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**FACULTÉ DES ÉTUDES SUPÉRIEURES
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**FACULTY OF GRADUATE AND
POSTDOCTORAL STUDIES**

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**From Technocracy to Authenticity: A Hermeneutic-Phenomenological Inquiry into an Authentic
Mode of Being in a Technologically-enframed World**

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**FROM TECHNOCRACY TO AUTHENTICITY:
A HERMENEUTIC-PHENOMENOLOGICAL INQUIRY INTO AN AUTHENTIC
MODE OF BEING IN A TECHNOLOGICALLY-ENFRAMED WORLD**

Mariusz Michał Zadrąg

**A thesis submitted to the School of Graduate Studies of the University of Ottawa
in conformity with the requirements for the Degree of Doctor of Philosophy**

September 2007



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395 Wellington Street
Ottawa ON K1A 0N4
Canada

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

ISBN: 978-0-494-41651-8

Our file Notre référence

ISBN: 978-0-494-41651-8

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In memory of my Father

Acknowledgements

My first debt of gratitude goes to my wonderful mentors Dr. Bertha Mook and Dr. Claude Lamontagne. Without their wisdom, support, encouragement and dedication this work would never have come to fruition.

Dr. Mook in particular has given so much of her knowledge, understanding, time, energy, and patience to guide and nurture my early efforts in scholastic thought, and to later provided unparalleled direction and supervision during the time of research and writing of this thesis. Much of my intellectual development I owe to her exceptional instruction and unwavering assistance, gifts which she so generously bestowed upon me. It was Dr. Mook who personally encouraged and directed me in my academic pursuits. Her mastery of the field, theoretical complexity and philosophical sense has made me aspire to reach deeper and look further in my own life and work. I will always be indebted to her for her intellectual generosity and personal kindness.

To Dr. Lamontagne I would like to express my gratitude for his interest and support in my academic and professional development. His enthusiasm for knowledge has helped me find greater appreciation in my scholarly endeavours, and his pedagogical commitment led me to discover my own passion in teaching. His contagious zest for life and undeniable generosity of spirit set him aside as one of the greatest educators I have ever had the privilege of learning from and working with.

I would also like to extend my thanks to the external examiner, Dr. Bernd Jager, and the remaining thesis committee members, Dr. Pierre Gosselin, Dr. Robert Flynn, Dr. Robert Stelmack, and Dr. Gregory Walters, who from the beginning have expressed interest and enthusiasm for this project. I particularly thank them for enduring my sometimes-tormented prose.

To my friends, who, in more ways than I can recount, have helped me with their kindness and support. To Marta Demjen, for her wisdom, compassion, and generosity of her

heart. To Ania and Piotr Pytlak, for sharing in their wilderness oasis so that I could complete the work in tranquil surroundings. And to Sandra Czybora, who, through her own journeys, had remained my intellectual and spiritual companion.

I would also like to thank my neighbours for their continuous interest, particularly to Mari and Rolf Wesche who have never failed to extend their thoughts of encouragement and support.

There is no way that I can adequately acknowledge the influence of my parents in shaping my life and my thinking. I am thankful to my mother for her assertiveness and perseverance. She has inspired in me a sense of adventure and self-assurance, which aided me in many of the difficult decisions I had to make during the years in the program. I am thankful to my father for his gentleness and wisdom. He has instilled in me an appreciation for reflectivity and inquisitiveness, which led me on this journey in the first place.

Finally, I wish to express most special thanks to my spouse, Joanna Gil, who in the last three years not only gave birth to our two beautiful children, Krzysztof and Krystyna, but also bore the brunt of the work in and outside the house. She has endured the highs and lows of this project with more patience and grace than I could have ever hoped for. In this sometimes-tumultuous journey she has never faltered in her support. I thank you from the depths of my being.

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INTRODUCTION

Grounded in a socio-historical context, this dissertation examines the phenomena of authentic and inauthentic being in our modern-day technologically-enframed world. The definition of enframing is here adopted from the existential phenomenologist, Martin Heidegger (1954/1993), who characterized it as a way of disclosing things and people in terms of their ordered and challenged resource capacity. While applying Heidegger's notion of enframing to the world of our formal social structures, it will be argued that in becoming absorbed with the modern, scientific and social technologies of the day, we find ourselves having to rely and depend on their instrumental and pragmatic function to the extent, and intent, of being challenged and ordered by them. This modern form of challenging and ordering, therefore, will be shown as demarcating our complex human nature in terms of our technologically-enframed, and institutionally established, resource potential.

The ensuing hermeneutic-phenomenological (i.e., interpretive) analysis of the issues around our technologically-enframed world, and our technocratically-minded mode of being-in-the-world, will serve as the ground for the revealing of our "inauthentic," or disowned existence. The revealing of the inauthentic mode of being itself, however, will, in turn, serve to facilitate the disclosure of our "authentic," that is, our own-most possibilities and potentialities for being. It will thus be the challenge of this project to recover, or rather disclose, these covered-over potentialities of the authentic mode of being within, and in spite of, our modern-day technologically-enframed reality.

Ultimately, the aim of this thesis, however, is neither to suggest a new theory or definition of authenticity, nor to propose a guide of specific steps or strategies to be followed in order to achieve a way of living that might be deemed genuine or authentic. Instead, the intention behind this work is to provide a clearer understanding of the meaning of our being as it is revealed in the modern-day, highly scientific and technologically-enframed society, as well as to heighten our awareness to the socially-constrained or subordinate (i.e., inauthentic) possibilities, as opposed to our own-most (i.e., authentic) potentialities for being.

The Question of Authenticity

The original meaning of the word authenticity, as used by the Greeks, indicated an autonomous and self-governing mode of being. This meaning, however, had faded away at the time of the Roman cultural and military dominance, and was replaced with the notion of authenticity that was applied strictly to things and animals, so as to establish their genuine origin. The revival of authenticity as a psychological concept is thus a relatively new occurrence. Interestingly enough, however, with its application to humans, it was not the Greek but the Latin interpretation of the term that has since been adopted. In this sense, the term authenticity has been subjugated to reflect intellectual and behavioural traits or attributes of human beings (people), as opposed to the owned or disowned modes of human beingness.

Today, as a modern psychological concept, we find a vast number of definitions and notions of authenticity as they are applied to a variety of human features and characteristics. Some theorists, for example, interpret authenticity in terms of our highest, or most positive, qualities and potentials (Raihally, 1993). Others define it as living in an intimate communion with one's true identity (Gruba-McCallister & Levington, 1994). Still others describe it as a valued commodity, a positive trait or, an attribute (Harter, 2002). Authenticity has also been regarded as a sign of organization (Sheldon, Ryan, Rawsthorne & Ilardi, 1997), or as a fulfilling of one's commitments to, or expectations for, the self (Rebecca Ericson, 1994). It has even been described as a natural by-product of the self-formative process of one's true and whole self (Morgaine, 1994). In effect, within the last two decades, the concept of authenticity has acquired so many descriptions that, as Golomb (1995) suggested, "it may very well resist definition" (p.7). Moreover, any definition we might attempt to arrive at would today be hindered, not only by the diversity of commonly applied understandings, but even more so by the challenge of trying to delineate the philosophical nature of its meaning - for, "... even to speak of the 'nature of its meaning' is misleading, since it implies a kind of essentialism, a perspective of objectivity which is foreign to authenticity" (p. 7). For this

reason, we shall not attempt to propose, or arrive at, a new definition of authenticity, but rather to retrieve its ancient meaning of an autonomous and self-governing mode of being. As based on the original Greek interpretation, therefore, it will be argued, contrary to the assumptions of some modern definitions, that authenticity, as a mode of being, possesses no objective characteristics or subjective qualities. Similarly, it will not be considered as a phenomenon that is tangible or concrete, as one could potentially suggest of other human experiences such as joy or despair. Essentially, the notion of authenticity, as here applied, will be used as a qualifier for delineating a mode of being reflective of owning up to one's ownmost potentialities for being.

An Ontological Project

An authentic mode of being, as examined in this thesis, is not meant to be understood in the same manner as one would understand intentional or intended actions, which may or may not be deemed truthful or honest. Instead it is presented as a conscientious or reflective attitude, which precedes any such value-laden view of purposeful activity. From this perspective the idea of authentic being takes on a distinct significance, indicating a dwelling in awareness (prior to any behavioural directedness) of one's own possibilities, which are inclusive of, but not dependent on, the socially prescribed norms, customs and standards.

The question of being itself, whether authentic or inauthentic, has not been posed or examined by modern psychology. The ontologically-grounded notion of authentic being, therefore, will be utilized to discern between ways of being that are socially-prescribed and constrained (i.e., inauthentic), and those that are created or chosen according to one's own design (i.e., authentic). For this reason, an ontologically based consideration of authenticity as owning-up to, rather than fleeing from, one's being-in-the-world will be used as the theoretical ground of the ensuing project.

A Hermeneutic-Phenomenological Approach to the Study

A mode of being, whether authentic or inauthentic, does not present itself as an objective, tangible, or physically observable phenomenon. For this reason, it cannot be addressed or examined using experimental methods of investigation. Instead a hermeneutic-phenomenological approach, designed to inquire into the meanings and structures of being, will be utilized.

The hermeneutic-phenomenological method adapted in this thesis rests on Heidegger's ontological foundation of *Dasein* as being-in-the-world (*Dasein* is literally translated as "there-being"). It was Heidegger who initially acknowledged that a hermeneutic interpretation of *Dasein* is possible only from the perspective of an ontological foundation of being. In this sense, the hermeneutic approach here used does not indicate a process of hypothetical abstraction, but instead the deliberate unfolding or unlayering of the meaningful and intelligible ways of being in the world as they manifest themselves to us in our everyday lives. Initially, therefore, we shall follow the task of Heidegger's hermeneutic phenomenology in an attempt to unveil and unlayer the covered-over ontological constitution of *Dasein*, as well as reveal *Dasein* as understanding in the disclosedness of its being.

Next, by way of a hermeneutic-phenomenological analysis, the present study will approach the phenomena of *Dasein*'s authentic and inauthentic modes of being by interpreting them within the technocratic (i.e., enframed) context of contemporary society. As such, the technocratic mode of being-in-the-world will itself be presented and analyzed as a crucial aspect of *Dasein*'s socially-shared existential constitution, which will in turn be used to elicit a new understanding and guide our interpretation of the phenomenon of authentic and inauthentic being. For this reason, in an attempt to disclose *Dasein*'s authentic mode of being, several socially-relevant characteristics of technocracy itself (e.g., pragmatism, instrumental rationality, professionalism, etc.) will be analyzed and interpreted in order to disclose *Dasein*'s ownmost possibilities of being-in-the-world that have not yet come to rely on, or be bound by, a technologically-enframed meaning.

Overview of the Study

As an ontological project of disclosing and illuminating Dasein's world of being and its being-in-the-world, the present dissertation aims to clarify Dasein's very specific being-in-the-technologically-enframed world. For this reason, therefore, we have established three main objectives so as to bring about a new understanding of being and its authentic and inauthentic possibilities in our modern-day Western world. They are:

1. To reveal our technologically-enframed (i.e., enchained, determined) world of being. This issue will be addressed in Chapters 2 and 3.
2. To disclose our modern-day technocratic (i.e., scientifically-enframed) mindset. This issue will be addressed in Chapter 4.
3. To disclose the technocratically-minded (inauthentic) and technocratically-mindful (authentic) modes of being in the technologically-enframed world. These issues will be addressed in Chapters 5 and 6 respectively.

Similarly, the proposed thesis has three central research questions aimed to direct this project in a methodologically concise way. The research questions are addressed by chapters 4, 5, and 6 respectively. They are:

1. What is the cultural and historical context of the technologically-enframed tradition of the modern-day Dasein?
2. In what way is the modern-day Dasein addressed by the cultural context of our technologically-enframed tradition, so as to allow the revealing of its inauthentic mode of being?
3. In what way can Dasein address the cultural context of technologically-enframed tradition so as to reveal the possibility of its authentic mode of being?

This dissertation consists of six chapters:

The first chapter outlines the philosophical foundations of the present project and consists of three distinct sections. The first section introduces a threefold ontological framework to the study, consisting of the ontic-ontological distinction (i.e., distinction between the factual features of being, and the reflective articulations of being itself), followed by an introduction into Dasein's constitution as being-in-the-world, and an introduction into the ontologically grounded approach to the study. The second section addresses the epistemological considerations by describing the main characteristics that distinguish psychology as a natural science from psychology as a human science. Moreover, it introduces a philosophical approach to psychological inquiry in terms of the hermeneutics of Dasein. Finally, the last section of this chapter addresses the methodological consideration. It presents the rationality for using the hermeneutic-phenomenological approach, as well as the three research questions, and the validation criteria for the study.

The second chapter consists of the literature review on authenticity in the philosophical and psychological fields. Its aim is to present and examine a number of different interpretations of the concept from several theoretical approaches.

The third chapter consists of the literature review on the concept of technocracy as it has developed over the last century. It also introduces and explores an ontological distinction between technocracy understood in terms of the technologically-enframed world of being, and of technocracy seen as a technocratic mode of being-in-the-world.

In tracing back to the Greco-Roman cultural and linguistic traditions, the fourth chapter addresses the socio-historical context of the Latin mindset as key to the formation of an enframed character of the modern-day technocratic-mindset. It also examines the notion of enframing in the historical light of the relationship between technology and science, suggesting that only within the advancement of the relatively modern scientific tradition was technological enframing able to emerge. Furthermore, this chapter considers technological

enframing as a necessary condition in the establishment and maintenance of social sciences, that is, institutions relied upon for devising and propagating an enframed-mindset in the modern form of social technologies. Finally, the last section of this chapter revisits and examines the Greco-Roman ground for the technocratic spirit of the modern age.

The fifth chapter examines the topic of technocratic-mindedness as the type of instrumental-rationality inherent in the pragmatic character of technological-enframing. The pragmatic and instrumental character of technocratic-mindedness is thus presented as revealing of Dasein's inauthentic, or enframed mode of being. Furthermore, the issue of the gradual and inconspicuous pragmatic conformity found in technocratic-mindedness is analysed in terms of its unconcealment of specific and already prescribed ways of living within the given structures of the modern technocratic society. Similarly, the more complex issues of instrumental ordering and managing of natural and human resources is addressed in terms of its impact on the nature of Dasein's being toward itself and the world. In order to disclose the situatedness as well as the facticity of the modern Dasein, this part of the thesis presents and analyzes the processes of technological enculturation, and those of institutional indoctrination, which are seen as fostering an instrumental view of the social self in terms of its reserve capacity and resource utility. The objective of this chapter, therefore, is to reveal the specific aspects of social situatedness that promote and encourage technocratically-minded-being-in-the-world, and to disclose and illuminate those characteristics of modern Dasein's mode of being that are specific to the enframed ways of functioning within a technocratic society.

In contrast to the technocratic-mindedness as revealing of inauthentic-being-in-the-world, the sixth chapter addresses the issue of technocratic-mindfulness as a potential for disclosing of authentic-being-in-the-world. It first proposes that a shift from a pragmatic attitude of instrumental rationality to a conscientious attitude of reflective awareness can facilitate a way of confronting inauthenticity, both in the disclosing of the thrown character of technological-enframing and in owning-up to the thrown facticity of Dasein's enframed possibility.

Additionally, as a mode of revealing of understanding, the mindful and reflective attitude is also shown as aiding in the disclosing of Dasein's paradoxical reality with respect to the discrepancy between its thrown possibility of enframed being and its ownmost potentiality for authentic being. Finally, by way of conscientious and aware mindfulness, this chapter aims to expose the concealed aspects of a technologically-enframed existence as holding new possibilities for authentic being, i.e., those possibilities of our ownmost being, which can be recovered and reclaimed from a more primordial and universal horizon of being.

The concluding discussion chapter considers the findings of the present study as they relate back to the reviewed body of literature, the three proposed objectives, and the three research questions. It also addresses the philosophical implications and psychological applications of the findings as they relate to the psychological issues of authenticity, as well as to the issue of authenticity in the discipline of psychological itself.

1. PHILOSOPHICAL FOUNDATIONS

The challenge of writing about authenticity arises no so much with its definition and practical application, as it does with the philosophical foundation of the Subject upon which it is projected. For example, to consider authenticity in terms of character traits as opposed to seeing it as a way of living presents us with two divergent impressions, as each instance calls our attention to a different type of being. The former delineates an entity whereas the latter asserts a mode of existence. Put in another way, while one perspective refers to a being (a person), the other indicates the being of a being. This difference in the initial perception significantly impacts the types of questions asked, approaches adopted and research methods utilized.

In studying a human being as a biological organism with physiological systems and externally discernible behaviours one is naturally led to assume an objective stance. In turn, the material body, and the psychosomatic conditions it manifests, needs to be considered under the same physical laws as the rest of the material world it occupies. Even emotional expressions such as happiness, sadness, fear or surprise, when approached from this perspective, necessitate a type of examination which procures positively stipulated explanations anchored in physiological processes, cognitive functions, behavioural operations, or psychological traits, all designed to provide us with a specific understanding of our human condition. Yet a crucial question remains: what does the science of a human being tell us about being human?

There is no doubt that the biopsychosocial model of a human being serves as a compelling and an influential viewpoint, although by no means does it further the discourse on the meaning of being itself. In fact, by the very nature of its ontological presuppositions, the natural science model appears to elude the need to participate in this discussion. Its positivistic considerations of functions or processes defining the human condition find their meaning and significance in the applications and implications of mechanistic laws they enlist and conform to. On the other hand, when one aims to explore the meaning of being, the

natural assumptions of mechanical order utilized by the positivistic sciences reveal themselves qualitatively unsuitable, thus necessitating not so much an oppositional approach as an apposite one. Essentially, the change in focus from analysing a human being to describing and interpreting its being calls for a parallel shift toward an applicable ontological framework and equally appropriate mindset in epistemological considerations. As will soon be clarified and made apparent, without such a shift the discussion on the authentic or inauthentic modes of being of a human being would be less than fertile if not altogether futile.

Ontological Framework: Heideggerian Perspective

The issue of being is not as simple as it may first appear. To speak of being as basically living or existing, for instance, offers an inadequate picture. To be human entails far more than self-contained activity or personal aliveness. Indeed, despite the fact that being can be considered a most universal concept, it does not mean, as Heidegger (1927/1996) suggested, “that it is the clearest and that it needs no further discussion. [In fact] the concept of ‘being’ is rather the most obscure of all” (p. 2). Hence, it is not coincidental that our reflection on the notion of authenticity begins with the discussion on the ontology of being for, as the proceeding sections will establish, it both directs and dictates the philosophical position, epistemological concerns, as well as the methodological approach of the present inquiry into the meaning of authenticity.

The Ontological Priority of the Question of Being

There is much to be said with regard to the statement “I am.” It asserts our existence in as much as it affirms our being. In fact, it reveals the “I” as the “who” of being. The apparent obviousness of the statement, however, led to the neglect of the fundamental question of the meaning of being for more than two thousand years. That is, it did not receive any significant consideration from the time of Aristotle until it was reclaimed and

taken up by Heidegger over half a century ago. According to Heidegger, the phenomenon of being “has been basically misinterpreted, or interpreted in an ontologically inadequate way” (p. 58). Traditionally understood, the structure of being is experienced in terms of a relationship between the subject and his world. Thusly conceptualized, this relationship has been grounded in a notion of the corporeal presence of things, as in being objectively present within the world. Ontologically, however, this implies that the subject *is* essentially apart from the world and all things in it.

Question Concerning the Meaning of Being

By reviving the question concerning the meaning of being Heidegger’s developed an ontology grounded in our understanding of being as being-in-the-world. This ontology stood in stark opposition to the age-old understanding of a thinking and self-contained Subject, or mind substance, derived from Descartes’ *Cogito Ergo Sum – I think therefore I am*. Though simple and elegant, this statement has nonetheless given rise to a somewhat problematic view of being as consigned to the realm of the mind. As such, the issue with “I think therefore I am” is not that it is superfluous or redundant, but rather that it is thematically inconsistent, and fundamentally misleading in its assumption of the parallel relation of thinking to being. Following Heidegger’s lead, we find that “I think” characterizes an ontic (i.e., formal) distinction of an actual feature of being, whereas “I am” expresses an ontological articulation of being itself. Furthermore, the statement “I think therefore I am” is clearly conditional, in that the proof of being comes to rest on the assertion of thinking. Thus thinking stands as a misplaced substantiation for being. This presupposition can be likened to a suggestion that hammering brings about carpentry. Yet hammering does not bring about anything other than hammering. On the other hand, being a carpenter not only implies but also demands hammering, measuring, drilling, cutting, etc. In effect, the carpenter discloses himself as such in the practice of carpentry (i.e., in using the tools of the trade like hammers or drills). Similarly, thinking does not bring about being. Being simply is, or otherwise is not. If

anything, Heidegger argued, that it is in the disclosing of being as understanding that thinking is even possible.

Yet what does it mean to be? If it is not to think, is it to live, to act or to do? Or perhaps the meaning of being can be found in our efforts, projects or creations? The answer is not as clear-cut and instantly recognizable as it may first appear. Certainly, one would not be mistaken in choosing to ascribe actions such as kissing a spouse, playing with the kids or writing a dissertation to depict one's idea of being, but this depiction would be ontic rather than ontological in nature. Heidegger distinguished between ontic and ontological inquiries in that the former speak to the being structures and relations of beings, whereas the latter address the meaning of being itself. To illustrate this difference more clearly, we can reflect on the notion of a house and that of a home. A house is a structure organized, designed, and configured in a particular way to suit the relations of beings that occupy it. A home, on the other hand, goes beyond the determined function of a physical building. It reflects a shared attitude of aliveness and connectivity of the family that resides in it. A fraternity house, for example, is not a home. A home exhibits a rooted and emotionally infused character and a distinct dynamic between its members, providing it with meaning and significance. Sayings, such as, "home, sweet home," or "home is where the heart is," reflect this significance and meaningful quality. The argument here, therefore, is that both the house and the home suggest a dwelling, though one is indicative of an ontic *reference-to* relational configurations and characteristic ways of being of the inhabitants, and the other is indicative of an ontological *reflection-of* the meaning of being itself. Along these lines, therefore, when we speak of a subject inferred from Cogito (I think), as opposed to the being indicated in the Sum (I am), we recognize that in each case we address the "who" of the "I." The former, however, addresses the ontic reference to the mental acts "housed" in a thinking being, whereas the latter speaks to the ontological reflection of beingness itself.

The Ontic-Ontological Constitution

The distinction between the ontic and ontological, as accentuated in the above example, is not meant to be understood as a division between two unrelated realms. On the contrary, Heidegger insisted that the roots of ontological inquiry are essentially ontic. Ontic inquiry refers to the factual features of being characterized in structural terms, such as perception, cognition, conduct, language, communication, social roles, positions, etc. Ontological inquiry, on the other hand, reflects on the various modes of being in their ontically-characterized constitution. Ontological inquiry, therefore, draws from and interprets the meaning of ontic structures and concerns thereof. As such, ontological analysis of being is neither foreign to, nor divorced from, its pre-given ontic disposition. Far from it, the ontological is rooted in the ontic as much as being is rooted in beings.

In taking up the task of inquiring into the meaning of being, Heidegger (1927/1996) purported that intrinsically we already know what being is ontically, but that we don't know what being signifies ontologically. "When we ask, 'What is being?' we stand in an understanding of the 'is' without being able to determine conceptually what the 'is' means. We do not even know the horizon upon which we are to grasp and pin down the meaning" (p. 4). The meaning of being eludes us for it is not a being itself and cannot be grasped and determined objectively. Consequently, "to work out the question of being," as Heidegger suggested, we need to "make a being – one who questions – transparent in its being" (p.6). This being he called Dasein, literally translated as "there-being," or as Pivcevic put it, "the there of being," or "the place where being discloses itself" (quoted in Cohn, 1997, p.12). In this sense, you are at "home" in your being in that Dasein is a "place" of disclosure. Subsequently, it is through Dasein that Heidegger initiated the laying bare of the foundation for the understanding of the meaning of being, precisely because of the ontic-ontological constitution of the human being as such. As he put it:

Dasein is a being that does not simply occur among other beings. Rather it is ontically distinguished by the fact that in its being this being is concerned *about* its

very being. Thus it is constitutive of the being of Da-sein to have, in its very being, a relation of being to its being. And this in turn means that Da-sein understands itself in its being in some way and with some explicitness. It is proper to this being that it be disclosed to itself with and through its being. *Understanding of being is itself a determination of being of Da-sein.* The ontic distinction of Da-sein lies in the fact that it is ontological (p. 12, emphasis in the original).

In essence, what Heidegger meant was that we first and foremost grasp or understand ourselves, not in terms of being, but rather as a being, an entity, a subject, a consciousness, or a mind. It is from this ontic position of understanding that we disclose and characterize ourselves in factual terms, such as a carpenter, a parent, or an educator. Only later, once we describe the carpenter as creating, the parent as nurturing, and the educator as inspiring can we ontologically interpret and disclose the meaning of their being as that of caring-for and caring-about. In fact, Heidegger purported that to be is to *care*. In other words, Dasein in its being reveals itself as care. Care as ontologically determined, therefore, is one of the existential a priori characteristics, or structures of Dasein.

Dasein as Being-in-the-World

Another existential a priori structure of Dasein is being-in-the-world. Dasein, for Heidegger, stood at the centre of any philosophical or scientific endeavour as it pointed to the indissoluble unity or interrelationship of being-in-the-world, as opposed to the traditionally accepted, but fundamentally misconstrued, subject-object dichotomy. In his words, “Self and world belong together in one being, Dasein. Self and world are not two beings, as subject and object, also not as I and you, but self and world are – in the unity of the structure of Being-in-the-world – the fundamental determination of Dasein itself” (quoted in Zimmerman, 1981, p. 27). Thusly expressed, the notion of Dasein as being-in-the-world connotes the being-in and the being-with of beings as accessible in something like a world. In other words, Dasein stands for being-there-in-the-world-with-others-and-things, where

each and every individual and his world are viewed as co-constituting one another. In this sense, neither the “world,” nor the “being-in,” should be understood as being objectively present, as in the subject-object dichotomy. Rather, in each instance we are to understand Dasein ontologically, that is in terms of Dasein’s existence and it’s a priori constitution as being-in-with-others-alongside-the-world.

Dasein’s Being-in and Being-with

Dasein’s being-in indicates an inseparability from *its* “world”, i.e., Dasein does not exist without the “world,” nor does the “world” exist without Dasein’s determination of it. Furthermore, we do not come into the world, as it were, from outside but rather find ourselves already in it. In this sense, existential being-in-the-world is the ontological a priori of Dasein. Being-in, therefore, does not stand for spatial inclusion in a physical manner, like being in a room, or being in a shower. Instead, it characterizes being in an involved, existential sense, as in being in college, or being engaged in a project. As such, being-in is indicative of Dasein’s intentionality, which allows Dasein to experience and illuminate the “there” of being-in. Ontologically expressed, therefore, being-in stands for disclosure, unveiling, or opening-up of Dasein’s way of being-in-the-world.

The hyphenated form in which being-in-the-world is expressed indicates a web of meaningful relationships that is shared with other Daseins that co-create the world of being, which Heidegger termed *Mit-da-sein* (being-there-with). In this sense Dasein does not mean an entity among other similar entities, but a co-constituted or social way of being-there in time. The ontological determination of time as temporality points to not only the immediate situatedness of Dasein as co-existing with other Daseins, but also projects the historical co-relation with those Daseins of the past in whose being we share our cultural customs and traditions. This socio-temporal aspect of Dasein is crucial if one wishes to disclose and understand the co-constituted nature of being-with as expressed and experienced within the various societies, communities, or even institutions or organizations. To say that Dasein is

there in-the-world, therefore, is to point to its shared socio-cultural, as well as temporal and historical situatedness. In being contingent on this situatedness of the “there,” Heidegger insisted on the given nature of Dasein’s existence as being initially and for the most part determined by the “world” into which each Dasein is already *delivered over*. He expressed this *facticity* of being delivered over with the term *thrownness*, which should not be taken in an ontic sense of being physically thrown, but in a sense of a priori existential determination of Dasein in its socio-temporal situatedness. Expressed in this way, Dasein’s being-with is seen as being determined by the facticity of its thrown situatedness in the “there” of its temporal, historical and cultural world.

To clarify this position let us consider the following. Analogous to an archaeological site, which conceals many hidden and overlapping layers of social and cultural heritage, so too our being possesses social, cultural, and historical depth that is both intricate and multidimensional. Indeed, the concept of being extends far beyond the idea of physical existence. It speaks to a complex web of meaningful relations spanning across historical time and cultural space. To be, therefore, is not to be understood in a merely personal and individualistic sense. In fact, to a large extent we are the way everyone is, and our common ways of being are as affixed to the epoch in which we live as it is anchored to the epochs of the past. For example, we understand our present-day, Western way of thinking as one that is scientific and technological, nonetheless acknowledging that it is in part mediated by our historical past. That is to say that our educational, political, as well as economic institutions, to name just a few, though unmistakably determined by the scientific and technological character of our time, all have their roots deeply planted in our shared social, cultural and historical traditions. In a manner of speaking our being is not entirely our own. We are *thrown* into it, in that we already belong, and are *delivered over* to our temporal situatedness. Collectively, grounded in culture and history, we adhere to a shared set of public practices. That is, we follow similar trends and fashions. We engage in similar pastimes and pleasures.

We express affection the way one expresses affection (e.g., giving flowers), just as we express anger the way one expresses anger (e.g., shouting).

The ontological structure of Dasein's being as being-with raises anew the question of who Dasein is. More specifically, who is the "I" of Dasein? To say that my being is not altogether my own contradicts the idea of personal selfhood as expressed in the subject-world dichotomy. Likewise, it does not make the understanding of "my" Dasein any easier. To resolve this quandary Heidegger suggested that we examine the existential constitution of Dasein in its average everydayness of being-with so as to disclose the character of Dasein in its shared relation with other Daseins. Since Dasein is not a subject but a mode of being it is bound to the mode of being of others. This bound character of Dasein Heidegger termed the "they-self," indicating that, "*initially*, 'I' am not in the sense of my own self, but I am the others in the mode of the they. In terms of the they, and as the they, I am initially 'given' to 'myself.' Initially, Da-sein is the they and for the most part remains so" (p. 121).

From the perspective of the "they-self," therefore, my beingness is determined by the average everyday way of being that is shared by everybody in general, and owned by nobody in particular. In fact, the They is to be found in the status quo, where the status quo can be taken as a pre-ontological reflection of the existential constitution of the They. Put in another way, the status quo, which is neither explicitly taught nor written in stone, dictates the impersonal, yet already prescribed, ways of being of the They. In other words, in the They we share of the same stations and expectations in life. We make money, spend money, and save money. We get married, have kids, a mortgage, and a dog. We invest and make plans for the future. We retire with pensions, pay taxes to boot, and get buried in our finest Sunday fatigues. We do these things, not because they are the right or the best ways of doing things, but because they are the traditional ways of doing things. Each step of the way we are compelled to follow the established and prescribed norms of our culture and society, which are not so much imposed on us, as they are entered into, endorsed and maintained in us. Suffice it to say, the they-self is not what one would call a social *self* or a social *persona* as

distinguished among other selves. It is a mode of being of the everyday Dasein, whose “I” figures behind the curtains. Or, as Kockelmans (1990) succinctly put it, whose “‘I’ is fully submerged in the ‘they’” (p. 143).

With this distinction of the existential structure of everyday Dasein, as submerged or absorbed in the they-self, Heidegger, for the first time, articulated his notion of Dasein’s inauthentic mode of being. It is within the very world of the “they-self” from which we first emerge, he argued, that we inevitably disown ourselves by falling captive to the prescribed average, everydayness of being-with. For the sake of security, and a sense of belongingness, which our shared social practices and common ways of being appear to provide, for the most part, and of our own accord, we choose to define ourselves within the anonymity of the “they.” In a sense, within the world of the “they,” and most assuredly for the sake of the “they,” we appear to relinquish, or flee from, an often challenging and solitary journey of discovery of our ownmost possibilities for being. Conversely, it is in owning up to our ownmost possibilities, as Heidegger suggested, that our authentic mode of being could be disclosed. Understood from this perspective, therefore, authenticity, or inauthenticity for that matter, ought to be viewed in terms of disclosedness of those modes of being-in-the-world in which Dasein either reveals itself to itself, or conceals itself in the world of they-self.

The World of Dasein’s Being

Up to this point we have discussed the constitution of being-in-the-world as being-in and being-with. However, to grasp the totality of “being-there” of Dasein, we also need to address our being-in-the-world in terms of the “there,” that is in terms of the world’s being, or “worldliness,” and the ontological meaning of the “world” as a characteristic of Dasein’s mode of being. In Heidegger’s words, “The understanding of being that belongs to Dasein just as originally implies the understanding of something like ‘world’ and the understanding of the being of beings accessible within the world” (p.11). The “world,” as here indicated, is not to be taken as a sum total of inner-worldly or objectively-present entities or things. As

Heidegger put it, “ ‘World’ is ontologically not a determination of those beings which Dasein essentially is not, but rather a characteristic of Dasein itself” (p. 64). Consequently, as a characteristic of Dasein’s own mode of being, the inquiry into the meaning of the “world” is to be considered from an ontological perspective.

The traditional view of an inner subject coming to know the outer world of objects rests on the assumption that subject and world are separate from one another. Knowing is thus reached through a process of examination and inquiry into the observable and perceivable structures, properties and functions of particular objects or phenomena present within an objective world. Heidegger did not reject this view completely, but he suggested that its place in our understanding of knowing in terms of Dasein’s mode of being is genuinely misguided. He further indicated that in our average everyday existence we don’t simply experience things as being merely present, but that for the most part we find ourselves in a world that is already meaningful to us. For example, imagine someone noticing a police cruiser while travelling at 160 km/h. The cruiser would most assuredly not be perceived as a mere object but primarily as a threat (be it to one’s wallet or driving record). Conversely, a sight of a police cruiser would appear as a saving grace in an emergency situation, such as a robbery. Hence, as Heidegger suggested, things don’t show up for us as mere things that are just there, but rather as things which already matter to us, even before we come to inspect them objectively or scrutinize them theoretically. Put in another way, things disclose themselves in their being, not as entities that are physically present, but as a characteristic of Dasein’s mode of being in its average everydayness.

In the analysis of the world of everyday activity, Heidegger further focused on the practical relevance of things as opposed to their objective presence. He was not concerned with knowing what things are like ontically, but rather how things are ontologically, particularly in their everyday usefulness, that is in their being “ready-to-hand.” In fact, Heidegger argued that our theoretical or scientific knowledge of things as objectively present in the world, or “present-at-hand,” is only a derivative mode of a more primordial way of

engaging things in their meaningful world of significance – that is, a world in which they make sense. Hammers, for example, make sense only in terms of nails, wood, or housing projects, just as cars make sense in terms of roads, destinations, or transportation. In this way, things are, as Heidegger claimed, encountered within a referential context already articulated prior to our initial engagement of them. We learn to hammer, because we build things with nails. We learn to drive because we transport things in motor vehicles. From this perspective, the world of things and phenomena, which we encounter, is not external, foreign or inferred. We emerge from it, already knowing and experiencing it as meaningful. This meaningful world of things that are ready-to-hand, however, consists not only of things like hammers, cars, cell phones or computers. It similarly includes “things” like institutions, organizations, or corporations, as well as phenomena such as education, healthcare, or media. We can address education, for example, in terms of a useful commodity when we say, “you need to get an education,” or when we inquire, “do you have any education?” In this sense, the final product of education, i.e., a diploma or a degree, demonstrates its concreteness and likely utility. As such, just like other useful things, education exemplifies a “thing” that is not merely present-at-hand, but rather ready-to-hand.

The meaningful world of things as ready-to-hand is further disclosed to us in their handiness, in that they appear to us, first and foremost, as useful equipment – not in an objectively evident way but in a transient and transparent way of being handy. In this respect, “handiness,” as Heidegger argued, “is not grasped theoretically at all, nor is it itself initially a theme for circumspection. What is peculiar to what is initially at hand is that it withdraws, so to speak, in its character of handiness in order to be really handy. What everyday association is initially busy with is not tools themselves, but the work.... The work bears the totality of references in which useful things are encountered” (p. 65). Thus, a skilled carpenter does not pay any particular attention to the hammer while he is driving in the nails, especially when the work is going well and without a hitch. Similarly, a driver does not concentrate on changing gears, slowing down or accelerating. Like the carpenter, he

does things automatically while focusing on getting to his destination. It is only when things break down and lose their handiness, as in the shank snapping in half, or the engine stalling that, according to Heidegger, we begin to view things as objectively present. Hence, it is in losing their handiness, and in becoming “unready-to-hand” that things come into view in a traditional, objective way as “present-at-hand.” This theoretical and ontically-oriented stance reveals things as autonomous and independent entities with measurable and quantifiable properties. Viewed as such, a hammer, for example, becomes a shank with a metal headpiece, characterized as having a particular shape, weight, texture and balance. Divorced from the context of its usefulness, it is approached ontically as a mere object in a world devoid of its worldliness – a fish out of water, so to speak.

To sum up, ontically we can speak not only of a world of things present-at-hand (i.e., innerworldly things), but also of one’s own relational world, both private and public, in which one dwells or exists. This relational world, for example, refers to one’s family, a circle of friends, a religious community, or even the Western world, as far as its physical and political boundaries are concerned. Ontologically, however, to speak of a world is to reflect on the meaning of Dasein’s way of being itself. The world of Dasein is a world of being. In fact it has its own being. Accordingly, we can talk about a physician’s world of medicine, a poet’s world of literature, or a Catholic’s world of religion. In each case, we refer not to something uniform or concrete, but rather to an already articulated, meaningful and referential context of commonly shared practices and attitudes. And whereas ontically we can speak of a profession (e.g. medicine), or a professional (e.g. a physician), in ontological terms we might talk of a professional way or mode of being. In other words, just as we can differentiate between a thing being ready for use (ontic), and a thing being handy (ontological), we can similarly distinguish between being a professional (ontic), and being professional (ontological). We can likewise speak of an authentic being (ontic), or conversely, of being authentic (ontological). As well, we can inquire into a world of technology (ontic), as opposed to, a technologically-enframed, or technocratic world

(ontological). *All in all, the ontic in each case refers to the structural complexity of things and phenomena in the world, whereas the ontological reflects the meaningful structures of Dasein's phenomenal world. It is always in the latter, however, that we address Dasein's involved way of being in a world of intelligibility and significance, that is, in terms of its being as being-in-the-world.*

Fundamental Ontology

The outline of Heidegger's thought hereto presented is sketchy at best. However, given the limits of the present thesis, we will not go into any more detail, but will instead turn to the underlying aim behind his philosophy, which simply stated, is to ascertain and ground a fundamental ontology. By fundamental ontology Heidegger meant an ontology that is genuinely concerned with the question and the meaning of being, not in a merely theoretical way but in an apt and proper understanding capable of establishing an adequate access and directionality to the study of being itself.

Heidegger, maintained that modern ontologies, whether in sciences, or philosophies, deal with human matters and concerns in a rather obscure manner, in that their research into the fundamental question of being is glazed over with debatable, ontically-oriented substitutions, such as a mind, self, or consciousness, which at present time can be additionally observed as being housed within the traditionally accepted biopsychosocial models. "But since each of these [scientific] areas," argued Heidegger, "arises from the domain of beings themselves, this preliminary research that creates the fundamental concepts amounts to nothing else than interpreting in terms of the basic constitution of their being... [which] remains naïve and opaque if its investigations into the being of beings leave the meaning of being in general undiscussed" (pp. 10-11). In each case of naively grounded ontology, therefore, being itself, though always assumed, is never inquired into in a meaningful way. Moreover, the edifice of knowledge founded on the presuppositions of such an ontology, no matter how firmly constructed and internally consistent, is basically

misguided in its assumptions and conclusions. In mainstream psychology, for example, we can observe that the issue of being is overshadowed by a predominantly biopsychosocial focus on the functioning of beings among other beings. For this reason, and in the most fundamental way, the ontological inquiry into the question of being is of utmost importance.

As Heidegger put it:

All ontology, no matter how rich and tightly knit a system of categories it has at its disposal, remains fundamentally blind and perverts its innermost intent if it has not previously clarified the meaning of being sufficiently and grasped this clarification as its fundamental task.... Ontological research itself, correctly understood, gives the question of being its ontological priority over and above merely resuming an honoured tradition and making progress on a problem until now opaque (p. 11).

Heidegger contended that to understand Dasein ontologically is to consider and interpret the question concerning the meaning of being from the position of the existential a priori structure of being-in-the-world. Traditional ontologies are not capable of fulfilling this task, as their aim is to understand beings within the world in a rather functional if not all together substantial and quantitative way. It is thus from a position of an ontology that is not foundational but rather fundamental, where Heidegger believed that a proper analysis of the mode of being characteristic of Dasein can be undertaken. As such, he insisted that, “fundamental ontology, from which all other ontologies can originate, must be sought in the existential analysis of Dasein” (p. 13). It is in carrying out this existential analysis, he further argued, that all modes of Dasein’s being can be made intelligible – not as theoretical artefacts at the level of sensory or conceptual representations (i.e., perception, conception, or consciousness), but in terms of Dasein’s involved existence, characterized by such key existential structures as discourse, disclosure, attunement and understanding. The method, which in Heidegger’s opinion was most suited for this ontological task was the method of hermeneutic phenomenology. It is to the explication of this method in the context of other epistemological issues and concerns that we shall now turn.

Epistemological Considerations

As has already been indicated, for no less than several hundred years the meaning of being of *Sum* (I am) has been equated with a misplaced rationality of *Cogito* (I think). It was misplaced, for *I think* took precedence over *I am*. The fallout from delegating the thinking subject as evidence or confirmation of our existence went far deeper than the philosophical debate of the truth-value of its assertion. For what is the account of the subject found in the theory of the mind, if not an observer separate from the world. In fact, placing the onus of detached reflection of the thinker on the objects of its reflection, shaped not only our epistemologies and accounts of knowledge, meaning and understanding, but it also gave rise to a number of ontologies of an *ahistorical* subject – a self-contained observer of his circumstance. This solipsistic view was challenged by Heidegger who argued that, it is in fact the very set of our socio-historical circumstances, or our socio-temporal situatedness in which we as Dasein find ourselves, which characterizes our being, not in terms of inner subjectivity, but in terms of an existential and already involved mode of being as being-in-the-world.

Accordingly, in being approached from the position of human existentiality, as opposed to the perspective of human rationality, the epistemological concerns, as hereto addressed, will be shown as taking on an ontological direction, not in opposition to, but definitively as diverging from the traditional epistemologies of the subject. What follows is the discussion on the methodological issues, assumptions and implications of the natural and human science approaches to psychology, as well as the rational for choosing the phenomenological-hermeneutic approach as the method to be employed in this study.

Psychology as a Natural Science

Descartes' *Cogito Ergo Sum* presents us with a problematic dilemma - a dilemma of a knowing subject separate from the objective world of his knowledge. This seemingly innocuous split between the knower and the known continues to create rifts between those

attempting to study and expound on the relationship *between* the two. The primary challenge of deriving knowledge about the nature of our human condition, as approached from either side of the polarity, is that it inevitably reveals itself as incomplete. A human being viewed as a body in physical sciences is no more whole than a human being seen as a mind or consciousness in metaphysics. Since the 17th century, however, in a struggle for authority and legitimacy of knowledge, and given the significance in their performance on an instrumental level, it was the natural sciences, which appear to have dominated the debate (Ferraris, 1988/1996).

Positivist Approach

In adopting a natural science methodology, mainstream psychology of today can be characterized as being empirical, positivistic, quantitative, deterministic and predictive. As such, its subject matter is concerned with the type of phenomena that will lend themselves to the manner of scientific inquiry bound by its specifically prescribed measurement procedures. In using this type of methodology, we are thus led to the study of human physiological functioning, as well as to the psychological domain of observable behaviours with their correlational antecedents and causal effects. Even the field of applied functionalism of cognitive science, which aims to quantitatively measure, test and study intelligence and other thought processes, by the very nature of its positivist epistemological underpinnings, cannot but remain faithful to the constructs of materialism and physicalism. In the very spirit of this attitude, it explicates qualitative experiences as phenomenal expressions of mental states and processes stemming from physiological operations, which it further aims to validate and rationalize in terms of causal relationships by way of statistical correlation and verification.

Although epistemologically sound within the parameters of its psychometric methodology, any psychological approach that is based on the philosophy of materialism, physicalism or functionalism will unequivocally encounter the ontological quandary of an

objectified Subject. For the most part, in studying the objective world, like traditional physics, positivist psychology binds itself to the *matter* at hand with no apparent epistemological repercussions. Behaviour for example, is seen as observable, recordable, and testable. Similarly, psycho-physiological operations are studied using measurement and experimentation. It is only by venturing into the metaphysical space of subjectivity that natural science loses its ontological footing. By its very design, in adopting the traditional positivist approach based on observation, experimentation, measurement, psychometric analysis, and causal inference, traditional psychology is constrained by its methodology to view the experiencing subject in objectified terms of behavioural operations, physiological processes or cognitive functions. Consequently, to demonstrate the link between physiological processes and psychological experiences, any subjective meaning needs to be objectively framed or operationalized, so that it may lend itself to positively prescribed procedures and methods of inquiry. As such, within the boundaries of philosophical dualism, subjectivity becomes objectified.

With the natural attitude well established we have come to rely on a positivistic approach to our inquiry of the subject's psychological world as revealed through the objective physical senses. In a way, the subject-object principle has been maintained, though the modern positivist version is different from Descartes' original understanding. While serving as a guiding principle in most positivistically oriented sciences, including traditional psychology, this unilateral subject-object split gave rise to a paradoxical view of reality. In a not so apparent twist of fate, as it were, with the Object becoming the subject of study, the Subject became an object to be studied.

Implications to the Study of Authenticity

With traditional psychology turning toward positivism, the epistemological quandary highlighted by the divergent views of rationalism and empiricism has not been resolved. The subject-object or mind-body dilemma continues to pose a challenge to psychology as a

natural science, particularly in the study of qualitative phenomena attempted within the framework of quantitative methodology. To combat this challenge, whether justifiably or not, many features or expressions of our psychological makeup have been ascribed to personality traits, character attributions or intelligence quotients. Yet, there are other phenomena such as those of will, courage, inspiration, creativity or authenticity, to name just a few, that are not merely expressed but existentially and experientially lived. Based on their existential “place” or “space” in psychological life, therefore, these phenomena are neither readily observable, objectively measurable, nor indiscriminately verifiable without bias or prejudice. Accordingly, they cannot be satisfactorily abstracted from lived experience, functionally operationalized, examined using psychometric methods, or be generalized based on causal inferences. For these reasons, we can conclude that the positivist science methodology is not particularly well suited to the study of phenomena such as authenticity, particularly if it is considered either in terms of Dasein’s mode of existence, or as experientially lived.

Psychology as a Human Science of Consciousness

Since its inception as a natural science, psychology has been fitted with an empirical tool belt. Subsequently, in following the long-held view that to do science one had to apply positivist methodology, psychology as a discipline of the human psyche has turned into a science of human behaviour. Yet, a question remained: Should the science that deals with human phenomena limit itself to the empirical and positivist methods, particularly if its subject matter involves human experience?

At the turn of the 20th century an anti-positivist movement led to an establishment of a human science approach which aimed to deepen the understanding of human experience, with a proper philosophical foundation, suitable theoretical models, and appropriate research methods (Polkinghorn, 1983). Today, psychology as a human science contributes an approach to the analysis of human phenomena that is quite different from that used within the

natural science paradigm. Whereas the latter seeks to describe and explain relationships between independent entities, the former views phenomena as structured wholes, i.e., as complexes where the whole is greater than the sum of its parts, which, in turn, can only be identified and described given some sense of the whole.

Phenomenological Approach

It was Husserl (1911/1965, 1931/1977), who brought forth a comprehensive phenomenological method of rational investigation into the realm of the mind, or rather the structures of consciousness, which he had considered as lacking proper philosophical explication and research methodology. He had criticized the application of natural science methodologies to the study of meaningful human phenomena in psychology in that, as he argued, the positivist approaches ignored the fact that psychology deals with living, experiencing subjects. He delineated a new phenomenological method of looking at “reality” as experienced through our consciousness, and not through scientific instruments.

Husserl’s main objective was to study phenomena as they appear to consciousness. He viewed consciousness as co-constituted between the subject and his/her world (Valle, King & Halling, 1989). He suspended the belief that everyday objects exist in such a way as to be unaltered by our consciousness of them. This shift from a natural attitude to a phenomenological attitude demanded what he referred to as a *phenomenological reduction or bracketing*, which resulted in detailed description of objects or phenomena as they appear to our consciousness without any claims concerning their “actual” existential reality. The primary reason for bracketing was to suspend the beliefs in the objective reality while attending to the phenomena as they appear to us, and are experienced in the *life-world*. The term life-world refers to the world as encountered in our everyday experience prior to any reflection on it. In fact, Husserl posited that only in setting our theoretical reflections or preconceptions aside can we truly “go back to the things themselves” and see phenomena for what they really are (Giorgi, 1970). Eventually, by means of phenomenological description,

he wanted to show the essence or purely immanent character of phenomena in our conscious experience of them, as well as the structures of consciousness that enable it to grasp and refer to phenomena as lived and experienced.

By emphasizing phenomena in the life-world, phenomenology is essentially a descriptive science, which seeks to understand the meaning of lived experience (Mook, 1987). This type of articulation or grasp of our lived reality presents consciousness as a constituting activity, thus revealing it as *intentional* in nature as it is always directed toward its object of study. Husserl emphasised that the constitution of experienced phenomena is done by the experiencing subject through this intentional process (Polkinghorne, 1989), meaning that the subject in relation to his/her life-world co-constitutes the phenomena in that he/she actively organizes the objects of its awareness into meaningful structures. In postulating the notion of intentionality, Husserl in essence suggested that the subject does not respond to the external objects per se, but rather to his/her own perceptions of what these objects or stimuli mean.

Implications to the Study of Authenticity

Husserl aimed at achieving ultimate objectivity through phenomenology. In his method, consciousness is to be distinguished from its social and natural entanglements. This inherently solipsistic view of subjective knowledge about the “bracketed” world, however, provides limited insight into the intelligibility and significance of one’s world of being. In treating consciousness as a realm within which “objects” are constituted, Husserl’s phenomenology continues to reflect an epistemological attitude centred on a Subject of knowledge. As such, its ontological underpinnings persist in the ontic tradition of subjectivity, even if considered as intentional acts of consciousness. In this sense, it is not possible to inquire into the meaning of authenticity ontologically in terms of our being, but rather ontically in terms of our suspended or bracketed knowledge of it.

Notwithstanding the relevance of phenomenological method in the human science of lived experience, without adequate ontological grounding, authenticity, as articulated in this thesis, cannot be examined as a phenomenon in the sense of Husserl's pure phenomenology. That is, it cannot be described and interpreted only in terms of meaningful noetic structures of consciousness, as they would fall short in disclosing authenticity as Dasein's existential constitution of a given mode of being-in-the-world. For this reason we shall now turn to hermeneutic-phenomenology whose sole theoretical and methodological objective was to unveil, interpret and understand Dasein in its authentic and inauthentic modes of being.

Psychology as the Hermeneutics of Dasein

Traditionally, psychology has always been regarded as the study of human subjects or human subjectivity. This thesis, however, will propose an approach to the study of human being, whereby Dasein will be considered as an important subject matter of psychological investigation. Even Husserl's transcendentalism, whether regarded in terms of intentional content of consciousness, or as consciousness itself, still adhered to the epistemology of *I think*, as opposed to the existentiality of *I am*. The problem with this view in particular, however, rests not so much on the generally accepted transcendental take on its subjectivity of *Cogito*, but rather resides in an assumed ideal of consciousness, understood as the ultimate ground for the epistemological knowledge of *Cogitare*.

An alternative to the purely epistemological knowledge came in the form of hermeneutic knowledge. Within its application in the human sciences, this knowledge became a matter of gaining understanding through language and interpretation of meaning, be it linguistic, experiential or existential. As such, it is utilized in the examination and interrogation of all different structures and conditions of human interaction, whether at the level of textual analysis, or the levels of socio-cultural, or historico-temporal analysis of human existence. Hermeneutic understanding, therefore, indicates a genealogical depth of interpretation, where our understanding of the immediate text, situation, or tradition hinges

on our understanding of a greater context within which the immediate text resides (Ricoeur, 1981/1989). The reverse is also the case. In this sense of going back and forth, the hermeneutic inquiry reveals itself as circular, in that it unwraps and peels away subsequent layers of meaning, bringing us to a deeper understanding of the immediate situation with each interpretative turn toward the contextual horizon. Heidegger was first to show that the unlayering of Dasein's meaning of being, and its structures of existence, is made possible with the application of the hermeneutic-phenomenological method of interpretation.

Hermeneutic-Phenomenological Approach

In Heidegger's (1927/1996) view, "phenomenology is the way of access, and the demonstrative manner of, what is to become the theme of ontology. Ontology is possible only as phenomenology.... [and] as far as content goes, phenomenology is the science of being of beings – ontology" (pp. 36-37). Furthermore, since the phenomenology of Dasein has a hermeneutic character (i.e. narrative depth), it thus designates the method of interpretation, which is that of hermeneutic phenomenology. And since the ontological question of the meaning of being as prepared by fundamental ontology takes the form of an existential analytic of Dasein, the analytic of Dasein itself requires a hermeneutic, as opposed to Husserl's transcendental, phenomenological method of inquiry.

As already indicated, Husserl aimed to establish norms for epistemic certainty. His essentially epistemological perspective, however, was challenged by Heidegger's ontological reading of Dasein's concern for its being (Ferraris, 1988/1996). In fact he argued that the concept of consciousness itself (whether understood traditionally, or in terms of Husserl's phenomenology) remains within an ontic framework of a subject-object relation. In his ontological undertaking, therefore, Heidegger (1927/1996) aimed to rectify this often-ignored impasse of reified subjectivity. He further indicated that although transcendental phenomenology provides the means to disclose and describe existential phenomena, it falls short of offering an approach to interpret the meaning of Dasein in the context of its world.

For this reason, while embracing Husserl's phenomenological method of understanding, he extended it to include the hermeneutics of interpretation, which he argued dealt with the meanings of existential concerns and phenomena of Dasein. In adapting the phenomenological method to the hermeneutic project, therefore, Heidegger shifted the objectives of inquiry from an investigation of consciousness to an investigation of Dasein. In other words, he moved beyond the transcendental phenomenological pursuit and articulation of the intentional contents of consciousness to a hermeneutic project of interpretation of the social practices in which we all share and partake within the world of our average everydayness. In this sense, Dasein would not stand for a substitution of a transcendental subject, as it is not itself a subject. Simply put, the hermeneutic-phenomenological inquiry into Dasein, as articulated by Heidegger, is an inquiry into our ways of being, which, though common and shared, are not self-evident and as such require proper articulation and interpretation. Ultimately, in contrast to Husserl's pure phenomenology, grounded in the structures of consciousness, hermeneutic phenomenology proceeds from the structures of existence, particularly the structures of everydayness, as they are disclosed, articulated, and understood.

Heidegger did not consider understanding as a way we come to know the world, but rather the way we *are* in the world (Polkinghorne, 1983). Viewed in this way, understanding reveals itself not as a simple mode of knowing but as a world-disclosive mode of being characteristic of Dasein. As such, it is not a manifestation of our subjectivity concerned with grasping particular facts, but with apprehending our ownmost possibility of being-in-the-world. Not surprisingly, the hermeneutic tension between self-understanding and understanding of the world, took on a new meaning for Heidegger, primarily in light of the existential task (i.e., understanding of being) with which we are confronted (Dreyfus, 1991). In taking up this task, Heidegger shifted his focus from a purely phenomenological description of *acts* and structures of consciousness to a phenomenological-hermeneutic interpretation of *activity* and structures of being. In the end, as hermeneutic, Heidegger's

phenomenology proceeded from Dasein's thrown facticity toward the understanding and determination of the meaning of being itself. As such, his analytic of Dasein took the form of a fundamental ontology in contrast to the epistemological focus ascribed to Husserl's transcendental phenomenology.

Gadamer's Hermeneutic Phenomenology

Gadamer (1976) built on Heidegger's exposition in his own philosophical hermeneutics. He saw hermeneutics as a science of understanding and interpretation, and clarified how understanding takes place. In adopting Heidegger's exposition of the fore-structure of understanding, Gadamer situated it within a historical tradition of culture and language. In fact, he broadened it into a conception of culturally shared "prejudices," which make up a given "horizon of understanding" within one's "hermeneutic situation." By hermeneutic situation he meant "the situation where we find ourselves in relation to the tradition we endeavour to understand" (p. 302). In our case, for instance, we can speak of the Western, Christian, capitalist, or rationalist traditions, with all the practices and prejudices they entail (e.g., individualism, entrepreneurship, democracy, etc.). In each instance, therefore, we find ourselves as already present within a given tradition and its horizon of understanding as revealed to us through our shared way of being. Thus as Westerners, for example, we already have an understanding of what democratic freedoms are and what they stand for, even if we are unable to clearly articulate their underlying tenets.

Since we find ourselves as already having been embedded in a given social context of customs, practices, prejudices, and beliefs, Gadamer suggested that we couldn't, in fact, fully understand ourselves unless we endeavoured to understand ourselves as situated in the historical and linguistic tradition of our culture. In his view, cultural content, found in works and texts born out of tradition, provides us with such a horizon of understanding through which our world-view is shaped. Moreover, this cultural horizon is by no means limited to the meaning of written works or texts, but extends to encompass a broader realm of human

communication, including verbal dialogues (Mook, 1999), as well as a much more expansive dialogical relationship between our present times and the historical past - that is between one's own horizon of understanding and that of one's tradition. For Gadamer, therefore, both the interpreter and the tradition he wishes to understand maintain their own horizons. In the dialogical process of interpretation, however, the interpreter bridges the gap between the horizon of his present situation and the horizon of the cultural past. Accordingly, Gadamer (1960/1989) insisted that, "understanding is not to be thought of so much as an action of one's subjectivity, but as the placing of oneself within a tradition, in which past and present are constantly fused" (p. 293). In this process of co-constitution or convergence, therefore, coming to a shared understanding between the interpreter and the cultural tradition amounts to what Gadamer called the *fusion of horizons*. Here the interpreter, initially aware of the distance between his hermeneutic situation and that of the cultural tradition, finds common ground with the cultural text and comes to a new understanding and interpretation of a more encompassing and comprehensive horizon of meaning, or "a horizon of interpretation" (p. 397). From this position, understanding, as hermeneutic, has not only a dialogical character but also a circular structure, which Gadamer described as...

the interplay of the movement of tradition and the movement of the interpreter....
[where] tradition is not simply a permanent precondition; rather, we produce it
ourselves inasmuch as we understand, participate in [its] evolution... and hence
further determine it ourselves. Thus the circle of understanding is not a
"methodological" circle, but describes an element of the ontological structure of
understanding (p. 293).

Ultimately, therefore, Gadamer suggested that in the hermeneutic process of the interpretive interaction, the interpreter's horizon fuses with the meaning of the cultural text of tradition where he gains a richer and a more profound understanding of not only the cultural tradition itself, but also of himself.

Ricoeur's Phenomenological Hermeneutics

Heidegger's (1927/1996) analytic of Dasein was centred on the ontological question of the meaning of being. Moreover, his whole project in *Being and Time* aimed at establishing a fundamental ontology. Throughout his thesis, however, he always maintained the ontic-ontological priority of Dasein. He insisted for example that, "*Initially* the who of Dasein is not only a problem *ontologically*, it also remains concealed *ontically*" (p. 116). Furthermore, he surmised that, for their part, the roots of the existential analysis are ultimately ontic. In fact, on the second last page of *Being and Time* he enquired rhetorically: "Can ontology be grounded *ontologically* or does it also need for this an ontic foundation...?" (p. 436). An adequate and unpretentious response to this question, I would argue, is to be found in Ricoeur's (1981/1989) confrontation with the epistemological question of explanation within the hermeneutic process of understanding and interpretation.

Ricoeur agreed with Heidegger and Gadamer in that phenomenology and hermeneutics belong together. In contrast to their ontological focus, however, he believed it necessary to return to epistemological questions and to reconsider them in the interplay of understanding and explanation. It was Dilthey who first distinguished explanation from understanding as he applied them within natural and human sciences respectively (Palmer, 1969). Ricoeur saw the distinction as overstated and suggested that explanation has a rightful place in human sciences such as linguistics, history or psychology. In his theory of interpretation he transcended the explanation-understanding dichotomy, and incorporated explanation in the hermeneutic process of understanding and interpretation. It is important to note here that the notion of understanding in terms of epistemological inquiry, as explicated by Ricoeur, is different from Heidegger's and Gadamer's ontologically revealed structure of understanding as Dasein's mode of disclosedness in the determination of its being. It was from an ontically oriented position, therefore, where Ricoeur postulated that in order for human sciences to be considered scientific, a certain degree of objectivity at the level of written texts and human activity is required.

Drawing from structuralism, and using mediation by the text as a model, Ricoeur suggested that a text as a work of discourse incorporates the dialectic of an actually realized event and the text's enduring meaning where, in turn, the meaning itself includes its own dialectic of sense and reference. In considering the meaning of a text, therefore, Ricoeur emphasized that the sense of discourse (i.e., what it says) is surpassed by the reference of the meaning unfolded in front of it (i.e., what it talks about). Approached from this perspective, the process of interpretation of texts considers explanation as being directed toward the analytical structure of texts with a certain level of *distanciation*, where the meaning of a text does not coincide with the subjective intentions of its author, but instead opens up a world unfolded in front of it – a world, which one could “inhabit,” and which reveals new possible modes of being. Viewed in this way, Ricoeur considered *distanciation* as part of the initial movement in the progression of understanding itself. The subsequent act of self-interpretation is what he saw as the culmination of the movement of understanding, which he characterized in terms of *appropriation*. That is, by appropriation, Ricoeur explained,

we [may] understand the process by which one makes one's own what was initially other or alien. What we make our own, what we appropriate for ourselves, is not an alien experience or distant intention, but the horizon of the world towards which a work [of a text] directs itself.... In this respect, mediation by the text is the model of a *distanciation* which would not be simply alienating... but which would be genuinely creative (pp. 111-178).

Essentially, in relating his concept of *distanciation* to Gadamer's notion of belonging to a historical tradition, Ricoeur suggested that cultural texts of tradition, in addition to providing us with a horizon through which our world-view is shaped, impart thematic representations of that world-view. Once produced, they take on an autonomous character with a fixed meaning open to a plural reading. In short, Ricoeur showed that in reading a text (or a meaningful act for that matter) we can also read into it and make it our own, for in being interpreted, the text allows for its own meaning, separate from that of its author, to emerge

and disclose a horizon of the world toward which a text directs itself. In other words, what one appropriates is a new world proposed by the text, in which one could, using Heidegger's language, project one's ownmost possibilities. In this sense, to interpret a text is to explicate a new way of being in the world unfolded in front of it.

Ricoeur thus argued that what must be interpreted in the text is not just the structural sense of the text's internal organization of its content, but a proposed world unfolded in front of the text where one could project one's possible modes of being. Accordingly, he insisted that to understand oneself is to understand oneself in front of a given text (including the cultural text of tradition), not by imposing our capacity for conjecture but by exposing ourselves to the text itself so as to receive, what he called, an *enlarged self* from the apprehension and appropriation of the possible worlds the text unfolds, and the potential modes of being it affords.

The dialectic of sense and reference, as well as that of distanciation and appropriation, serve as the bases of the opposition between explanation and interpretation. In his theory of interpretation, therefore, Ricoeur essentially returned to the epistemological problematic of explanation seeing it as an essential phase in self-understanding. He suggested that explanation and understanding, though operating on different levels, are not two opposing methods. In fact, as he pointed out, in their reciprocal movement, understanding precedes, accompanies, and encloses explanation, and for its part explanation, on an epistemological level, enhances understanding (Ferraris, 1988/1996). In this sense, Ricoeur (1981/1989) suggested that the circling movement between explanatory interpretations of the text followed by self-understanding against the text, constitutes the hermeneutic circle. In this movement, he further contended, we proceed from a first order reference to a second order reference, i.e., from naïve interpretations to critical interpretations, or from surface interpretations to depth interpretations. In fact, Ricoeur argued that, "the abolition of the first order reference... is the condition of possibility for the freeing of a second order reference, which reaches the world... at the level that Husserl designated by the expression *lebenswelt*

[life world] and Heidegger by the expression ‘being-in-the-world’” (p. 141). In relating back to the ontological tradition of Heidegger’s thought, therefore, Ricoeur distinguished the interpretive project of phenomenological-hermeneutics as “the explication of the being-in-the-world displayed by the text” (p. 112). In so doing, he made tangible and concrete the ontic-ontological project which Heidegger initiated, but never fully realized, and in the context of which we shall now proceed in our own inquiry into the meaning of authentic being.

Methodological Considerations

The hermeneutic-phenomenological method employed in this thesis was necessitated by the subject matter here investigated, i.e., the phenomenal disposition of Dasein’s authentic, as well as inauthentic modes of being. Identified in this way, therefore, it is being as such, and not a self, a subject, selfhood, or subjectivity, which is to be considered and inquired into as either authentic or inauthentic.

According to Heidegger (1927/1996), in moving toward the understanding of Dasein’s complex ways of being-in-the-world, a methodological shift from phenomenology to hermeneutics is required. This initial shift is necessary to establish the primary project of Dasein’s disclosure within an ontological, as opposed to an epistemological, frame of reference. Hermeneutics as the psychology of Dasein, therefore, must first and foremost be seen as Dasein’s mode of being. In this sense, it is Dasein itself that calls for a hermeneutic inquiry. That is, it is from within the hermeneutics of Dasein that we can adequately shift back to the epistemological project of interpretation within the mode of knowing in order to study the demonstrative logos of Dasein’s socio-cultural activity. Approached in this way, argued Ricoeur (1974), “hermeneutics would discover a manner of existing which would remain from start to finish a being-interpreted” (p.11).

Rational for a Hermeneutic-Phenomenological Approach.

The hermeneutic-phenomenological method adapted in this thesis rests on Heidegger's ontological foundation of Dasein as being-in-the-world. It was Heidegger who initially acknowledged that phenomenological depth of interpretation of Dasein is possible only from the perspective of an ontological foundation of being. Approached from this perspective, therefore, when we speak of authenticity (as well as inauthenticity), we shall speak about it in terms of Dasein, or in terms of Dasein's ways or modes of being-in-the-world. Furthermore, by considering authenticity as a phenomenon, or as phenomenal, we shall inquire into it, not in terms of behaviours, cognitions, or character traits, but rather as experientially-lived.

In this context, hermeneutic phenomenology is neither grounded in human consciousness (i.e., Ego or mind) nor in the human categories of understanding (e.g. perception or cognition), but rather in the manifestness of things and phenomena as they are encountered in our being. In this sense, the hermeneutic approach is not a process of hypothetical abstraction but instead the deliberate unfolding or unlayering of the meaningful and intelligible ways of being in the world as they manifest themselves to us in our everyday lives. Initially, therefore, we shall follow the task of Heidegger's hermeneutic phenomenology in an attempt to unveil and unlayer the covered-over ontological constitution of Dasein, as well as reveal Dasein as understanding in the disclosedness of its being. Accordingly, following the literature reviews, the main structure of the three consecutive chapters shall adopt the movement of Dasein in its disclosedness *as understanding*, that is:

1. From the initial ontic grasp of the cultural and historical ground of its existence (i.e., mindset) in chapter 4
2. ... to a pre-ontological understanding of itself as a being grounded in the socio-cultural existence (i.e., mindedness) in chapter 5

3. ... and culminating in the ontological understanding of itself as being, in the sense of belonging to, and not being bound by, the socio-cultural existence (i.e., mindfulness) in chapter 6

Expressed in this way, the movement of Dasein from minded understanding to that of mindful understanding is designed to reflect the movement from an inauthentic to an authentic mode of being-in-the-world.

In the first phase of our interpretation, we shall follow both Heidegger and Gadamer's exposition of understanding in terms of our technologically-enframed situatedness, as well as of our technocratic, hermeneutical situation. In examining our horizon of understanding as already embedded within a social context of customs, practices, prejudices and beliefs, we will attempt to also disclose our cultural horizon of understanding grounded in the modern tradition of technological enframing. By inquiring into the common, technologically-enframed social structures (e.g., professions, institutions), and the shared technocratic ways of being-in (e.g., pragmatic, instrumental), this phase of the dialogical process of interpretation will aim to explicate not only the modern-day world of Dasein's being-in, but it will also aim to bridge the gap between the horizons of understanding of our present situation and that of our cultural tradition. If successful, this process of convergence, or fusion of horizons, will serve in providing us with an enriched understanding not only of our tradition, but also of ourselves within it. This step in the interpretive process is crucial if we are to understand and approach the world of Dasein's authentic, or inauthentic being-in.

In the second phase of our interpretation, we shall look to Gadamer's and Ricoeur's expansion of Heidegger's hermeneutic treatment of being by situating the analysis of Dasein in the cultural tradition and its thematic representations, making possible the study of Dasein in terms of a dialogical text against the epistemologically demonstrative background of its social context. In light of its situatedness in the technologically advanced Western world, the dialogical text of modern-day Dasein will be presented in this study as reflecting the technocratic mode of its being. Viewed from this perspective, Dasein as text will be

hermeneutically interpreted on the basis of its dialogical interaction with its technologically-enframed world of being, i.e., in the way it is engaged with its technologically encompassing situatedness. Similarly, the con-text of Dasein's being in the technologically-enframed world will be examined phenomenologically by analysing a number of social and cultural examples of technocratic ways of being within the personal and public domains of everyday life (i.e., education, media, healthcare, etc.).

Ultimately, what we are aiming for is to interpret and gain an understanding of a particular mode of being of modern-day Dasein, i.e., its technocratic mode of being in terms of its authentic and inauthentic possibilities. Moreover, and within the said parameters, with each chapter, we shall peel away (i.e., interpret) the onion of our understanding of authentic (as well as inauthentic) being-in-the-world of the modern-day technocratic Dasein, both in terms of the epistemological (ontic) sense of knowing, and the ontological reference to its being. Also, the two layers or phases of interpretation, as outlined above, are not to be considered here as occurring successively, but rather as taking place simultaneously within the hermeneutic process of explanation and understanding, as well as between our interpretation of the cultural text of tradition and that of self-interpretation.

Research Questions

Given the epistemological and ontological parameters of this study, the proposed thesis has three central research questions, which it aims to address in three consecutive chapters respectively.

1. What is the cultural and historical con-text of the technologically-enframed tradition of the modern-day Dasein?

This first question addresses an ontic grasp of our technologically-enframed world. The issue of technological enframing can be viewed here as being explored in terms a cultural and historical text, where technology (a form of language) is enframed (encoded) and

appropriated within Dasein's technocratic mode of being (technologically-enframed discourse).

2. In what way is the modern-day Dasein addressed by the cultural con-text of our technologically-enframed tradition so as to allow the revealing of its inauthentic mode of being?

This second question aims to address the initial understanding of ourselves as disclosed in Dasein's average, everyday, technocratically-minded mode of being in the they-self. It is meant to reveal the embedded socio-temporal existence among other Daseins, with particular (technologically-enframed) cultural and traditional entanglements associated with it. As such, it will portray Dasein in its facticity of being delivered over to a shared world of public practices and prejudices in which Dasein's absorbed way of being-with will be suggested as concealing or covering-over its ownmost potentiality for being itself.

3. In what way can Dasein address the cultural con-text of technologically-enframed tradition so as to reveal the possibility of its authentic mode of being?

This final question aims to address the paradoxical reality with respect to Dasein's thrown facticity of enframed being-in as opposed to its ownmost potentiality of being itself. The idea of movement from technocratic-mindedness toward technocratic-mindfulness will be offered to suggest a possible shift in Dasein's mode of disclosedness of itself to itself from an ontic and pre-ontological grasp of its thrown facticity to an enriched understanding of its facticity as potentiality.

Validation Criteria for the Study

As quantitative research seeks causal determination, prediction, and generalization it relies heavily on psychometric methodology based on validity, reliability and generalizability (Kvale, 1995). Qualitative research, on the other hand, by relying on reflection, description, and the analysis of meaning, seeks instead illumination, understanding and interpretation.

Moreover, in being concerned with phenomena, and the general themes of human existence, it does not aim to explain behaviours or cognitions but rather to grasp the meaning of human experience. For example, in Hamlet's call of despair, or Salieri's lament over his mediocrity, we recognize our own feelings of anguish or limitation. Such themes, when taken up by hermeneutic phenomenology, are "predicated on a methodology that undertakes to reveal or disclose what is not merely private or particular to one individual Dasein, but lays bare those insights and principles that are valid for every person who takes time and trouble to reflect upon his own existence and the conditions of his being" (Keogh, 1978, p. 25). Similarly, the theme of authenticity here examined rests on the ontological foundation of human existence and as such can be viewed as a viable *general* feature of Dasein's *particular* way of being.

In the present study the psychometric criteria of reliability, causality, and generalizability, as employed in quantitative research, will be replaced with descriptive and interpretive criteria of congruence, convergence and coherence, as utilized in qualitative research (e.g., Giorgi, 1970; Karlsson, 1993; Kruger, 1981; Kvale, 1995). Within the framework of the current hermeneutic-phenomenological inquiry, therefore, the criterion of congruence will be utilized to establish the suitability of the approach to the phenomena being studied. The criterion of convergence will be used to observe the coming together of the disclosed commonalities found within the socio-cultural structures of the tradition being analysed. And finally, the criterion of coherence will be employed to observe the soundness and internal consistency of meanings and understandings arrived at in the hermeneutic process of interpretation. Based on these criteria, the goal of the present study will be to arrive at an understanding and interpretation of the meaning of authentic (as well as inauthentic) being as it is experienced in the context of our modern-day, technologically-enframed world. Furthermore, since human products and activities can be understood in terms of texts and text-analogues (Ricoeur, 1976), in utilizing the phenomenological-hermeneutic approach, this study will also seek to interpret selected externalized expressions of human experiences as they are objectified in the cultural texts of the instrumental, socio-

cultural structures of the modern-day, technologically-enframed tradition. The outcome of this inquiry will then be validated by demonstrating that the arrived-at interpretations meet the above outlined criteria of congruence, convergence and coherence in terms of their logic of probability. "In this sense," as Ricoeur (1981/1989) pointed out, "the validation is not verification.... [but] an argumentative discipline comparable to a juridical procedures of legal interpretation. It is a logic of uncertainty and of qualitative probability" (p. 212).

Finally, when we question the validity of the positivistically and empirically established statements about cognitive functions, structures or processes, as well as personality traits or character attributions, we realize that in each case their validity rests not on the ontological truth of their underlying assumptions, but on the usefulness of theoretical constructs and the reliability of empirical methodologies they employ. In the present study, however, we begin not with a theoretical or operationalized assumption of being but with its facticity. As such, what we need to validate (in the sense of logic of probability) is not the facticity of our being, but our interpretations of the many thematic structures we assign to it (e.g., the they-self, the ownmost self, authentic and inauthentic modes of being), and the way those interpretations reflect and speak to our present-day facticity of being itself.

2. LITERATURE REVIEW ON AUTHENTICITY

Having emerged at the turn of the 20th century, the notion of authenticity, as we understand it today, is relatively new. In actual fact, it is predominantly modern. The first philosopher who gave it considerable attention, and subsequently made it a cornerstone of his philosophy was Heidegger. It was not Heidegger's thought on the topic, however, which influenced the emergence of the current psychological ideal of a true or authentic self. This ideal, as recognized by Taylor (1991) and Guignon (2004), resulted from conceptions about an inner process of self-fulfilment and self-realization – conceptions already expressed in philosophical and psychological viewpoints of the 18th century Enlightenment, and the 19th century Romanticism. Indeed, as Guignon remarked, “part of the appeal of the idea of authenticity comes from the fact that the notion grows out of a tradition of practices and thought that have been profoundly important in Western civilization” (p. X).

In light of this tradition, therefore, the present review will attempt to provide a chronological sketch of the ideas and concepts, which gave rise to the modern understanding of authenticity. It is by no means a comprehensive account as only those works that were theoretically grounded were included. The authors here presented, therefore, were chosen for their more in-depth considerations on the matter.

Authenticity in Philosophy

As we explore the ideas of the following thinkers we should be aware that it is we, and not they, who speak of authenticity. In other words, it is we who lift their ideas out from their original context and adapt them to fit our present-day understanding that the notion of authenticity. We should also recognize that to this day no unified definition of authenticity has ever been agreed upon, whereby various definitions are used in an informal, unstructured and unsystematic manner.

Philosophical Roots of the “Authentic” Self

The first clear articulations of a true self, which found their way into our modern conceptualization of authenticity, can be traced back to Rousseau’s exposition on irrationality, autonomy, and the psychology of the inner self – all framed within an overarching context of his distrust for social rule and order (Ferrara, 1993; Trilling, 1972). Reflecting the climate of his times, Rousseau (1755/1992; 1762/1911) expressed a commonly shared viewpoint that “Men are depraved and perverted by society” (1762/1911, p. 4), where science, art, cultural institutions, and even our civilization have in essence corrupted the humankind. He also held, however, that we could recover our natural, inner state of being which, in his view, was morally and ethically superior to that of social enculturation. On the whole, he espoused the idea that the majority of ills caused by society could be remedied by a return to a simpler way of life intended by nature. Thus, to free ourselves from the restraints of civilization, he argued, we ought to discover our inner truth, and view it as more fundamental and primary to those objective truths provided for us by our culture or society. Ultimately, he raised the level of consideration for the inner life of subjectivity, irrationality, and emotional expression to convey its importance and superiority to that of purely rational thought. His views on liberation from social restraints, and his project of self-exploration became the two main pillars of his philosophy, which resonated not only with the thinkers of his day, but also with those who have followed afterwards (Guignon, 2004; Taylor, 1991).

Kierkegaard (1845/1988), the father of existentialism, has also attempted to shift the focus from the socially-prescribed, objective knowledge of rationalism to the subjective knowledge of personal existential concern, particularly in terms of passionate commitment to one’s religious obligations. As he put it, “I must keep to myself, and to the truth.... I must grasp the eternal truth” (p. 653). Kierkegaard (1846/1995) saw that in a society ruled by rationalism and intellectual abstraction, the genuine self becomes impersonal, anonymous, and lost to the collective ethos of objectivism. In effect, he proposed that intellect and reason are the main ways in which people escape their own true self. As a counter-measure to the

rationalist attitude, therefore, he suggested a return to the origin of our selfhood, which according to him is to be found in the “world of inwardness” (p. 384), i.e., a world of our feelings, as well as our religious beliefs and passions. In the end, Kierkegaard’s ideas spoke to the very personal, albeit spiritual self-creation marked by inward choices, and a leap of faith into religious life (Golomb, 1995).

Unlike Kierkegaard, Nietzsche (1882/1974) rejected the possibility of self-creation in a world of religious beliefs. To him “God is dead. God remains dead... [as] we have killed him” (p. 125) through the manipulative religious values of a “slave morality” (1886/1990, p. 260). Morality itself, argued Nietzsche, whether religious or social, represents a “herd instinct in the individual” (p. 116). In other words, outer-directed morality tends to mould individuals to become a function of a given herd, and in so doing generates in the masses blind conformity. Nietzsche attempted to assist us in overcoming these oppressive cultural tendencies by uncovering our own creative powers as presented within his concept of *Übermensch*, or Overman. Overman stood for an ideal being, who in overcoming culture’s oppressions, attains maturity and becomes the free author of his/her own self. Nietzsche thus maintained that all human behaviour is motivated by the will to power, which when realized in its positive sense, becomes manifest in Overman’s establishment of independence, creativity, originality and true dominion over oneself.

Camus (1942/1955) has similarly rejected Kierkegaard’s religious “leap of faith,” and like Nietzsche adopted a defiant stance against the nostalgic yearning for salvation. He discarded both the nihilistic as well as the transcendental views of existence and asked that we accept the absurdity of life without searching for external meaning. In fact, Camus suggested that it is not the human existence that is absurd but the “confrontation of the irrational and the wild longing for clarity whose call echoes in the human heart” (p. 24). He maintained that such annihilating attitudes are forms of escape that transform us into alienated strangers to our own lives, and in turn encouraged adopting an “art of living,” i.e., a

fashioning of life as if it were a work of art (Sprintzen, 1988) – a theme similarly explored in Nietzsche’s writings (Guignon, 2004).

Finally, in echoing Rousseau’s, Nietzsche’s and Kierkegaard’s views, Sartre (1943/1957) spoke of how social influence perpetuates our tendency to live inauthentically, or as he put it, to live in “bad faith.” This, he claimed, occurs when we relinquish the responsibility for our own meaning, while accepting the assumed meanings of our culture. As such, “bad faith” is a socially-driven, self-deceptive lie, where I lie to myself about my “absolute freedom” of choice, whilst opting to follow societal authority. The determinate mechanisms of modern society, which compel us toward this way of existence lead to what he described as the loss of self. And since bad faith, as well as good faith, possess an inherently public character, Sartre suggested that we should turn to political action directed against the social mechanisms responsible for such life-patterns, which manifest or provoke acts of bad faith (Golomb, 1995). According to Sartre (1969), therefore, to live in good faith means to resist social pressures and be nothing but what one is.

This turn toward oneself, portrayed through ideas of self-recognition, self-fulfillment, or self-creation was recognized by Taylor (1991) as being representative of a turning away from traditional values and social commitments in an attempt to generate a form of modern identity grounded in self-centred subjectivity. In *The Ethics of Authenticity*, originally titled *The Malaise of Modernity*, Taylor explicated how in the Age of Romanticism we have recoiled from a socially-rooted identity oriented toward communal life, instead opting for one of inward orientation, of self-fulfillment, and inner expression, giving rise to a moral ideal (as expressed by the above mentioned authors) of being true to oneself. This powerful ideal, he argued, “accords crucial moral importance to a kind of contact with myself, with my own inner nature, which it sees as in danger of being lost, partly through the pressures toward conformity” (p. 29). In short, the central issue emerging from this moral ideal is the issue of autonomy, which could also be described in terms of personal freedom, liberty, or pursuit of

happiness – all self-centred values, which to this day continue to impress on our collective Western psyche.

Philosophy of Authentic Being

Heidegger's philosophical explication of the notion of authenticity did not take root in the modern climate of a dualistically oriented, self-centred mentality. Unlike his predecessors and contemporaries, he was not on the quest for the holy grail of the one true self. His quest was a simpler one, but by no means any easier. Heidegger's aim, as outlined in the previous chapter, was to return to the question of the meaning of being. It was from that starting point that his conceptualization of the notion of authenticity took place. He was the first philosopher who explicitly defined and dealt with the issue of authenticity as being grounded within the ontologically determined socio-historical context of our being and existence. Furthermore, his conceptualization differed from those of the previous authors here discussed in two other major ways. First, Heidegger (1927/1996) viewed the pursuit of one's meaning of being authentic not as an ontic but as an ontological project. And second, from this ontological perspective, he clearly demarcated the a priori structures of Dasein's authentic and inauthentic modes of being as situated in, not opposed to, its socio-historical constitution. Approached from this point of view, he insisted that inauthenticity itself is not a negative mode of existence, and like authenticity, is a basic a priori "structure of existentiality" (p.44). As such, the two modes can be differentiated ontologically as distinct, yet at the same time viewed as equally valid, natural ways of being.

Inauthentic-Being-in-the-World

The existential view of inauthenticity, as articulated by Heidegger, is not meant in a pejorative sense. In fact, Heidegger (1927/1996) stressed that the term "does not express any negative value judgement... [and stands for] being lost in the publicness of the they" (p. 175). In other words, Dasein inevitably finds and defines itself in public practices, which it shares with others in the communal existence of the They. Inauthentic Dasein, therefore,

stands for being absorbed by, and fascinated with, everyday activities to the point of “falling prey to,” or “being lost in,” the prescribed average everydayness of the They. This a priori structure of existentiality, then, establishes the inauthentic mode of being as much as it reflects Dasein’s falling prey to the world and its simultaneous fleeing from “one-self.” Essentially, what Heidegger suggested was that in “falling prey” Dasein “falls away” from its potentiality-for-being-itself. It becomes lost in the They, and for the most part begins to grasp itself “in terms of the possibilities of existence that ‘circulate’ in the actual ‘average’ public interpretedness of [itself]” (p. 383). This inauthentic mode of being, however, cannot be taken as a loss of oneself, but has to be understood in the proper context of Dasein’s existential constitution.

For every Dasein the inauthentic mode of being is inevitable, as in each case it is shaped and bound by our existential structure of the they-self. For this reason, we cannot simply escape the they-self to retrieve our authentic possibilities, as it is the they-self itself, which gives ground to all possibilities. Similarly, we cannot disengage from what Nietzsche referred to as “the herd,” nor can we disown our socially enculturated character of publicness. Ultimately, we cannot turn away, run away, or liberate ourselves from the they-self, simply because we *are* the they-self. The issue, therefore, is not to transcend the thrown character of our publicness (no matter how disconcerting it may be), but rather to approach it in the right way. As Guignon (1984) put it: “To say that Dasein is essentially the Anyone [i.e., the they-self]... is to say that all of its possible ways of understanding itself and its world are drawn from the social content into which it is enculturated” (p. 334). In other words, there is no true self to be found outside of its social context, but rather there is an ownmost-self to be disclosed to itself within the possibilities of the they-self.

Authentic-Being-in-the-World

While describing the inauthentic Dasein as fleeing from its ownmost possibilities, Heidegger (1927/1996) has conversely portrayed the authentic Dasein as moving toward

these very possibilities, even in the inauthentic world of the They. Put in another way, in realizing the inevitability of its thrown condition, authentic Dasein continues to choose from the socially available possibilities but does it in such a way so as to disclose and manifest to itself the understanding of its ownmost Self, thus making possible its “authentic-potentiality-for-being” (p. 268).

According to Heidegger, authenticity, although seen as an a priori mode of existence has to show or reveal itself to Dasein as a possibility that is covered over in being caught up in inauthenticity. On the other hand, for authenticity to emerge it involves a shifting away from the inauthentic. And since both are a priori modes of existence, the distinction between them appears to be subtle at best, being disclosed only in Dasein’s intention to fully reveal itself in its possibilities. However, “because Da-sein is lost in the ‘they’,” as Heidegger contended, “it must first find itself. [But] in order to find *itself* at all, it must be ‘shown’ to itself in its possible authenticity” (p. 268). The shift from the inauthentic to the authentic, therefore, can be seen as an intended shift from the world of possibilities in which Dasein finds itself, to the world of possibilities where Dasein actually chooses itself, i.e., chooses its potentiality-for-being-itself. Viewed from this perspective, authenticity emerges as an explicit and intended recovery, or as a taking-back of one’s own-self that has been covered-over or lost to the inauthentic modality of the they-self.

Another important issue related to the recovery of the ownmost possibilities, however, has to do with the fact that the recovery itself is not to occur simply, or solely, within an inward sphere of subjectivity, as implied by the earlier cited authors. Heidegger recognized that the possibilities for our ownmost being, though covered over by our absorption in the traditionally prescribed ways of being in the They, could nonetheless be recovered within a new horizon of understanding, where instead of recoiling from the impositions of an immediately given tradition, one could choose to root oneself within a less obvious, but more grounded, historical heritage. As Heidegger put it, we are “... constantly compelled to face the possibility of disclosing an even more primordial and universal

horizon... [where] the primordial occurrence of Dasein... lies in authentic resoluteness in which it hands itself down to itself... in a possibility that it inherited and yet has chosen” (pp. 26 - 384).

With the notion of the handed down historical heritage, Heidegger expressed a new understanding of our situatedness as going beyond the thrown character of our being as shared with others in a traditional world of the They to a type of belonging concealed in historical heritage of Dasein’s historicity. We can see, therefore, that whereas we are thrown into our tradition, we are handed down our heritage. As such, it is not our traditions but our heritage which grounds us, and where we find our “true,” inherent depth. From this perspective authenticity is not to be found in uprooting oneself from a given tradition of social entanglements, as proposed by Rousseau, Kierkegaard, Nietzsche and Sartre, but in rooting oneself in one’s heritage. And whereas traditions can pass on a particular way of being, heritage, handed down through generations, imparts the meaning of being itself. Traditions, like trends, change with the times. Lacking in inherent stability, they invite defiance and insubordination. Heritage, on the other hand, and the meanings it conceals, endures over time and grows deeper with each generation. In the context of Dasein’s historicity, therefore, the theme of temporality in *Being and Time*, acquires deeper meaning and significance, which appears to be lost even on Sartre, as his existential explication of “uprooted” beings in *Being and Nothingness* implies.

In this light, Heidegger’s work can be recognized as being both, a continuation of the theoretical tradition, and a criticism of self-contained subjectivity that is uprooted and disengaged from its socio-historical context. In his response, he essentially put forward that, “only authentic temporality... makes... authentic historicity possible... [where] Dasein in and with its ‘generation’ constitutes the complete, authentic occurrence” (p. 385). This means, that only in being approached within the concrete historical context of tradition and heritage can Dasein’s complete authentic being be disclosed and realized.

Authenticity in Psychology

As can be observed from our present-day perspective, Heidegger's exposition of authentic Dasein has not been readily embraced within the field of psychology, since for the most part it remains within the positivistically oriented and dualistically-enframed state of "mind." Motivated by scientific ideology, and guided by a fractured view of subjectivity, therefore, mainstream psychology endeavours to primarily concentrate on the dynamics of a dis-eased subject of modernity, rather than on the potentialities for its authentic mode of being. In the following sections, therefore, we shall examine several views of authenticity, or the psychological issues relating to it, that have been articulated in their respective psychoanalytic, humanistic, existential and hermeneutic approaches.

Psychoanalytic Articulations

Freud never wrote about authenticity, or about the authentic or inauthentic self. Interestingly enough, however, like his philosophical counterparts, he did not fail to recognize the importance of social influence on the makeup of an average individual. In his later writings he stressed the undeniable effect of social pressures on the mental life of its members. He even went so far as to say that, "under the influence of cultural urges, some civilizations, or some epochs of civilization - perhaps the whole of mankind - have become 'neurotic'" (Freud, 1930/1961, p.91). The parallels between Freud's repressive character of a neurotic society and Sartre's social mechanisms of bad-faith are too great to ignore. Both positions imply that to guard against neuroticism, or bad-faith, individually and as a society, we must not only discard but also refuse to accept the repressions which are imposed upon us by the constraints of thwarted conventional standards, norms, or morality, which, when left uncontested, we inevitably impose upon ourselves.

Jung (1964) did not have as pessimistic a view of our social makeup as did Freud, though he too acknowledged that the modern individual "is blind to the fact that, with all his rationality and efficiency, he is possessed by 'powers' that are beyond his control" (p. 71).

He further suggested that every mental system, rather than being conflictual, strives to equalize or harmonize its life forces, where even the conscious and the unconscious are not necessarily in opposition to one another, but instead complement one another to ideally form a totality, which he termed the Self. In fact, Jung (1948/1969) believed that our primary goal in life is to achieve self-realization, a harmonious blending of many opposing components and forces within the psyche, leading one to achieve a state of individuation or wholeness of the self. It is in his notions of individuation and self-realization that we recognize Jung's view of what can be described as a movement toward authenticity, portrayed by him as a striving to reconcile the psychic opposites in an attempt to establish the Self within the personal and collective world of conscious and unconscious polarities.

Humanistic Articulations

Though not a coherent body of doctrine, humanistic psychology clearly aims to explore issues of human health and exceptional functioning. This change in direction away from the pathological focus of psychoanalytic psychology can be viewed as a shift from an analysis of the inauthentic and neurotic to the authentic and healthy human functioning.

Maslow (1954) championed the view that human beings are not bound by their biological instincts or cultural pressures, but are essentially creative and highly motivated to pursue needs aimed not only at physical survival but also at an emotional, intellectual and aesthetic enhancement. Like the existentialists, he focused on the potential of human existence. Maslow's self-actualizing individual can find its reflection in Nietzsche's Overman, and in Heidegger's authentic Dasein. In contrast to the ontological basis of existentialism, he was fundamentally concerned with the understanding of human nature as rooted in the value of inner motivation, and the promise of an enhanced life it carries. Maslow (1962) proposed that from a motivational perspective, striving for self-actualization is an indicator of psychological health. In fact, he described the actualizing process as "a development of personality which frees the person from the deficiency problems of youth,

and from the neurotic... problems of life, so that he is able to face, endure and grapple with the 'real' problems of life" (p. 109). The self-actualizer, therefore, can be seen as being on a self-motivating journey aimed at eliminating personal and social deficits in the quest of fulfillment of one's greatest human potential.

Maslow's ideas about self-actualization were similarly shared by Rogers (1963) who believed that all individuals strive toward personal fulfilment. He did however venture further from Maslow in proposing that all living beings, not only humans, possess what he called the "actualizing tendency" or an innate, built-in motivation. This tendency, he suggested, is the driving force in all of life, where in human beings it moves them "in the direction of greater independence or self-responsibility" (Rogers, 1951, p. 488). Conversely, he claimed that in succumbing to the "societal conditions of worth" that may be out of synch with our experiencing, we are bound to develop an incongruent self. To aid us in the evaluation of our experiences that are in synch with our actualizing tendency, we are equipped with what he called the "organismic valuing process" – a method of intuitive assessment and coordination of experiences, which are in accordance with our organism's tendency toward self-actualization. By living in accordance with the organismic valuing process, rather than the social conditions of worth, Rogers argued that the gap of incongruity would diminish leading one toward becoming a fully functioning person. In the end, both Maslow and Rogers focused on the development of the Self, where Maslow's self-actualized individual was mirrored by Rogers' notion of a fully functioning person, as both these formulations express the idea of an authentic self in their respective models of ideal mental health.

As surmised from the above explications, humanistic psychology has for the most part reflected, and further developed, the philosophical positions of the Romantic view of human nature as inherently good, although still seen as needing to free itself from social constraints in order to realize its inner potential. Viewed in this way, the character of self-realization, self-actualization, or self-fulfillment requires from us that we do not walk in step

with society, but rather act in self-serving ways and, should the need arise, in opposition to social demands. It is from this type of individualistic perspective, according to Taylor (1991), that the modern “culture of authenticity” has taken its cue in further expanding the idea of a true authentic self, which, as Guignon (2006) noted, is additionally reflected in the rapidly expanding field of pop-psychology, or its related self-help industry. In Taylor’s view the culture of self-fulfillment reflects, if only in part, an ethical aspiration, not of authenticity but of the ideal of authenticity. It is this ideal, he claims, which in turn sustains the self-centred approaches which “tend to see the fulfillment as just of self, neglecting or delegitimizing the demands that come from beyond our own desires or aspirations, be they from history, tradition, society, nature, or God.... In other words, [they foster] a radical anthropocentrism” (p. 58). Having been appropriated and accepted as natural, this anthropocentrism is now practically inherent in our average everyday understanding. Moreover, the newly emerging theories and approaches, whether in pop-psychology, or traditional psychology, continue to adopt as their aim the well-being of a self-centred subject. A clear example of this can be observed both, in the popular media (i.e., Oprah, Dr. Phil, Dr. Marla), as well as in a relatively recent approach of Positive Psychology.

Articulations in Positive Psychology

The newly emerging field of positive psychology could be seen as an articulation of what might be described as humanistic positivism. Dissatisfied with the pathological focus of mainstream clinical psychology and the relatively weak scientific status of the humanistic psychology, positive psychology hoped to bring empirical research to the discipline of mental health and well-being (Maddux, 2002; Seligman & Csikszentmihalyi, 2000). According to Seligman (2002), one of the founders of the field, “The aim of positive psychology is to catalyze a change in psychology from a preoccupation only with repairing the worst things in life to also building the best qualities in life” (p. 3). In order to achieve this goal, Keyes and Lopez (2002) suggested that “researchers must move toward the *operationalization* of mental

health as a syndrome of symptoms of well being” (p. 47, my emphasis added). Accordingly, a number of psychologists who have joined the ranks of this new field have attempted to bring an empirical body of research and scientific understanding to such phenomena as happiness, joy, satisfaction, optimism, and authenticity.

In the first handbook of positive psychology, Harter (2002) began by stressing the importance of defining the construct of authenticity. She criticized the current body of literature on the topic as being put together in a piecemeal fashion with different aspects addressed by unconnected perspectives, such as historical analysis or developmental formulations. Consistent with the aims of positive psychology, she sought to provide a functional characterization of the concept within a behavioural frame of reference. Accordingly, Harter viewed authenticity “as reflected in self-reported true-self behaviour” (p. 389), and further called it “a valuable psychological commodity” (p. 391). In this sense, she promoted a view of authenticity as a type of character trait or a personality attribute, which can be encouraged and developed over time. In fact, she claimed that, “authenticity is clearly a commodity... associated with adaptive psychological characteristics that mental health professionals, educators, and laypeople seek to foster” (p. 389).

In a more empirical fashion, Goldman and Kernis (2002) have attempted to assess and examine what they characterized as multiple components of authenticity, such as awareness, unbiased processing, behaviour, and relational orientation. In employing an “authenticity inventory,” which they developed, they produced data linking their concept of authenticity to other measures implicated in optimal psychological functioning and subjective well-being. Along the same lines, although several years before the actual establishment of the field of positive psychology, Sheldon and associates (1997) have found a significant correlation between authenticity and the Big-Five traits. Their results suggested that the more authentic or genuine a person felt in a given role, the more extraverted, agreeable, conscientious, open to experience, and non-neurotic they appeared to be. Ultimately, the empirical findings of Goldman and Kernis (2002), as well as those of Sheldon and associates

(1997), presented the notion of authenticity as being indicative of positive functioning, and as being consistent with one's personality traits.

In viewing authenticity through the trait lens of optimal functioning and well-being, the field of positive psychology in general, however, falls victim to the unsubstantiated assumptions about the apparent constituents of what they describe as authentic components of positive character or personality. In their attempt to articulate a version of a good and meaningful life, they promote a predominantly objectified view of an authentic being. Additionally, by trying to establish narrowed-down and quantifiable parameters of qualitative phenomena like happiness, optimism or authenticity, positive psychology substantially reduces the richness and depth of their meaning as lived in our experience. In effect, the newly emergent field appears to foster a rather technocratic attitude, as will be elaborated on in the following chapter.

Existential and Existential-Phenomenological Articulations

More so than the area of positive psychology, existential approaches can be said to have more in common with the humanistic tradition, as they also ascribe to the view of an experiencing subject, securely planted in the world of his/her design. Strictly existential perspectives, however, are ontically-oriented and offer somewhat conventional and rather transparent views of authenticity along the familiar lines of personal striving toward one's true self, as explicated in the philosophical traditional of early existential thought. Although himself an existential-phenomenologist, Laing (1969), for example, while inspired by Sartre's ontic view, suggested that, "to be 'authentic' is to be true to oneself, to be what one is, to be 'genuine'" (p. 108). Conversely, to be "inauthentic," he added, "is not to be oneself, to be false to oneself: to be not as one appears, to be counterfeit" (p. 109). The assumptions behind the "false self" echo notions of Freud's neurotic individual or Fromm's conforming automaton, each portraying the "part" of the Self which submits to the pressures and demands of the social world at the detrimental price of denial of who one truly is.

Another psychologist who attempted to explore the issue of authenticity was Bugental (1965/1981). In his book, *The Search for Authenticity*, he introduced a notion of authenticity as a primary existential value, which according to him should not be argued but rather recognized as self-evident. To that effect he posited that, “a person is authentic in that degree to which his being in the world is unqualifiedly in accord with the givenness of his own nature and of the world” (p.31). As a value, therefore, Bugental suggested that authenticity reflects an awareness and acceptance of one’s being with which one participates in the world. In other words, as a genuine perception of one’s awareness, authenticity signifies a full presence in the here and now. Although Bugental’s applied view of authenticity departs from Heidegger’s ontological conceptualization, it should be mentioned that it is presented in a context of a therapeutic approach, and thus portrays a more functional perspective on authenticity in the sense of being experientially transparent.

Like Bugental, van Deurzen-Smith (1990, 1998) applied the existential notions of authenticity in her psychoanalytic writings. She similarly viewed authenticity as the ultimate goal of existential work in therapy. To her the therapeutic process, having authenticity as its aim, should indicate an exploration of one’s meanings and a discovering of one’s courage to affirm oneself. Van Deurzen-Smith hoped that existential therapy would help clients realize and follow the direction of their own conscience and become authors of their own destiny; in other words, to live authentically. In adopting an existential view of societal influence, she suggested that, “authentic living is about being able to make clear and well-informed choices in accordance with the values one recognizes as worth committing oneself to, instead of following the lead of the public or the crowd... or living immersed in the ‘They’” (p. 54). Thus, to van Deurzen-Smith, the inauthentic person conforms to social norms and expectations, whereas the authentic individual owns up to the authorship of his/her life in being “... loyal to self before anything else” (p. 54).

Approached from an ontically-oriented philosophical tradition, and concerned with the liberation of the self from the social restraints, the existential views here expressed fall

somewhat short of the Heideggerian project. The limitation in these theories stems not so much from the notions of authenticity they arrive at, as it does from an incomplete application of Heidegger's ontological perspective being interpreted and incorporated at an ontic level of relational experience. *In other words, Dasein's ontological, a priori constitution of being-in-the-world, has been modified to fit the ontic structures of beings in relation to their world-designs as experienced within the context of social, personal, or spatio-temporal existence. Proceeding in this way, purely existential articulations explore different ontic designs of authentic existence without inquiring into their ontological significance.* Notwithstanding these limitations, however, a clear and detailed "description and clarification of a client's way of being in the world seems... a valuable aspect of any existential therapy" (Cohn, 1997, p.18).

Unlike the traditional existential, psychoanalytic or humanistic psychologies, existential-phenomenological psychology reflects the notion of authenticity within Dasein's ontological framework. Leaving behind the subject-object dichotomy inherent within the humanistic notions of self-actualization or self-realization in favour of a more inclusive view of being-in-the-world, it presents Dasein's authentic way of being in terms of a particular mode of engaged being-in-the-world. Frankl (1967) for example indicated that, "only as man withdraws from himself in the sense of releasing self-centred interest and attention will he gain an authentic mode of existence" (p. 46). He further explained that the principle of self-actualization itself points to the pursuit of potentialities, or the actualizing of available possibilities. In other words, self-actualization is being realized to the extent that one's possibilities are being fulfilled. The possibilities themselves, however, have to be viewed in terms of their meaning and the value of responsibility they represent to a given individual. As some possibilities are chosen, others are discarded. It is in taking up this responsibility for choosing the meaningful possibilities or potentialities that one in fact decides, "for weal or for woe, what will be the monument of his existence" (p. 47). For Frankl, therefore, the

authentic mode of being rests not only on taking up the responsibility for choosing, but also on the choosing of those possibilities that are seen as meaningful.

Whereas Frankl emphasized the significance of meaning in actualizing one's potentialities, May (1983) stressed the relevance of courage in their realization. In fact, in recognizing the importance of the ontological foundation, he suggested that self-realization "in the fullest sense.... requires the courageous living out of the individual's potentialities" (p. 79). To him the notion of courageous living, however, is tantamount to the concept of authenticity as expressed in the creative encounter with the world. In defining creativity itself, May (1975) made a distinction between creativity's pseudo aesthetic form and its authentic form of bringing something new into being. He claimed that only this type of authentic creativity requires courage in its most significant expression. In fact, he argued that authentic creativity is the most basic manifestation of fulfilling one's own being in the encounter with the world. Based on the existential phenomenological articulations of Dasein, May saw Dasein's "world" as not merely an objective reality but as a pattern of meaningful relations in which a person exists and in the design of which he/she participates. In this sense, the authentic encounter is in fact a creative encounter with an often difficult and threatening reality of experience where we nonetheless find the courage to "give birth to some new reality... and express being itself" (p. 39).

As can be inferred from the above, it is within the framework of an ontologically-oriented existential-phenomenological perspective where we can begin to observe a view of authenticity, which embodies not only a subject but also its being and its world. To that effect, the existential-phenomenological psychology is thus able to provide a ground for a much richer explication of authentic existence in terms of Dasein's a priori existential constitution. However, as Dasein's ontological constitution is also socio-historical, we can similarly recognize that its dimensions of being-with, as well as, being-there in terms of historical situatedness, have not been explored. Once again, as with the previous approaches, the main concern for these theorists also appears to be centred on the individually grasped,

possibilities of being for itself. As such, Dasein's world, as presented in these theories, reflects only the immediate world of its experience, but does not clarify Dasein's shared, socio-temporal dimension of being. It is within the shared and historical world, however, where Dasein's socio-temporal constitution of its existence, as well as the meaning of its being, can be revealed and explored to a much fuller extent. For this reason, we shall turn to a related hermeneutic approach, which does account for this dimension in a more explicit way.

Hermeneutic Articulation of Authenticity

Contemporary theories of self-centred individualism present us with a certain understanding of a "true" inward identity, and an impression of a changing, traditionless worldview specific to our modern times. Literary and historical works before modernity, on the other hand, point to a shared, collective existence where individuals emerged from, and for the most part belonged to, a given community. Every person had an unambiguous role to play, purpose to fulfill, and a specific place to occupy. It was the commitment to their family, neighbours, friends and the community at large, which, in the end, came to define the meaning of their "true" existence. In this context, the notion of authenticity, as we understand it today, would not have held much meaning or resonance.

Today's picture of our communal existence is very different. From a hermeneutic perspective, as argued by Guignon (2004), our most recent view of community, society or culture can be described "as something man-made, as a product of human decision and contractual agreements rather than something natural and preordained.... [or] regarded as something we have opted into... as something 'other' to the real self" (p. 33). This state of affairs is not surprising when we take into consideration the influence of the philosophical Cogito, political individualism, or economic consumerism, which all have helped in inciting a shift in the perception of our subjective and independent "place" in the world. In fact, today we tend to be somewhat socially displaced, culturally-disenfranchised and

communally-disembodied. We appear to gradually disengage from our identity as having its place within the context of our culture and community. Yet, it is in this dwindling context, however, where Guignon suggests we should look for a more encompassing meaning of authenticity. As he put it:

becoming an authentic individual is not a matter of recoiling from society in order to find and express the inner self. What it involves is the ability to be a reflective individual who discerns what is genuinely worth pursuing within the social context in which he or she is situated.... When the ideal of authenticity is understood in terms of its actual social embodiment, it is clear that being authentic is not just a matter of concentrating on one's own self, but also involves deliberation about how one's commitments make a contribution to the good of the public world in which one is a participant (pp. 155-163).

It is in taking this socially-inclusive path that Guignon has brought us closer to the Heideggarian project of disclosing Dasein in its authentic being-in-the-world, i.e., within the dimension of its being-with. In expressing the social role of authenticity, he has suggested that we should not dismiss, but rather reflect on, our social commitments and interactions, and see them as fundamental constituents of our identity. This view stands in stark contrast to the cultural ideal of self-contained individualism and offers a dialogical alternative to our identity as embedded within a shared web of relationships and interlocking narratives unfolded in a wider context of tradition, history, and culture. As opposed to the traditional, self-centred view, therefore, Guignon's hermeneutic narrative perspective gives rise to a sense of belongingness – a belongingness to a shared historical tradition, and socio-cultural situatedness. At long last, in bringing together the existential-phenomenological approach with a socially-embedded hermeneutic narrative perspective, we appear to have come closer to meeting the ontological challenge of disclosing Dasein's existential constitution of being-in-the-world, as inclusive of its shared, socio-temporal dimension.

3. LITERATURE REVIEW ON TECHNOCRACY

Although there are many social, cultural, or historical features that can be seen as central to our times (e.g., capitalism or industrialism), most scholars agree that it is our technological and scientific situatedness, delineated within the concept of modernity, that speaks to the overarching climate of our modern age (Bell, 1973/1999; Lyotard, 1984; Walters, 2001). As such, modernity in the context of our present-day situatedness discloses a form of technological and scientific mode of existence marked by calculative rationality and an instrumental engagement with nature and with ourselves. The argument here is that, as opposed to our pre-modern times marked by a connectedness of space and time, where one would emerge from and adapt to the continuity of one's community and its sense of history and tradition, the age of modernity is marked by an adaptation to an ever-changing set of institutionally-guided practices for living in a nonhistorical way (Spinoza, Flores, & Dreyfus, 1997). Moreover, it is not the community, but the expert systems that now penetrate all aspects of our lives – from the food we consume, to the medicines we take, to the buildings we inhabit, or the modes of transportation we utilize. Furthermore, the expert powers extend not only to social affairs, but also to our most intimate relations (Walters, 2001). Mediated by expert opinions of doctors, counsellors, or therapists, the natural or reflexive knowledge of oneself is being gradually undermined and replaced with the certainty of the technical data and scientific fact. A shift from a traditional to a technological mode of being has now come into the fore. In fact, it is the technological and the scientific which now appear to define the tradition of our contemporary world.

Bell (1973/1999) recognized this technological transformation as a new period in our history where we can observe a breakthrough in the human powers not only over the mechanisms of our material world, but also over the processes of nature. Technology has become, as he put it, “more than making things in a reproducible manner. It [has become] a rational ordering of means-ends relations, a rationalization of work and even of sectors of life” (p. xii). In fact, in our now ordered world, we have rationally come to no longer expect

our careers, employers, or communities to remain the constant foundation of our lives. What we do expect to be constant, stable and reliable, on the other hand, are the technical and technological systems and institutions on the axis of which our ever-changing lives continuously revolve. By the same token, it is not our neighbours, friends or community members that we hold to account and rely upon the most, but rather it is the expert, the professional, or the technocrat whom we now endow with this privilege.

The social shift toward a technocratic way of thinking, therefore, appears to be one of the main mechanisms contributing to a changing view of society and of the meaning of human being. Over the last century many definitions of technocracy have surfaced in different social, political, and economic arenas, yet none have endured and been accepted in terms of an overarching self-contained theory. It is not the aim of this chapter, however, to propose such a theory or definition, particularly as we are not focusing on, but rather departing from, the ontic issues as addressed in these previously articulated conceptions. We will, however, propose in this chapter an interpretation of the notion of technocracy as a mode of being, and in the following chapter provide a historically based clarification reflective of its longstanding and historical mindset in our Western culture. The present chapter, therefore, will begin by considering the traditional views on technocracy, aiming within the first two sections to examine their ontically grounded theoretical and practical features. The third section, on the other hand, will explore from an ontologically based perspective its social and psychological implications. That is, it will consider technocracy in terms of its role or influence in the social context of technological-enframing, as well as its psychological input in terms of the development and creation of a new mode of being, hereto defined as the technocratic mode of being.

Historical and Ideological Roots of Technocracy

The technical and technological control embedded in the design of the social systems is now beginning to be seen as a natural mechanism of the overall social infrastructure. And

although technologies that are implemented and employed are presented as having no extraneous agenda but merely that of organizational function of management and administration, the ideology behind their utility points to intrinsic mechanisms of control exercised through expert and technical knowledge and the social means of their application. For over a century now, the privileged powers of the expert elite, and the synthetic type of technical and technological authority they uphold, have been broadly described in terms of technocratic organization, or simply as technocracy (Burris, 1993). In fact, since the early 1900s the notion of technocracy has acquired a significant number of definitions. Many reflect social and political shifts in contemporary thought, as exhibited by the efforts of early technocrats, whereas others indicate a more tangible change in the administrative infrastructure of the modern, technologically driven economy. Whatever the definition, however, each one addresses an understanding of technology and technical expertise as being instrumental in our social, political and economic functioning.

The presently given historical review of concepts and theories is by no means a complete or an exhaustive one. Such endeavour would be most lengthy and quite unwarranted for the purpose at hand. The points of view here presented were chosen not necessarily for the depth of their thesis or ideas as for their implications in the historical picture, which they helped unfold. The account here offered, therefore, is of a limited and primarily chronological nature so as to give a sense of the socio-historical influence or relevance of this relatively new movement in the contemporary expression of professional thought and institutional practice.

Technological Expertise and Technocracy

The root ideas of the concept of technocracy can be traced back to the pioneering times of scientific thought and technical rationality. According to Fischer (1990), the first notions of a society run by technicians can be attributed to Francis Bacon who in his book *The New Atlantis* (1622) conceived of a leading class of research scientists. Fisher suggested

that, “where Plato had envisioned a society governed by ‘Philosopher kings,’ ... Bacon sought a technical elite who would rule in the name of efficiency and technical order” (quoted in Fischer, 1990, p. 66). In his opinion, Bacon’s city of Atlantis was the first example of a technocratic society, i.e., a society run by technological experts.

Ideas of technical order were also envisioned and eventually realized through the work of an industrial engineer, Frederick Taylor (1911), who campaigned for scientific management of industrial productivity. His ground breaking proposal of an administrative technology, published in *The Principles of Management*, aimed to reduce production costs, increase efficiency and productivity, as well as bring about an increase in wages and a decrease in prices of the manufactured goods. What Taylor essentially advocated was a type of social management that would improve the work process. In effect, what he suggested was that “among the various methods and implements used in each element of each trade there is always one method and one implement which is quicker and better than the rest. And this one best method and best implement can only be discovered and developed through scientific study and analysis of all the methods and implements in use, together with accurate, minute, motion and time study” (p.25).

Based on his theory, Taylor came to be considered the originator of scientific management in business. Following his own dictum, in a very short period of time, and with great efficacy, he had developed a management system designed to gain maximum efficiency from both the machines, as well as the workers who operated them. As could be expected, ideas of scientific management readily appealed to the private sector, giving rise to a new class of scientific experts (Fischer, 1990), and prompting the emergence of a technocratic movement.

Social Management and Technocracy

Encouraged by the developments in management technology, the original technocratic movement appeared in the early 1900s in response to the political and economic

unrest of the times, marked by recession, unemployment and partisan politics. It stood for scientific management and greater political and economic control by technical experts (Frederic, 1933). It was an engineer, William Smyth, who in 1919 coined the actual term technocracy to convey the notion of social engineering within the political bounds of democratic governance. Like Taylor, he believed in the application of administrative technology, and went so far as to suggest that not only industrial plants but in fact all national institutions should be under the control of a national counsel of scientist (Burris, 1993).

Similarly, Vablen (1921), being critical of the “captains of industry” for being unable to maximize technological advancements and social productivity, proposed that a more qualified administrative body of engineers and technical experts should obtain the power and authority of political governance. He argued that the social mechanisms of modern industry were very different from those of the past, both in terms of the systematized management, and in terms of mechanized production. In this sense, he pointed to the distinct shift from the manual craft and skilful manipulation of the past to the mechanical processing of the machine technologies in the present. He further suggested, that it is the socio-economic and business oriented organization of mechanical powers and material resources, and not the skill of the craftsmen or the technological experts, that provide direction for the industry. In other words, Veblen observed that the system control was left to the administrative governance of the industrial business elite and not to the more appropriately trained technical experts or engineers. Eventually, he proposed that contrary to the established capitalist control of the industry, the power of direction should be given to the technical experts, who in his view, were better suited, both in knowledge and interest, to drive the industrial machine in a more rational and efficient manner.

Finally, however, it was an engineer, Howard Scott, who late in 1919 formed “*The Technical Alliance*,” a group comprised of engineers, technicians and scientists, which by 1932 came to be known as the “*Committee on Technocracy*.” In the following year they published their first impressions of the economic challenges and their technocratic solutions,

where they pointed out the inability of society to adjust to new technologies, suggesting that the future society ought to be restructured along more rational and scientific lines, and be regulated to the energy producing values which can be managed by scientific methods (Burris, 1993).

It did not take long, however, for the early technocrats to come under heavy criticism for their philosophical ideologies and political aspirations. Having been accused of a fascist and non-democratic character (Frederic, 1933), the initial technocratic movement was short lived and virtually disappeared from the political scene by the late 1930s (Meynaud, 1969). In its wake, however, it left a legacy of a new awareness of the socio-political reality, which demanded that more attention be given to the effects and implications of technological development in view of the deficient structures of the economic, social and especially political systems.

Bureaucracy and Technocracy

The rejection of the technocratic ruling class did not abate the momentum of technological and scientific progress, or the necessity for skilled technicians and scientists in its development and management. The realities of the economic and political instability of the 1930s, which led to WWII, as well as the great depression, have shown that modern industrialization and technology required not only highly trained personnel, but also efficient methods of administrative management (Karl, 2001). Already in 1941, James Burnham wrote that, "through changes in the technique of production, the functions of management become more distinctive, more complex, more specialized, and more crucial to the whole process of production, thus serving to set those who perform those functions as a separate group or class in society" (quoted in Burris, 1993, p. 34). Burnham has thus realized that it was not the control of the technocratic elite but the new managerial class that would gain power by presiding over the bureaucratic apparatus of the centralized economy of the emerging managerial society. Similarly, Galbraith (1967) in hindsight of the post WWII

technological explosion saw a correlation between technological advances and a growing need for economic planning. In his conceptualization of the new industrial state he emphasized that, “the imperatives of technology and organization... are what determine the shape of economic society” (p. 7). Unlike Burnham, however, he agreed with the technocrats by acknowledging that the “technostructure” of the managerial society is without a doubt heavily dependent on the educational and scientific expertise of the technical intelligentsia.

In agreement with Galbraith, Beninger (1986) suggested that administrative management, or bureaucracy, has always evolved alongside industrialization with its body of scientific and technical experts. It is not surprising, therefore, that since Burnham’s early debate on the issue of the evolving bureaucratic technostructure, new types of bureaucracies have likewise been proposed. In her review of the many different bureaucratic categories of today, Burris (1993) listed several types ranging from those with an economic and technological focus, such as rational-productivity and technical or scientized bureaucracies, to those with a more administrative focus such as professional, advisory or technobureaucracies. Notwithstanding their theoretical or ideological orientation, however, she found that all modern types of bureaucracies reflect the changing nature of management from the mechanical bureaucracies of the industrial past to the professional bureaucracies of the post-industrial present. In an apparent disregard for the early concerns of technocrats re democratic fairness and equality in the labour force, Burris suggested that the present shifts in modern bureaucracies reflect a growing segregation between expert and non-expert sectors, not only in political power but also in economic compensation, as well as status privileges.

Sociological and Philosophical Considerations on Technocracy

Technocracies, in terms of the socio-economic movements or ideologies, arose in conjunction with industrialization and were instituted to rationalize a given agenda, be it commercial, social, or political. Given their shared history, it is not surprising that

technocracies, in whatever form, have all undergone one type of modification or another, simply to parallel the changes in the social infrastructure from the production and manufacturing industries to the service and information institutions. It is the newest form of technocratic control and administration of technological and scientific knowledge, however, which has come to attract additional attention, as it has become a new strategic resource and lever of social change, not only in the technological and scientific areas of industry and commerce, but also in the informational and administrative spheres of society at large.

As the experts, professionals and technicians have increased in numbers and influence across most bureaucratically-oriented institutions and organizations such as hospitals, government agencies, educational institutions etc., the focus on the impact of the knowledge they produce and the technocratic role they hold has come to the forefront of not only the political and economic, but also of the sociological and philosophical debates.

Technocracy and Post-Industrialism

At the close of the Victorian Age, Marx and Engels had examined and criticized the debilitating impact of industrialization on society, as well as its alienating effects on the individual working within the confines of a mechanical assembly line (Schneider, 1975). Since then, however, it has become clear that from the second half of the 20th century, the global transformation in manufacturing gave rise to the post-industrial age of cybernetic, information-based, and service-sector-driven economies of the West, which no longer fit the picture painted by Marx or Engels. Computer technologies, for example, have precipitated what could be called a second industrial revolution where “the integration of computerized equipment throughout industry... is producing a re-conceptualization of the nature of work, triggering a... widespread ‘shedding’ of redundant workers” (Menzies, 1989, p. 31).

In addition to the transformation in the occupational sector of the present-day workforce, the shifting influence of professional and technical experts within the modern hi-tech industry, as well as the educational and scientific fields, has brought some social and

political theorists to question and analyze the changing structures of the modern, technologically advanced industrialism. In a ground-breaking book, *The Coming of Post-Industrial Society*, Bell (1973/1999), suggested that post-industrialism did not emerge because of economic or political challenges, but rather grew out of the need for scientific and technical knowledge within an expanding industry. He explained:

Broadly speaking, if industrial society is based on machine technology, post-industrial society is shaped by an intellectual technology.... Post-industrial society is characterized not by labour theory but by a knowledge theory of value. It is the codification of knowledge that becomes directive of innovation. Yet knowledge, even when it is sold, remains also with the producer. It is a 'collective good' in that, once it has been created, it is by character available to all (p. xiii-xiv)

Bell focused his notion of post-industrialism on a socio-technical rather than a socio-economic dimension of industrial development. Furthermore, he argued that whereas capital and physical labour were the major features of an industrial society, information and knowledge are the major features of the post-industrial society. In other words, post-industrialism marks a shift from a material production of goods and commodities to a knowledge production of services and information. In 1999, in a special anniversary release of his book, Bell also added that in the relatively recent coming together of the modern technology and science, the central feature of post-industrial society became further marked by the codification of knowledge. "Only in the twentieth century," he argued, "have we seen the codification of theoretical knowledge and the development of self-conscious research programs in the unfolding of new knowledge" (p. xiv). Subsequently, and for this very reason, argued Bell, the modern post-industrial society has given rise to a growing class of technical and professional experts. As such, in following Galbraith, he suggested that more progressive intellectuals, such as social scientists and theorists, should become more integral to the technical decision-making process.

In a reformulation of Bell's post-industrial theory, Block (1990) argued that post-industrialism could be viewed as having emerged at such a time when the industrial concepts ceased to provide an adequate account of social development. In the recent past, therefore, the rapid growth of the service sector and the decline of the manufacturing sectors, coupled with the computerization of the workplace, have come to serve as clear examples in support of his thesis. Though twenty years apart in their theoretical analyses, both Block and Bell agreed that the growth of the expert knowledge class is at the centre of the of the post-industrial, information-based society.

In following Block and Bell, Castelles (1996,1997) has similarly argued that the most recent changes to the Western capitalist system have resulted from the effects in the growing region of information technologies in conjunction with social developments they promoted. Subsequently, the old social contract between labour and capital has come to be recognized as inflexible and outdated, particularly in the context of the modern global village and the diverse worldwide network of institutional and information-based societies therein. In addition, Castelles noted that unlike the old manufacturing, the primary source of productivity in the information age lies in the generation, communication, circulation and integration of knowledge itself. As such, the new economy has clearly shifted from industrialism to what he referred to as informationalism, i.e., a new mode of development, primarily oriented toward technological progress, data processing, and the accumulation of information and knowledge. In following Castelles, Walters (2001) has furthermore suggested that:

Because informationalism is based on the technology of knowledge and information, there exists a close linkage between culture and productive forces... in the informational mode of development. More important, the new informational economy affects the whole planet either by 'inclusion' or 'exclusion' in the process of production, circulation, and consumption. As such we may expect radical new forms of social interaction, social control, and social change in the information age. (p. 7)

Technocracy in Post-Modernity

The central place of information-generated knowledge in the form of a social, political, or economic commodity has marked the decline of mechanized industrialism in the West. Additionally, in conjunction with other forms of relatively recent cultural and socio-political changes it has made more noticeable the intellectual and ideological shift from modernity to postmodernity, or what Giddens (1990) has called an accentuated modernity marked by technological revolutionization and de-traditionalization on the global scale. This new type of technologically generated and socially constructed knowledge has inevitably attributed to the questioning of the long held worldview, where the time-honoured conception of knowledge as a mirror of reality has been rapidly dissolving. With a growing decline in the confidence of universal laws and social truths of modernity, rationalism has been replaced with relativism as a new intellectual outlook (Bertens, 1995; McGuigan, 2006). In a nutshell, the advance of postmodernity, or an accentuated modernity, represented a socio-cultural reaction to the longstanding assumptions of modernity, and its traditional practices and ideologies. This critical shift has been most apparent in the field of social sciences where the credibility and application of modernist scientific and expert knowledge have been put into question (Roseneau, 1992).

The issue of expert knowledge has come under the hermeneutic scrutiny of Michael Foucault (1980). In a reading of the modern-day, socio-political practices, he revealed a complex interrelationship between knowledge and power, suggesting that, "one can understand nothing about economic science if one does not know how power and economic power are exercised in everyday life" (p.52). Accordingly, Foucault proposed that the economic and socio-political trends in the contemporary world have given rise to what he called bio-power, i.e., domination through an organizational and disciplinary control of bodies in the supposed interest of political rationality and social productivity. He further argued that the administration of techniques of bio-power, specifically "disciplinary power," usually at the hands of the legal and educational apparatus, is often intended to increase the

state's control over its members. In his analysis on the relationship between power and knowledge he wrote:

History has studied those who held power... but power in its strategies... and its mechanisms, has never been studied. What has been studied even less is the relation between power and knowledge, the articulation of each on the other.... But we should add that the exercise of power itself creates and causes to emerge new objects of knowledge and accumulates new bodies of information.... [Furthermore] it is not possible for power to be exercised without knowledge, it is impossible for knowledge not to engender power (p. 51-52).

For Foucault, therefore, the troubling realities of bio-power stemmed from the fact that they emerged in the distinct form of the social sciences. In his view these new intellectual disciplines, apparently created to generate new knowledge, were nevertheless driven to enhance disciplinary technologies, and in turn supported the increase of disciplinary power. In their review of Foucault's work, Dreyfus and Rabinow (1982) suggested that in the social sciences and disciplines, the advance of bio-power goes hand-in-hand with the appearance and proliferation of the very categories of anomalies that the social technologies were supposedly designed to eliminate. Subsequently, "by identifying the anomalies scientifically, the technologies of bio-power are in perfect position to supervise and administer them.... Once this has been accomplished the problems have become technical ones for specialists to debate" (pp. 195-196). In reflecting on the technocratic ideology, therefore, Foucault's bio-power could be equated not so much with the technical experts themselves, but rather with the disciplinary technologies they represent.

Along similar lines, Lyotard (1984) addressed the concern of what he referred to as the commodification of expert knowledge in the modern computerized world. Specifically he suggested that with the wide ranging implementation and impact of computer technology, we now experience a shift in the relation of knowledge to knower in that knowledge itself is no longer being produced as a social commodity to be shared, but as an economic commodity

to be owned and traded. As such the central question becomes not who will produce the knowledge but rather who will have control over it. For this reason Lyotard proposed that unlike the engineers of the past who had access to technology, it will be the experts of the present that have access to data who will be destined to become the modern ruling class of decision makers.

Equally disconcerting to Lyotard, however, has been the issue of dominance of modern scientific knowledge over narrative knowledge. Driven by instrumental reasoning and enhanced by computer technology, scientific knowledge appears to be given the authority and priority over and above the narrative discourse to the point where scientists question the validity and legitimacy of narrative statements for not meeting the rigorous standards of scientific scrutiny. More recently, Lyotard (1993) added that at present the scientific knowledge is being seen as having excessive institutional and organizational worth, with no apparent need to be concerned with its truth-value as long as it is useful, efficient and marketable. In other words, scientific success “is the only criterion of judgement technoscience will accept. Yet it is incapable of saying what success is, or why it is good, just, or true” (p. 18). Ultimately, in agreement with Foucault, Lyotard suggested that in giving rise not only to an authoritarian class of experts and their disciplines, the technological nature of modern knowledge has become a threat to the democratic ideology, as well as to human society at large (Burris, 1993).

Social and Psychological Implications of Technocracy

As explicated by Foucault, Lyotard, Castelles and others, in providing a general direction and a frame of reference, technology and science possess a great degree of power in actively shaping not only the social structures, but also social decisions, choices and attitudes. Moreover, whether on a social or a personal scale, technology as well as science assist us in forming a particular way of knowing and perceiving the world of our experience, and in so doing they simultaneously foreclose on other avenues of perceiving and conceiving

of our reality. In a sense, the types of technologies and sciences we utilize today become the expression and the embodiment of our technocratic understanding and experience of what reality is, thus giving rise to what we shall, from hereon, refer to as the *technologically-enframed world of being*.

Thus far, the technocratic issues have been largely approached from an ontic perspective, i.e., in terms of the effects, whether beneficial or detrimental, of modern scientific knowledge and technology on society at large. This present section, on the other hand, will approach the above issues from an ontological perspective in terms of our understanding of modern science and technology as characteristic of our shared world of being. From hereon, therefore, the traditional (i.e., ontically-formulated) notions of technocracy will be interpreted in terms of our technologically-enframed world of being. In other words, the concept of technological enframing will be reserved to express the formal social aspects of technocracy in terms of our shared world of techno-scientific institutions, bureaucracies, systems, and organizational structures, while the term technocracy itself will be reserved to express the ontologically distinct *mode of being-in-the-technologically-enframed-world*.

Technologically-Enframed World of Being

From an ontological perspective tools and technologies disclose themselves in their being not simply as physically present but also as a characteristic of Dasein's (our shared) mode of being. In other words, they disclose and thus establish a world of being in which we dwell and participate. For example, the spear, the knife, or the bow and arrow revealed, and thus cemented, a direct relationship between the hunters and their prey, and in the process provided meaning to their predatorial mode of being. In this sense, the early hunters built their tools while considering their meaning and significance within the context of their world, i.e., the world of the predator and prey. Along these lines of reasoning, we need to inquire into the meaning (or the essence) of our world of being, where we (as a culture or

society) necessitated the development and use of scientific technologies. The relevance of this inquiry becomes more apparent when we recognize that we no longer hold the same power over our technologies as, for example, our ancestors did over their hunting tools. In fact, the reverse might be the case.

Heidegger (1954/1993) was the first philosopher to address the above question of the essence of modern technology. In his analysis he examined the close relationship of science to technology and came to the realization that the union of the two gave rise to a never before seen mode of revealing. As Heidegger put it: "The revealing that rules in modern technology is a challenging... which puts to nature the unreasonable demand that it supply energy which can be extracted and stored as such" (p. 320). In this sense, the natural world around us is disclosed by modern technology as a storehouse of means and resources, but not in the way it was disclosed to our early ancestors. Our early ancestors viewed the world about them in terms of a sacred communion, where they saw themselves not only as having been granted dominion over the earth with all its creatures, but also as having been charged with its stewardship. Nature was both feared and respected, and what's more, human beings saw themselves as being a part of it. In the present-day, by way of science and technology, however, we no longer share of nature's gifts, rather we challenge it for its resources. As Heidegger put it:

Such challenging happens in that energy concealed in nature is unlocked, what is unlocked is transformed, what is transformed is stored up, what is stored up is distributed, and what is distributed is switched about ever anew.... Everywhere, everything is ordered to stand by, to be immediately on hand, indeed to stand there just so that it may be on call for a further ordering. Whatever is ordered about in this way has its own standing. We call it standing-reserve.... Whatever stands by the sense of standing-reserve [however] no longer stands over against us as object (p. 322).

When approached in terms of standing-reserve, for example, cows, pigs, or chickens are not identified as living creatures but as sources of protein. Incidentally, in being a source of something they ultimately become a resource for somebody. We cultivate them purely in terms of their consumptive value. They are no longer viewed as living against or beside us, but as existing for us. Similarly, from this technologically-enframed perspective, we view the forests, rivers, lakes and mountains in terms of their natural resource potential, i.e., as lumber, mineral deposits, or hydropower. As resources, however, they are no longer viewed as needing to be nurtured, cared for and cultivated, but rather as having to be discovered, explored and exploited. It is precisely in this sense, that we, by way of modern technology, impose ourselves on nature, challenging it in the most intrusive and ravaging way, and forcing it to reveal its bounty, no longer on its terms but on our own. This modern technologically-driven world of ordering-about, was also addressed by Rojcewicz (2006). In following Heidegger, he poignantly observed:

The farmer of old submitted, tended, and nurtured.... The old way of farming is midwifery, and what it brings forth is that with which nature is already pregnant. Modern agriculture, on the other hand, hardly brings forth *crops*; it produces “foodstuffs” or, perhaps we should rather say, ingesta. Modern agriculture does not submit seeds to the forces of growth; on the contrary, it interferes with the seeds, genetically manipulating them. The forces of growth are now in the farmer’s own hands, which is to say that she *imposes* the conditions that determine growth. The end product, in the extreme case, to which we may be heading inexorably, is astronauts’ food. It would be a travesty to say grace before “eating” a “meal” of such “foods.” They are no gifts; they are human creations. They are not grown; they are synthesized. They are created by someone *playing God*, and it would make no sense to *pray to God* before ingesting them. (p. 77, emphasis in the original)

It is in this modern agricultural sense that the proponents of high-tech farming, for example, suggest that science and technology enrich the cultivation of crops, poultry, beef,

etc. Likewise, the notion of enriched foods and beverages conjures images of something valuable being imparted or added. The technological reality, however, diverges from the common perception. In fact, most enriched, processed or artificially-developed foods are initially stripped of their nutritional value and only later synthetically enhanced. This agricultural “marvel” of science and technology, therefore, can be compared to steeling someone’s car and then offering them a ride. Ultimately, the idea of scientific *enrichment*, improvement or enhancement, is what gives rise to the enframing character of modern, scientifically *driven* technology. It is in this sense that our modern technology (the vehicle) can be viewed as having been hijacked by science (the driver), and we (the passengers) are being taken for a ride, which, whether considered literally or metaphorically, would make us hostages – not of technology per se, but rather of the scientific promise of enrichment.

In becoming hostages to, or supporters of, the scientific promise it is we who inevitably become challenged by the enframing character of modern scientific technology. As Heidegger (1954/1993) suggested: “Only to the extent that man for his part is already challenged to exploit the energies of nature can this revealing that orders happen. [However] if man is challenged, ordered, to do this, then does not man himself belong even more originally than nature within the standing-reserve?” (p. 323). Essentially, what Heidegger attempted to bring to our attention was the notion that in the modern world of technology we are not mere masters of it, but like all other *resources* are subordinate to its scientific order. Rojcewicz (2006) clarified this idea by pointing out that,

... the challenging accomplished by humans is encompassed by a more general challenging; humans challenge nature because they are themselves challenged to do so. Humans look upon things as disposable because humans are themselves at the disposal of a more general disposing. Humans take up a posing attitude because they are themselves subjected to a more encompassing imposition. This more encompassing imposition is the current event in the history of Being. The current guise of Being is an all-encompassing imposition. In other words, that which is

addressed to humans today is of the nature of imposition; Being imposes on humans, imposes on them to impose in turn. Human posings, opposings, exposings, imposings, and disposings are merely the human responses that conform to the more encompassing imposition that includes humans in it. (p. 94-95)

In the industrial age, therefore, the revealing of the standing-reserve concerned the imposing upon, and the challenging of, the resources stored in nature. In the post-industrial or institutional age, technological-enframing equally reveals the world of Dasein's being as that of ordering-about and challenging of the human standing-reserve (i.e. human resources). Viewing human beings in terms of their resource capacity, however, leaves open the occasioning for enframing to take hold. From this perspective, human beings, like other objective things, are in danger of being seen in terms of their usefulness as ready-to-hand, and thus being revealed as having the capacity to be challenged and ordered-about by the very technologies they have constructed. Ultimately, what Heidegger and Rojcewicz have proposed is that the essence of our modern technologically-inundated world of being is to be found not so much in the specific technologies we use, but rather in their potential capacity for the enframing (i.e., scientifically-driven challenging) of being itself. Technological-enframing, then, represents a technocratic, that is, an enframed world of being. What this furthermore implies is that it is in and through the disclosure of enframing itself, as expressed in the way we take up technology, that the technocratic *mode* of being-in-the-world can also be revealed and clarified.

Technocratic Mode of Being-in-the-world

As a consequence of enframing we have come to identify not with the natural world from which we have originated, but with a world that has been ordered and challenged by way of the tools and technologies we have created. And although modern tools open up new possibilities of relating and interacting with the world of nature, the interactions themselves inevitably become influenced by, and dependent upon, the multifaceted array of technocratic

(i.e., enframing) technologies that support them. According to Postman (1993), the early tool-using cultures employed tools and technologies for two reasons, either to build things or to solve specific problems to fix things. In either case the tool technologies did not encroach on the dignity or integrity of the cultures that used them. Such is not the case within the present-day, technologically-enframed societies. Postman argued that information and communication technologies, as modern tools of the day, are not integrated into the Western culture from which they emerged, but instead challenge its very existence. As he explained:

In a technocracy, tools play a central role in the thought-world of the culture. Everything must give way, in some degree to their development. The social and symbolic worlds become increasingly subject to the requirements of that development. Tools are not integrated into the culture; they attack the culture. They bid to become the culture. As a consequence, tradition, social mores, myth, politics, ritual, and religion have to fight for their lives (p. 28).

Today technology is not simply something that we merely come across at work when dealing with the tasks of production. We are now in a constant encounter with it as it is “deeply embedded in our everyday experience” (McCarthy & Wright, 2004). Contemporary computer and communication technologies, for example, have not only permeated all facets of Western society, but they have also drastically altered and shaped our lives to fit their high-tech and high-speed design (Menzies, 1989). They are implemented at all levels of modern social and economic infrastructure and are organized around the expert and professional bureaucracies. Accordingly, bound by networks of flowcharts, systems, and institutions we find ourselves confined within the world of formal procedures, structures and organizations, shaped by the exquisitely detailed, and massive, technocratic mechanisms.

According to Schwartz (1997), “the shape of our lives is [now] defined by our insertion into institutions and systems whose interlocking power generates the ‘virtual reality’ we experience” (p. 23). The virtual mechanisms of these institutions and systems are not made up of mechanical parts like those found in computer systems or motorized

equipment. Instead, as Foucault, Lyotard, Castelles, and others have suggested, they consist of procedures, techniques and doctrines designed to regulate and normalize not only behaviour but also experience itself. IQ scores, grades, rules, polls, or statistical analysis, for example, are essentially intended to make us accept and conform to the scientifically-established norms, thus leading us to obtain reliable assistance from certified professionals who offer appropriate services designed to deal with the problems at hand (Postman, 1993). In other words, in our specialized world, dominated by scientific and technological principles, much of modern life is now seen as ordered and organized around formal and technical systems which, in stressing the reliance on expert knowledge, in effect contribute to the rise in individual alienation and to the deterioration of the informal fabric of communal existence. As modern technology underlies most aspects of our day to day functioning, spanning from the tasks we perform to the prescriptions we use, our lives, and our commonly shared ways of being, appear to be overwhelmingly dictated and ordered by it. Perhaps Carlin (2005) expressed it best when he said:

I'm a modern man....

A diversified, multi-cultural, post-modern deconstructionist....

I've been uplinked and downloaded.

I've been inputted and outsourced.

I know the upside of downsizing.

I know the downside of upgrading....

I interface from a database – my database is in cyberspace....

I'm tireless and I'm wireless.

I'm an Alpha male on Beta-blockers....

A fully equipped, factory-authorized, hospital-tested, clinically-proven,

Scientifically formulated, medical miracle.

Though in a most humorous way, Carlin has nonetheless managed to express, and point out, how today we have come to intimately identify, not so much with the natural world

in which we live, but rather with the artificial world of tools and technologies we have created. According to Gergen (1991) these technologies engender “a multiplicitous and polymorphic being who thrives on incoherence... [while] being... increasingly enraptured by the means by which this protean capacity is expressed” (p. 173). Subsequently, in the context of this enframed or technocratic mode of being, pagers, e-mails, faxes and cell phones characterize a “natural” and widely accepted form of expression and communication. However, with multiple outlets of varied connections, a great majority of contacts become surface encounters evident only through the disjointed and superficial relatedness they embody.

The modern computer and information technologies of today similarly affect other domains of social interaction, causing many of them to become as artificial as those encountered in an often-virtual cyberspace environment. On a daily bases we are bombarded with messages and images from the radio, TV, newspapers, e-mails, faxes, etc., forcing us to come into contact with a countless number of people in less than meaningful encounters. In the mid-20th century, Van den Berg (1974) saw this increase in numerical density in human relations as a potentially neuroticising factor. With the advancements in cybernetic technology, Gergen (1991) furthermore suggested that the increase in frequency and intensity of insignificant and often virtual contacts can, in extreme cases, lead to a state of social saturation and the experience of living a multiple and dissociated existence.

In addition to the technologically-mediated connections, Gergen also observed that the average individual in the West is similarly exposed to a vast number of virtual relationships, in which he or she participates willingly or simply vicariously. In his opinion, the world of media has become so powerful and compelling that TV personalities have in their significance approximated normal relationships and implicitly entered the lives of viewers and their families, providing the social glue for shared opinions of differing points of view. In fact, Gergen argued that the media technology became one of the most powerful

rhetorical devices in the world, which ensnares the spectator with often-conflicting criteria for self-definition of his or her incrementally populated self.

Ultimately, whether in the social context of institutions, systems, and organizations, or the personal context of technologically-mediated connections, cyber communications or media generated rhetoric, the modern-day mode of our socially-shared being seems to reflect the technocratic, i.e., calculative, evaluative, scientifically-enriched and technically-enhanced character of an enframed mode of being. This enframed mode of being appears to be an essential way in which we grasp, approach, take up and subsequently experience technology. For this reason, we are left with a crucial question: How did we come to give rise not only to the enframed character of technology, but also to enframing itself? In order to find the answer we shall presently turn to the historical context and origins of the technocratic mindset from which our enframed way of thinking emerged.

4. TECHNOCRATIC-MINDSET AS DISCLOSING OF DASEIN'S TECHNOLOGICALLY-ENFRAMED WORLD

Today, we no longer live with technology. We embody it, i.e., we are enframed by it. It is the mental furniture of our understanding - an established fixture in our mindset. Enticed by the promise of progress and development, we are drawn to view the world and ourselves through its technical, as well as scientific lens. Things, people, events, and even our moral values, are all approached and validated in light of its methodical scrutiny and technical consideration. From the highly complex technologies we utilize, to the simplest behaviours we exhibit, no aspect of the artificial world of our creation, or the natural world of our existence, is left to its own devices. Without much opposition, rather, with much curiosity and anticipation, our physical and psychological reality is stripped down to its primary elements and its basic components as outlined by scientific data and technical procedures. In effect, we are witness to the architecture of social and psychological deconstruction. Physically and psychologically, we have been exposed in the most rudimentary way, from the material strands of the DNA to the mental syndromes of the DSM. Our actions, emotions, and intentions are continuously identified and stratified in the biological and physiological annals of scientific knowledge. Amassed within the confines of sanctioned disciplines and social institutions, the new knowledge is monitored and managed by professional bodies and their formally authorized experts. Essentially, as many of the social, economic and political critics have pointed out, our modern age is not only an age of science and technology, but more so, it is an age of scientifically-framed social technologies.

Since the establishment of modern science during the Renaissance and its marked influence on the mechanical and social technologies of the industrial revolution, the relatively recent tradition of scientific technology has unquestionably aided in our transformation from beings that shape technology to beings that are shaped by it. Moreover, by design or necessity, we seem to have embraced technological and scientific ideals of mechanical and methodological order, which nowadays appear to be omnipresent from scheduled

management of personal affairs to the social world of formal organization of systems, structures, and procedures. Briefly put, within the context of scientific technology, in both our personal and social endeavours, *we have become technologically-enframed – not in the sense of our excessive use of technology, but rather in our focus on the primacy of science in its function as a value, over and above the value of its scientific function.* In the end, whether as a professional or a client, an expert or a customer, we are all grounded in the technologically-enframed world of the modern scientific tradition. It is to this end, that the present chapter shall address the first research question, i.e.: What is the socio-historical context of the technologically-enframed tradition of the modern-day Dasein?

Although this chapter addresses the social context of the technologically-enframed world of scientific tradition, it is the technocratic aspect of our enframed being-in-the-world itself that shall serve as the guidepost of our inquiry. Thus, it is not the intention of this thesis in general, or this chapter in particular, to discuss the ontic issues of science and technology in their immediate application within the social or political arenas. These issues are examined and elaborated on in much greater depth within the works of sociological, political and anthropological research. Their place in the following discussion, in the limited capacity in which they will be utilized, is meant to provide an ontic anchor in the context of our scientific and technological condition. Subsequently, although emerging from an ontic grasp of our modern-day situatedness, the aim of our inquiry is geared toward an ontological understanding. In this capacity we are required to shift our attention away from the function of science and technology within society to the meaning of their social significance in the technocratic mode of being.

Technological Enframing

By all accounts we can infer that the modern world is a highly technological one. There is hardly a facet of our day-to-day activity that is not affected by the myriad of gadgets and equipment. From the wristwatches to the World Wide Web, we function in a calculated

and a virtual world. Clearly, our leisure and work related activities are framed by the technologies we use. This, however, is not the issue being presently examined.

Though not readily apparent, there is a difference between being framed by technological things and being enframed by technology. Framing by tools, equipment and even institutions, or organizations is inevitable if one is to operate and perform in a modern society. To a greater or a lesser degree, we are bound to, and bound by, the use of computers, teller machines, faxes or phones, just as we are bound by educational, financial, regulatory, or political establishments. Technological enframing, however, is of a different category. It is neither practical nor functional in nature. We are not braced or structured by it, as much as we are embraced or enticed by it. In this sense, technological enframing does not represent anything technological or mechanical but rather theoretical.

In the following sections we shall examine the notion of enframing in the historical light of the relationship between technology and science, suggesting that only within the advancement of the relatively modern scientific tradition was technological enframing able to emerge. We will also consider technological enframing as a necessary condition in the establishment and maintenance of social sciences, that is, institutions relied upon for devising and propagating an enframed mindset in the form of social technologies.

Technē and the Theoretical Form of Technology

The term technology is derived from the Greek words *tekhnē*, which refers to an art or craft, and *lógos*, meaning comprehension or apprehension, as well as, discourse. In other words, technology literally means the grasp or understanding of one's craft as a mode of discourse with beings, and with the essence of being itself. As far as its present-day application, however, this definition appears to have fallen away from the original meaning, in that it currently refers to a process of fashioning tools and machines for the purpose of construction and manufacturing. Alternatively, as Heidegger (1954/1996) has traced back, for the ancient Greeks the word *tekhnē* was infused with a much broader, and primarily

theoretical meaning, which, for the most part, preceded and underlayed the practical aspect of technical skill and activity. In fact, as Heidegger pointed out, until the time of Plato and Aristotle, *tekhnē* was linked with *epistēmē*, thus connoting a theoretical mode of knowing in terms of the revealing of beings in their essence or Form (not Plato's Ideal Form, but Aristotle's Form as essence), and of bringing their being forth into unconcealment. In this sense, *tekhnē* indicated a disclosure of being as such. Thus an artisan, in the mastery of *tekhnē*, would, in his craft, disclose, bring-forth and unconceal not only the practical knowledge of beings, but also the theoretical knowledge of being, which made the practical application possible. In the end, *tekhnē* was that which gave Form to, and in-Formed through, the artistry and the artisanship.

The English words craft and craftsmanship, in their fuller sense, hold the theoretical meaning of the word *tekhnē*. Although suggestive of skill or trade, more importantly, craft and crafts-man-ship, when understood in terms of a vessel that carries (as in an aircraft, or a watercraft), disclose a theoretical mode of bringing-about or bringing-forth. Thus a craftsman, like an artisan, conveys in and through his work a type of theoretical knowledge (*tekhnē*), both in terms of *epistēmē* (i.e., knowledge about beings), as well as, *poiēsis* (i.e., knowledge of being). Craft and craftsmanship, therefore, express two distinctive modes of disclosive looking. One, being concerned with bringing-about into unconcealment that which is hidden or covered-over in beings and things, and the other with bringing-forth into being that which calls-out so as to be revealed. Considered in this way, disclosive looking is both ontic (bringing-about-in-beings) and ontological (bringing-forth-into-being).

Ontically, therefore, *technē* of a craft, in terms of *epistēmē*, discloses in the manner of looking at or looking for, thereby revealing the essence of beings in a conceivable, as well as perceivable Form. For example, a cup or a chalice are both containers, though each by its projected shape, size and the materials from which it is to be fashioned, makes known its intended purpose. It is this knowledge of the Form, which allows the craftsman to bring about the desired object. Ontologically, on the other hand, the *technē* of crafting, in terms of

poiēsis, discloses in a manner of insight or foresight, that is, it reveals the essence of being by way of bringing-forth into being that which previously was not. In this sense, the Stanley Cup or the Eucharistic chalice are fashioned, each in its own way, so as to bring-forth into being a new, or a renewed possibility of being, both for the hockey fans, as well as for the Christian faithful.

The understanding of *technē* or craftsmanship as a form of practical and theoretical means was not exclusive to the artisans of the ancient Greece. For example, the Christian architecture has for centuries relied on the skills, as well as a shared vision of thousands of craftsmen and artisans, not only in the construction of places of worship, but also in the formation of spiritual expression (Kluckert, 2004). The distinct cross-axis in the floor plans of churches and sanctuaries, for instance, disclosed, at the time of their implementation, the cult of crucifixion and martyrdom in the Romanesque period. Eventually, some three centuries later it was replaced by the Gothic ecclesiastical forms articulated in the structural extension of spires, pinnacles, or highly vaulted stained glass windows designed to let in the Heavenly Light, or the Light of God (Toman, 2004). Though grand in size and scope, far exceeding its functional purpose, the evolving styles and structures of sacral architecture mirrored the ever-changing historical and cultural beliefs and circumstances. By this account, at the end of the 15th century the old House of the Lord, dim and confined in structure and character, has been *trans-formed* (revealing or disclosing a renewed essence) so as to capture and reflect the idea of an illuminated Kingdom of God.

The crucial function of disclosive looking in *tekhnē* or craftsmanship was meant not only to unconceal and bring into view a new form of being, but also to answer a call of historical being, whether worldly or divine. Such a call, for instance, which came from the peering ruins of the conquered past, has led to the Renaissance, a time of re-birth of the ancient wisdom, culture, and beliefs. The craft and artistry of the period reflect a return to the Greco-Roman classic order and aesthetic form, of which Michelangelo's David is a prime example. Once hidden in the block of marble, as the long forgotten hero, in was then

released by a skilled hand of the master craftsman, exposing not only a powerful and a beautiful mythical being, but also expressing (locked within David's dignified pose and gaze) a proud mode of being, effectively reflecting a renewed spirit shared with the ancients. It is in this marriage of skill and spirit that the craftsmen and artisans of the old possessed and expressed a practical, as well as a theoretical grasp of *technē* and *lógos* (in the sense of discourse). Aside from having the proper skills and adequate knowledge of materials and techniques, they also held an understanding of their craft's place, purpose, and function within a given historical and cultural climate. In other words, they were attuned to the existing and emerging ways of being, which they expressed, or else addressed, in and through their craft.

Like *technē*, so too, modern technology can be approached from a practical (i.e. ontic), as well as, a theoretical (i.e., ontological) perspective. Ontically, modern technology can be, and most often is, understood as a means to an end. That is, it stands for the machinery, built and utilized to perform a particular task in order to attain a specific goal. For example, a hammer is fashioned so as to drive in nails in order to build a bench, a staircase, or a house. Similarly, a nuclear plant is built so as to harness energy from nuclear fusion in order to provide electrical power. Viewed in this way, technology stands for the process by which we make tools and machines to increase our control over objects and forces in nature. In turn, technological things are disclosed as a type of a resource – a set of techniques or equipment.

Viewed from an ontological perspective, however, technology like *technē*, offers a different picture. It is, as Heidegger suggested, a mode of revealing. It is where hammers, watches, or even psychometric tests come to disclose their value and significance as opposed to their function or convenience. Moreover, however, in divulging their value and significance, modern technologies, like those of the ancient past, simultaneously open up the disclosive space where the revealing of knowledge and truth of what it means to be in general can take place. As Rojcewicz (2006), following Heidegger, pointed out, “technology is...

not the application of some more basic knowledge but is itself the most basic knowledge, namely, the understanding of what it means to be at all” (pp. 9-10). Thus, *ontologically speaking, technology is not seen as a set of mechanical resources or technical means but rather as a source of existential meaning.*

To clarify this point, let us consider a simple example of the primitive hunting technologies. We might begin by asking: What came first, the hunter or his tools? The early humans who preyed on animals had to see themselves as predators before they could devise any equipment that would aid them in the hunt. Also, they had to view the animals as a source of food, clothing, medicines, etc. Spears, clubs, bows and arrows were a by-product of that conception. They were a manifestation of a predatorial way of looking or perceiving. Consequently, as a way of looking, the hunting technologies, which materialized in the tools they devised, not only *defined* them as hunters and the animals as resources, but also *disclosed* them as predators and the animals as prey. It is in this disclosive sense where the hunting technology, or any technology for that matter, opens up for us an ontological dimension where we can interpret the meaning and significance of a given mode of our being. Thus, a hunter, defined ontically, is a predator disclosed ontologically.

The ontic-ontological distinction similarly applies to our modern-day technologies, though not as clearly as it did in the ancient past. Because of the high level of technical specialization, modern technē-cians (i.e., professionals) are trained in the more practical rather than theoretical aspects of their expertise. For this reason, our modern-day technologies reveal the practical bringing-about-in-beings, as much as they conceal the theoretical bringing-forth-into-being. As Heidegger (1954/1993) remarked, “the revealing that holds sway throughout modern technology does not unfold into a bringing-forth” (p. 320). A modern-day physician, for example, is first and foremost required by the medical and administrative bodies, which govern his practice, to be an expert in anatomy and a specialist in procedure ahead of, and prior to, being a healer. Similarly, modern educational institutions reveal in the contemporary teacher a competent lecturer and evaluator, over and

above a compassionate guide or mentor. This is not to say that modern technologies disregard the theoretical importance of *technē*, though at the same time they cannot be accused of embracing it. In either case, however, whether ontologically based or ontically driven, modern technology retains the function of *technē* in terms of its practical bringing-about.

The Latin Mindset as the Ground of Enframing

Thus far, as based on our discussion, we can intuit that the modern technology, though stemming from *technē*, for the most part represents its (ontically-grounded) practical element of a bringing-about in the process of production or manufacturing. Furthermore, as will be argued in this section, the theoretical aspect of *technē*, in terms of *epistēmē* (i.e. knowing about beings and things), has nowadays been relegated to a more rational and empirical, as opposed to an intuitive way of gaining knowledge, which at present has been consigned to the methods and practice of science. A crucial question remains, however: Can or does modern technology hold within itself an ontologically-grounded theoretical element of bringing-forth (i.e., revealing of being) in terms of *poiēsis* (i.e., knowledge of being in the process and practice of creativity), without being relegated to the province of art or philosophy proper? Interestingly, as will soon be suggested, the answer to this question rests on our understanding of technology within the current scientific circumstance.

To clarify the modern relationship between science and technology we need to trace back to the time when *technē*, as the prevailing technological as well as scientific practice has begun to diminished in its importance and influence, giving way to a more speculative and less intuitive approach of rational thought and empirical method of inquiry.

Anthropological and archaeological findings suggest that the ancient Greeks have felt around them a mysterious, powerful, and a far-reaching life force, which to them appeared to be present in all animate and inanimate beings and things (Kumaniecki, 1975). From the raging fire or a lion's roar, the gods spoke to them through beast and human alike. As the

anthropomorphic world of myth (a world of a multiplicity of individualistic divinities having human form and feelings) intertwined with the world of men, their joining together came to signify a symbiotic union of an intuitive and mythical existence. Here one listened, in an instinctive and an attuned way, to what the gods of the cosmos and nature had to say – answering in like manner. *Technē* provided an effective vehicle for such a mode of communication. Whatever the activity, craft or philosophy, each endeavour, in its own way, reflected a cultural dialogue with the gods, the heroes, and the virtuous modes of being they revealed.

Ancient mythology arose in response to social existence, expressing the way society represented humanity and its place in the world (Parandowski, 1969). In fact, the cosmological order found in Greek mythology mirrored the social structure and organization of the times, where mythical tales and figures all echoed and expressed an enhanced system of values and beliefs, both in the world of the gods and the culture of men. Tarnas (1991) has also suggested that, “among ancient mythologies, that of Greece was singularly complex, richly elaborated, and systematic. As such, it provided fertile basis for the evolution of Greek philosophy itself, which bore distinct traces of its mythic ancestry” (p. 14). Similarly, and in the most profound way, *technē* also re-created this Greek world filled with the lives of mythical beings and the being of ethical life. In other words, it embodied a dialogical mode of addressing and expressing the ancient cultural *mýthos* (Greek for narrative) of being. This *mýthos* revealed an attuned way of being with the gods, and the natural world that they animated. *In a way, the being of the gods of nature belonged to the Greeks as much as the Greeks belonged to the being nature of the gods. Technē, thus, served as a powerful mode of addressing and answering the call of the gods, that is, the call of being itself.*

With the military exploits of Alexander the Great, the Greek civilization has, by the mid fourth century BC, exposed the concurred East to its many ideas and branches of learning, and opened itself to new ways of thinking from as far as the Orient. Eventually, however, during the Hellenistic period, which followed, the Greek cultural influence started

to decline (Tarnas, 1991). With the later rise of the Roman Empire a new cosmological view of the divine realm began to unfold. The Roman gods were not as forward as the Greek ones, and did not stoop down to walk among the mortals. In fact, they remained at bay in their exalted places only to be revered, consulted, or appeased. The Romans did not befriend their deities, nor did they feel it necessary to bring them to their secular existence – that’s what the altars and the oracles were for. Even following the conversion to Christianity in the fourth century, the new Messiah and his heavenly Father remained confined within the House of the Lord, not to be found out-and-about in the streets of Rome. In being separated from the world of their gods and deities, the Romans did not create a mythology – they adopted one. Nor did they engender a clear cultural *mýthos*, having instead cultivated a powerful social *ēthos*, characterized by a sense of autonomy (from the gods) and self-determination (in citizenship). It is this *ēthos*, which gave rise to a more rational and empirical way of thinking about the world of daily affairs, devoid of divine intrusion or intervention. Though today we speak of the Greco-Roman antiquity, the two cultures were very distinct in sentiment and character. One could even say that Greece was created by the gods, while Rome was created by men. Consequently, it was in this atmosphere of men where *technē* of the old Greek craftsmanship had lost its air of significance, having been replaced with the Roman *artes* (Latin for skill), and *artificium* (Latin for workmanship, art or craft).

Having concurred the Greek state at the turn of the millennium, the Romans came to appreciate but not appropriate their cosmological and philosophical worldview. They borrowed many religious and theoretical ideas from the anthropomorphic qualities of the mythical gods and from the philosophical teachings of the Greek scholars. Eventually, the well-educated and learned Romans portrayed a semblance of critical reflection and contemplation, though they never assimilated or extended the borrowed teachings beyond their original scope, as their own natural and largely secular worldview precluded them from dialoguing or communicating with the Greek *mýthos*, and its underlying understanding of being. “Rome’s cultural splendour,” noted Tarnas (1991), “was an *imitatio*, albeit inspired,

of Greece's glory, and its magnitude alone could not indefinitely sustain the Hellenic spirit" (p. 88). Unlike the Greek knowledge, therefore, which emerged and was closely tied to the cultural *mýthos*, the Roman form of knowledge (*sapientia*) was most practical in application and based primarily on worldly experience and expertise. *Sapientia* stood both for *scientia*, meaning the knowledge of things in the world, and *intelligentia*, meaning an understanding of oneself. Incidentally, it is from *scientia* where modern science, with its natural approach, takes its roots. Neither *scientia*, nor *intelligentia*, however, reflected the intuitive or dialogical grasp of being, which was present in *epistēmē* and *poiēsis* of *technē*.

Notwithstanding the apparent philosophical shortcomings, however, the Romans were receptive to many social, political or religious views and ideas. This openness contributed not only to an eventual acceptance of Christianity, but also to the emergence of Christian philosophy, which, from its early inception, maintained close ties to Greek thought, particularly to Plato's dualistic distinction between the sensible world of things and the intelligible world of ideas (Tatarkiewicz, 1931/1997). In a rather Christian interpretation of Plato, more palpable for the Roman populace and evidently independent of Hellenic reasoning, St. Augustine reintroduced the notion of Ideal Forms as present not in the reasoning minds of men, but rather in the creative mind of God. In so doing, however, he continued to retain the established split between the secular and the spiritual (Tarnas, 1991). Thus, while replacing the deities of the old Roman religions, the Christian mystical knowledge remained within the province of God's grace, and the natural knowledge within the province of man's *scientia* and *intelligentia*. From here on, the myth and the mind remained separated.

For the next millennium it was not Greek reason or mythology, as much as Latin rationality and Christian spirituality that ruled the day. The Latin language itself, inclusive of the meanings it held, as well as the culture, attitude and the way of thinking it encompassed, had managed to infiltrate every aspect of religious and secular life. Scriptures, ecclesiastical documents, legal, scholarly, or scientific texts, all have been written, taught and interpreted in

Latin. During the Medieval times, throughout all of Europe, a gradual, steady and determined conversion of the pagan mind ensued. A new mindset based on strictly chosen Christian doctrines and dogmas, as well as church approved rational disciplines of medicine, law and theology, came to dictate and dominate the intellectual life of scholars, the religious life of the clergy, and the secular life of the faithful. As Lavine (1984) noted, “from the fourth to the fifteenth centuries, Christianity shaped the entire social and cultural world of Europe, its political and personal life, social institutions, economic relations, knowledge of the natural world, literature and the arts – all these were under Church direction and control” (p. 77). The Greek wisdom and influence appear to have been lost. Even Plato’s Ideal Forms, which had been interpreted by St. Augustine as the mind of God, by the end of the Medieval period came to represent the Ideal of Christ in the Form of Eucharist. Similarly, what remained of Greek reason, philosophy, and *technē* had been replaced with the Latin rationality (from *ratio* and *rationis*, meaning calculative way of thinking), science (from *scientia*, meaning knowledge of things in the world), and art (from *artes*, meaning skill).

During the Medieval times, the Latin language came to exert its influence on all known European cultures, customs, and traditions. Likewise, the tribal tongues have similarly been affected. It has been estimated, for instance, that of the 20,000 most used words in modern English, over half are of the Latin origin, about a quarter come from the Anglo-Saxon dialects, and only one-tenth have their source in the Greek vernacular (Winniczuk, 1975). It is no surprise, therefore, that many disciplines, crafts or branches of learning, which formed and flourished all across the European continent, have eventually been framed by the Latin language and a way of thinking it engendered – modern science being no exception. The word science, as earlier indicated, comes from the Latin word *scientia*, or knowledge. Its Greek equivalent was *episteme*, which also meant knowledge. The difference between the two, however, rests on the fact that the former indicated knowledge of the senses, and the latter of the essences. The modern understanding of *episteme* as epistemology has subsequently lost its original meaning, and presently connotes

a branch of philosophy that deals with the origin, nature and limits of knowledge, but not with its essence.

This much is evident, as Wittgenstein had suggested, language is both a vehicle and a driver. Indeed, each one allows for a different experience of reality, and a corresponding method of its exploration. In the Greek language and mindset, for example, the theoretical grasp of the essences underlay the practical understanding of the senses. In the Latin language and mindset, on the other hand, it was the knowledge of and from the senses that took precedence over and above the consideration of the essences. Moreover, in addressing the physical world of the senses, science, and not philosophy, has become the preferred theoretical method of divulging practical, as well as, hypothetical knowledge about the concrete and physical reality. The knowledge, or rather the consideration, of the metaphysical has in turn been diverted to the province of the arts, to which philosophy has likewise been added. Even psychology (Greek *psychē* + *lógos*), which stood for the grasp or understanding of one's soul, or the essence of being, currently reveals itself as the study of various behavioural, cognitive, and neurological processes. The ontological consideration regarding the essence of being has been all but removed from the subject matter of its theoretical interest or concern. As such, modern psychology has been, at least within the mindset of the establishment, approached primarily as a science with practical socio-economic potential, and only marginally as a philosophy with ethical value. Moreover, today's philosophy, though concerned with knowledge, is excluded from the domain of science, i.e., a rational, measurable, or calculable field of knowledge of things in the world. Inversely, it has been relegated to the domain of the arts, particularly in terms of theoretical skills. A similar fate has befallen *téchne*, where its modern latinized (i.e., framed by the Latin language) version no longer carries its original significance or essence.

In as much as the Latin language was exact, it proved useful with respect to the technical aspects of scholarly, religious, legal, political, and scientific management. However, being less flexible and accommodating than Greek, its vocabulary proved limited

and thus less likely to express abstract ideas. Consequently, the Latin language failed to retain the full significance or the rich meaning of Greek terminology, even when assimilated into its vernacular. Still, when the Greek philosophy, art, literature, as well as, the many branches of learning were recovered from the Arab world, between the 12th and 15th centuries, it was not the limitation of the Latin language, but the restrictive doctrines of the Christian thought that were scrutinized. As Lavine (1984) noted: “Classical Greek humanism, which had been man-centred and nature-centred, now inspired many of the artists and intellectuals of the Renaissance to glorify man and celebrate the works of human genius, and to repudiate strenuously the prevailing Christian themes of the worthlessness of man and the insignificance of nature in relation to the supernatural world” (pp. 81-82). Thus, like the *Phoenix* from the ashes, so emerged from the Dark Ages the modern *rational* man of *science*.

Science as the Essence of Technological Enframing

From the late medieval period and the early Renaissance the development in scholarship, philosophy, and technology has been unprecedented. Having secularized the religious teachings of the Church, all three areas began advancing without theological constraints. Modern science was born, and with it a new worldview, bound not to the divine and the transcendent, but to the rational and the intellectual (Tatarkiewicz, 1931/1997). With the reintroduction of Aristotle’s works in the 13th century from the Arab world, and the empirical way of thinking they open up, a purely rationalist scholastic view has come to be overtly questioned, as philosophy itself set out to establish its independence in the intellectual sphere of cultural life. Indeed, by the 15th century a clear transfer of allegiance from religion to science has taken place (Tarnas, 1991). Nature, and not God, has become of central concern for the new knowledge. The natural science, which emerged, came to shed new light on the observable reality and its hidden processes. As recognized by Francis Bacon in the 17th century, it held practical promise of granting us power over nature, and presented a possibility of advancing human endeavours and prosperity on a scale previously

unimaginable (Magee, 2001). With the intellectual progress well on its way, the advancing sciences were rapidly opening up and giving ground to the development of new technologies, which in turn, with each passing century, came to rely more heavily on the scientific knowledge. Most of note, however, is that with the rise of modern science we have lost sight of the knowledge which was to be gained from technology itself. In fact, today we do not think of technology in terms of providing us with knowledge, as much as we see it as a useful means to the scientific end. Yet technology, like science, holds within it a way of approaching and disclosing knowledge, though it may be less forward or deliberate.

Science as *scientia* emerged from the Latin mindset. Its knowledge, whether practical or theoretical, is thus concerned with things in and of the world. Technology as *technē*, on the other hand, came from the Greek mindset. Its knowledge, when approached in the original Greek spirit, was concerned with the theoretical grasp or understanding of things or beings (including human beings) in their essence, that is, in terms of the meaning of their being. In this respect, the knowledge of science as *scientia* is for the most part ontic in quality, whereas the knowledge obtained from technology as *technē* is, above all, ontological. Science and technology are thus two distinct, or one could even suggest opposite, ways of approaching and disclosing knowledge. Indeed, in being primarily empirical (in the original Greek sense of *empirikós*, meaning in or through experience) *technē* was meant to answer the call of nature (i.e., the call of being). Things made in this way had practical, as well as, symbolic or ceremonial value, indicative of the mode of being they disclosed. A sword, for example could have been used for knighting or beheading, as it wielded the function of a weapon, a symbol of power, and a facility for ritual. Interestingly, a similar understanding was likewise shared on the other side of the world, where a samurai's sword was said to contain his soul, and to each warrior represented more than a deadly blade, as it also embodied an honourable way of life. *Scientia*, on the other hand, in being primarily rational (in the original Latin sense of *ratio*, meaning taking or giving an account of), was meant to have its call answered, or accounted for, not in nature, but in the natural world of the

quantifiable. In other words, science was always meant to account for things that are not readily apparent but which can be shown to exist through indirect methods of detection (based on measurement of effect or influence), quantification and computation. As such, science was always highly symbolic and theoretical, though not meaningful in a ceremonial or ritualistic sense. Indeed, things of science have no double meaning or significance aside from the practical function they provide. General relativity, periodic table of elements, or electromagnetic radiation are all examples of scientific knowledge arrived at through the rational (i.e., calculable and quantifiable) methods of inquiry.

An often-made error is that of comparing Greek branches of learning, particularly those distinguished in Aristotle's philosophy, to the different sciences of today. It is true that Aristotle clearly differentiated between physics, biology, astronomy, etc., though he never considered them in terms of rational sciences, but instead as distinct domains of knowledge within an overarching epistemologically and empirically grounded philosophy (Tatarkiewicz, 1931/1997). Similarly, reason, or rather reasoning, as expressed in the Greek writings, was not equated with the Latin rationality, but was otherwise understood in terms of disclosing a cause or a motive, as in revealing a reason or motive for being or behaving a certain way. To reason, therefore, meant to look for and uncover a given cause. In fact, Aristotle mapped out four distinct principles or types of causes, which clarified the nature or the essence of things, beings, and phenomena (Heidegger, 1954/1993). The Greek understanding of reason, therefore, was much broader and more meaningful, where rationality, in terms of taking or giving an account, comprised only one of its elements. In this sense, a rational man does not automatically mean a man of reason, just as being rational does not always equate with being reasonable. The rationale behind the Nazi extermination camps serves as one sobering example.

Though *scientia* and *ratio* dominated Western thought until the 16th century, the Aristotelian approach, once reclaimed, was eventually taken up by the English empiricists, such as Bacon (Francis), Locke or Berkeley who, in following Aristotle, affirmed that true

knowledge could be derived only through experience and observation, and not simply through rational or spontaneous thought. This view was in stark contrast to the rationalist position, where such figures as Descartes, Spinoza or Leibniz argued that the human mind was capable of recognizing reality by means of reason (i.e., mind and not motive or cause), which to them represented a faculty that was independent of experience (Magee, 2001). An eventual compromise was reached where today both, rational logic and empirical observation, have come to constitute the scientific process. It is important to note, however, that the relationship between the empirical and the rational ways of thinking or analysing was never a balanced one, for it was the long forgotten empiricism of the Greeks that was assimilated into an already Latin and predominantly rational mindset of the early Renaissance. The rational position was furthermore strengthened and made more appealing during the latter part of that period by way of Descartes' *Cogito Ergo Sum*, and the claim that mathematics, geometry, as well as reasoning by axioms and deduction would indeed make science into knowledge that would be certain. Ultimately, the rational, the logical and the explanatory aspect of science, combined with the practical applicability of the findings in the typical, run of the mill craft and industry, led to its extraordinary infiltration into every aspect of our day to day functioning, whether social, political, or economic. It was technology, however, which, by far, was one of its most fitting benefactors, as well as one of its most crucial contributors.

In becoming scientific, modern technology displaced not only the Greek *technē* but also the Latin *artes*. Yet, as we have discussed earlier, the practical function it acquired in the union did not erase its theoretical significance. Indeed, the practical tasks and functions of technology interact rather closely with the theoretical findings of science. What this indicates is that science, as a way of knowing, represents the modern expression of the ancient *epistēmē*. However, since science is mostly concerned with the knowledge about things and beings, as opposed to *epistēmē's* interest in the understanding of being, each inspires a different *form* of technological and technical practice. In the case of the ancient

technē, as inspired by *epistēmē*, the practice within a given craft was meant to address and reflect the knowledge of the essence. In the case of modern technology inspired by science, on the other hand, the practice within a given profession is meant to address and reflect the knowledge of the subject matter and its substance. The modern physician, for example, is to know the body and its processes. A chemist is to know the periodic table of elements, their formulas and reactions, just as a pharmacologist is to know his prescriptions and their possible side effects. In each case science plays an instrumental role in bringing-about the necessary knowledge of any given substance, whether that of a thing, a being, or a phenomenon. It is not, however, instrumental in bringing-forth the knowledge of the essence of being of the professional, or of what he professes.

The modern technician, whether an expert, a specialist, or a professional, is not required by neither science nor society, to be a craftsman of his craft or an artist of his artistry, i.e., in terms of the ancient *technē*. What he is required to do, however, is to be proficient, efficient, and competent in his practical (i.e., technical) and ethical application of scientific knowledge. No other prerequisite is expected or mandated. As a result, Western professionals are exceptionally well skilled and knowledgeable, and yet are clearly disengaged and disconnected from the world in which they occupy themselves, not in terms of their personal dedication, but rather in terms of their professional obligation. We might ask, for instance, to what extent is a surgeon expected to see himself as a healer when performing a triple bypass surgery? Or, to what degree is a professor required to see herself as being a mentor to her students while giving out multiple-choice exams? It is understandable that technological and scientific innovations in medicine and education, as well as any other scientifically oriented field, will necessitate a high level of technological and technical expertise and proficiency. At what point, however, is one's mode of being (e.g., a healer or a mentor) altered from being framed by science (i.e., in terms of becoming skilled and specialized as a physician or a teacher) to being technologically-enframed (i.e.,

going about one's business in a strictly technical and scientifically preordained way as a medical expert, or an evaluator)?

It is undeniable that while performing a triple bypass surgery, a surgeon's main concern should be with the application of his medical knowledge and technical skill. Enframing becomes an issue, however, when a given surgical procedure and its success rate, and not the patient's overall welfare, whether on or off the operating table, is of primary concern in his practice. Similarly, a professor is required to evaluate her students as accurately and as fairly as possible. Multiple-choice exams were designed specifically for this purpose. Though here the issue of enframing also becomes apparent when evaluation of performance is revealed as being of primary concern and relevance, over and above the teacher's consideration for her students' understanding and meaningful appropriation of the material being taught. *Technological enframing, it thus appears, has to do not so much with our reliance on technology in the performance of our day-to-day tasks, as it does with the degree of relevance we place on the value and importance of its scientifically determined validity and reliability. As such, enframing is not a function of the modern technology per se, but rather of the modern scientific mindset upon which it is based.*

We experience and partake in the world of science through technology. Subsequently, it is their union which gives rise to enframing, particularly since the highly advanced technologies of today are typically based on, and thus are framed by, scientific data and evidence. Technology, however, does not frame us in the same way as science frames technology. Rather, the enframing feature of technology reveals it as the science's mouthpiece. For example, when we use cell phones, microwaves or radios, we are exposed to an underlying "reality" of electromagnetic radiation, i.e., a theoretical world framed by the prism of the physical sciences. Similarly, in the administration of social technologies such as diagnostic tests, personality inventories, or intelligence quotients, we inadvertently partake in enframing, that is, in a propagation process of scientifically framed knowledge of our psychosocial reality. Science, therefore, arms technology with the ammunition of theoretical

knowledge, to be used with professional discretion. Just as a police officer enforces the mandate of the police force and other governing bodies, so too the enframing feature of technology enforces the scientifically framed knowledge, and the worldview it discloses or promotes. For the most part, this worldview may not be openly acknowledged or accepted, but under closer scrutiny it reveals a distinct form of a modern mindset, which speaks to a shared set of values, of both the scientific establishment and the secular world it serves.

While utilizing the scientifically based technologies in the social, political, or economic arenas, we become enforcement officers of the knowledge they impart. Scientific technologies, therefore, whether in the form of a psychometric test or a bullet-proof vest, serve to impress a specific social mindset, and uphold a particular scientific worldview, which in the case of our modern technological tradition is a view of an ordered, calculated and mechanical universe, as well as a conception of a rational mind capable of disclosing, analysing and interpreting its secrets.

Technocratic Mindset

Although anchored in the heritage of the Greco-Roman antiquity, a new, autonomous and self-determining, scientific tradition has emerged. From the Renaissance on, the old metaphysical and cosmological worldview has been replaced with a view of a rational, sceptical, individualistic and secular mindset (Tarnas, 1991). Empowered with scientific knowledge and led by the technological progress, a new human being, assured of his intellectual power and capacity, has come to claim self-rule over his fate, his future and his fortune. Science itself, in offering the possibility of epistemological certainty, objective agreement, and experimental prediction, presented a seductive prospect for the modern mind, whereas unprecedented technological modernization gave it outward expression and validation. Subsequently, the spirit of the modern age, it appears, has found its new faith in the promise of science, and its salvation in the potential of technology.

In the following sections, we will examine, in more detail, the ground for the technocratic spirit of the modern age. Mainly, we will revisit the meaning of technocracy in light of the Latin influence on the Greek mindset. This will lead us to consider the likely possibility of the new, scientifically grounded, cultural *mýthos* as embodied in the technological character of the modern social *ēthos*.

Technocracy as Technē-Crātis

Initially, the term technocracy, as chosen for this thesis, was to reflect the ever-increasing reliance and dependence of individuals and institutions on the present-day, highly advanced technology. Though, this still appears to be the case, the historical analysis of the origins and the demise of the Greek *technē*, as well as the emergence of modern science and technology, suggest that the Greek and Latin mindsets of the past continue to play a role in shaping our current ways of thinking about the practical and theoretical relationship of *technē* and *scientia* in their relatively recent union.

Based on the preceding historical analysis, it appears, that a more fitting and accurate interpretation of the word technocracy, which would reflect the intermixed Greco-Roman legacy while maintaining its generally-acknowledged, present-day meaning, could indeed be put forward. Simply stated, the word technocracy can be interpreted as the Greek *technē* and *krátos*, meaning rule or power, or even more precisely with the Latin *cratia* or *crātis*, meaning frame. Understood in these terms, *technocracy can be interpreted as the ruling or framing of technē, that is, as framing, restricting or inhibiting the initially unconstrained spirit, nature, or essence of craftsmanship*. In fact, the combined meaning of *-cracy* in terms of *krátos* and *crātis*, carries with it a legal and a practical legacy of the Greek, but more so of the Roman character, which fittingly supports its present use as reflective of the practical and technical meaning of *-cracy* in words such as bureau-cracy or demo-cracy. Furthermore, the suffix *-cy* itself indicates a state of being, thus suggesting that bureaucracy, democracy or technocracy are, to a greater or a lesser extent, all forms of constrained ways of being.

The new understanding of technocracy, therefore, not only reflects the administrative, official, specialized, or instrumental features of the currently accepted definition, but also suggests a loss of an intuitive, natural, and attuned way of experiencing, developing, and being with technology. In other words, technocracy, as a term descriptive of our mode of being with and around technology, reflects not only a practical view of the modern technological world, but also a distinct mode of highly technical and inhibited human interaction as substantiated by, and revealed in, the modern Western (and predominantly Latin) mindset.

Scientific Foundation of the New Cultural Mythos

A substantial aspect of the present-day Western mindset is grounded in the specific direction of the modern scientific tradition. It is this tradition, which shaped, and continues to guide, the views and beliefs of the contemporary world. The secular and positivistic position of science has clearly evolved beyond the seemingly primitive, superstitious, and uncritical outlook of the ancient and medieval cultures. With the discovery of a systematic method of acquiring knowledge about the natural world it came to establish a new cosmology of the universe, as well as reveal the value and relevance of the rational mind. In the philosophical, technical, and scientific arenas, a new worldview had been clearly identified, conscientiously acknowledged, and widely established, displacing traditional ways of knowing and inquiring into the nature and the essence of the cosmos and our relation to it. The most critical and influential characteristics of the modern knowledge have securely planted their roots, not in spiritual mythology but in scientific methodology.

Methodological importance and significance in the pursuit of certainty and unbiased analysis came to be addressed by the empiricists and the rationalists alike. Francis Bacon, often considered by many as the godfather of science, has introduced to empirical observation the theory of induction, thus proposing a new method of inquiry by way of controlled and systematic procedure of unbiased analysis of observed data, whether of the

senses or by the use of instruments and experimentation, which would then, and only then, be followed by inductive reasoning, thus providing us with general and empirically-supported conclusions (Tarnas, 1991). The new science, therefore, placed central emphasis on observation and the assessment of general, inductively obtained ideas against experience. The rationalists, on the other hand, claimed that the attainment of true knowledge was possible by way of rational logic and mathematics. In his *Discourse on Method*, Descartes emphatically proposed that mathematics, as the rational ideal, is the most clear and specific approach to gaining knowledge. "Of all who sought for the truth in the sciences," he declared, "it has been the mathematicians alone who have been able to succeed in producing reasons which are evident and certain" (quoted in Lavine, 1984, p. 93). In his view, therefore, it was not the empirical experience or experimentation, or even inductive speculation, but rather the logical and rational method of mathematics and deductive reasoning that could bring about certainty and clarity, not only in the area of analytic geometry (which he invented), but also in philosophy proper.

Descartes' objective, therefore, was not only to pursue the certainty of existence in terms of *Cogito*, but also of things in the world as far as they can be rationally and logically established in the mind. Mathematics provided him with the necessary philosophical and methodological means. This powerful idea that truth about the natural world could be represented by way of numbers, equations and logical deduction was revolutionary. It furthermore gave rational basis to an ordered and mechanical view of the objective reality where things, beings, or phenomena were losing their spiritual, mystical, or symbolic significance, while at the same time they were coming to be comprehended by the rational and logical faculties of the human intellect. Indeed Spinoza argued that since everything in the universe appears to follow scientific laws and mathematical equations, there is no need for God to function as any part of the explanation (Tatarkiewicz, 1931/1997). Eventually, Descartes' position on mathematical logic was not so much challenged as it was modified and further extended by Frege at the close of the 19th century. Unlike Descartes, who

proposed that mathematical logic is a faculty of reason, Frege argued that mathematical relationships, and not human reasoning, comprise the only objective form of logic, precisely because they are independent of human thought (Magee, 2001). The relationship of two plus two, for example, does not need to be argued or interpreted, but only observed and comprehended. The importance and significance of modern methodology owes much to Frege's analysis of mathematical logic, as it provided philosophical ground for instrumental validation of the objective (i.e., mathematically-obtained and established) results. Today, by way of mathematical logic, we can observe, study, examine, or experiment with any operationalized concept or structure, thus giving us the certainty and objectivity, which both the empiricists and rationalists so highly desired.

Ultimately, in response to the collapse of the fundamental scholastic tradition, and in reaction to the emergence of sceptical relativism that followed, modern empiricism came to recognize and establish an ordered and mechanical universe, whereas modern rationalism brought to light its immutable and objective laws. The Western mind had acquired a new way of discovering, analysing, and validating knowledge. Knowledge itself was no longer to be intuitive but rational. The natural world of things and beings shifted in the scientific mind from a mystical and organic cosmos to a mechanical and ordered universe. Rationalism and empiricism became the two pillars of modern epistemology producing their own metaphysical entailments. As Tarnas (1991) summed up: "While modern rationalism suggested and eventually affirmed and based itself upon the conception of man as the highest or ultimate intelligence, modern empiricism did the same for the material world as the essential or only reality – i.e., secular humanism and scientific materialism, respectively" (p. 286). Ultimately, our perception of the natural world and reality had fundamentally shifted. The world of the Greek *mýthos*, where the universal order was shared by both the nature of the gods and the human reason, was now clearly split into the world of rational subjectivity and the objective world of mechanical and mathematical order. Essentially, the mystical

lógos of mythology has been replaced by the mathematical logic of methodology. In other words, science became the new cultural *mýthos*.

Though the universe is still perceived as mysterious, science is believed to hold a promise of unlocking its secrets. With the successful fissioning of the atom in 1945, it was not the material or mystical universe that endured but a mechanical and a theoretical one. Science gave us proof that the physical world is essentially non-physical, and only by way of its methods, and not religious or philosophical conjectures, can we disclose and utilize its treasures. All modern technologies stem from the scientific discoveries of the last five hundred years. Radioactivity, electromagnetism, general relativity, superconductivity, thermodynamics, or quantum electrodynamics all influenced, and continue to play a part in, the invention and production of most modern technologies, be they mechanical, artificial, or social.

Until the discovery of penicillin in 1928 by Alexander Flemming, for example, humankind appeared to be helpless against bacterial infections. With the ensuing wave of antibiotics and massive immunizations, a general sense of victory against the gruesome reality of disease was finally felt. Similarly, the first anti-psychotic medication, which came on the market in 1954 and was hailed as the wonder drug, has by the mid 1970s led to a billion dollar industry, with over 200 million tranquilizers, anti-depressants, and sedatives being prescribed in the US alone (Inglis, 1981). Consequently, medicine, as well as its related subfields of biology, pharmacology, and neurology, etc., firmly established themselves within the ranks of natural science. In fact, all social fields of study, such as psychology, sociology or criminology, are today considered, by way of methodological (i.e., mathematically based) inquiry, to be scientific in nature, or at least in principle. Psychology, for example, may not be able to split the atom, but it can certainly observe, experiment with, and provide general principles of cognitive or behavioural functioning, even if based on models of artificial intelligence. Indeed, it is the use of mathematically consistent, and

statistically-sound models, which give scientific credence to the methods of observation and data collection, as well as its later analysis and interpretation.

The present-day media, by far, is the most efficient and principal vessel, which contains and carries the modern message of scientific promise. Sparked by science's television début during the O.J. Simpson trial, an overwhelming majority of prime time television programs began portraying issues of daily life and drama in a practical, legal, technical and scientifically-sterile format. Relatively recent television series such as CSI (Crime Scene Investigation), Law and Order, or Criminal Minds, all deal with the human drama on grounds of scientific knowledge and technical know-how. Cases are solved or resolved with the aid of science. In fact, the prominence and importance of science gives it an air of presence as a powerful and an authoritative character behind the scenes – an all-knowing entity, or an almost mythical god. It is science, which in each case helps decipher and tell the story of the crime. It is science, which helps unravel the thinking processes or motives of the perpetrators. It is science, which is used as the primary weapon in the delivery of unquestionable proof or evidence. It is science, and not religion or philosophy, which has become the tree of knowledge, the oracle of Delphi, the Sherlock Homes of the 21st century.

Science has striped the ancient gods of their powers, and brought them down from the heavens. In the process it moved the earth and with it the human mind. In effect, as Tarnas (1991) noted, "The way was now open to envision and establish a new form of society, based on self-evident principles of individual liberty and rationality. For the strategies and principles that science had shown to be useful for discovering truth in nature were clearly relevant to the social realm" (p. 283). By way of strict logical and mathematical methodology, and a promise of clarity and certainty it held, science has led the Western mind to a new rational mythos, where the Einsteins of today, being the new-fangled gods of math and logic, weave the thread of the modern cultural narrative.

Technological Character of the Modern Social Êthos

Every cultural *mýthos* (narrative), finds its expression and reflection in the social *êthos* (character). The Greek gods of wisdom, beauty and passion were to be found among the works of art, poetry and philosophy. The Roman gods of order and reign, and the Judeo-Christian God of the covenant and commandments, brought about societies of rule, power and justice. When Alexander the Great concurred the Eastern world, he left behind institutions of culture and learning, as well as self-governing states dotted with public gardens, academies, and libraries (Kumaniecki, 1975). The Roman conquests, on the other hand, in conjunction with later medieval influence of the Roman Catholic Church, gave rise to societies of rule and order, both human and divine, with intricate structures of legal and doctrinal organization and procedure (Lavine, 1984). Subsequently, churches, cathedrals, castles and courts were to dominate the European social landscape for more than 15 centuries.

Today, we too have our distinct *mýthos*, though not as divinely inspired as the ones from the past. The emerging scientific narrative, or account of the universal reality, feeds the Western imagination and inspires the force and direction of mechanized ingenuity, thus giving rise to the technological character of the modern social mindset. With sophisticated scientific innovation, over the past five centuries, a shift from tool bound artistry to high-tech industry has occurred, in effect changing the face of our every-day life. And although remaining within the ancient ethos of social law and ethic, the predominant feature of the contemporary Western world is that of an advanced industrial society. It is upon this characteristic that we rank the global order, from the third world countries that have no industry to speak of, to the developing countries with moderate technological progress, and the industrial societies at the apex of technological innovation and expansion. *Today's technology, therefore, is not only the mouthpiece of the modern cultural mýthos, but is also the centrepiece of its social êthos.*

In a swift wave of technological progress we have become the mythical Merlins of the 21st century. With ever evolving powers that supersede our greatest expectations, the universe finally appears to be at our fingertips. We have divided water into hydrogen and oxygen, split the atom into quarks, and unfolded the complex helix of our genetic code. We have broken the sound barrier five times over. We have utilized water, wind, and solar power. We have breached the space gap with radio and ultrasound waves. We have mapped the skies and touched the moon. And all of this we have done with modern scientific technology. As Romanyshyn (1989) so unmistakably expressed:

Technology seems to invest us with such power.... Without much effort we can summon into presence any number of figures and just as easily with the press of a button can we condemn them to the fading light of absence. We can light up the night and banish the darkness. We can withdraw from the minerals of the earth billions of years of stored energy of the sun. We can even re-create that energy here upon the earth by releasing from within matter itself the radiating energies of a star. And perhaps most awe-ful and miraculous of all, today we stand poised and ready to reach beyond our island earth for the stars themselves. Technology is the magic of the modern world and every man and woman and child, however humble their circumstances, can be a practitioner of its art (p. 2).

Feats of the present-day human ingenuity appear unprecedented on the historical scale of technological development. However, even those most primitive and ancient tool technologies represented not only the technical know-how, but also the theoretical knowing-about. Seen this way, the mastery of fire, invention of farming, or the construction of the wheel, are not unlike the development of electrical heating, agriculture, or motorization, in that all entail the practical and the theoretical knowledge. The difference is, however, that unlike the old technologies, which did not depend on the outside theoretical influence, the modern ones are themselves theoretically blind, and chiefly perceive through the theoretical eyes of science. The separation of the theoretical and practical aspects of the old form of

technē, has led to the loss of the immediate experience of technology as lived – as in the case of the hunter and his prey. In the ancient times, the relationship between the two was unmistakable, and the ontological understanding of the hunter's mode of being was clearly discernible. Today that is no longer the case. With the changing technologies, and the separation of theory from practice, the ontological grasp of our predatorial mode of being has been covered over, and veiled by our sightless technology. *Subsequently, one must look beyond the technological veil and dig beneath the scientific practice to once again disclose the now distant, and in some instances alien, understanding of our mode of being.* In our contemporary times, for example, where we have “evolved” from hunting to herding, we continue to embody an aspect of our primal nature, no matter how concealed. Though we no longer prey on the bison, the boar, or the fowl in the sprawl of the wilds, we nonetheless bargain hunt for beef, pork or poultry in the supermarket meat isles. From the slaughterhouse saws and cleavers to the supermarket shelves and freezers, the latest meat manufacture and packaging technologies remove the average consumer from the brutal and grisly process of its production. In this sense technology conceals something of our being when we delight ourselves over a bucket of fried chicken wings, quarter pound stakes or turkey cull cuts, without giving a second thought to their grim journey. When that journey is disclosed, however, the modern-day meat manufacture technologies reveal hidden within the livestock agriculture, as well as the meat consumer culture, our now saran wrapped, yet ever-present, predatorial mode of being. *Unlike technē, therefore, today's technology, being theoretically-dissociated from its intended objective, no longer looks disclosively so as to bring-forth, but is rather brought forth so as to express and execute scientific visions and aims, though no longer understood or grasped ontologically.*

When Heidegger spoke of science as being employed by technology, he wrote from the theoretical perspective of *technē's* use of scientifically obtained knowledge. Based on our analysis, however, it is safe to conclude that the ancient *technē* lost its place in the world of modern thought. Its theoretical knowledge, in terms of *epistēmē* and *poiēsis*, has been

largely replaced by the Latin *sapientia*, in terms of *scientia* and *intelligentia*. Subsequently, having re-emerged in the shadow of *scientia*, the ancient *epistēmē* itself, within the contemporary system of epistemology, failed to regain its value and importance of ontological disclosure. In other words, while based in *scientia* (i.e., ontic knowledge of things in the world) neither the processes of modern technological production, nor the produced technologies themselves, speak directly to the meaning of our being. On the contrary, it is we who answer to the technological character of a given age, which in our case happens to be the age of virtual (i.e., information and data-based) technologies. In being overwhelmingly scientific, therefore, modern technologies are more a reflection of the Latin mindset in terms of *sapientia*, than of the Greek *technē*. It is to that extent, therefore, whereby technology appears to be employed by our scientifically-oriented mindset, rather than the reverse, as Heidegger had contended.

As modern scientific technology is of a computational and calculative frame of mind, it is primarily ontic in nature. Moreover, science itself ventures out beyond the scope of necessity or circumstance, and thus inspires technological innovations which, while being driven by curiosity, become less concerned with the thoughtful consideration of the elements and more with their manipulation and management. Modern technologies are therefore primarily designed to manage the natural and the human resources, as well as to manipulate the artificial and scientifically discovered ones. As such, they forfeit their disclosive character, essentially disconnecting us from the ontological grasp or understanding of our personal, as well as social situatedness. To this extent, we can be in full agreement with Heidegger (1954/1993) who warned us that the unfolding of technology threatens revealing, that is, it distances us from relating to the meaning of our disclosive looking.

The early hunter-gatherer and farming societies recognized themselves as being in a sacred relationship with the life giving earth. Thus bows, arrows or spears, and later hoes, scythes, or sickles were not simply tools or symbols but also statements of who these humans thought they were – stewards of the land, with god-granted dominion over the earth's

creation. Their tools and technologies stood for the divine order of things, and gave meaning and significance to one's toils, as well as a place in the sacred scheme of life. In short they defined not only their activities but also their identities. Today's technological character of the modern social ethos, on the other hand, is theoretically impoverished, particularly as we place our convictions and expectations not in the practical, but rather in the conceptual (i.e., scientifically-based) feature of technology. Science itself does not provide us with new ways of managing or manipulating the material world as does technology, though it clearly opens up those possibilities. In fact, it guides and even directs them. It is with the scientific blueprint in hand that new practices, techniques, and technological inventions are designed, devised and developed. *Science, therefore, and not technology, reveals itself as the primary form of disclosive looking. As such, we can think of science as a conceptual or theoretical map of the terrain on which the technological road network is being constructed. It is to this extent that our modern technological character is one of detached theoretical vision from our lived and experienced reality, essentially leading us toward a discordant, that is, technocratic mode of being.*

5. TECHNOCRATIC-MINDEDNESS AS REVEALING OF INAUTHENTIC BEING-IN-THE-WORLD

Our modern-day, technocratic mindset has not been forced or imposed on us. It has evolved over centuries and became an integral part of our collective Western psyche. We have come to view our world and ourselves through its scientific eyes and technological lens, sometimes to the extent of trusting it at the expense of our intuition and experience. Our challenge, however, is not to dismantle this mindset, but to understand its implications with respect to how we take it up. The discordant nature of the technocratic way of thinking inevitably sets up the stage for a discordant mode of being, where the ontically-grasped knowledge of the world of substance takes precedence over and above the ontological understanding of its essence, and of our being in relation to it. Subsequently, this and the following chapter will, in turn, examine two distinct ways or modes of approaching the technocratic mindset, first from an attitude of mindedness, and second from that of mindfulness.

Technocratic-mindedness, as the phrase suggests, represents an inclination or a disposition toward the techno-cratic frame of mind, as based on the technologically-enframed worldview. The aim of this chapter, therefore, will be to establish and clarify the scientific and technological influence on the way of thinking that is acceptive of, and compliant with, a form of instrumental rationality and pragmatic scientism predicated on assumptions of an objective and measurable reality. In addition, technologically-enframed social structures of institutionalization and professionalism will be offered as being indicative of a post-modern industrial influence in terms of providing a social context, or ground, for Dasein's inauthentic being-in-the-world, marked by the disjointed, disengaged and disowned modes of being. Finally, this chapter will also express the idea of technocratic-mindedness as revealing of Dasein's thrown condition of being delivered over to the socio-historical conditions of technological enframing. Moreover, in being disclosed as thrown, the enframed character of

technocratic-mindedness will be presented as revealing Dasein's socially prescribed possibilities of its inauthentic mode of being.

Now that we have established the historical ground of the technocratic mindset, it would be fitting to revisit the definition of authenticity in terms of its original meaning in both the Greek and Latin languages. When we trace the term back to the Latin *authenticus*, meaning original, genuine, from the real source, and not counterfeit or false, we find that the term concerns things and phenomena while referring to their credibility. In other words, the Latin use of the term implied a genuine origin of an object or a thing, such as a document or a work of art, as established based on evidence. On the other hand, when we trace the term authenticity to the Greek *authentikós* (*autós* self + *-héntēs* one who acts), meaning independently, directly, of one's own accord, and not subject to another, we find that the term concerns an autonomous and self-governing mode of being, free of outside interference or imposition. For Greeks, therefore, most authentic was someone like a merchant or a philosopher, free to be and think of one's own accord. In contrast, Greek slaves were never seen as being authentic for they belonged to another, and their actions and intentions, even when self-serving, were always subordinate to the intentions of the one who owned them.

Based on the two definitions, we can see that the modern view of authenticity has adopted a Latin interpretation in terms of genuineness and legitimacy, extending it from authentic things to genuine actions and emotions of human beings. If, however, we were to adopt the Greek version, the notion of authenticity would have to be applied to our mode of being as against any possible form of outside authority or influence, which in our case is the influence of technocracy. Subsequently, as the heading of this chapter suggests, the technocratic-mindedness, or inclination toward a technologically-enframed worldview, will be presented as indicating an inauthentic mode of being, that is, a mode of being that is not fully one's own as it is subordinate to an enframed way of thinking and being. In taking up the issue of authentic being from the perspective of the Greek interpretation, therefore, the present chapter will speak to the second research question, i.e., In what way is the modern-

day Dasein addressed by the cultural context of our technologically-enframed tradition of science and industry, so as to allow the revealing of its inauthentic (i.e., subordinate) mode of being?

Technocratic-Mindedness

Technocratic mindedness was a phrase coined by Bullough, Goldstein and Holt (1984) indicating a form of instrumental rationality, whereby the importance and application of technical method and action replaces other modes of reflection and communicative interaction. In other words, technocratic-mindedness is to be understood as an uncritical acceptance of the view that only the mathematical and calculative methods of science can produce genuine knowledge. Moreover, the authors suggested that this type of mindedness assumes that the only appropriate way to solve our social problems or dilemmas is by way of applying these methods of science to such issues or challenges.

In adopting this definition of technocratic-mindedness we shall also incorporate our understanding of technocracy as techno-cracy, that is a disjointed mode of understanding, where the ontological grasp of technological revealing is enframed or covered-over by the science's ontic outlook. Under this view, modern science will be viewed as portraying the human being, as well as his actions, in terms of an intricate system of integrated functions or mechanisms, with technology being utilized to generate its often elusive, structural context. As a result, with the high-tech information-processing framework serving as the backdrop, the modern individual finds him/herself in a highly artificial, and yet strangely natural, reality. What this suggests is that scientific technology possesses a great degree of power in actively shaping our collective outlook, not only of the world in which we live, but also of how we experience it. In a sense, within the frame of technocratic-mindedness, the scientific technologies we utilize have the potential of becoming the practical "embodiment" of our very understanding of what our reality is. For this reason, in the following section, we shall elaborate on two most prominent features of technocratic-mindedness, which are those of instrumental rationality and pragmatism.

Pragmatic Attitude

What Taylor's scientific management did for technology, Peirce's pragmatism did for science. Though both systems of thought and method developed separately they nonetheless coincided in time (end of the 19th and beginning of the 20th century) and in ideology. Each expressed a logical application of knowledge in the form of a practical and an efficient instrument, in Taylor's case of technological production, and in Peirce's case of scientific methodology. Moreover, pragmatism, like scientific management, has from its inception been considered an American invention. Their synchronous appearance has been seen by some as a reflection of the American pioneering spirit (De Waal, 2005), not only in terms of the colonial expansion over the continent, but also in terms of the radical venture into the uncharted territories of modern technology and science – particularly as most of the major technological developments and scientific discoveries of the 20th century have occurred on this side of the globe.

The notion of pragmatism is not new, however, as it appeared in both the Latin and Greek languages. In both ancient versions a pragmatist was defined as someone who was efficient and skilled in the civil affairs, most often an expert in legal or political matters. Within the context of the modern-day mindset, on the other hand, pragmatism is generally seen as having to do with practical results or values in everyday activities, and also in terms of viewing things and phenomena in a matter-of-fact way. Though this interpretation is by all means applicable with respect to our definition of technocratic-mindedness, it is not entirely complete. Pragmatism, as described and expressed in the writings of Peirce, James (William), or Dewey has been presented as a technical doctrine. According to Pratt (1909/1977), it “offers us a theory of meaning, a theory of truth, and a theory of knowledge; that it is trying to work out a theory of reality; and that it is also a general point of view or way of looking at things – a way that is in part peculiar to pragmatists, in part adopted by them from a larger tendency or attitude which colours much of contemporary thought” (pp.

9-10) – or, as we have otherwise established, a scientifically framed attitude of technocratic-mindedness.

Pragmatism, therefore, either as a theoretical doctrine or a practical method, did not partake in giving rise to technocratic-mindedness, but instead arose from it. As such, its theoretical and practical implementations in the areas of science or technology serve to disclose and reveal the nature of our socially shared, and technocratically-minded mode of being. As a theoretical doctrine, pragmatism is the right hand of science. As such, it offers us a theory of the meaning of truth, knowledge, and reality in general. It also offers a practical approach to a general way of thinking, usually within the bounds of scientifically generated hypotheses. In fact, according to Pratt (1909/1977), the scientific view of the meaning of hypotheses was seen from early on as the more important source of pragmatism. Viewed in this way, the hypotheses themselves, in terms of their practical doctrine, serve as the short-hand for human experiences. In other words, it is their usefulness, which is seen as having priority above its truth-value. Evidence-based results are thus preferred over the theoretical truths on which they are based, or even those that they argue against. In consequence, argued Pratt,

the scientist... sees that his hypotheses and laws ultimately get their meaning from our experience. And, moreover, he no longer regards them purely as ends in themselves; rather they are now his *instruments* by the use of which human action may profitably be guided. Hence he is less concerned than were his predecessors with the question whether the hypotheses are true; what concerns him most is their usefulness (p. 15).

All modern evidence-based approaches to research and practice rest on pragmatism's premise of the useful nature of meaning and truth. In fact, the pragmatic notion of truth is not identified with experienced reality but with known facts that have been verified, validated, and proven true by way of research and methodical observation. Accordingly, only those claims which work, or are seen as useful, are accepted as truth. This also means

that pragmatism discards those answers which are derived by way of pure interpretation or common sense. Essentially, pragmatic truths need to be instrumentally established.

A clear example of pragmatism at work can be observed in psychological research, where the most commonly used approaches are based on the methodology of experimental designs, controlled and objective measurements, and statistical procedures of data analysis. The inferential feature of psychological research, and conclusions thereof, is thus primarily based on observed facts, figures, and data. As such, psychological constructs and conceptual models reveal an orderly, structured, and predictable organization of a given social or psychological phenomenon being studied. Moreover, based on the specific methods used by a given scientific discipline, in our example by psychology, only particular kinds of facts, stemming from repeatedly observed events, can be produced. It is these facts, which in the end provide the bases for objective meaning to the initial hypotheses. There is a catch, however, as each hypothesis already presuppose some kind of a meaning, thus the research conclusions can only support or reject it, but not produce it. *What this shows is that pragmatism covers over the genuine interest behind the research with practical usefulness of its results.* In aiming for the usefulness of its results, therefore, pragmatism directs us in the choices of issues that we ought to concern ourselves with. In other words, by way of its doctrine, pragmatism aims to formulate for us a practical and useful method for determining what philosophical questions are worth discussing and what problems are worth selecting (Pratt, 1909/1977).

Ultimately, pragmatism, as can be gathered from our discussion, does not mean practicality in terms of a direct hands-on activity. It is not a doing, but a technocratically-minded approach to doing. It is a theoretical attitude based on the practical applicability of efficiency, proficiency, economy, effectiveness, expediency, usefulness, and convenience of a given method chosen for a particular task. However, though pragmatism is a philosophical and thus a theoretical method, it does not account for the historical, interpretive, narrative, or intuitive approaches to practical or theoretical inquiry. Once it is implemented or utilized in

terms of its practical attitude, therefore, it forecloses on the employment or utility of all other non-instrumental methods.

Instrumental Rationality

Whereas pragmatism offers a theoretical method to a practical approach, instrumental rationality offers a practical method to a theoretical approach. As the other hand (i.e., opposite to pragmatism) of technocratic-mindedness, instrumental rationality adequately expresses a form of knowing and accounting for things by way of scientifically based (i.e., mathematical and calculative) instruments, techniques or technologies. In other words, numbers, calculations, statistical analysis, graphic representations, as well as any computerized (data-based) equipment which transfers and interprets information, are all instruments that are utilized in a rational way so as to give a symbolic version or account of reality. The challenge here is not in being discriminate with respect to the accounts that are presented to us via the instruments, but rather in discerning the meaning of the rational knowledge they facilitate.

A clear and explicit example of instrumental rationality can be recognized within the general field of education, where from the elementary to the graduate levels, similar ways of expressing, and accounting for, knowledge are applied. One of the most crucial aspects of modern curriculum is that it is standardized so that it may be presented, taught, and objectively tested across the board. By this account, what is introduced as knowledge in schools has been limited to formal, information-based subject matter, over and above intuitive and experience-based learning. As Bullough, Goldstein and Holt (1984) have noted, "the rather straightforward outlook is that truth is known and is found in textbooks. Following this line of reasoning, education, to a considerable extent, is learning to read and remember" (p. 8). Textbooks, and test materials, therefore, serve as the primary source of instruction and examination. In fact, in being passed as objective means of measuring knowledge, the technical procedures of testing and measurement have become the primary

staples of the modern-day educational method. As a consequence, whether inadvertently or purposely, standardized testing itself has become a means of social classification and control. It is in this sense of being forced to have one's knowledge objectified, tested and measured that an average student, from a very young age, is introduced to the inauthentic (i.e., subordinate, not one's own) mode of being.

The issue here discussed, however, is not concerned with modern educational institutions per se. Plato's *Akadémia*, or Aristotle's *Lykeion* (Latin *Lyceum*) were also institutions of learning. The difference between the two, however, lies in the fact that the Greek schools, as also most schools until the 18th century, had no grading system till its introduction in 1792 at Cambridge University by a tutor named William Farish. It was his idea of assigning quantitative value to his students' work that brought out the concept of mathematical reality from the world of science and philosophy into the mainstream world of education, as well as other social institutions. From that point on, according to Postman (1993), numbers were assigned not only to the quality of thought, but also to other qualities such as those of love, beauty, creativity, intelligence and even sanity. In fact, the instrumental use of numbers became so prevalent that "most of us are now inclined to make these inclusions. Our psychologists, sociologists, and educators find it quite impossible to do their work without numbers. They believe that without numbers they cannot acquire or express authentic knowledge" (p. 13).

Another example of instrumental rationality can be found in the application of, and expectation from, the medical technologies. Medical technologies, by the very nature of their application, are extremely sophisticated, to the point of infiltrating the body without penetrating the skin. Unlike the stethoscope, electroencephalogram, or electrocardiogram, the latest CAT scans, MRIs, or ultrasounds make it possible for doctors and patients alike to finally "see" into the body. This modern miracle, however, is not without its drawbacks. As Postman (1993) suggested, medical magic "directs our attention to the wrong place... and evokes in us a sense of wonder rather than understanding" (p. 94). Mesmerized by

technology, we have learnt to trust its images even more so than the lived experiences they represent. Within the medical establishment itself, machine results have come to be trusted over and above the traditional methods of patient examinations. Consequently, however, “as medical practice has moved into the stage of total reliance on machine-generated information, so have the patients. Put simply, if a patient does not obtain relief from a doctor who has failed to use all the available technological resources, including drugs, the doctor is deemed vulnerable to the charge of incompetence” (p. 101-102).

With technological advancements in the 20th century, most institutions have gradually succumbed to the effects of instrumental systematization in the social construction and management of the subject, as well as the subjective experience itself. In the field of psychology or psychiatry, for example, the introduction of the DSM (Diagnostic and Statistical Manual of Mental Disorders), together with the impressive assortment of diagnostic tests and questionnaires, has produced “an overly formalistic blueprint that pathologizes ordinary and extraordinary experience and that disaffirms the meaning-oriented subjectivity of suffering in favour of technical diagnoses that often lack personal and collective significance” (Kleinman, 1996, p. 20).

Since the mid-20th century, in an effort to assert the DSM model within the framework of natural science, first psychiatry and later psychology attempted to espouse an organically-oriented approach to an essentially non-corporal domain. Consequently, the mental health establishment assumed the paradigm of disease-centred psychology, thus proclaiming itself as “ ‘a *scientific discipline*’ that ‘*seeks to identify the biological factors that cause mental illness.*’ As such, mental disorders were conceptualized as specific biological diseases in the brain with the same ontological status as diabetes or cancer.” (Castillo, 1997, p.13, emphasis in original) However, as Kirmayer and Young (1999) pointed out, notwithstanding the limited number of organic conditions, most DSM disorders do not qualify as diseases but as syndromes, for they lack any clear and identifiable biological substrate or etiological agent. For this reason, while grounded in psychiatric

nosology, the clinical discourse aimed at diagnosing and treating “mental disorders” has taken on a primarily technical function lacking in meaning, and consequently lending itself to the instrumental confines of reification.

Mind, personality, and intelligence, to name just a few, are concepts that tend to be rationally accepted as real and tangible things. In turn they allow for other more functionally applicable constructs to arise. For example, the construct of mental illness would not be possible without the notion of the disturbed mind. Dissociation disorders would not hold much merit without the view of a split mind or personality. Educational establishments would not evaluate or stratify students without our belief in successive levels of intelligence. And yet there is no such *thing* as a mind, or personality or intelligence. They are all concepts, ideas, and notions, which for centuries have served as means of understanding and grasping the subjective reality of the human condition. However, with social technologies, guided by instrumental rationality, the subjective understanding gave way to objective ordering. The mind has been subdivided into functions and ordered into processes. Personality has been affixed to traits and their associated patterns of socially recognized and approved behaviours. And intelligence, the most prominent and utilized of all ordering concepts, has come to be trusted across every domain of private and public functioning into assigning individuals to their socially appropriate slots in the already prearranged institutional categorization and classification.

The modern, technologically-minded notion that we can quantitatively measure, test and study such things as intelligence, or other thought processes, however, presents a primarily instrumental, and thus an incomplete view. Yet, as a society we demand more tests, studies, classifications and categories. We yearn for labels that can define us, and procedures that can guide us. Seemingly content with our socially prescribed tags, we appear to readily embrace the reality of our institutionally shrouded existence. Defined by our grades, IQ tests, and personality inventories we appear to consent to the instrumentally objectified and the rationally circumscribed view of our subjectivity and humanity.

Technocratically-Minded Mode of Inauthentic Being-in-the-World

Technologies we utilize shape our very understanding of how our world works and how we should operate, function, and think within it. Once this way of thinking permeates our society to a certain degree, the established patterns of knowing predetermine the public conception of what technology is and isn't, not by being imposed from outside, but through the channelling of thought on the inside as people accept those values and integrate them into their belief systems. Technology and science, as well as the positivist attitude they embody, serve as powerful tools in the modern age. More importantly, however, as any tool they lend themselves to being used in a particular way ascribed to its possible function and ideology, subsequently disclosing those possibilities of being that conform to their utility. The issue of conformity to the technocratic mindset and attitude as disclosed through technocratic-mindedness will thus be considered and analysed in terms of its unconcealment of specific ways of living within the instrumental and pragmatic paradigm of the modern technocratic society. In disclosing Dasein's situatedness in terms of its technologically-enframed facticity, therefore, this section will aim to reveal the specific aspects of the professional and institutional context that promote and encourage a technocratically-minded mode of being-in-the-world.

Additionally, the pervading technocratic mindset will be shown as having dominion over our shared mode of being in the They, in effect reflecting the current climate of our technologically-enframed situatedness characterized by ordering, challenging, imposing, etc. Put in another way, it will be suggested that in its present-day situatedness, Dasein is being delivered-over to the socio-historical conditions of enframing, thus revealing the technocratic and socially prescribed possibilities for its inauthentic mode of being. Essentially, in taking up these issues, the present chapter will address the second research question, i.e.: In what way is the modern-day Dasein addressed by the technologically-enframed social context, which allows the revealing of Dasein's inauthentic mode of being?

Disjointed Mode of Being in a Technocratically-Construed Natural World

For millennia human species have been a part of nature, a reality that has come and gone with the proliferation of scientific technology and the ensuing technocratic mode of being. As a consequence of the last four hundred years of our blatant objectification and exploitation of the natural world, we have gradually begun to lose our sense of belonging to it in the natural way. We have become disjointed, disconnected, detached and estranged. In effect, we have reached a point where our wilderness experience feels quite natural when aided by such unnatural accessories as a motorized vehicle, a portable gas stove, or a radio. Even the avid outdoorsmen rely on gadgets such as night-vision goggles for hunting, or the sensory under-water migration detectors for fishing. Our brief contacts with nature have turned into a weekend activity that is timed, scheduled and technologically assisted. More and more of our encounters with the wilderness are mediated through an array of specialized devices and tools, removing us further away from the actual experience and making it that much more assisted and controlled. In a sense, we have come to resemble not the natural world from which we came but the artificial world of the tools we have created.

The modern SUV is a prime example of this estrangement. This newest automobile is advertised as a tool of freedom, designed to allow access to the most extreme of terrains in the maximum of comfort. Heated seats and windows, air-conditioning, TVs and VCRs, electronically adjustable gas and break pedals, automatic starters and light adjusting systems are just some of the less extravagant accessories designed to enhance the pleasure of the backwoods experience, evident only by the extent of mud coverage accumulated on the body of the vehicle. This is the new world of the modern urban dweller. A world of luxury squeezed into a box on wheels. A box used for its convenience to traverse the shortest and farthest of distances, while enclosed in a personal space of artificial freedom. The type of freedom that allows one to objectify all that is outside the box to the point of virtual disengagement, where, while separated by glass and metal, the outside world and others in it can often become mere spectacles, or even annoying obstacles. For this reason, the

phenomenon of road rage is no accident. It is a reaction to the estrangement of the other, similarly hidden in a shielded box of privacy and comfort.

Our disconnected technocratic mode of being puts the natural world and that of humans at a distance. This attitude, however, is not new. For centuries our Western culture and tradition has viewed nature from a skewed perspective of renewable and disposable resources. Whether forests, rivers, animals or fish, all aspects of the wilderness have been, and continue to be, seen in terms of industrial possession, economic value or social currency. The difference today, however, is that with the aid of modern science nature need not be considered on its own concrete terms but rather in terms of abstract symbols, formulas, and equations, which can furthermore be explored, exposed and exploited. In fact, modern science itself no longer studies things in nature but, to borrow David Suzuki's phrase, it studies "the nature of things." By this account, the natural things of the earth, the air, or the water are now things of the physical laws and chemical reactions. Their meaning has been reduced to the most basic elements of science. As such nature is seen as a storehouse of energy or a standing energy reserve (Heidegger, 1954/1993).

Essentially, we no longer look upon nature from the perspective of a steward or a custodian but from the standpoint of a customer. With no storekeeper, however, the "storehouse" is being plundered. We no longer seem to feel obliged to "ask" nature for permission. We take what we can get our hands on and more. This is the case not because our human nature is evil, but because our mode of being is out of joint with nature itself. An animal killed by our ancestors was prayed to and thanked for offering itself. Today, we don't pray to the animals, the fields, or the water, nor do we thank them for their offerings. Seen through the eyes of science, animals, birds, fish, fruits and vegetables are a source of nutrition and energy. They provide us with proteins, starches, vitamins, and minerals. However, in being seen as a source of our nutrition they are treated as standing-reserve designated for our consumption. Farm animals, for example, are objectified to the point of disregard. They are raised in the most efficient and profitable way at the expense of their

natural way of being. In other words, they are stripped of their inherent predispositions and tendencies and are furthermore degraded and ravaged for the now scientifically established elements they have to offer. In fact, we appear to approach all the natural resources in a similar manner. As Rojcewicz (2004) pointed out:

We can exploit water, understood as H_2O ; we can exploit it for its hydrogen and oxygen. But no one swims in H_2O ; no one baptizes with H_2O . To see in the water H_2O is equivalent to looking upon a woman as a mere sexual object: in both cases, we have the same reductionism, the same violation, the same exploitation.... To expose and exploit [however] is to rape. It is to force something (or someone) to relinquish its (or her) treasures. It is to take the other as merely there for one's own satisfaction. To challenge is to demand satisfaction, and to rape is to obtain that satisfaction by force, by imposition, by pressing upon (p. 75-78).

In other words, over the past several centuries we appear to have lost our intimate connection with nature, whereby today we take it to be at our disposal. Consequently, we have now begun to view and treat things of nature not simply as renewable resources but as disposable ones.

Most recent computer and information technologies have similarly begun to reshape and transform our view of nature and of ourselves, particularly in terms of the relatively new and still emerging field of the information sciences. In fact, as outlined by Rifkin (1999) in his book *The Biotech Century*, the story of creation itself is now being retold by these sciences in the language of physics, chemistry, and mathematics. Rifkin has thus suggested that the earlier mechanical view of life is subsequently being reinterpreted, and even replaced, by the idea of life as information. Approached in this way, things in nature are now explicated from the perspective of their functions and processes, and explained in terms of information flows. Living organisms are thus being reconceptualized into a set of abstract codes and messages to be discovered and later deciphered. The sacred mysteries of life are coming to be seen as genetically programmed patterns of information. In being programmed,

however, these patterns can also be reprogrammed, although now not only by nature itself but also by us. By way of this informational re-framing of the natural matrix of living things we have thus placed ourselves in a position of authority, thereby establishing our right to bioengineer life itself. In fact, as Rifkin pointed out:

Nature is being made anew.... We no longer see ourselves as guests in someone else's home and therefore obliged to make our behaviour conform with the set of preexisting cosmic rules. It is our creation now. We make the rules. We establish the parameters of reality. We create the world, and because we do, we may no longer feel beholden to outside forces and universal truths. We may no longer have to justify our behaviour, now that we are taking on a new task as architects of our own biological destiny and the rest of nature (p. 221).

Subsequently, in this quest to redesign and improve on nature we have embarked on our most significant frontier – to genetically engineer the human DNA itself.

Today, biotechnology in general and genetic engineering in particular exemplify the power of technology in shaping society at a very fundamental level. In making the shift from the management of externally controlled reproduction through in-vitro fertilization to the management of genetic restructuring, modern science has in fact succeeded in suggesting that the human species is defective and imperfect. In turn, the scientific community appears to have aimed its efforts not toward helping us improve and better ourselves naturally but toward the modification of our flawed and malfunctioning gene pool. The cutting edge of scientific discovery (and technological development) has thus attracted the modern individual into accepting the enticing nature of the modern bio-chemical, information-based reality, particularly as its influence extends to the discoveries in the socially relevant fields of medicine, psychology and pharmacology.

Within the medical establishment, for instance, the laboratory or instrument results are replacing traditional methods of patient examination, shifting the medical practice toward greater reliance on machine-generated information and bio-chemical intervention. Our

perception of this pragmatic and instrumental mindset, however, and the continued faith in its scientific promise, has blindsided us to its side effects. Since the first massive use of antibiotics in the early 1940s, for example, a new phenomenon of iatrogenic (i.e., physician-caused or hospital-acquired) diseases has plagued the medical system. It is presently estimated that more than 200,000 individuals in the United States alone die from iatrogenic causes, which include more than 100,000 deaths from pharmaceuticals, between 40,000 to 80,000 deaths from medical errors, and roughly 80,000 from nosocomial infections caused by a growing number of mutated antibiotic resistant organisms (Lazarou, et al., 1998; Leape, 1994; Starfield, 2000). Though these statistics are startling, what is even more astonishing is that, as a society, we continue to trust and support the medical establishment, not because of its less than satisfactory record, but simply because of the technocratically-minded belief in the scientific promise it holds.

As in medicine so too in the mental health profession, the newest generation of SSRI (Selective Serotonin Reuptake Inhibitors) anti-depressant and anti-anxiety drugs introduced into the market in the 1990s, and said to pose minimal risk to patients, have since been shown to produce a vast number of adverse side effects ranging from headaches and loss of appetite to seizures and unusual or severe mood and mental changes (Glenmullen, 2000). Subsequently, the mental health profession, which keeps on defending its stance despite the accumulating evidence against its position, appears to be facing the same iatrogenic nemesis as the medical establishment. This defiant attitude, however, continues to impress upon patients and the public at large that mental “illness” is a bio-chemical reality, and as such reinforces the already accepted view of organic fallibility and psychological imperfection.

The tendency to medicalize larger numbers of conditions continues to expand, often being supported by technocratically-minded social players such as parents, teachers, school systems, and other groups with vested interest and recommendations on how individuals ought to behave. With the rising number of medications being prescribed to children diagnosed with ADHD, for example, Fukuyama (2002) has noted that this trend may not be

so much a medical issue as an issue of compensatory public intervention. With respect to ADHD he suggested that,

there is of course a simpler explanation, which is that ADHD isn't a disease at all but rather just the tail of the bell curve describing the distribution of perfectly normal behaviour. Young human beings, and particularly young boys, were not designed by evolution to sit around at a desk for hours at a time paying attention to a teacher, but rather to run and play and do other physically active things. The fact that we increasingly demand that they sit still in a classroom, or that parents and teachers have less time to spend with them on interesting tasks, is what creates the impression that there is a growing disease (p.47).

At the beginning of the second half of the 20th century, a prominent psychiatrist Thomas Szasz (1961) had recognized that in adopting the medical model the mental health profession has gone astray, primarily because psychiatry and later psychology accepted the physiological model as being at the core of mental illness. Eventually, with no apparent opposition, the idea that psychopathology is just another term indicating physio-chemical disorders in the brain became widely recognized and firmly established. It is no surprise therefore that as Inglis (1981) noted, "the most prevalent of all the diseases of civilization are those loosely categorized as 'mental'" (p. 106). As a result of this misinterpretation, a growing number of people continue to seek professional assistance in dealing with psychological difficulties, which ironically are less an indication of an innate chemical imbalance than a forewarning sign of inauthentic (i.e., disowned and technocratically-minded) existence in a world enframed by technology. In propagating the already accepted medical disease-centred paradigm, the mental health profession has managed to impart on the society the view that mental illness is a bio-chemical reality, and as such reinforced the already accepted view of supposed physical and psychological frailty. With an astounding variety of medications, both fields promote an idea of psychological hygiene to the point mental sterility. In the end, medicine as well as psychology has produced an overly

formalized diagnostic classification system that may even pathologize ordinary experiences and disaffirm the experience-oriented subjectivity of distress in favour of a technical diagnosis.

The enframed view of the human social and psychological nature, as well as that of nature itself is clearly becoming an issue of concern, particularly when we recognize its impact on the newest generation of children, who today grow up mainly within the technocratic understanding and the instrumental and pragmatic attitude it imparts. As Rifkin (1999) noted:

It's... not hard to understand why the first generation raised in a fully computerized society might come to accept so readily the new concept of nature that is emerging. They are growing up using the computer to organize their entire environments. Is it any wonder, then, that they will come to believe that nature itself is organized by the same set of assumptions and procedures they themselves are using when they manipulate it? The point is, our new ideas about how nature operates are coming to mirror the new technological and economic relationships we are establishing with the natural world, providing the new generation the assurance that the way it's going about organizing its world is compatible with nature's own organizing design (p. 212).

It is in this computerized atmosphere where one is furthermore struck that in a culture which created the microchip and unveiled the powers of electromagnetism, most appear to be unmoved by the unknown. For having grown up in a technologically driven society few mysteries, if any, are viewed as being so powerful that the future technologies would not be able to demystify them. In the meantime the hungry curiosity of technologically-enframed and media-saturated individuals is sustained on a daily ration of Survivor and Bachelor reality shows, spectator sports, or recycled Idol personalities. In the world of media itself, knowledge is replaced with trivia, intellectual exploration with money-making entertainment. While the Matrix and Terminator trilogies quell imaginations, computer games curtail

creativity. Ultimately, nourished by the world of virtual reality, individuals are called to a mode of being marked by estrangement from the bodies in which they live, detachment from the communities in which they dwell, and a disconnection from the natural world which they inhabit. In our post-modern, information-inundated society, deterministic and objectifying rationality has been gradually replacing the traditional way of being that once oriented everyday natural flow of life. Today the technological and scientific mindedness has occasioned a kind of disorientation and uncertainty with respect to natural existence, which is evidently revealed within the context of our disjointed mode of being-in-the-natural-world.

Disowned Mode of Being in the Institutional World of Human Resources

Once disclosed, the most obvious form of enframing occurs as a function of being absorbed with the scientifically inspired and technological things like computers, cell phones, media players, or the internet. They all confer a virtual, but still a very real, world of experience, even if disjointed from the natural environment itself. There exists however another form of enframing that is more “powerful” and influential than the hi-tech gadgets we have come to exploit and rely on. This enframing is of a social, and mainly institutional nature.

Whereas the scientific technologies grew with industrialization, social technologies developed in response to, and as a result of, the modern form of institutionalization. Though separated in their respective time frames, both types of technologies relied on the development of rational, instrumental, and calculative knowledge, similarly employing the technologically-enframed mindset. In the case of scientific technologies the application was geared toward the natural resources, whereas in the case of institutional technologies the application was directed toward the human resources. In fact, in both areas the idea of resource development and management was born of the modern scientific knowledge and the enframing mindset it imparted. Accordingly, whether from an industrial or institutional perspective, this enframing type of knowledge is of extreme influence, not because of what it

reveals about humans and the world, but rather what it implies about their respective natures, i.e., that they can be ordered and challenged.

In the world of industry the challenging and the ordering of the natural resources is relatively obvious. That is not the case, however, in the world of institutionalization. Institutionalization is both a practical formalization of accumulated knowledge, and an institutional application of formalized knowledge (Fredison, 1986). In the process of formalization and eventual application, however, the originally gathered knowledge emerges in the form of an enframed or technocratic (i.e., instrumental and pragmatic) knowledge. Accordingly, it is a form of specialized knowledge “that is developed and sustained in institutions of higher education, organized into disciplines, and subject to a process of rationalization. It is composed of organizing ideas and theories and of systematic substantive statements about both the nature of that portion of experience it addresses and the human activities that are appropriate to undertake in dealing with that experience” (p. 225). In education, for example, national sampling of school performance, as based on tests, examinations and IQ scores, is eventually translated into a set of modifications to a given school curriculum. Similarly, assessments and evaluations of patient care and hospital spending are ultimately reflected in the administrative and financial changes to the health care programs and initiatives. Institutionalized form of knowledge, therefore, whether directly or indirectly, concerns all aspects of our lives, from schools and hospitals to government agencies, prisons or universities. Its influence, however, is largely technocratically-minded, as in each case it aims to fashion an ordered, efficient and standardized system. As such it advocates, or rather assumes, a specific view of, and a worldview for, the recipients as well as the providers of the social services.

In the modern-day school environment, for example, education is viewed as imparting a body of knowledge on students. This body of knowledge, however, is not something that students come into contact with naturally through lived experience. It is formalized, organized and finally approved by an overseeing governmental body, like the Ministry of

Education. Students, or teachers for that matter, have little say in the process of curriculum formation, even though they are bound to its goals and assumptions. From a social and institutional perspective a given school curriculum has two objectives. First to socialize, and second to order and challenge by way of evaluation. Of these two, socialization is less complex in its application. It consists of imparting those social values and attitudes which are deemed appropriate and which serve the public and the economic goals of society at large. As Schmidt (2000) observed:

Schools prepare students for the labor force not just by teaching them arithmetic, English, history and so on, but also by teaching them to follow instructions, adhere to a rigid time schedule, respect authority and tolerate boredom. Lessons in this hidden curriculum are taught as much in the number of school-student interactions not involving the official curriculum as in those interactions that do (p. 32).

The second feature of the school curriculum, on the other hand, is more complex in its enframed and technocratically oriented structure. It is dictated by a uniform challenging through tests and examinations, as well as by the evaluative ordering through grades and certifications. With rote learning and testing of formalized knowledge, it serves as the staple of today's educational system. In this system, calculation and measurement, and not experience or understanding, are at the center of any evaluation. Standardized tests in fact, being technical and detached, are ostensibly seen as unbiased and neutral in measuring student's knowledge of apparently objective subject material. Not surprisingly, therefore, Bullough, Goldstein & Holt (1984) have noted that,

Because the standardised test is seen as something that measures knowledge, the success of teaching and learning is determined by how well students perform on the test.... Moreover, that selection of knowledge also determines to a considerable extent the relationship that students will have with the information presented – uncritical acceptance and incorporation (p. 8).

Learning, particularly at the high school and university levels has turned into memorizing for the sake of the tests themselves. What is being imparted on the students, therefore, is that their understanding of the material being taught is not as important as their performance on the ensuing examinations. In this respect students are seen as passive receptacles to be fed facts and figures, which are to be memorized and later regurgitated. Accordingly, students are not evaluated on the merits of what they have learned, but on the grounds of their subsequent test performance. Even more disconcerting is the fact that they are evaluated not on their own understanding, but on the worldview which has been impressed upon them. This formalized challenging of students brings them to question the validity of their own ideas as a valuable source of perception, understanding and knowledge. To this extent, their mode of being is challenged to be disowned and, in turn, to be replaced by the institutionally imposed ordering – which we can recognize as the first step in their human resource development.

In his analysis of higher education, particularly that of the graduate programs, Schmidt (2000) argued that before entering colleges and universities, students go through a systematized and regulated socialization process which readies them to “excel at playing by the rules” (p. 250). In fact, he observed that students who become most successful, according to the educational standards, are those who are willing and able to comply to the constraints of the institutional order and bureaucracy rather than confront them. In other words, the elementary, secondary and later the professional schools serve as an “intellectual boot camp,” which ultimately manufactures subservient and technocratically-minded thinkers. What Schmidt has suggested, therefore, is that professional training at colleges and universities changes people. In fact, in his analysis of graduate programs in particular, he observed that today:

The outlook of students completing professional training programs is markedly different from that of students entering them.... While the new professionals emerge from training somewhat more conservative on average than they were when they

entered, the most striking difference is that they show less diversity in their attitudes – their views of the world, the nature of their intellectual interests, the roles they see for themselves in society, the roles they think their chosen field should play in society, and their goals for society itself (pp. 119-120)

In effect, Schmidt concluded that the entire process of professional training, as it currently stands, reveals itself as an ideological weeding out. Put in another way, it is a systematic indoctrination into a set ideology of an efficient and productive, but most importantly a disciplined, i.e., subordinate mind. To Schmidt, therefore, the entire institutional process of modern education exemplifies the production of the professional through an ideological “metamorphosis and unnatural selection” (p. 123). Accordingly, as opposed to the human resource development at the elementary and high school levels, the professional indoctrination at the graduate and post graduate levels could be viewed as an advanced level of human resource engineering.

The point being made here is by no means an attack on educational institutions, or their providers. These institutions are not viewed as exercising social control, hegemony or domination over the student body, teachers or professors. The aim of this section is rather to disclose the technocratic-mindedness and instrumental efficacy inherent within our educational system, and its mechanisms of administration and management. In being treated like social resources, for example, both students and teachers alike, in the face of this technologically-enframed institutional order, are less likely to utilize their unstructured, uncalculated, and unregulated personal ways of being that are truly resourceful (i.e. being imaginative, intuitive, spontaneous, reflective, contemplative, etc.). Moreover, in being assessed, evaluated or graded, students as well as teachers are, in fact, being de-graded in terms of their resource-fullness. What this essentially points to is that in being institutionally-bound or enframed they are, in a way, led to disengage from the fullness of their being.

As earlier discussed, Heidegger (1954/1993) suggested that the essence of technology is nothing technological, as it shows itself in what he called *enframing*, otherwise specified as *revealing* of the mode of ordering of the resources, or the standing energy reserve. In its most basic form, therefore, different technologies (social technologies included) represent the challenge of deriving, transforming and ordering the resources from their natural state, as in the production of electrical energy from a river current, or in the generation of services using humans beings. Beyond this primary form of revealing, however, Heidegger warned us of the dangers of enframing, particularly when regulating and ordering become the chief characteristics of revealing itself. For as he put it: As soon as what is unconcealed no longer concerns man even as object, but exclusively as standing-reserve, and man in midst of objectlessness is nothing but the orderer of the standing-reserve, then he comes to the very brink of a precipitous fall; that is, he comes to the point where he himself will have to be taken as standing-reserve" (p. 332). In other words, as technology shifts from production to the process of production, the human component of that production becomes itself a part of the standing reserve that is developed, engineered and eventually managed.

From our discussion, we can observe that whereas industrialization gave rise to the idea of natural resources, institutionalization gave rise to the idea of human resources. As such, the development and management of the human resources, both in principle and practise, is not unlike the management and administration of any given industry and its resources. One does not need to look far to see the close resemblance between the two, as they follow the exact same mechanisms of procedure and administration. In comparing the educational institutions to any industry, for example, we can clearly recognize the same steps in the development and regulation of their respective reserves. In each instance, their development is highly regulated and in many cases engineered. In other words, they go through an established process of how they are to be raised or developed, and later how they are to be tested, graded, evaluated, classified, and finally certified. Subsequently, just as we can obtain grade "A" lumber, grains, beef or eggs, so too we can obtain grade "A" students.

In this sense, students and later employees are a product of the academic institutionalization, and thus a technocratically-enframed institutional resource.

It is sobering to recognize that more than fifty years after Heidegger wrote of the dangers of losing ourselves to enframing, his words sound more prophetic than cautionary. Today, the social technologies of ordering and challenging, inherent in the widespread implementation of tests, assessments, evaluations or certification, have brought about a regulated and well-ordered society where human beings have been distributed according to their reserve capacity and resource facility. Subsequently, we find that in moving from the highly standardized and regulated world of human resource development and engineering, we end with the management of a highly ordered and stratified world of employment. Here, in the management of the human resources, the bottom graders enter the labour work force, the average graders enter the administrative professions, and the high graders enter the executive world of politics, commerce, and academia. *Notwithstanding the stratification of their specific positions in society, however, they all share in the same technocratic mindset and mindedness, which allows for relative balance even in the face of elitism and socio-economic inequality.* Formal knowledge of any social discipline or profession, in a majority of cases, hinges on, and is thus enframed by this technocratic mindset. As Schmidt (2000) observed:

This necessary bias favours those who are most promising from the establishment's point of view: the most promising college students, the most promising future staffers of the system. This bias accounts for the low test scores of various social groups whose members clearly have the aptitude for further learning but not the attitude and values that would make them good servants of the current social structure (p. 186).

Thus professions with their techniques of assessment, evaluation, and certification become the instruments of institutionalization, and its technocratically-minded implementation. The established institutions, professions or disciplines, therefore, advocate and impart only the expert type of formalized knowledge, which in turn promotes the personal challenging and

social ordering of the technocratically-minded mode of being. For a great majority of society's population, this technocratic mindedness forecloses on other possibilities of knowing and being. In turn, most individuals, even those of the professional elite, inevitably fall into the trap of the commonly accepted, though individually disowned, and socially disintegrated, mode of being in the They.

Disengaged Mode of Being in the Social World of Formal Systems

The world of the They had for centuries relied on the existence and the coherence of communal life. With the rise of the modern institutionalized network of technocratically-minded disciplines and professions, a new enframed mode of social interaction has emerged. In fact, one of the most prominent themes of our technologically-enframed Western life is our introduction to an institutionally bound reality of systems and procedures. It is now becoming clear that in the technological age of our times, the shape of our lives has come to be defined not by an informal communal existence, but by our insertion into the world of formal structures and organizations (Schwartz, 1997). Today, this indoctrination into a systematized and standardized reality, overwhelmingly structured by contacts and exchanges with bureaucracy, administration, supervision and regulation, steadily begins to take precedence over our informal, face-to-face interactions with others.

The present-day world of formal, professionally bound systems is a direct reaction to the postmodern reality of technocratically-driven institutionalization. In fact, the notion of professionalism as we understand it today came with the emergence of modern institutionalization (Larson, 1977). Moreover, professionals are a direct product of this socio-economic development, and thus express its technocratically-minded ideology and knowledge. Professional experts like lawyers, schoolteachers, doctors, nurses, engineers, social workers, counsellors, psychologists, etc., all serve as the gatekeepers of the formalized knowledge bestowed upon them by their respective disciplines. As such, they pass on the technocratic mindset inherent to the institutional ideology or agenda. With this in mind,

Fredison (1986), following Foucault, has suggested that the professionally applied formal knowledge “so orders and structures the possibilities for choice and action on the part of ordinary people that true choice is prevented.... The formal knowledge of the disciplines shapes the way human institutions are organized and the way the behaviour of human beings is conceived” (p. 6). Ultimately, dominated by strict scientific, technological and technocratically-ideological principles much of modern life has been organized around these formal systems, while we have learned to trust them to the point of eluding common sense practices (e.g. helping a stranger on the street) so characteristic of the previous generations. Consequently, the formal systems created to help us, have in effect contributed to the rise in individual alienation, and to the deterioration of the informal fabric of communal life. Today, governments, churches, universities, courts, banks, insurance and investment companies, military and policing organizations all ascribe to the mechanisms of institutional frameworks and flowcharts, well oiled with rules, regulations, systems, and procedures. Alas, the modern individual often finds himself surrounded not by a concerned and caring community but by a sterile world of experts, specialists and professionals.

In this technologically-enframed and technocratically-minded context, the old traditional patterns of relating have reached a point of vagueness and uncertainty. We find it more difficult to fully encounter the other as we ourselves are socially disjointed and disengaged. When dealing with the pressures of daily living, for example, we opt for *qualified* mental-health *experts and professionals*, and not family or community members, to provide us with adequate guidance and support. We are led to entrust our personal issues and problems to the scientific world of certified specialists organized around formal systems - the very systems that attributed to the deterioration of the informal fabric of our communal life in the first place (Schwartz, 1997). And thus, we enter into simulated and pre-circumscribed relationships with social workers and mental health professionals and let virtual strangers provide us with personal services designed to deal with specific symptoms of our disjointed

and discordant lives, while at the same time risking to form yet another aspect of technologically-enframed beingness, in this case hinged on socially formalized dependence.

Today, the sense of familial and communal existence, which had been so crucial to the survival of our predecessors, is being lost. Communities are disappearing. What remains are shadows of a social ideal that conflict with a cultural reality. The new technologically-inundated and technocratically dependent being has pervaded our Western existence. Everywhere we look, we find that in order to obtain reliable assistance we have to search for a certified professional that offers the appropriate services designed to deal with the problem at hand. Doctors deal with the sick, teachers deal with students, police officers deal with criminals, priests and psychologists deal with the troubled, and increasingly plastic surgeons deal with the insecure and the vain. These social structures, however, have their shortcomings. For example, in the modern world of professionalism, an injured individual is sure to find him/herself surrounded by medical systems and specialists before being helped by a bystander. The average person tends to absolve him/herself from helping on the grounds of not having the suitable training. It is generally understood that in order to provide any medical and/or psychological assistance, one has to invest many years in developing expertise. But where does this leave the injured, the distraught, or the troubled? Are they not left to their own devices until the professionals arrive?

In transforming our social landscape, today's scientific and technological establishments also appear to be instrumental in shaping our average everyday ways of being and doing. Expert knowledge and opinion, no matter how trivial or commonsensical it may be, when based on the modern scientific techniques and procedures, is viewed to be of substance and consequence. With no great surprise, therefore, we are presented with expert judgment and scientific data on such matter-of-fact issues as the value of creativity in graphic design, or the dangers of pesticides in food production. What is more interesting and perhaps troubling, however, is that in the modern, technologically-enframed world of experts and professionals, when faced with such everyday issues, the average individual forfeits his or

her commonsense judgements and practices, relinquishing them to the authority of scientific affirmation and evidence. As a result, the experts, according to Postman (1993), “claim dominion not only over technical matters but also over social, psychological, and moral affairs.... There is no aspect of human relation that has not been technicalized and therefore relegated to [their] control” (pp. 87-88). The force of the technocratic mindset embedded in the institutional mindedness, therefore, carries with it the means and the potential to modify the conduct of individuals, control their behaviours, and ultimately shape their lives. No more clearly has this been evidenced than in the fields of medicine and the mental health sciences.

Institutional management of formalized knowledge, and the services based thereupon, have created a reality, for both patients and physicians alike, where technologies and techniques take precedence over the patient’s lived experience and the physician’s intuitive sense. Traditional methods of examination have, for the most part, been replaced by a mirage of technological measurements, tests, or assessments, leading to a gradual view that a careful face-to-face observation and consideration of signs and symptoms is less relevant and more unreliable than the machine-generated results. Thus, medical instruments, whether technological or technical, appear to bring about a perception of objectivity and certainty – a view readily supported by the technocratic establishments, which promote their economic value and utility. Unfortunately, however, with the over-reliance on the technological results and solutions, modern medicine has turned its focus away from patient care to the treatment of diseases, or rather to the management of their symptoms. As such, the medical establishment is concerned not so much with the underlying social causes of disease (as they cannot be objectively measured), but with the physical signs and symptoms which can be readily addressed, even if with little or no success.

Modern, technocratically-focused medical healthcare, therefore, is designed to address not the health of individual patients but the maladies of the social systems on which the patients increasingly depend. For this very reason the medical issues addressed on the

political stage focus on such concerns as shorter wait times, faster access to diagnostic tests, or additional funding for selective surgeries. Conversely, the social causes of the modern-day health crises (i.e., disjointed, disengaged, disowned modes of being in the publicness of the They) are neither addressed nor approached with any serious reflection or thoughtfulness. What is being addressed and approached are the surmounting symptoms of these causes (i.e., chronic depression, fatigue, high blood pressure, cardiovascular diseases, etc.). Ultimately, however, what we end up with is an overtaxed medical system, which, not having been designed to deal with the social causes in the first place, cannot handle the symptoms that ensue. When we hear of medical crises, therefore, what is being addressed is not the poor health of individuals but the poor health of the system which has difficulty dealing with the sick, the sad, and the disgruntled. Subsequently, it is not difficult to recognize that an ailing medical system is a victim of the same social malaise as that experienced by the patients themselves. However, unaware or oblivious to their common plight,

the typical doctor works year after year with a narrow focus on patching people up, content never to take a stand against the social inequalities that generate so much stress and disease. Such service work is necessary, of course. But that work, whether prescribing antibiotics or tranquilizers or operating on people's wrists to relieve carpal tunnel syndrome, is part of the status quo, not a contribution to social progress (Schmidt, 2000, p. 109).

Things do not fair any better in the realm of mental health. Many psychological problems today stem from an uprooted existence devoid of communal support or a natural pace of living. As such, the mental problems commonly experienced have less to do with issues of bio-chemical imbalance and more with the defects and deficits of our modern society. Lack of security, both social and economic, fast-passed routines bound by deadlines and protocols, or an unfulfilling service job all contribute to a diminished sense of meaning and significance in one's personal and professional life. Yet, in majority of the cases the social symptoms of stress and malcontent are considered in terms of mental imbalances or

social deviations and are therefore seen as social problems of the status quo. As such, the troubled individuals are dealt with within the institutional framework of clinics and hospitals, where psychiatrists and psychologists (agents of the status quo) are charged with their adjustment to the social conditions, which brought about their problems in the first place. The mental clinics and hospitals, however, are, first and foremost, institutions of the status quo, and as Schmidt pointed out, “they are not about to turn the troubled into troublemakers, no matter how healthful that might be” (p. 34). Instead, the mental health professionals are entrusted “to move confused people away from struggles with social norms and authority and toward a life in which they are ‘well adjusted’ to their place in the socioeconomic hierarchy” (p. 34). In other words, the mental health professionals are implicitly entrusted with enforcing, maintaining and propagating the institutional structures of the status quo, as well as the technocratic mindset of which they partake.

In response to this discrepancy, a vast number of books have been published aiming to expose, or at least question, the biased outlook and the self-serving motives of the medical and the mental health professions. As of yet, they have not succeeded in swaying the public opinion away from the institutional ideology or its agenda. This may be the case because the average person shares of the same technocratic mindset as is contained with the institutional ideology with which, in the end, he or she might very well disagree. In such circumstance, and regardless of the data to the contrary, the modern-day formal world of medical and mental health systems appears to the average-everyday individual as a viable social structure or mechanism (even if imperfect), which could perhaps (as many would argue) be improved-upon with appropriate administrative, fiscal or technological adjustments – a point not lost on the politicians attempting to buy the public vote with calls for increased funding, more physicians and shorter wait times.

In effect, backed by the rigours of science and the precision of technological results, medicine, psychology and other social sciences have come to be seen as possessing a

profound grasp and understanding of the human condition. Moreover, this impression has been further sanctified, as Postman (1993) argued,

by our granting an inordinate prestige to experts who are armed with sophisticated technical machinery.... [Today] all experts are invested with the charisma of priestliness. Some of our priest-experts are called psychiatrists, some psychologists, some sociologists, some statisticians.... The god they serve does not speak of righteousness or goodness or mercy or grace. Their god speaks of efficiency, precision, objectivity" (p. 90).

In this new "religious" reality one is led to communicate not with moral or ethical values but with statistical ones. Also, none are brought to commune with the gods or the mythical heroes but rather with objective facts and mathematical results. This institutional religion of formal knowledge, however, though lacking in a concrete or stable community, nonetheless manages to amass a widespread and an exceptionally-faithful following in the average, everyday realm of the They.

The formal, institutional world, therefore, appears to be the major force in the promulgation of the technocratic mindset within the everydayness of the They. Devoid of communal bonds, however, the social role of any given profession or discipline is primarily technical in nature. As such, professions themselves do not play a role in fostering or maintaining communal life, but rather in maintaining and reproducing their own formal and institutional structures. Moreover, in being charged with the implementation of institutionally formalized knowledge, professions and disciplines are granted a particular status of authority in our society, placing them above any other social movement or association. In fact, based on their status, professionals themselves have become the role models of the society toward which we are heading (Schmidt, 2000). Subsequently, to recognize the privileged position of professionalism is to recognize the modern technocratic society itself.

Within the present-day, technocratic-mindedness the modern individual also appears to be particularly accepting of the institutional and professional realities. All fields, no matter how insignificant, strive to attain the status of professionalism. And although the label of professionalism stands for a technical concept designed to market institutions and establishments, the idea of professionalism on a personal level has become so valued by the public perception that most have fallen prey to its institutionally circumscribed worth. And thus, employees are no longer defined or characterized by their work but by the titles and positions they hold, which are only as reliable as the functions they fulfill in the grand institutional scheme of organizations and corporations they serve.

No matter how misguided, the present-day fad of professionalism has come to be valued by the public perception to such an extent that the simplest of fields, vocations, and leisure pursuits ascribe to its socially recognized appeal. In an attempt to gain public acknowledgment, as well as an increase in wages, therefore, every accepted discipline strives to attain the status of professionalism. It is no longer odd or peculiar, for example, to hear of a certified witch, or a professional cheerleader. In a way professionalism, no matter how overused a designation, has come to signify a bourgeois attitude of cultural importance and significance, or at least acceptance. As such, professionalism in its essence, though implying competence, skill, and proficiency, stands for a virtual concept designed to promote institutions, their formalized knowledge and technocratic ideology. Subsequently, unlike the scholars of the past, our modern experts "tend to be ignorant about any matter not directly related to their specialized area.... The role of the expert is to concentrate on one field of knowledge, sift through all that is available, eliminate that which has no bearing on the problem, and use what is left" (Postman, 1993, pp. 87-88). In other words, with the technocratic focus and the specific tools at their disposal, modern professionals are inclined to approach only those problems that are institutionally and formally delineated. As such, physicians are primarily trained to address physical diseases, rather than the overall health; psychologists are taught to deal with emotional and behavioural disorders rather than with

psychological well-being; teachers are trained to focus on the presentation and evaluation of the subject matter rather than on its implications or understanding. In each instance, therefore, the expert, the specialist, or the professional is educated, for the most part, to deal with the deficient aspect in the area of his or her expertise. Put in another way, by way of their formalized training, professionals are led to disengage from the authentic (i.e., ownmost, resource-full) possibilities of their professional positions. For example, as opposed to merely treating their patients' signs and symptoms, doctors could aim to bring about their physical health and vitality. This instrumental and deficient reality of the formal systems, however, can be similarly detected in the attitudes of the patients themselves, as most of them disengage from their abilities to heal, opting instead to rely on the healthcare system, its specialists and technicians.

In addition to the above examples, the phenomenon of disengaging from one's ownmost possibilities, i.e., from one's authentic mode of being, can be similarly extended to any facet of our daily living, where the formal systems with their regulations and procedures are to be found. As such, whether faced with a leak in the roof or a clog in the drain, more often than not, instead of tackling a given problem ourselves, we call the appropriate professional; just as we are called when our services are required. Simply put, in routinely connecting ourselves to the formal world of professional assistance or service, we gradually and progressively disengage ourselves from our authentic, fully encompassing, and ownmost possibilities of being.

Implication for Psychology

As progress brings forth newer and more advanced technologies, individuals and societies in general face new problems in adapting to the changes imposed on them by the emerging, and constantly shifting industrial and institutional systems and structures. In short, our increasingly man-made, material environment appears to have had successfully altered the natural flow of living, and created an artificially imposed strain on the present natural

world and our experience of it. Likewise, the pace and accuracy of the modern automated economy, designed to run ceaselessly at all hours of day and night, requires that we keep up (and keep up-to-date) with its non-stop activity. Ultimately, fax machines, laptop computers, cellular phones, and the internet have made it virtually impossible to escape the twenty-four-hour schedule of the global market place (Moore-Ede, 1993).

The rippling effect of technological progress has likewise been experienced outside the work environment. With the seemingly time saving convenience of automobiles, computers, telephones, tape recorders, or microwave ovens, North American habits began to alter. Once considered innovations of luxury, new technologies have become practical necessities for the fast-paced reality of our daily activity, drastically accelerating our lifestyles. Trying to catch up to the speed of the electronic gadgets and devices we use, our activities are now becoming organized by tight schedules and up to the minute timetables. In effect, tools and technologies that were designed to improve our labour, or ease our efforts, have succeeded in increasing the demand for high rate productivity.

Thus far, as evidenced by our analysis, we can safely conclude that the technocratic ideals of social mechanization, expert control, and technocratic order, have in fact been realized and even surpassed, as the above examples suggest, to the point of socio-economic tension and personal discord. Taylor's ideas about the scientific management of industrial productivity, for example, have since the early 1900's been implemented not only in the area of manual labour within the manufacturing sector, but also in the area of social management within the institutional domain of organizations, professions, and disciplines. Likewise, Smith's notion of social engineering has come to be reflected in the educational development and management of the human resources, and Burham's views on the managerial elite, or Veblen's notions of technical experts, have been echoed in the modern institutionally centralized economy.

Notwithstanding the successful development and implementation of technocratic ideals, their shortcomings have also been experienced. As Burris (1993) had noted, the

modern shift of management from mechanical to professional bureaucracies reflects the growing segregation between the expert and non-expert sectors. Over the last century professionals and technicians have increased not only in numbers but also in social influence, occasioning what Bell, Block and Castelles have observed to be a move toward a socio-technical development in the production of codified knowledge and the opening up of information technologies. The housing of these technologies and their codified knowledge, however, created not only ethical but also social challenges. Ultimately, it had been the socially established institutions, and not the informal communities, which had claimed the jurisdiction over the reserve of formal knowledge, and in effect proclaimed their authority over its distribution and application. The ensuing institutional implementation of formalized knowledge has thus forged a new way of dealing with issues and concerns, most notably via the avenues of professional assistance.

Today, more and more individuals choose not to seek the wisdom of an elder, a counsel of a priest, or a compassionate ear of a trusted family friend. Instead they opt for professional assistance in dealing with psychological difficulties, which may be less an indication of an innate flaw within an individual character than a forewarning sign of an inauthentic existence in a world enframed by technology and its institutional network of professional systems and organizations. In the technocratically-minded institutional society, therefore, it was instrumental rationality and the pragmatic attitude which have replaced the traditional ways of being and interacting that once oriented everyday life in its informal flow of common sense and intelligibility. Today, the institutional shift toward a professional world of formal systems and procedures has instead occasioned an inauthentic mode of being, evidenced by a disjointed, disowned and disengaged being-in-the-world, which, as May (1983) pointed out two decades ago, "is suffered not only by people in pathological conditions but by countless 'normal' persons as well" (p. 118-119).

Already in the sixties, Fromm (1968) poignantly articulated the socio-cultural impact of modern institutional and socio-economic mechanisms and structures on the emerging

character of the contemporary human being. In his analysis of psychological distress in the Western world, he concluded that modern neurosis is primarily a social, and not an individual phenomenon. Clearly, he was in agreement with the earlier presented existential views of personal inauthenticity (e.g., Rousseau, Nietzsche, or Sartre) as being representative of “social pathology.” Fromm proposed that modern society suffers from a “pathology of normalcy” where socially-accepted defects (e.g., economic indulgence) are utilized in an adjustment of most members of society toward social conditions or patterns of behaviour that are pathological in nature (e.g., disproportionate consumerism), but which are generally accepted in the context of their culturally-provided remedies (e.g., commercialism). In effect, he proposed that pathological societies produce pathological character types such as a “market-orientated type” – a direct product of the modern marketing society. These pathological character types, however, are not necessarily neurotic, for they simply represent mass automaton conformity that allows for a pathological society to exercise its influence on the average individual. In this sense, Fromm (1941, 1968) suggested that it is not in being unable to cope with social demands or pressures that an individual ceases to be himself, as Freud had implied, but rather in relinquishing one’s personal integrity in order to adopt a culturally-prescribed personality.

The issue of the modern, social impact on psychological functioning was similarly examined by the existential-phenomenologist, and psychoanalyst, Van den Berg (1961, 1974). From a metabletic (historical-phenomenological) perspective, he had observed a shift in a number of social conditions effecting neurotic symptomatology. He came to the conclusion that within half a century since Freud’s definition and description of neurosis there occurred a considerable transformation in the manifestation of neurotic symptoms and in their underlying social conditions. Recognition of the perceived relationship between the symptoms and their social context led Van den Berg to propose the notion of “sociosis” as opposed to neurosis, for as he claimed, the unstable nature of neurosis is highly dependent on the constantly changing nature of the pervading social, cultural and economic context.

Our present-day society, as compared to the times of Fromm or Van den Berg, has since materialized a vast number of social “defects” that appear to be detrimental to the well-being of the modern individual. The underlying aspects of modern societies, as disclosed within the disjointed, disengaged and disowned modes of being, represent a microcosm of a larger mirage of cultural defects of being-in-the-technologically-enframed-world. The manifold expression of individual “pathology,” therefore, can be seen as stemming from the socio-historical climate of the technologically-enframed and technocratically-minded Western society. From this standpoint, when describing our Western “pathological” situatedness, Freud may have been quite right in remarking: “If the development of civilization has such a far-reaching similarity to the development of the individual and if it employs the same methods, may we not be justified in reaching the diagnosis that, under the influence of cultural urges, some civilizations... have become ‘neurotic’?” (p. 91).

Perhaps today we may recognize Freud’s insight more clearly, particularly when we realize that modern psychology has itself fallen prey to the cultural influence of technological enframing, and in the process of becoming a scientific discipline, also became a technocratically-minded (i.e., an inauthentic) instrument of social ordering and management. For this very reason, psychology, and in particular clinical psychology, is at odds with itself as an institutional discipline of social means. Schmidt (2000) had stressed this discrepancy in pointing out that:

As professionals, psychotherapists are “nonpartisan” in their work: They just help ill people get better. But to declare extreme nonconformity and illness, as psychology professionals often do, is a partisan act because of that down-on-the-victim therapeutic framework it realizes.... Evidently it is not the place of the clinicians to question the health of the society to which the patient must be adjusted. Their “legitimate” professional concern is how best to bring about the adjustment. In this alone, they are expected to use their creativity. The few who do raise questions are seen as “getting political,” even though it is hard to imagine how they could get any

more political than mainstream clinical psychology itself, which often practices conservative social action disguised as medical treatment (pp. 34-35).

In having disclosed the disowned and disengaged nature of our institutional systems as well as our individual lives, we are eventually led back to Heidegger's (1927/1996) view of inauthenticity as representing an enframed mode of being in the publicness of the They. From this point of view, we can see that the experience of the inauthentic mode of being is inevitable, as in each case our activities are shaped by, and are bound to, the everyday structures of our culture and society. As such, we cannot bypass them. What Heidegger suggested, however, is that we can choose not to fall prey to them. For it is in falling prey to the socially-prescribed and technocratically-minded possibilities that we are at risk of falling away from, and not exercising, our ownmost possibilities.

The fact remains, that it is easier to live by the rules, regulations, and conventions of our society. All social institutions are structured in such a way so as to propagate the technocratically-minded agenda and assist those who answer its call. The drawback in remaining technocratically-minded, however, is that one may begin to view one's possibilities for being only in terms of those possibilities of existence that circulate in the average, everyday repertoire of the socially-circumscribed public practices. On the other hand, as Heidegger pointed out, we cannot simply escape the social practices of the They so as to retrieve our authentic possibilities, as it is in the They where all our possibilities are grounded. As such, we need to recognize our ownmost possibilities of being as present within the possibilities of the They. The issue, therefore, is not to disown or reject the thrown character of our social and institutional publicness. Rather we should approach it while being mindful that there is no authentic-self to be found outside its inauthentic social context, and that our ownmost potentialities of being can be disclosed within an informal space of primordial (i.e., historically and culturally-grounded), and already present, possibilities of the They-self itself. Subsequently, it is to the disclosive and informal space of such possibilities that we shall now turn.

6. TECHNOCRATIC-MINDFULNESS AS DISCLOSING OF AUTHENTIC-BEING-IN-THE-WORLD

In becoming aware of the social context of our technocratic thrownness, we are led to the unconcealment of the thrown character of Dasein (i.e., our being-in-the-world) as divergent and incomplete. In the preceding chapter, we have inquired into our inauthentic mode of being in terms of falling prey to the thrown, or the enframing character of technocratic-mindedness, and a simultaneous disengaging, or fleeing from our ownmost possibilities of being in the institutional world of professionally-bound systems and procedures. Conversely, this chapter will address the possibility for an authentic mode of being in terms of disclosing and engaging our innate and historically grounded possibilities. The shift from an inauthentic to an authentic mode of being can therefore be viewed as an intended shift from the world of possibilities in which we find ourselves (e.g., institutional world of human resources), to the world of possibilities where we can actually choose ourselves, i.e., where we can choose our ownmost potentialities-of-being. Viewed from this perspective, an authentic mode of being emerges as an explicit and an intended recovery, or a reclaiming of one's own-most self that has been covered-over by, or even lost to, the inauthentic mode of being in the shared publicness of the They.

The possibilities for our ownmost being, though covered-over by our absorption in the average mindedness of the They, will be shown as having the potential of being recovered or reclaimed within a new *mindful horizon of understanding*. Thus, instead of accepting or recoiling from the impositions of our immediately given tradition of technological-enframing and technocratic-mindedness, it will be suggested that we can choose to root ourselves within a less obvious, but firmly grounded, *historical heritage of a more primordial and universal horizon of being*. This primordial mode of being will be presented as providing us with a new ground for the understanding of our situatedness, i.e., as extending beyond the thrown character of our present-day enframed being in the technocratically-minded tradition of the They. From this perspective, the shift from an

inauthentic (minded or disposed) to an authentic (mindful or grounded) mode of being will be approached not by way of uprooting ourselves from our modern-day technocratic tradition and the social entanglements thereof, but rather in rooting ourselves in our historical heritage of primordial being itself.

In this chapter, therefore, we will examine the issue of technocratic-mindfulness as a potential disclosing and grounding of authentic-being-in-the-world. It will also be suggested that in becoming mindful of our thrown condition, we become enabled not only to address our technologically-enframed facticity, but also to answer the call of our historically grounded, primordial potentiality for being. Essentially, in addressing this shift we shall focus on the last research question, i.e.: In what way can Dasein address the technologically-enframed social context so as to disclose the possibility of its authentic mode of being?

Technocratic-Mindfulness

The concept of technocratic-mindfulness as hereto-applied points to a conscientious attitude of thoughtful awareness. In other words, it represents a reflective mode of being that is mindful not only of its facticity, as being bound to the technocratic situatedness of the modern world, but also of its facility to expand one's potentiality-for-being in an unbound, i.e., resource-full way. In the most general sense, therefore, technocratic-mindfulness reflects a mode of disclosive being that opens up additional (i.e., unrealized or forgotten) possibilities for being, particularly those that have been covered-over or concealed by technological-enframing and the technocratically-minded practices stemming thereof.

The idea of mindfulness as used in this thesis rests on two concepts. The first concept is that of reflective or thought-full reasoning, which incorporates the notion of critical-mindedness (i.e., critical thinking), as described by Bullough, Goldstein & Holt (1984), as well as the notion of meditative thinking (i.e., contemplative thinking), as articulated by Heidegger (1955/ 1969). The second aspect of mindfulness, as here presented, is based on the concept of conscientiousness, and reflects a more philosophical idea of an aware and

attuned way of being. That is, it speaks to a more rhythmic and natural existence as lived in the ancient past. The conscientious attitude, however, is not presented here as a call away from our modern life. Instead, it is interpreted as a call toward an intentional reclaiming of that ancient way of being-in-tune-with the natural flow of life, which, in terms of our modern way of being, appears to have been forgotten or even altogether abandoned.

Finally, it is important to keep in mind that technocratic-mindfulness, as a reflecting and a disclosing, is a predominantly ontological endeavour. For this reason, the present study in general and this chapter in particular, will not aim to provide ready answers for the ontically-oriented plan of action to retrieve new or different ways of acting or behaving. In other words, it will not in any way purport to attempt an exercise in cognitive-behavioural theory. On the contrary, as an ontological project, it will aim only to reflect-on, but not to refer-to, the disclosive space of our primordial possibilities for being, as the reclaiming of those possibilities itself can be attained only in a personal, unstructured, and an informal way.

Conscientious Attitude

The term conscientiousness, as it is here utilized, is not meant to suggest a personality trait or a higher state of consciousness. It is meant to be understood as an attitude of being aware, not in terms of conscious attention or responsiveness, but rather in the sense of aware attentiveness and response-ability. Put in another way, to be conscious is to be awake, but to be conscientious is to be aware. Conscientious attitude, therefore, is an attitude of awareness. To clarify this point let us consider the following example adapted from Sogen (2001).

Most of us, while experiencing good health, do not contemplate much about our stomachs (or any other body part for that matter). We go about our daily business without giving it a second thought. Until, that is, something goes wrong. If we miss a meal, for example, we notice hunger pangs. In stressful or anxious times we might feel nauseous. Or perhaps we might get ulcers or acid reflux and experience debilitating spells of pain. It is

during such times that we become keenly aware of our ailing stomachs. Otherwise, we do not pay any particular attention to them – as there appears to be no real need.

What this example illustrates is our average everyday approach to things. Simply put, out of sight out of mind. What it also illustrates, however, is a lack of a conscientious attitude, or a particular aspect of that attitude which we can express as *foresight*. Lack of foresight can be easily observed in the emergence of many of the modern health problems plagued by our pragmatic “don’t fix it if it ain’t broke” attitude. For example, increase in obesity, cardiovascular diseases, or even heightened stress and anxiety levels, which go unnoticed for decades, speak to this disjointed and out-of-sight relationship we have with our bodies, their cycles and rhythms. Similarly, as we have discussed in the previous chapter, in the modern Western world we have also come to forge a disjointed relationship with the cycles and rhythms of the natural world. We no longer take guidance from nature to prepare for things ahead of time. By the same token, neither are we required to reflect back on the rhythms and cycles of nature, which in our ancestral past made things intelligible. Most of us have no need to plant or harvest, store wood for the winter or adhere to a seasonal diet. Refrigerators, supermarkets and electrical or gas heaters have *relieved* us of those “burdens.” Our food, clothing and other necessary provisions are readily available to us at a moments notice. Hence, there is no apparent need to reflect back, or into the foreseeable future. Essentially, in becoming technologically-enframed, we have indeed been “relieved” not only of our *foresight* but also of our *hindsight*.

Our conscientious or mindful attitude also consists of another aspect, which we can refer to as *oversight* (not *an* oversight). To clarify this point let us consider the following analogy of technology as the vehicle for our modern-day formalized existence. For a vehicle to be effective, it has to have the appropriate supporting infrastructure, such as roads, bridges, fuelling stations, etc. In using the vehicle, we begin to depend on it. In becoming dependent we begin to be tied to it (i.e., enframed by), particularly as we get accustomed to its facility (e.g., driving to the grocery store located a mile away). In time, most work-related activities

and leisure pastimes are planned with the utility of the vehicle in mind. Eventually, however, by driving everywhere we become tied not only to the vehicle (technology), but also to the pavement (institutional infrastructure) itself. In other words, we become confined to the road network. Consequently, fewer and fewer of us (despite the prominence of the all-terrain-vehicles) venture into the wilderness to experience a campfire in the woods, or paddle a canoe in the moonlight. The vehicle precludes us from venturing beyond the road's horizon. It gives us tunnel vision, set on a prescribed destination.

What this analogy illustrates is that we are limited by the horizon of our technology. Put in another way, in having to depend on the technocratically-minded social structures, we are led to experience the landscape of our being from a circumscribed viewpoint. To hold a conscientious attitude, therefore, is to be mindful of not only the possibilities which the modern technological vehicle affords us, but also of being aware of what possibilities it puts at a distance, and prevents us from seeing, especially from the technocratic standpoint. Essentially, even though none of our innate and primordial possibilities are taken away from us by way of technological-enframing or technocratic-mindedness, they are nonetheless overshadowed, and thus covered-over, by way of the technocratically-circumscribed looking. In other words, in the technologically-enframed world we are led to see only as far as the technocratic-mindedness allows us to venture, i.e., we lose our *oversight*. In this sense, the minded type of looking is not an unconstrained disclosive looking but an efficacious (i.e., pragmatic) looking. Strictly adhering to a DSM diagnosis of a patient's condition, or evaluating student's progress based only on her test results are examples of such a circumscribed short sightedness.

The forth, and last, aspect of the conscientious attitude, which we will take into consideration, can be described in terms of *insight*. As the word suggests it is a mode of looking within. From an ontic perspective, it could be utilized to describe feelings, emotions, or even physical sensations. From an ontological perspective, on the other hand, it speaks to a disclosure within one's beingness. In other words, it can be used to address our most

natural and primordial essence of being. This essence of primordial being has been described in the Eastern philosophy as no-knowledge. No-knowledge, therefore, is neither a mode of thinking nor a mode of intuiting, but rather an attitude of aware being. As Siu (1957/1996) so poignantly pointed out:

It is in this area of no-knowledge that all nature shares a kindred voice. Its utterance is not restricted to the rationality of one species nor to the grammar of one language. It is the reservoir of the evolutionary vestiges shared by all, as they differentiated into their respective genera and forms. There is something of primordial man in the fish; there is something of primordial fish in the man (p. 76).

A conscientious attitude of insight, therefore, is an attitude of belongingness and communion with all that is. It is not a reflective thinking per se, as much as a reflective disclosing. And whereas with rational or even intuitive knowledge one is a spectator of nature, with conscientious insight, or no-knowledge, one “becomes a participant in nature. There is a communion of understanding” (p. 77).

Ultimately, all four aspects of the conscientious attitude, i.e., *fore-sight*, *hind-sight*, *over-sight*, and *in-sight*, point to an innate, unhindered and attuned mode of disclosive *looking*. Also, in being very distinct in their ways of looking, each one of the four modalities essentially provides us with a specific disclosive space where we can realize our potentiality for being. Put in another way, in upholding a conscientious attitude we don’t raise our level of awareness of being, as much as we ground and expand it to include those possibilities of being which may have been forgotten or unrealized.

Reflective Reasoning

Though ontically sound, the notion of technocratic-mindedness, as discussed in the previous chapter, is not necessarily ontologically grounded. Through instrumental rationality, it addresses the conceptual world of causes but does so in the observable world of their effects. As Hawkins (1995/2002) suggested, however: “From the human record, we

may note that answers never arise from identifying 'causes' in the world. Instead, it's necessary to identify the conditions that underlie ostensible causes.... There are no causes within the observable world... the observable world is a world of effects" (p. 27). Put in another way, technocratic-mindedness in general, and instrumental rationality in particular, are not mindful, i.e., conscientious of the disclosive space outside of rational reasoning. In lacking the ontological grounding technocratic-mindedness only represents a one-sided way of thinking and thereby of being. In adopting this one-sided instrumental or calculative way of inquiring about things, however, we ultimately risk being-lead-astray from the truth-of-the-matter, so to speak. In order to address this omission, therefore, we can utilize another feature of mindfulness, hereto delineated in terms of reflective reasoning.

Reflective reasoning can be seen as contrasting instrumental rationality of technocratic-mindedness by way of critical or philosophical mindedness. As Bullough, Goldstein & Holt (1984) have suggested: "Whereas technocratic-mindedness indicates an... uncritical apprehension of what is considered natural or the way things really are and the way they must be, an opposite state is also possible. We can be critically or philosophically minded. That is, we can rationally scrutinize what is taken as being natural for individuals and for social life" (p. 9). In other words, instead of calculating, ordering, and rationalizing, we can take the time to pause, question and contemplate things from a more philosophical standpoint, as calculative or instrumental knowledge itself will not be sufficient to ensure this high-quality reflection. In effect, we need willingness and a capacity for reflective or philosophical though capable not only of recognizing but also of addressing instrumental discrepancies or affairs that are at odds (e.g., a bright student with a C average). For these authors, therefore, critical-mindedness reflected a strong qualitative dimension of reasoning, which not only brings discrepancies and ambiguities into light, but also signals a process of mutual respect and of openness toward the disclosure of what had been instrumentally concealed and thus hidden from view. In short, they suggested that for critical-mindedness to take hold "it requires... discussion, dialogue, and communication" (p. 9).

Heidegger (1955/ 1969) has similarly addressed the issue of what he called calculative thinking, though he did so from an ontological standpoint. Having recognized the lack of grounding and the loss of rootedness (both cultural and historical) in our ways of thinking, he reflected bluntly:

Let us not fool ourselves. All of us, including those who think professionally, as it were, are often enough thought-poor; we all are far too easily thought-less.

Thoughtlessness is an uncanny visitor who comes and goes everywhere in today's world. For nowadays we take in everything in the quickest and cheapest way, only to forget it just as quickly.... The growing thoughtlessness must, therefore, spring from some process that gnaws at the very marrow of man today: man today is in *flight from thinking*. This flight-from-thought is the ground for thoughtlessness. But part of this flight is that man will neither see it nor admit it. Man today will even flatly deny this flight from thinking. He will assert the opposite (44-45).

Flight-from-thought, therefore, reflects a *distancing* from reflective thinking grounded in conscientiousness. In short, born of the pragmatic attitude, our predominant mode of instrumental rationality does not entail much reflection or contemplation. On the contrary, it is preoccupied with computation, calculation, ordering, efficiency, etc. In this sense, however, instrumental rationality "never stops, never collects itself. [It] is not meditative thinking; not thinking which contemplates the meaning which reigns in everything that is" (p. 46).

According to Heidegger, therefore, reflective or meditative thinking reveals our modern instrumental or calculative rationality, not as an accidental, but as an actual and deliberate flight-from-thought, i.e., a flight from reflection rooted in being. However, since for the most part we lack in rootedness, we gradually lose the perspective on the importance of meditative or contemplative thinking itself. Subsequently, in being uprooted, and having fled from the attitude of deep and meaningful reflection, many have, in turn, come to reject or criticize reflective reasoning as being flaky, out of touch, impractical, and even worthless,

particularly in the day-to-day dealings and concerns. In effect, since reflective or meditative thinking adds no profit in the practical affairs, it has been all but abandoned and replaced by instruments of consequence, i.e., instruments which can readily produce information, even if it doesn't add anything of substance to our understanding.

School grades and IQ scores are a perfect example of providing us with lots of data and information but with little insight, foresight, hindsight or oversight about the student. Similarly, the DSM diagnoses present us with classifications which, when taken on their own, add very little to our understanding of the patient. In both cases the information is practical in terms of social management, but provides no significant depth to our consideration or understanding of either the student or the patient. Moreover, a C+ average, or a score of 102 on an IQ test, similarly fail to provide the student with any meaningful insight into her thinking or her being, nor does a diagnosis of a Gender Identity Disorder provide the "patient" with a meaningful understanding or comprehension of his "condition."

In order to regain the depth of awareness, therefore, we need to return to the meditative or reflective thinking. Seeing how we lack any tangible historical or cultural rootedness in our modern technologically-enframed world, however, we also need to be patient and open-minded. For meditative thinking, as Heidegger suggested, "demands more practice. It is in need of more delicate care than any other genuine craft. But it must also be able to bide its time, to await as does the farmer, whether the seed will come up and ripen" (p. 47). In other words, for any thought-full work to flourish, it must come from the depth of its ground and in its own time.

Technocratically-Mindful Mode of Authentic Being-in-the-World

There are many common challenges, difficulties and problems that we all share and experience simply because we live in a technologically-enframed and technocratically-minded culture and society. These challenges are subtle enough not to be explicitly recognized. Yet, to some extent we experience and grasp them as incongruities and tensions

sensed through inner conflict, doubt, discontinuity, or uneasiness. With all the scientific and technological advancements, we know that we have gained so much yet we can sense a disharmony and a loss of something much greater and more precious. It is in this feeling of disharmony, however, where the primordial potentialities for being reside.

In the previous chapter we have spoken of the discrepancies and the disharmonies of a disjointed, disengaged, disowned, i.e., disembeded mode of being. In other words, a mode of being where we have given something up, or have had something removed from ourselves. We shall suggest, that in our scientific and technological quest, we have indeed given-up something of ourselves; namely our shared psychē, “soul,” or essence of our being. This loss, however, is merely an illusion, for in giving-up we never actually gave anything away. Instead, by way of becoming absorbed-in, and with, our attempts to master and control our modern tools and technologies, we chose to give up something of ourselves in the process. And there’s the rub. In our quest to gain control over our tools, and thereby, over our world, we have given up on our capacity to commune with it. In other words, in controlling (challenging, ordering) we have covered over the possibility of communion with that which we have essentially aimed to dominate. To clarify this point, let us consider the following example.

Anyone who has ridden a horse knows that you can’t control it. You have to commune with it, feel its moods, and react accordingly. The horse will always sense the rider, and the rider, in turn has to get a sense of the horse. Both need to *be* in communion; otherwise, they’re in for a shaky ride. In our technologically-enframed world we have moved from riding to driving. With this change, however, we have also moved from communing to controlling. A car has no feelings, no moods, no dispositions. We don’t need to communicate with it, but merely control it. In fact, any time we use any sort of technique, tool, or technology, we make that same shift. In becoming aware and mindful of this shift, therefore, we can reverse it, and in the process reclaim the possibilities and potentialities of communion which we had either given-up or covered-over.

Subsequently, it is with the controlling-communing dichotomy in mind that we can now make a much clearer distinction between the technocratically-minded and the technocratically-mindful modes of being. *In short, a minded mode of being is a mode where we are in control of our being. A mindful mode of being, on the other hand, is a mode where we are in communion with our being.* It is with the conscientious and reflective attitude in mind, therefore, that the last three sections of this chapter will address the disclosing of the given-up potentialities, so as to reclaim a mindful communion with our being-in-the-technologically-enframed-world.

Reframing of the Enframed Mindset

It is no secret that we have been enthralled by our scientific technology. The gifts, which it bestows on us, are many, and they are wonder-full. In fact, they are so full of wonder that our own average everyday abilities pale in comparison. None of us can compute the way calculators do; nor can we soar without an aircraft. We stand in awe of the microchip and are amazed by its gigabyte potential. In being so captivated by our innovations, however, we have also come to revere the instrumental and calculative methods by which they were acquired. In fact, in our modern hi-tech age, we have been enticed ever so tightly by the wonder-full features of technology, that in adapting them to our average everyday lives, we have also adapted the technical ways of thinking they promote, and in the process denied our own meditative nature (Heidegger, 1955/ 1969).

In having set aside our meditative ways of contemplating our reality, we began to view the world and our place in it through the scientific, calculative eyes. This view, however, is itself problematic as “our perceptual apparatus seems incapable of grasping its limitations. It is difficult to get ‘new eyes,’ so to speak, that will enable us to see things from a perspective that challenges or even contradicts the one we were born into. It means taking the world view that was natural, correct, and right for us and declaring it now unnatural and incorrect, at least in part” (Bullough, Goldstein & Holt, 1984, p. 15). In fact, we have

transformed our ways of thinking such that rationality is now being seen as the primary medium for understanding. Intuition, insight, or reflection itself, are viewed as subordinate and unreliable. These “less reliable” qualities of human awareness are relegated to the arts and crafts but not to the domain of scientific inquiry.

The social sciences are no exception. Psychology, for example, is nowadays considered a science of human behaviour, which, while aiming for instrumental objectivity and statistically significant results, relies on biology, neurology, pharmacology, etc., to provide it with supporting data. Yet, the nature of psychology for an average individual is not based in numbers, percentiles, and statistically significant results. It is based on unpredictable and erratic, inspiring or depressing, comforting and sometimes capricious experiences, which, in turn, are grounded in being. In fact, the original Greek meaning of the term psychology, as in *psychē* (soul or essence of being) and *lógos* (dialogical ground of meaning), expressed a conscientious and reflective inquiry into the essence and the meaning of being. This approach to psychology is today neither socially acknowledged or scientifically accepted. The rational scientific mind will gladly acknowledge the theoretical implications and importance of such a reflective “exercise,” but not on the scientific *watch*. Psychology, however, as the Greeks have shown us, is first and foremost a philosophy of being, with the science of human behaviour *being* one of its expressions. There is no need for scientific psychology, therefore, to refrain from, or altogether reject, the philosophy of being (or the Eastern philosophy of no-knowledge) from its inquiry, but rather to recognize the importance of the reflective and mindful ground it offers and affords. As Siu (1957/1996), already fifty years ago, so elegantly expressed:

The chief value of science lies in the introduction of a new way of thought. The method relies on postulation, based on rational knowledge. During the past three hundred years this technique has opened up expansive and heretofore inaccessible vistas. But the acquisition of new jewels does not exhaust the treasure troves of old. The wisdom of the sages, amalgamating the elements of intuitive and no-knowledge,

remains untarnished. It is still the basic guidance behind the important decisions affecting man as man. Wisdom is the artful way in which rational knowledge, intuitive knowledge, and no-knowledge are mastered, handled, integrated, and applied. Segmented knowledge, as science is wont to offer through its emphasis on rationality, is hardly wisdom (p. 84).

Over the last fifty years, the hard sciences (physics in particular) have begun to recognize the need to become more philosophically mindful (i.e., reflective and conscientious). Not because of the consequences and implications of the many potentially dangerous scientific discoveries, but rather because the instrumental foundations behind these findings were beginning to reveal the nature of scientific reality as primarily hypothetical. Behind the quirks and quarks of matter, they found that there is no matter to be found; and whatever there is, is as predictable as a mood swing. In venturing further into the mysteries of the measurable reality, they found that it couldn't be measured. Yet, for over three hundred years science was held to be the most reliable way of obtaining certain and irrefutable knowledge. Scientific laws, once discovered, were not open for debate. The view was that scientific growth itself was to be accomplished through the accumulation of more scientifically proven facts. The power of scientific ideas and the notion of the infallibility of its method gave it a place as exalted, and as revered, as that of religion. The fall from grace, however, was inevitable. It was with Einstein's General Theory of Relativity that the assumptions about the certainty of scientific facts came into question. In a sense, the scientific tower of Babel had been shaken to its foundation by the universal gods of the old. "It is fascinating to see," wrote Capra (1976/1991), "that twentieth-century science, which originated in the Cartesian split and in the mechanistic world view, and which indeed only became possible because of such a view, now overcomes this fragmentation and leads back to the idea of unity expressed in the early Greek and Eastern philosophies" (p. 28). The hard sciences, at the farthest edges of known reality, and at the most distant frontiers of discovery,

have recognized that a new scientific mindset needs to be established – a philosophical mindset that would provide meaningful intelligibility, to an unpredictable universe.

With the philosophy of being, we too are likewise called to hear and face the discrepancy between the knowledge of the social sciences and that of our own experiences. We are called to reformulate our instrumental mindset. In other words, we are not called to abandon our wonder-full tools, techniques, or technologies, but rather to become rooted in reflection and contemplation over their utility. We are thus called to become conscientious in our scientific efforts and our social affairs. In short, within this reframed mindset, we are called to become conscientiously aware of being itself.

Reclaiming of an Informal Mode of Being

There is a paradoxical reality which exists within our world of formal institutional systems. In their aim for social security, they have lost the feeling of communal care. Communities themselves have turned into neighbourhoods, and the old fashioned warm hospitality turned into sterile hospitals and institutions of social service. This is not to say that there are no caring individuals working in these settings. On the contrary, most professionals are caring and hospitable people. Being bound by the virtual mechanisms of flowcharts, formal structures and procedures, however, they have been prevented from approaching patients, clients or patrons in a less formal, or more care-full way. Working within these mechanisms, therefore, distances the professional and the patient or client alike. Hospitals are a prime example of this distancing.

Long awaited improvements to the medical health care systems, for example, are just that – improvements to the system. They focus on providing more nurses, more doctors, better administrative procedures, case-managers, and caseworkers, etc. All of these individuals, however, are not employed by the institutions to *care* but to *administer care*. There is a huge world of difference between the two, and it is the administrative aspect which has long been promoted and accepted as being more practical and reliable. Few, in any, of

the practical or reliable improvements to the health care *system*, however, have actually advanced the health *recovery* or increased the quality of patient *care* (Schwartz, 1997). What they did increase, on the other hand, are the expediency and efficiency of the system itself (Manzies, 2005). There is a much higher turn over of patients, for example, than ever before. Not because they have been healed, but because they tend to be transferred about from one specialist to another, from one clinic to another, from one battery of tests to another. Patients today are more probed, poked, tested and examined than ever before, yet the improvements to their diagnostic tests do not appear to have improved their well being.

It is true that the nature of modern illness has changed drastically from that of the past, in that today we see more highly potent viruses, cancers, or cardiovascular diseases. Nevertheless, we cannot ignore the fact that today more patients get seriously ill or die from iatrogenic causes in the many facilities of professional care, than from the caring hands of friends or professionals themselves. For more often than not, the hands of caring professionals are bound and tied by the formal and administrative bonds of the health care system itself. The fast-disappearing informal mode of being-with patients, however, begins not in hospitals or clinics but in the institutions of higher learning, which produce the modern-day health care professionals. As Schwartz (1997) observed:

Professional training programs based upon such a formal, structural view of the world... have vast influence in maintaining the certainty that care is a systematic endeavour. They generate vast numbers of graduates who go back into society "educated" into seeing formality and educated *out of* seeing informal sides of human culture. What one knows from one's common sense and cultural legacy is often erased (p. 103).

This is true not only in the medical and nursing programs, but also in the domains of psychological and social-work training. The challenge in all these programs is that they overemphasize the formal, institutional and administrative approaches to social and psychological management, at the expense of an informal mode of being-with a patient or a

client. In fact, within the social, psychological and medical domains of assistance, patients and clients are now being regarded in terms of specific cases or case-specific issues, which are then administered, processed, and managed. Ultimately, set within a technocratically-minded formal frame of reference, both the health care providers and patients or clients alike have come to accept this unnatural way of relating as nonetheless acceptable and tolerable. What gets covered up by our taken-for-granted institutional notion of healthcare, however, is our understanding “that the ultimate ‘ground’ of intelligibility is simply shared practices – that there is no *right* way of doing things” (Spinosa, Flores, & Dreyfus, 1997, p. 29). In other words, though we are surrounded by the systems and institutions, we are not forced or obligated to follow their suit.

We do have a choice, though much limited due to the loss of communal sense, to dwell in the most intimate networks of friends and family members where care and hospitality continue to exist. In such a case, the world of professionalism becomes a viable and a potential, but not the primary or only resort. In becoming conscientious and aware of the abundance of informal care all around us, we ourselves can partake in its cultivation and development. Not in any organized (formal) way, but rather in the informal and intimate setting of one’s closest world of being. In becoming conscientious of this possibility, we are being called to cultivate those long forgotten tribal modes of communal care and affection, where the other is not a stranger but merely another expression of our shared being.

The idea of intimate communion with those whom we care-for, and care-about, can be similarly extended to the natural world of our being. The industrial and institutional systems have long since cultivated the view of the natural world as being there at our disposal, so that we may explore and exploit it in the most practical and technical ways. Indeed we are enculturated into thinking this way from our early childhood, or at least from the time we enter the school system. The formal mode of education, as we have discussed previously, introduces us not to an informal and intimate, but to a rational, calculative, technical and ordered way of looking at reality. The question is, however, whose order are

we to adopt? As Bullough, Goldstein & Holt (1984) pointed out: “It makes all the difference whether that order is the one embedded in... the accepted or dominant view... or if it is one wrested from reflection upon the accepted view and what our needs and values require” (p. 14).

We do not need to dwell for too long to recognize that the views passed on to us and to our children in the institutional settings are of a formal and a dominant nature. Today, the educational systems themselves have become increasingly preoccupied with the imparting of formalized knowledge about the observable world, as well as with the practices of efficiency, proficiency and productivity around this formalized knowledge. In this desk-bound and result-driven curriculum, the child is taught less about an intimately present world of beauty, mystery, and enchantment, and more about a sterile world of symbols, numbers and equations, all of which can be applied in the exploration and the exploitation of the world outside. This does not need to be the case, however, as Siu (1957/1996) had suggested:

In addition to thinking, the student should be provided with the education of feeling. He should not be led into the abject slavery of formal logic and rationality. He should be untethered from the restrictions of verbal and written symbols. He should learn to transcend symbols.... [in a] wordless communion with nature.... There should be an extension of the student's awareness into the “suchness of nature.” The sound of the bell is heard before it rings; the flight of a bird is seen before it flies; if one waits for the bell to be struck before one hears the sound, he is merely listening in the sense world. The latter, of course, is precisely the kind of inelastic knowledge that is stressed using positive techniques of the day. What should be sought... is the sensing of the undifferentiated (p. 96-97).

Thus at any level of education, whether elementary, secondary or postsecondary, teachers and professors alike can help cultivate the wisdom of which Siu had spoken. Not by teaching it, but rather by reflecting upon it alongside the curriculum of formal knowledge. In contemplating the existence of an atom, or of the *meaning* (not the definition, scope, or

application) of psychopathology, a new informal mode of being-in-the-formal-world can be attained. Again, however, it is the educators and the professionals who are first called to be conscientious and aware of the formalized mode of being that they themselves, intentionally or unintentionally (by way of technocratic-mindedness) propagate within the professional and institutional settings. This can be (and is already being) accomplished, as we have been suggesting, by conscientiously opening up the disclosive space of mindful-awareness and reflection.

Owning-up to One's Ownmost Potentialities of Being

Our technocratically-minded way of thinking did not come about as a reaction to scientific and technological innovations. In fact, the reverse is the case. We would not have been able to create such marvels had it not been for the calculative, and instrumental way of thinking. Thus we should not be discouraged from utilizing or continuing to exercise our instrumental abilities, but we should become mindful of their potential side effects. One of the most prominent of these side effects is our skewed view of our human nature. We have come to create a splendidly mechanical world with tools and technologies that defy human experience itself. In the process of their creation, however, we have also begun to ascribe these same mechanical, and strictly technical attributes of process and function to our own human condition. This would not have been so detrimental had we retained and cultivated our other, less technical, and more philosophically-grounded human attributes such as reflectivity, insight, foresight, etc.

Today, as we have been discussing, most of our formal institutions are based on the mechanical model of processing, managing, and administering, with its additional technical attributes of efficiency, proficiency and productivity. Moreover, within the institutional setting of the human resources management, the same mechanical characteristics are being attributed to the average everyday employee or manager alike. We are trained from early on (often inconspicuously) to abide by this mechanical model and learn to fit into its efficient

and regimented framework. Eventually, we come to emulate the characteristics of a machine itself in adapting to the institutionally framed, input-output protocol. However, as Siu (1957/1996) reflected:

Thinking of man as a machine cannot help quickening the atrophy of his human capacities. There must be a return to human-heartedness, wholeness, and balance.

Only then can there be true objectivity, which people demand but often confuse.

Does not objectivity include every aspect that bears on the question at hand? Is not the human being himself one of the factors? (p. 129).

In order to answer this question, we first need to recognize that we have not addressed the nature of the human being on the basis of its being, but rather on the basis of an artificial mythos. In the forth chapter we have proposed the idea of science as providing us with a new mythos of a technological and scientific being. This mythos can be seen as having played-out on our present-day cultural stage of the entertainment media. It is here that we can find the modern heroes of the technological and scientific age. The Terminator, Robocop, or Neo, The-Chosen-One from the Matrix, all exemplify the human-science-machine interface. More importantly, however, they represent the modern-day ideal of a human being infused with supernatural, hi-tech powers and abilities. These heroes don't abide by the poetic justice of the old. They don't cultivate wisdom or beauty. Nor do they embrace human qualities of tenderness, intimacy, or reflection. In each case they are heroes for being able to fight in a calculated, rational, and methodical way an even greater mechanical, scientific or technological villain, who is often depicted as presenting a threat, not simply to an individual or a community, but to humanity itself.

The villain can be interpreted as technology gone awry. Thus the message is clear, in order to save ourselves from the dangers of technology we need to become more technological ourselves – or at least more calculative and rational. This theme similarly plays itself out on the small TV screen of the already mentioned criminal investigation dramas, where science is portrayed as an omnipotent and all knowing presence (though

absent from the screen itself), and where scientists are depicted as heroes. In an interesting twist, human beings are portrayed as entering onto the scientific stage, as opposed to science having to come onto the human stage. This idea of science as possessing omnipotent powers, and thus relative importance, is similarly reflected in our everyday vernacular. Often we can overhear such phrases as “science behind lovemaking,” or “science behind geological evolution,” or even “science behind human behaviour.” In fact, when desiring to make an impact with one’s work or opinion, referring to science adds authority to one’s statements. Science and technology, therefore, appear to have become the modern gods, though unlike their Greek predecessors they fail to clarify the deeper significance of being in general and of the human being in particular. In other words, science does not tell our story, it proclaims a truth. As professionals and scientists, therefore, whose story are we telling? Whose agenda are we imparting? Whose “truth” are we proclaiming? – And to whom?

Experts, scientists and professionals have a powerful arsenal at their disposal. As any enforcement officer, they too use their tools of the trade to enforce an established order. They are empowered by their respective disciplines to profess, i.e., to claim, to declare, though not of one’s own beliefs or opinions per se, but rather of the institutionally-held and approved “truths-of-the-matter.” In professing or proclaiming, however, professionals do not share but merely impart. In imparting or enforcing, they are not required to listen to the other side. A police officer with a warrant in his hand, for example, is not required to, moreover he is discouraged from, listening to the story of the person he is arresting. In fact, the professional tools at his disposal do not encourage a dialogical relationship with the accused.

Similarly, teachers or professors are empowered to profess a given curriculum, and not to engage in a semester-long dialogue with the students on the truth-value of the knowledge, which they are charged to impart. Subsequently, even when such a dialogical classroom is established, the eventual grading and evaluation at the end of the course kills any spirit of the dialogical exchange, which may have been fostered in the process. In grading and evaluating, the teacher or professor is effectively placing the “truth” of the

curriculum over and above the “truth” of the student. Thus, whether a student receives a C+ or an A+ on a report card, the grade itself, though it may matter, is not meaningful as it does not recognize or acknowledge the student’s experience of self-understanding. What the grading and evaluation methods do acknowledge, however, is the student’s grasp of the material being presented. In the end, therefore, students are not allowed to participate in the telling of their or any other story, but in the retelling of the circumscribed “truth.”

The “story” is not much different in the domains of psychological practice. Aside from the therapeutic setting of psychoanalysis, the remaining clinical structures of the mental “health” establishment are set up to proclaim the institutionally-declared “truth” together with the regulations for its distribution, application, or even enforcement. Once “patients” are inserted into the established procedural systems of assessments, evaluations and diagnoses, their stories become framed within the thematic protocol of the Diagnostic and Statistical Manual for Mental *Dis-orders*. It is not the story of their life or experience, therefore, which is considered to be dis-ordered, but rather the more impersonal and instrumentally bound facets of clinically ascertained, mental functions and processes. From the clinical perspective, therefore, the patient’s story is not viewed as a dramatic and personal *play*, but rather as a formally acknowledged *dis-play* of his or her symptomatology.

It is in this context of the scientific mythos, therefore, that we need to ask, what is the cultural story that we are telling ourselves through the technological and scientific instruments we have come to not only use, but so readily rely and depend on? The ancient Greek mythology did not direct, but rather came to reflect in its gods and heroes the lives and stories of ordinary mortals. In other words, in the many stories of that mythology, human beings were able to dialogue with the gods, the heroes, their values and virtues. The mythos of science, on the other hand, does not enter into a dialogue. It is not a mythology but a methodology. In partaking of its story we are made to abide by its methods and procedures. In short, the scientific story has taken the curtain call. Alas, in becoming mere players who

strut and fret upon its technocratic stage, to then be heard no more, we sound a silent cry – a cry for a new mythos.

This cry for a new mythos, according to May (1991), is a cry for a rooted communal life of meaning and intelligibility. Being without a myth is like being without a home – a stranger and a drifter in one's own land. Myths, as May purported, "supply fixed points in a world of bewildering change and disappointment.... No self can exist as a self apart from a society with its myths.... Such is the necessity of having a community, a home where we can feel we belong, a family where we will be protected and in which we can feel some intimacy.... We all cry [out] for a collective myth which gives us a fixed spot in an otherwise chaotic universe" (p. 50-53). In this sense myths are not mere stories with imaginary characters and supernatural powers. They are "narrative patterns that give significance to our existence.... [they are] beams in a house: not exposed to outside view, they are the structures which hold the house together so people can live in it" (p. 15). Our cry for myth, therefore, is a cry for a voice in the telling of our story - the story of human being.

Science and technology do not, and cannot tell this story. They are props in a human play, though sometimes thought to be its participants. To think of science and technology in terms of a story, therefore, is to consider them as part of a sub-plot of human invention within a much greater play of human being. To see it as *the* play of human being, on the other hand, would be folly. Perhaps this is why Freud's quest to bring back the mythos had failed. It was not because it was irrelevant, but rather because it was placed in the sub-plot of the scientifically circumscribed mind, and not in the story of human being itself. Science, however, cannot take the place of our stories or narratives, for it cannot give meaning to our existence. When parents decide to bring a child into this world, for example, they don't do it because they want to propagate their DNA (as some scientific theories would purport). They do it because they found some beauty and value in life, and they desire to share it and pass it on. It is in that beauty and value that our human story resides – not simply in the genetic information of our DNA. Ultimately, science and technology give us much except what

really matters – a sense of belonging, connecting, communing, that is, a sense for a narrative of being. In becoming aware and mindful of this, therefore, *let us hear the call of our Being and take up our Mythos.*

DISCUSSION

The ontological significance of technocracy, as well as authenticity, lies not only in their definitions, but primarily in the socio-historical context from which they emerged. In posing three major objectives, therefore, the present hermeneutic-phenomenological analysis attempted to disclose and illuminate an ontological dimension of our modern-day, technologically-enframed, as well as technocratically-minded (and mindful) existence within the context of our socio-cultural facticity, as well as our historical situatedness. These objectives were:

1. To reveal our technologically-enframed (i.e., enchained, determined) world of being.
2. To disclose our modern day technocratic (i.e., scientifically-enframed) mindset.
3. To disclose the technocratically-minded (inauthentic) and technocratically-mindful (authentic) modes of being in the technologically-enframed world.

In addressing the first major objective, as contained within the literature review of both technocracy and authenticity, chapters two and three examined the implications of technological enframing on our world of being, as well as on our being-in-the-world within its authentic and inauthentic possibilities. In addressing the second objective, the fourth chapter examined and revealed that the cultural and historical development of our understanding is predominantly grounded in the Latin language and culture, as well as in its modern scientific tradition. Finally, in addressing the third objective, the fifth and sixth chapters examined the disclosive socio-cultural space of both our inauthentic and technocratically-minded, as well as our authentic and technocratically-mindful modes of being in the technologically-enframed world. Ultimately, the overarching aim of the thesis, i.e., to reveal the disclosive space of the technologically-enframed situatedness of the They, where all of Dasein's possibilities (both authentic and inauthentic) reside, was attained.

Epistemological and Methodological Implications

The epistemological aim of this study was to interpret, and gain better understanding of Dasein's mode of being in terms of its authentic and inauthentic possibilities. Chapters four, five and six were utilized to interpret several layers of our understanding of authentic, as well as inauthentic being-in-the-world. Ultimately, given the parameters of epistemological (ontic) sense of knowing and the ontological reference to being, the proposed thesis aimed to address three central research questions. They were:

1. What is the cultural and historical context of the technologically-enframed tradition of the modern-day Dasein?
2. In what way is the modern-day Dasein addressed by the cultural context of our technologically-enframed tradition, so as to allow the revealing of its inauthentic mode of being?
3. In what way can Dasein address the cultural context of its technologically-enframed tradition so as to reveal the possibility of its authentic mode of being?

The first research question was approached in terms of Gadamer's exposition of the fore-structures of understanding as situated within a historical tradition of culture and language. To that end, the third chapter examined our linguistic, cultural, and scientific context as being deeply grounded in the Greco-Latin tradition. Furthermore, in view of the cultural content of our contemporary (i.e., scientific) Western tradition, we were able to establish the horizon of our modern-day understanding as being reflected in the calculative, rational, and scientific (i.e., enframed) mindset of the past. Also, in the dialogical process of interpretation, over the two proceeding chapters, the horizon of the cultural tradition was similarly brought forth to explicate and clarify the horizon of the present-day understanding of our technologically-enframed *world of being*, as well as of our technocratically-minded *mode of being*.

The second research question was approached in terms of Gadamer's notion of the cultural horizon of understanding and Ricoeur's concept of distancing from the text, with the aim to reveal Dasein's inauthentic mode of being in terms of its unfolding possibilities in front of the cultural con-text of our technologically-enframed tradition. The purpose in answering this second question, therefore, was to present the initial understanding of ourselves as disclosed in Dasein's average everyday and technocratically-minded mode of being in the they-self. It was also meant to reveal the embedded socio-temporal existence among other Daseins, with their particular (technologically-enframed) cultural and traditional entanglements. As such, in relating to Gadamer's horizon of understanding we portrayed Dasein in its facticity as being delivered over to a shared world (horizon) of public practices and prejudices in which its absorbed way of being-with was suggested as having had its ownmost possibilities of being concealed and covered-over. Moreover, in relating to Ricoeur's concept of distancing we were able to approach the task of interpretation of the inauthentic Dasein in terms of the institutional and professionally bound cultural texts of our tradition, as well as establish its enframed horizon through which our modern-day technocratically-minded world-view is shaped. Once revealed, the meaning of technocratic-mindedness allowed for a potential interpretation (reading) of Dasein's inauthentic mode of being, and of its enframed horizon of understanding in front of which Dasein unfolds its inauthentic possibilities.

The third research question was approached in terms of Gadamer's fusion of horizons, and Gadamer's dialectic of distancing and appropriation. The aim in answering this question was to present the possible ways in which Dasein could approach the cultural con-text of technologically-enframed tradition so as to reveal the possibility of its authentic mode of being. As such, the final aim was to examine the paradoxical reality with respect to Dasein's thrown facticity as opposed to its ownmost potentiality of being. The idea of movement from technocratic-mindedness toward technocratic-mindfulness was offered to suggest a possible shift in Dasein's mode of disclosedness (fusion of horizons) of its

inauthentic they-self to its authentic ownmost self from an initial grasp of its thrown facticity (distanciation) to an enriched understanding of its facticity (appropriation) as potentiality for authentic being in an inauthentic social context. In other words, by exposing itself to the social text of modern-day technocratic structures Dasein was able (as Ricoeur would suggest) to receive an enlarged self from the appropriation of the possible modes of being the enframed world afforded.

Ultimately, in light of its enframed situatedness in the technologically-advanced Western world, the dialogical text of modern-day Dasein was presented in this study as reflecting the technocratic mode of its being. Viewed from this perspective, Dasein as text was hermeneutically interpreted on the basis of its dialogical interaction with its technologically-enframed world of being, i.e., in the way it is engaged with its technologically encompassing situatedness. Similarly, in the two final chapters, the context of Dasein's being in the technologically-enframed world was examined phenomenologically by analysing a number of social and cultural examples of technocratic ways of being within the personal and public domains (i.e., education, media, healthcare, etc.) of everyday life.

In the end, in view of the framework of the current hermeneutic-phenomenological study the criteria of congruence, convergence and coherence were applied. The criterion of congruence was thus utilized to establish the suitability of the approach to the phenomena being studied. The criterion of convergence was used to observe the coming together of the disclosed commonalities found within the socio-cultural structures of tradition being analysed. And finally, the criterion of coherence was employed to observe the soundness and internal consistency of meanings and understandings arrived at in the hermeneutic process of interpretation. Based on these criteria, the goal of the present study to arrive at an understanding and interpretation of the meaning of authentic (as well as inauthentic) being as it is experienced in the context of our modern-day and technologically-enframed world was achieved.

Implication for the Psychology of Authenticity

The traditional notions and definitions of authenticity in modern-day psychology rest on an impression of an inward identity, which can seek and possibly attain an authentic character, identity, or even an authentic self. In other more socially inclusive conceptions, the self is seen as expressing its authenticity in fleeing from the cultural constraints or social restrictions. Neither of these approaches, however, addresses the meaning of the notion of authenticity in terms of being itself. For this reason, the present thesis adopted a hermeneutic-phenomenological approach so as to inquire into the many layers of meaning of our modern-day authentic and inauthentic being-in-the-world. This shift away from a subject to being similarly necessitated a shift toward an ontologically grounded approach to psychological inquiry. This thesis, therefore, reflects a philosophical approach to the psychology of being. Proposed in terms of the hermeneutics of Dasein, it is a psychology not only of being-in-the-world, but also a psychology of the world of being. Approached from the perspective of being and not of subjectivity, therefore, the notion of an authentic mode of being takes on an existential significance.

In view of this perspective, and in following our analysis, several aspects of an authentic mode of being can be surmised. First and foremost, an authentic mode of being is not a rediscovering of one's self, but a reclaiming of one's covered over possibilities of being. The aim, therefore, is not to live authentically, or to search for one's authentic self, but rather to answer the call of being to disclose and own up to one's ownmost possibilities. Moreover, to be authentic is not only to find (i.e., disclose) one's own voice or narrative, but also to take it up in a conscientious, aware and reflective way – in effect, it is to *become* one's own narrative. In other words, it is to write the story of one's life in and through one's way of being. What this implies, however, is that in becoming authentic one aims to bring meaning and intelligibility to our common world of being, beyond the enframed (i.e., disjointed, disengaged, disowned) illusion of the They-self. Here one joins others in the

disclosing, revealing, and illuminating of the discrepancies and disharmonies of our shared socio-cultural and historical existence.

Finally, the authentic project, though played out on the social stage, is always a solitary and a personal one. It does, however, carry with it social implications – as our being is always shared. It is not a goal directed or straightforward undertaking, but a reflective, contemplative, and meditative journey of joining in the discourse of humanity itself, by way of laying-down the ground for disclosure of being. In its essence, therefore, authenticity is a mode of being in communion with being itself.

Implication for Scientific Psychology

In approaching the professional project of psychology authentically (i.e., in terms of the Greek meaning of owning-up), we need to inquire into the meaning and implications of its practice. In view of our analysis, therefore, we are called to inquire: As a scientific discipline, what form of the technocratic logos (i.e., discourse, narrative) is psychology imparting on our collective psyche? As the question itself is an ethical one, we shall turn to the Canadian Code of Ethics (1991) for the answer.

The Code of Ethics makes explicit the role and the responsibility of psychology as a science within a larger context of society in which it functions. It points to two expectations facing the profession, one of which is to increase knowledge and the other to implement it. This functional side of psychology is shown to be of grave value not only to the scientific community at large but also to the individuals who are its recipients. As discussed in this thesis, however, there is an aspect of psychology, which, although very crucial to societal well-being, is nonetheless underrepresented and overshadowed by its scientific and readily operational counterpart, i.e., the reflective role of psychology in the form of applied philosophy of being (i.e., hermeneutics of Dasein).

Psychology is considered as comprised of both theoretical as well as research components, with a primary focus on the scientific study of behaviour. The discipline of

psychology, however, has its roots deeply planted in the ancient philosophies that go back thousands of years. Underneath the shroud of testing, research and experimentation, therefore, we still continue to pose the same questions about our human nature, as did Plato and Aristotle. What has changed, however, is the purpose behind those questions. Today we tend not to require of psychology (like we did of philosophy) to bring about conscientious or reflective awareness. What we do ask for, instead, is scientific knowledge. This specific and dominant aim of psychology is very clearly reflected in the Code of Ethics. On numerous occasions the importance of knowledge, but not understanding, is stressed. Such statements as: "psychology as a science and a profession... will increase knowledge," or "psychologists will actively increase knowledge," or "ability of psychologists to increase the beneficial use of psychological knowledge and structures..." (p. 67) are predominant.

When we examine what scientific knowledge is, however, we find that it is not knowledge of direct experience, but rather a type of knowledge inferred from instrumentally-derived, and systematically-ordered data based thereupon. Moreover, since scientific knowledge in instrumental and not experiential, in its operationalized form it may be presented in a way that could reflect a number of formalized possibilities or positions. This type of knowledge, therefore, has the potential of being used, as well as being abused. In the Code of Ethics, this understanding is clearly reflected where psychologists are advised that, "they need to engage in even-tempered observation and interpretation of the effects of societal structures and policies, and their processes of change, developing the ability... to increase the beneficial use of psychological knowledge and structures, and avoid their misuse" (p. 67).

To have scientific knowledge, therefore, is to have instrumental data. A question emerges however: If our professional practice is to be based merely on scientifically-acquired knowledge, will its application be wholly sufficient and beneficial with respect to the programs, policies and structures it helps to develop? In other words, if the programs, structures and policies are based solely on the scientific data, will they reflect, and thusly

support, the nature and the essence of our social being, or will they merely offer short-term, social “first aid”? Today, as a scientific discipline, psychology can provide considerable support and assistance on a local scale. It can implement programs that reflect the needs of a particular region being studied. It can also, very effectively, advocate for change with respect to the immediate issues being observed. It is less effective, however, in terms of providing the disclosive space for understanding of our modern-day ways of being.

This being the case, we need to ask: Does our responsibility as a profession end with our input into the bank of instrumental data, and the implementation of the scientific knowledge derived thereupon? Or perhaps we should exercise an essentially diminishing practice of reflection, where through conscientious insight and awareness, and not merely instrumental facts and figures, we could provide our dwindling communities, as well as our society as a whole, with greater awareness about the impact, implication, and importance of our shared, socio-historical being-in-the-world? The answer is not a simple one, for it involves a marriage of two divergent ways of thinking (i.e., calculative vs. reflective). In the end, therefore, we need to consider whether psychology should continue to be viewed purely as an instrumental science of behaviour, or whether it should also include the hermeneutic-phenomenological inquiry into our being-in-the-world.

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