can preclude the necessity of personal judgment wherein the knower acts by self-set standards aiming with universal intent under the compulsion to conform to reality. Polanyi labours early on in his epistemological project to show that scientific judgment, which is personal, inevitably has a moral aspect to it (Polanyi, 1964b:38-41) and therefore cannot but entail conscience (Polanyi, 1964b:39-41). Tacit knowing is responsible knowing.

Furthermore, as we ascend Polanyi's hierarchy of knowledge in commensuration with his hierarchy of being, we see that our understanding is increasingly reliant upon an increasing indwelling of the subject matter and upon a greater engagement of our powers of personal judgment. Indeed, our indwelling and personal judgment are most highly attuned and involved in the moral judgment of the actions of our fellows as assessed on the criteria of personal responsibility, for these ultimately are of greatest consequence upon our understanding of ourselves and our place in the universe which we indwell.

Polanyi's analysis of the Hungarian Revolution, "Beyond Nihilism" (Polanyi, 1969:Ch. 1) and "The Message of the Hungerian Revolution" (Polanyi, 1969) engage the knower (here Polanyi) on this higher plane of knowing and being. Hence, they are moralistic and polemical in tenor. He condemns or praises human action by laying bare the reasons for their actions in light of their belonging, their exercise of personal responsibility in tacit knowing and willingness to conform their decisions to reality's beckoning. He praises the Hungarian revolutionaries, limited by their circumstances of belonging who acquiesced to moral inversion but re-ignite intellectual freedom by responding to reality; he condemns Western intellectuals, who by adherence to behaviourism, distort reality and incapacitate personal judgment.

What his analysis lacks, to my mind, is the failure to ascertain how individual response to moral reality could only change social reality by becoming embodied in a modified CAT. How did a new CAT come into being which brought down the old totalitarian CAT? Here is a gap which TTK had the resources to close but in overemphasizing the intellectual aspect, he overlooked the social dynamics of what occurred.

Polanyi looks to the Hungarian Revolution as an oracle. He sees it points to the reversal of moral inversion. Hence, the Revolution, to his mind, shows what happens when the belief in the independent power of thought and the obligation to truth is re-established.

I hold that his account of the Revolution does not pick up how the recovery of the belief in the power of thought and the obligation to truth led to the transformation of a totalitarian CAT. His account, as a whole, focuses on how tacit knowing (exercise of intellectual freedom) in the pursuit of truth led to new truth or conversion, a new mental existence. However, he does not go so as to account how or why the transformation of new self transforms the social-epistemic reality of a totalitarian CAT.

I want to use Polanyi's account of the Hungarian Revolution as a case study within the framework of personal knowledge or TTK to show how the exercise of intellectual freedom leads to the overcoming of even a totalitarian CAT, i.e., my modified tacit knowledge can capture and reinterpret the social and epistemic phenomena which occur around the Hungarian Revolution. I want to show how my recast TTK gives a way to use scientific discovery to re-interpret the Hungarian Revolution, as a new moral self

who transforms a totalitarian CAT. This has fundamental implications upon the relationship of society and social freedom, the concern of the early Polanyi.

Polanyi argues that totalitarianism arises when all responsibility for holding beliefs by the human person is eliminated from life and society of men (1962:323). Objectivism eliminates the responsibility for holding beliefs, for exercising personal judgment, and leads to totalitarianism, an ideology, and its embodiment in a totalitarian CAT or society. He maintains that a community which relinquishes its obligation to pursue truth will continue to exist only by submission to single centre of unlimited secular power (1964b:79). This is the totalitarian State which controls the thoughts and society.

However, I say that totalitarianism is more than an ideology imposed by totalitarian state; it is an ideology embodied in a totalitarian society, a totalitarian CAT. I maintain that neither the ideology nor the totalitarian state could perpetuate itself unless it took root in a certain kind of CAT, a totalitarian CAT. Hence, I argue a totalitarian CAT is one whose members have abdicated responsibility for their beliefs.

Objectivism gives a world in which metaphysical and existential certainties are eliminated leaving humankind aimless, uprooted, without meaning and vulnerable to totalitarianism. Given such a state, totalitarian ideology offers an immediate home, a new mental existence in which life takes new meaning; with it comes a new totalitarian CAT built on appearances. The only cost for such a social dwelling is the abdication of reason, conscience and responsibility; such is the nature of a totalitarian CAT.

Thus I propose that the totalitarian CAT which constitutes its society is a peculiar kind of CAT; it is an anonymous collection of selves without identity who therefore believe they bear no responsibility and are not amenable to reason or conscience. Further before we can think about the Hungarian Revolution, we must first imagine the totalitarian CAT. Given the fall of Communism, to get at the existential nature of a totalitarian CAT is not easy; in this regard, Polanyi does not help much.

Yet it is essential to get at the nature of a totalitarian CAT. Even my extensive travels to the region during the communist era are of little account to bring across something of the fundamental distortedness at work. Hence I propose to go briefly to Vaclav Havel's essay, "The Power of the Powerless" (1985:Ch. 1) which, I believe, discloses a totalitarian CAT's twisted nature.

First and foremost, a totalitarian CAT was a web of mendacity. A totalitarian CAT is a social reality, driven by a "blind automatism" (1985:30), a social system which "creates a world of appearances trying to pass off for reality" (1985:30), a social reality "thoroughly permeated by hypocrisy and lies" (1985:30). Because it is caught in its own lies, it must falsify everything, the past, present and future (1985:31). It is a system of pretences which "pretends to pretend nothing" (1985:31).

Further, people don't need to believe the ideology: they must only pretend to accept it by accepting the rituals, rules of the social game (1985:31). Note the words <u>ritual</u> and <u>rules:</u> they point to tacit functions of a false CAT. Thereby a person unwittingly has made herself a player in the game and has begun to live the life of a lie which lets her play the game (1985:31). Or in terms of CAT, the self has submerged its existence, its identity, into the existence of a false CAT, a false social reality and one which one knows to be false. A totalitarian CAT leads to a life of duplicity

By living the life of a lie, a person violates her authentic existence, that is, she alienates herself from self (1985:41). Yet, beneath the life of lies, there lies under the surface "a

hidden sphere of life in its real aims, of its hidden openness to truth." (1985:41). It is this hidden sphere of life which I believe is what Polanyi drives at in his essays; truth is always existentially available.

Yet it is only by breaking from the life of lies and living in the truth that existential change occurs. This is breaking out or conversion. Further, living in the truth becomes decisive because once one begins to live in submission to the hidden sphere, with what Polanyi calls the independent life of thought, the life of thought begins to grow and by extension our existence, our self, begins to grow. By its submission to truth, self, in a new mental existence, takes on new calling and takes on a public authority that overcomes CAT; truth by its nature cannot remain private but demands to go public, the mechanisms being discussed in section 1.3.2.

Moreover, being an independent power of the mind, the self living in relation to the transcendent realm, exposes in its life the lie (Havel, 1985:39-40). This means, as Polanyi stated, no ruler has any power over the life of mind (1966:84); the independent cultivation of truth strikes fear to a totalitarian regime. Thus the independent power of thought pursuing truth is ultimately authoritative and decisive in life and society. I will now rehearse Polanyi's account of the Hungarian Revolution and then reinterpret its events in the light of my notion of intellectual freedom.

5.5.1 Polanyi's Hungarian Revolution

My case study of the Hungarian Revolution refers primarily to Polanyi texts. But I draw in others to either (1) introduce better the background to find a deeper perspective to the events; or (2) make clear the social-epistemic reality dynamics at work which his largely intellectual account, by my reading, overlook. As noted, the late Polanyi fails to carry through the social-epistemic implications of the <u>to</u> side of TTK's triad_back to the <u>from</u> side, leaving TTK triad incomplete. My reconstructed TTK completes the triad (truth \rightarrow CAT side), rehabilitates CAT and thereby recovers social freedom to which his early project aims. The Hungarian Revolution shows how, even given a totalitarian CAT, the power of reality's draw on the human mind mobilizes the creative exercise of tacit knowing, modifies self, overcomes CAT and gives the recovery of social freedom.

Let's briefly recount the Hungarian Revolution's context. Marxism-Leninism established its hold on Hungary as well as the rest of Central Europe in the late 1940s. The national Communists achieved this by manipulating democratic political process to consolidate their power from 1944 to 1948. Joseph Stalin, whose ruthless methods led to the deaths of scores of millions in the Soviet Union, still held power there and could now extend it over Central Europe; the national communist parties were under the direct control of Moscow.

Yet, following moral inversion's logic, not Stalin but indigenous, morally inverted intellectuals in objectivism's grip made this possible. They had abdicated the judicial attitude, their public responsibility and the principle of truth by which a civilization coheres (Jha, 2002:17-18). From 1949 to 1953, Hungary gave way to moral inversion and turned into a concentration camp (of which Polanyi's essays regrettably have not the space to address.) Not moral principle but nihilism or naked power reigned.

A scientistic Minotaur was thus born. It existed by deception, power and terror⁸; no-one, from top Party leader downward to the woman collecting money at public toilet, was immune to fear or the temptation to power. Mendacity and terror became norms, embodied in a totalitarian CAT but ultimately, ratified by individual acquiescence to deception and silencing of conscience. The question then is: Can self-deception, giving and embodied in a totalitarian CAT, be overcome?

Polanyi gives two accounts of the Revolution: "Beyond Nihilism" views it as the reversal of moral inversion while "The Message of the Hungarian Revolution" uses it to polemicize against objectivism in Western social sciences. In both, the Hungarian action centres on the communist writers and their awakening to and struggle for truth and intellectual freedom.

The role of writer, public intellectual in general, is indispensable for totalitarianism⁹. Totalitarianism, being total revolution, had to penetrate to the realms of consciousness and thought, to smash the old and to create space for the new. Writer and public intellectual were crucial to this task. Often caught in the throes of modern nihilism, they were vulnerable to moral inversion.¹⁰ At the same time, being sensitive, they could be incalcitrant Thus, the fault lines between Party-directed inspiration and openness to reality revealed itself among writers.

⁸ On the institution of terror, see TALMON, J. I. 1965. *The Origins of Totalitarian Democracy*, New York, Praeger.pp. 80, 97, 126, 127, 176; and ARENDT, H. 1968a. *Totalitarianism*, New Yord, Harcourt, Brace, Jovanovich. Ch. 4.

⁹ARENDT, H. 1968a. *Totalitarianism*, New Yord, Harcourt, Brace, Jovanovich and MILOSZ, C. 1981. *The Captive Mind*, 1981, Vintage Books.

¹⁰ See ACZEL, T. & MERAY, T. 1958. *The Revolt of the Mind: A Case History of Intellectual Resistance Behind the Iron Curtain* New York, Frederick A. Praeger. MILOSZ, C. 1981. *The Captive Mind*, 1981, Vintage Books., PALOCZI-HORVATH 1959. *The Undefeated*. London: Eland.

Indeed, dissent in the communist nations often coalesced around writers and other artists; with them lays the power of symbols which can change the course of power and, to some measure, the power of truth in the disclosure of reality. To a system of mendacity, to a totalitarian CAT, it is a mortal threat. Contact with reality, truth, emboldens its seekers, exposes the deceived, but cuts down deceiver, lessons now learned from Solzhenistyn and Havel.

Polanyi starts his revolution saga in 1956. However, to give its historical context, I refer to two works, *The Undefeated* (Paloczi-Horvath, 1959) and *The Revolt of the Mind* (Aczel and Meray, 1958) which go back to the late 1940s-early 1950s Stalinization period. Stalinization aimed at the total destruction of existent society and, in this sense was total revolution. Set against its Stalinist background, the Hungarian revolution, recalling liberal values, appears reformist in thrust.

In both works, the authors are communists, yet confronted by Stalinization's embodiment of evil, its destruction and deception; their minds revolt against evil. A decisive moment in both works occurs when the thousands imprisoned under the Stalinist Rakosi are released back into society in 1954 by the gentler and morally sensitive Nagy:

[These prisoners] knew how to smile and their hearts were serene. They had become kinder, less remote, more direct, more truthful. Instead of hardening them, the injustices they had suffered made them more human. Now, long forgotten sentiments broke through the frozen surface of their souls. Torment had killed the evil which had formerly inhabited them: the evil of power...[Their] friends had to admit they were afraid...when faced with the newcomer...they felt themselves sitting face to face with their own consciences. (Aczel and Meray, 1958:249)

The moral bankruptcy of communism was already apparent in 1954.

Polanyi's account begins in early 1956 when, three years after Stalin's death, the Soviet leader Nikita Krushchev shocked the Communist world by denouncing Stalin. His

unprecedented appeal to the truth about Stalin re-established a beachhead for truth. From Krushchev's singular deed, a chain reaction was set off in Hungary (and Poland).

Shortly afterwards, the intellectual *avant-garde* of dedicated Communists making the Petofi Circle of writers ¹¹ staged a rebellion in which they demanded the right to tell the truth and bring truth as independent power back into the public life (1969:24); this, quite simply, was the essence of the Hungarian Revolution. To start, let's hear Miklos Gimes who Polanyi quotes:

[W]e had come to believe...that there are two kinds of truth... that the truth of the Party is more important than objective truth...that truth and political expediency are the same thing...[that] even a lie can be 'true'...[The outlook] poisoned our whole public life...obscured our vision, paralyzed our critical faculties and finally rendered many of us incapable of simply sensing or apprehending truth. (1969:20)

A person who speaks in such a manner speaks under the obligation to conscience.

Polanyi maintains that the Hungarian Revolution is a rejection of moral inversion (1969:19) in response to the "upsurge of truth" (1969:21) and "newly awakened conscience (1969:21). A rejection of moral inversion is the negation of a negation (1969:21), a "recoil" to moral inversion (1969:21). The rejection of moral inversion, in terms of TTK, is a conversion, a breaking out or the workings of intellectual freedom springing from the discovery of totalitarian CAT's mendacity.

Polanyi calls the phenomenon "the recoil of morally inverted man; the act by which he violently turns himself right way up" (1969:21). Moral revulsion is a moral passion and

¹¹ The Petofi circle events are acknowledged to have triggered the revolution. See HEGADUS, A. 1997. The Petofi Circle: The Forum of Reform in 1956 *The Journal of Communist Studies and Transition Politics*, 13, 108-133.; GRIFFITH, W. E. 1962. The Petofi Circle: Forum for Ferment in the Hungarian Thaw. *Studies in Comparitive Communism*, 16, 85-98.. Its founders drew inspiration from and sought initially to name their group after the Galilei Circle which Karl and Michael Polanyi helped to found. See also CONGDON, L. 1997. Possessed: Imre Lakotos' Road to 1956. *Contemporary European History*, 6, 279-294. On the Circle's role in Imre Lakotos' break with Communism.

comes upon awakening to one's inability to discern truth (Polanyi, 1969:32). By extension, moral revulsion attests to and preconceives a moral good; revulsion and attraction point to the reality of a transcendent moral realm. Personal moral revulsion produces catharsis (1969:23), a hunger for truth and justice (Polanyi, 1969:28) and brings about breaking out or a conversion (1969:31). Polanyi insists these reactions are "rebelling against *real evil…because they knew it to be real evil"* (1969:34).

Polanyi's descriptions of the Petofi Circle events leave one with the sense of existential crisis which confrontation with moral inversion produces. Moral recoil confronts and relaxes the grip of a totalitarian CAT on the mind. Thus, a totalitarian CAT which denies morality an independent standing is unable to stand before the appeal of individual conscience to truth; conscience is a source of intellectual freedom.

The Petofi Circle unrest reveals a craving for truth (1969:26) which in itself presupposes truth. In craving truth, its members establish the power of truth over Party and thereby create grounds for opposition to the Party (1969:19). Further, if truth is no longer defined by the Party, then art, justice and morality are also set free to develop a life of their own (1969:19). But how shall we account for the craving for truth especially in a morally inverted person in the epistemic grip of a totalitarian CAT?

The Petofi Circle knew knowledge of good and evil; its roots were a lived-in tacit knowledge rooted in real social life and not totalitarian CAT's "social reality". Moral inversion may deny a transcendent realm but a morally inverted person cannot live this way. A morally inverted person is still confronted by moral notions in the woof and web of life; she is confronted by the "what-is-ness" of the world and the human predisposition to truth. Moral knowledge rooted in the CAT of real social life is at

disparity with totalitarian CAT and its denial of such moral knowledge. Such inconsistency leads conscience to demand the self turn itself the right way up.

Moreover, to respond to demand of conscience involves a commitment under selfcompulsion but one made with universal intent because we judge our commitment to be true. In making such a commitment, our higher judicious self takes control of the lower self (1962:318). Such acts of submission to conscience are existential, that is, selfmodifying.

An act of self-modification can involve minor modification of our interpretative framework but can also entail a comprehensive conversion (1962:318). Since our moral self takes in our whole person, then tacit moral knowledge weighs most and has the greatest force in self-modification. It follows then, and from the descriptions given ("smashing the glasses" (1969:30), "deep emotional upheaval" (1969:35)), that breaking out of moral inversion is a comprehensive conversion, a total change of outlook (1969:31).

Polanyi's Hungarian Revolution is an account of the individual, psychological dimensions of breaking out, of conversion in the context of the morally inverted man turning right side up. However, he does not go on to tell us how a self who undergoes such a conversion overcomes and transforms the totalitarian CAT of which it is a part. I want to show how "breaking out" overcomes totalitarian CAT by recasting tacit knowledge's scientific discovery into a triad into CAT-intellectual freedom-truth triad.

5.5.2 Tacit Knowledge as Transformation of CAT

I am concerned to understand how new truth gives a new CAT. We have seen how the Hungarian Revolution was the discovery of mendacity at the heart of totalitarian CAT and breaking out <u>from</u> this CAT <u>to</u> truth. But Polanyi does not explain, in the context of the Hungarian Revolution, how new truth leads to a new CAT, how to overcome a new tension, the one between new truth and old society even though his theory of scientific discovery, TTK, holds a structure for doing this. I propose my modified TTK enables us to carry out this move.

TTK goes to the practice of science leading to scientific discovery as paradigm of tacit knowledge. Scientific discovery teaches us tacit knowing leads to new truth by the exercise of intellectual freedom (the power of mind.) With new truth, I must account for how a new tension, now between truth and CAT, is to be overcome. However, new truth in tacit knowledge is not disembodied like the objectivist understanding; it is incarnated in a new self whose mental existence is changed by new truth.

To inquire how a totalitarian CAT is changed is to raise the question of responsibility: how the self who is not held responsible for things outside its control (CAT) can be brought together with the things for which it is responsible (personal judgment made with universal intent.) To accept the things for which we are responsible is to accept our calling and its epistemic limits (CAT) (1962:379). Yet any exercise of personal judgment in search of truth is a commitment which presupposes our judgments are made with universal intent (1962:379). The two must go together (1962:379).

A two-fold responsibility is in this structure: (1) acceptance of personal calling; and (2) commitment to personal judgments entailing universal intent. Polanyi's universe is one of responsibility; responsibility is a precondition to freedom and authority.

The powers which call us into being, our particular form of existence, shape our calling (1962:321); these are largely CAT and entered into tacitly (1962:321). We have little

control over the particular CAT which shapes our beliefs and skills (1962:322). Our belonging is an apprenticeship of our mental existence; it opens and limits possibilities simultaneously. Responsibility is to pursue the possibilities to establish new contact with reality within the sphere in which one is called. One thereby transcends old CAT and modifies self.

Now I find Polanyi's use of the word 'calling' apposite in the wider context. A calling is a response to a call which ultimately must come from outside of CAT but whose voice we learn to recognize by CAT. A calling originates in a not-yet attained reality which beckons to us; a response to it will entail crossing a logical gap, a breaking out. Thus entering a calling ultimately involves responsible judgments made with universal intent and presupposes the authority of those voices from the firmament of beliefs and values which are over those of CAT.

Knowing truth involves pouring ourselves into subsidiaries (indwelling) with the intent to extend ourselves to reality (1962:61). A change of idiom or intellectual frameworks (breakout) upon which we then rely (indwelling) to extend self to reality modifies judgment and changes mental existence. Breaking out seeks self-satisfaction but is under the regime of thought aiming with universal intent (1962:106).

The choices leading to a breaking out, a discovery, create in us a new existence and challenges others to transform themselves in its image (1966:80). This constitutes epistemic authority but is not authority unless exercised in public where it is social. The mental passions which impelled to discovery now demand a response, a willingness to learn, from others (1962:150).

Universal intent which accompanies the performance of crossing a logical gap creates both a psychological and social tension; a new vision of reality can be ignored or treated with contempt for its being at odds with the old school and a source of suffering (1962:150). Hence the discoverer is now under the onus to convert others, of helping them to convert (1962:151). As said, the conviction of truth demands public space to cultivate disciples for it desires that all taste of its pleasures (1962:150); it cannot be content to remain private.

If the vision of reality we have apprehended proves more satisfying and coherent than the old school, a new school will gather and the discoverer, the performer, the new self, will be its master until someone working in the tradition discloses significant new insights. Further, a new vision of reality calls for a new intellectual framework (1962:150) which in turn requires a new idiom; a new idiom aims at conversion (1962:150). Newly shared premises give rise to a new practice and tradition (1962:151);. For example, we had Aristotelian, then classical Newtonian and then Einsteinian physics. After Einstein, a whole new tradition of physics opened up and the process continues as long as new scientists make significant new discoveries.

So long as we hold belief in the power of thought and uphold the obligation to pursue truth concerning an indefinite expansion of natural reality, scientific originality will continue. Scientific originality will then constitute a new authority leading to new practices and form new schools of like-minded believers. Thus science and its practice is a paradigm of a wider human activity which extends itself towards objects of intrinsic worth. Social change, that is, the change in CAT takes place like scientific practice and community change after discoveries. Intellectual freedom brings about new and sometimes free CAT in a similar way as a discovery entails new scientific authorities, new communities of scientists and a new research tradition.

This paradigm extended to the realm of morals means TTK is a way to imagine how the discovery of moral mendacity (moral truth) gives individual moral transformation and second, to CAT's (social) transformation. So coming back to the Hungarian revolution; Polanyi's message of the Hungarian revolution is that there is in the existence of moral self a propensity to truth and if heeded, it brings a recovery of intellectual freedom as the pursuit of truth. Indeed, because even a morally inverted self is amenable to claims of conscience, to moral truth, it can respond to the moral truth which moral inversion points to. Thus, the exercise of intellectual freedom, breaking out or conversion, overcomes moral inversion.

I took from Polanyi's sources of tacit knowledge, the practice of science leading to discovery, a general analogue of intellectual freedom leading to new truth which becomes embodied in new self. A new self becomes a new authority who converts others in joint practice of the new truth, a new CAT. Thus new CAT overcomes old CAT.

However, the new CAT is aware that in the growth of knowledge which it fosters, it, too, is subject to transformation; an indefinite expanse still awaits exploration and CAT must foster an appreciation of both its articulate knowledge and tacit beliefs and skills to enable other pioneers to reach out to those realms of transcendent reality.

I conclude that in closing the gap between new truth and old CAT via truth's embodiment in new self, we overcome CAT's epistemic constraints and constitute a new CAT. Tacit knowledge shows itself to be a way to bring together intellectual freedom and truth, the late Polanyi's epistemic project. Thus tacit knowledge is a way to re-establish the pursuit of truth and the reformation of CAT and becomes a way to overcome the original problem, the self-destruction of liberalism.

6 Conclusions

In retrospect, my theoretical quest to understand post-Communist transition began with an assumption: if post-Communist transition was to be successful, it required rethinking the fundamental assumptions of liberalism for communism itself was a child of liberalism. An existential dimension lies behind the quest which comes with asking the question "why?" from the standpoint of an indwelling or identification with the human costs suffered under the experience. My reflections add little to the wider weightier discourse carried out by those in whom truth found embodiment by the descent in nihilism's cruelty, who recovered the sources of spiritual or moral order from which intellectual and social freedom springs. We owe much to individuals like Adam Michnik, Vaclav Havel, Alexander Solzhenitsyn, Cardinal Karol Wojtyla, Garbor Demszky (to name only a few) who not only saw the truth but determined to live in truth by a common bond with others and to act upon it by giving profound symbolic expression to it by our actions.

My quest acknowledges them, submits to their authority and joins their community of lovers of the liberal tradition who also saw its flaws. Yet it goes without saying that, here my bearing, compass and map have been the work of Michael Polanyi. Polanyi suffered the destruction of Europe by the moral disasters of the 20th century but believed that through reality's accessibility in them, a recovery of our moral bearings and the pursuit of transcendent ideals were possible. One wishes he could have lived through the Revolution of '89.

With eye to the future, I cannot but be concerned with the drift of late modernity and late-modernism. Are we not mot also flaunting our nakedness by the professions of nihilism? If so, then perhaps, out of Central Europe, out of their revolution of conscience and spirit and our reflection on their experience, will come prudent voices by which to recover a moral compass that bears upon transcendent ideals.

It has been a long trek and I come to its end. Looking back, I began by asking why liberalism too easily becomes nihilism or totalitarianism. But my quest turned out as the layers unfolded into a query which sought to understand the epistemic nature, origins and reach of intellectual freedom, to then grasp the implications of this intellectual freedom for CAT and, finally, to point to a way of overcoming the original tension between social order and social freedom by re-established truth. I am now struck by how, at every turn, the ubiquitous presence of the social-epistemic character not only of CAT but intellectual freedom and even of our knowledge of truth comes through. It makes the venture exciting but also rather hard to keep a grip on.

I framed the relations of social freedom, intellectual freedom and truth within the structures of (1) the early social theory of Michael Polanyi which considers the relation of social freedom and society, a theory which transforms it into public freedom - spontaneous order - truth triad; (2) his theories of moral inversion and academic freedom which brings together social freedom and intellectual freedom (and, already prefigures and presupposes the social-epistemic necessity of CAT and freedom's pursuit of truth; and (3) a recast theory of tacit knowledge drawn from the epistemology of the late Polanyi and joins the creative exercise of tacit knowing as intellectual freedom to CAT and to truth. My query is an original way to join truth and CAT, to re-establish truth rehabilitate CAT, and thereby recover social freedom. I achieved this by

overlapping and extending Polanyi's triadic social and epistemic theories into a third triad, the CAT – intellectual freedom - truth triad.

My stress on Polanyi's early social thought and his later epistemology turned out to be a way to join the two theories. The recast theory of tacit knowledge lets me bring together (a) the social-epistemic functions of community, authority and tradition; (b) intellectual freedom as tacit knowing of new truths I proposed that it also extends new truth back to CAT and thereby lets me bring together Polanyi's social theory and epistemology which he, as far I ascertain, never completed.

As I believe that my theory shows, TTK becomes a way to rehabilitate CAT by reestablishing the pursuit of truth in society; it thereby deals with the original problem of liberalism's self-destruction. It becomes a more complete account of the Hungarian Revolution, helps to explain the events of the 1989 fall of Communism and shows more clearly why the priority of the right kind of civil society, a CAT which embodies the pursuit of truth, should have been the highest priority on the agenda rather than the establishment of a capitalist economic order or democratic civil authority.

Polanyi faced totalitarianism's sweep across a liberal Europe and raised the dilemma between social order and social freedom. He saw that the individualist, private formulation of social freedom was amiss and gave nihilism. On the other hand, its positive formulation as impersonal obligation to society gave totalitarianism. The early Polanyi's response to these was a public freedom set within a spontaneous order which was part of a wider network dedicated to the pursuit of truth. I accepted his response that the commitment to pursue truth becomes a way to imagine a free society in which social freedom facilitates social order and social order facilitates social freedom. However, introducing truth as the solution to the social problem raises the issue of the relation of intellectual freedom and social freedom. The original problem of liberalism now appears that it might not have so much to do with social freedom but the more fundamental intellectual freedom. I considered their correlation by framing it in Polanyi's analysis of moral inversion.

The theory of moral inversion pertains to ethics or moral philosophy which asks the nature and origins and the justification of the values and beliefs which guide moral judgment. From this, Polanyi is obliged to give an answer to the epistemological questions: How does one justify holding ubiquitous beliefs in knowing and knowledge? How can beliefs be both stable and yet open? The questions give rise to TTK.

From TTK, one sees moral knowledge is a lived-in tacit knowledge. Moral inversion by sceptical doubt eliminates the sphere of moral ideals hence eliminates the grounds and obligation to pursue truth. Moral inversion turns out to be the destruction of intellectual freedom by sceptical doubt (nihilism) or by totalitarianism, an overemphasis on community authority and tradition or CAT (a totalitarian society.)

The quest was then transformed into the problem of the nature, origins and grounds of intellectual freedom and its relation to CAT and truth. I framed these relations by reinterpreting tacit knowledge. Recasting the <u>from</u> - <u>tacit knowing</u> - to triad into a <u>CAT</u> - <u>intellectual freedom</u> - <u>truth</u> triad, intellectual freedom presupposes CAT and overcomes CAT by going to truth.

Tacit knowledge presupposes CAT because all knowledge has tacit roots in society. Tacit knowledge, that is, tacitly operating basic beliefs and skills are prior to the knowing act; tacit knowledge has its being in and is transmitted by CAT. Tacit knowledge on the <u>from</u> side is seen as the catalyst and guide of the knowing act; CAT guides intellectual freedom. But this, as we saw, raised the dilemma of CAT eliminating intellectual freedom for now intellectual freedom appears determined.

But going to the <u>to</u> side of tacit knowledge, intellectual freedom as tacit knowing (exercise of the power of thought, or breaking-out) leads to truth. Intellectual freedom in pursuit of truth can overcome CAT to come to new truth. Intellectual freedom is breaking- out and leads to a new more truthful mental existence.

I extended Polanyi and put forward that a new mental existence leads to a new self and new CAT. A more truthful mental existence, while hidden in the organic life of thought, is essential within the framework of Polanyian vision. One either lives by the truth of one's new existence or denies it to be subsumed once again by CAT. However, by living according to truth, one transcends one's CAT and enters the freedom and responsibility which comes with breaking out.

This is decisive when thinking about totalitarianism and its CAT. A new mental existence brings to light the mendacity and distortion of reality which a totalitarian CAT embodies. Bringing things to light exposes their deceptive nature and weakens the totalitarian CAT's grip on the mind. Moreover, the embodiment of new truth becomes a new authority which comes with the responsible practice of the power of thought as intellectual freedom. It is an authority constituted by the pursuit of truth and higher things which transcend the power of CAT.

Polanyi imagines in the Hungarian Revolution the recovery of intellectual freedom, the pursuit of truth, all stemming from the discovery of moral inversion and its exposure thereby rendering both the lie and the false social reality powerless. The discovery leads to the overcoming of totalitarianism in the Hungarian Revolution. Polanyi envisions the Revolution as new truth in the discovery of moral inversion and its new truth embodied in a new mental existence. I take it further to say new truth embodied by those who renounced moral inversion came to constitute a new CAT.

Again, I extend Polanyi to say that a new mental existence gives a transformed self whose influence creates a more truthful CAT, a more truthful social reality which overcomes a false, totalitarian CAT, a CAT built upon appearances and not the reality of the "what-is-ness" of authentic human existence. In essence, a new self is one who embraces the responsibility to live in the truth.

I then set before me to understand, within these structures of tacit knowledge, how one could reinterpret the events of the Hungarian revolution as narrated by Polanyi, in the light of Polanyi's tacit knowledge, a case study using TTK. Polanyi's account of the Revolution was a narrative of discovering through moral revulsion the real embodiment of evil which each participant had become in totalitarian CAT's incarnation of mendacity and fundamental denial of truth, of basic human dignity and the need for moral integrity, to express themselves and to transcend the world of existence. Or what it meant to be human. The negation of moral inversion leads to the recovery of being human again.

Since evil presupposes good, the Hungarian Revolution was the negation of a negation and embracing the tacitly known "what-is-ness" of being human. By his account, the Hungarian Revolution was a newly awakened conscience and a recommitment to pursue truth. Yet Polanyi fails to fully give an account, one which is present in his own tacit knowledge, of social mechanisms at work which led from transformed self by discovery of truth to a transformed social reality. His account of truth remains disembodied from its incarnation in a transformed self of new mental existence.

Hence, using TTK's analysis of scientific discovery, I set out to shed light on how a new truth, embodied in self leads to a new, or better, transformed CAT. We see from TTK that the discovery of new scientific truth comes about by the exercise of personal responsibility in holding our convictions and making judgment. The exercise of personal responsibility leads not only to new truth, it leads to a new mental existence. Therefore, if one is to break from moral inversion, it means to embrace responsibility which moral inversion enables us to shirk. With it come freedom for freedom only comes with owning responsibility to the higher transcendent ideals.

Under the compulsion of new truth, one seeks to convince or convert others to the same mental existence. The new image arising from a new mental existence, being a more satisfying conception of self and its relation to the world, challenges others to transform themselves into its image. In other words, a new self embodying new truth constitutes a new authority because it commands respect.

Those who follow and embrace the new truth, too, find their mental existence changed. In practicing the newly embodied truth, they form a new community and tradition. A joint practice of beliefs under the authority of the new truth then takes shape in the shared life of a new community. This is how a new CAT takes on life as a social reality from the life of thought.

My quest arose in the context of post-Communist transition and its issues have a substantive character related to the questions of the rebirth of a sound robust civil society dedicated to the values of cultivation of thought, which to my mind, was Polanyi's vision of a good society. A post-Communist transition was the opportunity created by the departure from moral inversion. It was the broaching of liberalism and Christian faith that he had envisioned over two decades previous. Post-communist transition was a context which was the affirmation of many things Polanyi had foreseen when he saw the significance of the revisionist movement. Historical research could show the correlation between revisionism and the later dissident movement which played such a key role in what finally culminated in 1989.

But post-Communist transition raised questions of and for those responsible in leading the process. Was due attention given to find or rediscover the sources of transcendent order resident within post-Communism's CAT which could lead to a robust, free and good civil society? Moreover, given the priority of such a civil society, did the liberal West gloss over the importance of these transcendent sources by the priority which it gave to establishing a functioning capitalist economy and democratic governance? Both ways, these are realms that should serve society and not command society.

Were the real interests of post-Communist society and its obtaining more pure social relations then put at risk by transition's over-emphasis on the economic and political order? Was post-communist transition, by ignoring the underlying social-epistemic realities of CAT and the priority of truth to which Polanyi's epistemology points us, once again recreating another world of appearances trying to pass for reality within the structures of a misguided social reality?

Moreover, given the broader context of Enlightenment's collapse, does Polanyi's epistemic reform project have a place in contemporary social discourse and practice? How do we in our contemporary pluralistic society work out the paradox Polanyi discovered that no matter how liberal a free society is, it also is profoundly conservative? Does contemporary social and political discourse still need a Polanyian voice to rehabilitate CAT and re-establish truth? Does post-Communist transition have lessons for this broader context?

The early Polanyi taught that the real interests of society and more pure social relations were best served by the dedication of society's and individual conscience to the higher transcendent ideals of truth, morality, justice, beauty and God. The late Polanyi showed us the priority of rehabilitating CAT and re-establishing truth for recovering the creative exercise of tacit knowing. I joined the early and late Polanyi projects to show that the rehabilitation of CAT and re-establishing truth are the means to an intellectual freedom which leads to a free and good society and solves the original problem of liberalism, its self-destruction.

Indeed, my triadic theory of CAT-intellectual freedom-truth brings together the social vision of the early Polanyi and the epistemic vision of the late Polanyi. Remarkably, the theory, being social <u>and</u> epistemic, brings the lens of Polanyi's early social and late theories together, a stereoscope, and, through it, forms a stereoscopic three-dimensional view in which the interrelations of society and thought integrate.

Thus society can be understood only in relation to thought and thought can be understood only in relation to society; each presupposes the other and the dynamism of each relies upon the other. In both, dynamism originates in the individual-knower's creative act of tacit knowing, an act presupposing CAT but, all the same, transcending CAT in going to truth. In going to truth, a new authority of new self is constituted around which a new community coalesces and a new or modified tradition emerges. The process is dynamic. Each step or stage is only incremental. Furthermore, the destination, being transcendent, is not altogether secure given our fallibility. However, from the intimations of reality which have already been given by society, by thought and by new problems, the risk is worth encumbering and incremental progress achievable but only with a steady eye and firm leash on moral passions and human propensity to moral failure. My quest which carried Polanyi's epistemic project back into his earlier social endeavours finishes with question of whence and whither: Whence Polanyi's comprehensive vision of reality with its prudent character and whither it beckons those who seek to attend to concerns of contemporary society by the wider horizons which he opens.

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