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THE WORD: JACQUES ELLUL'S DIALOGIC RESPONSE TO LA TECHNIQUE

A Dissertation

Submitted to the McAnulty College and Graduate School of Liberal Arts

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Philosophy

By

Jeffrey S. Bogaczyk

May 2018

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Jeffrey S. Bogaczyk

2018

THE WORD: JACQUES ELLUL'S DIALOGIC RESPONSE TO LA TECHNIQUE

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ABSTRACT

THE WORD: JACQUES ELLUL'S DIALOGIC RESPONSE TO LA TECHNIQUE

By

Jeffrey S. Bogaczyk

May 2018

Dissertation supervised by Dr. Calvin L. Troup

The focus of this interpretive work is primarily to bring two Ellulian metaphors into conversation with one another: *la technique*, and “the word.” Jacques Ellul (1912-1994), a prominent French philosopher, sociologist, and theologian, is predominantly known for his critique of what he calls *la technique*, an underlying system which acts as an all-encompassing feature of necessity, which privileges the values of efficiency, speed, and progress in all societal endeavors, and which serves as the predominant interpretive lens by which we can examine and understand our current historical and cultural moment. Technique had its origination in the value system of the machine, but its tentacles have now reached into every aspect of human lived experience, turning humanity into a means, limiting human freedom, and reconstructing truth in terms of fact. In response to what Ellul calls the Technological Society, he presents the idea of “the word,” a dialogic

metaphor which illuminates the intersubjective intentionality in human relation by recognizing the value of authentic “encounter” in a phenomenological space which Martin Buber described as “the between.” Ellul prioritizes dialogue over and against the totality of a world given over to Technique. This dissertation seeks to understand the dialectic between these two oppositions, to bring them into conversation with one another in an effort to understand how Ellul’s dialogic hermeneutic can serve as a response to Technique, and to present some possible solutions which can serve to guide human beings seeking liberation within the tyranny of the Technological Society.

DEDICATION

This dissertation is dedicated to my family.

Lisa, you have inspired me and supported me in every stage of this process. Thank you for being such a wonderful person and for encouraging me to take the next step in my educational journey and pursue this degree. I couldn't have done it without you.

Jacob, Alyssa, and Jesse. You have all been so encouraging to me and have helped me to see the importance of education, study, and discipline. I'm grateful that you are my children but even more grateful that I have the privilege of being your father. Thank you!

Mom. I know you would have loved to see this day. This is also for you.

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Maximillian Ofori. Needless to say, your critiques of our work acknowledged the stark truth of where we needed yet to go and what we needed yet to do as scholars. One of the lingering memories of my time at Duquesne was Maxi leaning over to me after it was finished and saying in his Ghanaian accent “Well, brother. It appears we have not yet arrived at the destination.” I laughed and still laugh to this day at that memory. That critique made me better, it made me smarter, and it has served to guide me in my own scholarship. You have served as an exemplar for me and I’m very proud to say that you were my professor, my chair, and one of my readers.

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LIST OF ABBREVIATIONS

HOTW - The Humiliation of the Word – Jacques Ellul

POK – The Presence of the Kingdom – Jacques Ellul

TS – The Technological Society – Jacques Ellul

Chapter One: The Problem of Technique

Introduction

Humanity has always found itself in a unique relationship to technology. The astounding achievements and advancements that have come as a result of technological development have served to contribute to the betterment of the human condition in virtually every arena of human life. Science, business, communication, medicine and other fields all provide multiple examples of how technological advancements have contributed to more efficiency, greater production, newer discoveries and an overall progress in the advance of human society. Francis Bacon wrote in 1620 that the “real and legitimate goal of the sciences is the endowment of human life with new inventions and riches” (F. Bacon & Devey, 2010, p. 58). Bacon’s observation seems obvious.

On a less conspicuous note, however, there is an aspect to technology that has been considered problematic - a lingering question about some of the consequences of technological progress. As mentioned, the examples of the benefits of technological progress appear endless, but in the euphoria of new invention, the potential negative aspects of these technologies remain hidden from view and even shrink into the shadow they themselves create. The shining light of newness, speed, efficiency, and progress sometimes prevents us from realizing that in each new technological advancement, we might be losing something. Neil Postman referred to technology as a Faustian bargain – technology giveth and technology taketh away – and in his work *Technopoly* (1993) makes the argument that while technology produces multiple benefits to humanity, there are other less positive consequences. He states:

“[T]he accusation can be made that the uncontrolled growth of technology destroys the vital sources of our humanity. It creates a culture without a moral foundation. It

undermines certain mental processes and social relations that make human life worth living.” (1993, p. xii)

Postman’s critique of technology is not alone. Others have echoed and shared his sentiment and while some see technology as neutral – an instrumental view that recognizes technology as a tool subject to the way in which it is used - scholars have suggested that technology is itself “a human process that is value-laden throughout” (Christians, 2002, pp. 38–40). Today, we find ourselves in a historical moment characterized by technicalization in all areas, and particularly in the realm of our communication media. Van der Laan states, “Technology determines now, as never before, the modalities of our existence” (Laan, 2012, p. 242). Postman, with an attention to our communication media, reconsiders Ellul’s *la technique* as “the technical thesis” and points out how, in a technically dominated culture, we can come to the point where procedure supersedes and even becomes more real than purpose. This situation across the totality of a culture is what Postman calls Technopoly (Postman, 1993). Whether it is called the technical thesis (Postman, 1979a, pp. 90–91), *la technique* (Ellul, 1964), Technopoly (Postman, 1993), technics (Mumford, 2010), mechanology (Stiegler, 1998), or scientism (Lewis, 2015), the problem of technology affects a culture in its totality. This problem, especially in regard to communication, defines the scope of a discipline within communication studies that investigates the mediated environment. “Media Ecology,” formally developed into a meta-discipline through Postman and draws its theoretical foundations from a multitude of scholars, the most notable including Lewis Mumford, Harold Innis, Walter Ong, Marshall McLuhan, Elizabeth Eisenstein, Eric Havelock, Jacques Ellul, Alfred Korzybski, Neil Postman, and Lance Strate. Media ecology directs its focus toward understanding our symbolic environments - our communication environments. Postman states:

“Every society is held together by certain modes and patterns of communication which control the kind of society it is. One may call them information systems, codes, message networks, or media of communication. Taken together they set and maintain the parameters of thought and learning within a culture” (Postman, 1979a, p. 29).

Media ecologists are interested in how these media of communication influence us and how they impact and relate to one another. As our communication environments change due to technological advancements in communication media, our thinking and behavior change as well (Forsberg, 2009, p. 138).

A main tenet of the media ecology discipline is the ecological metaphor. As with any ecological system, the system itself is predicated upon balance. A change in one component of a system changes the entirety of the system itself. This balance-centered theory of media is what media ecology addresses. Gencarelli states “If balance is the key principle underlying the ecology of natural environs, then media ecology is about striking a balance in the ecosystem that is the information or *media environment*” (Gencarelli, 2000, p. 94). The attention to ecology points to an environmental concern that the means by which people communicate comprise an environment referenced by Marshall McLuhan in his famous aphorism, “the medium is the message.” The medium *is* the message precisely because the medium structures our modes of thought (For greater understanding of this concept, see McLuhan, 1994).

Defining the Problem

As previously mentioned, the argument has been made that the uncontrolled growth of technology is having an adverse effect on what it has traditionally meant to be human – in our moral foundations, our mental processes and social relations. While technology promises to connect us in greater ways through newer electronic communication technologies (i.e. the

internet, mobile phones, chat apps, social media platforms, etc.), the reality is that our human social interactions are growing apart. Sherry Turkle exposes this dichotomy, how today, “insecure in our relationships and anxious about intimacy, we look to technology for ways to be in relationships and protect ourselves at the same time... We bend to the inanimate with new solicitude. We fear the risks and disappointments of relationships with our fellow humans. We expect more from technology and less from each other” (Turkle, 2012, p. xii). Ellul noticed the same predicament, albeit years earlier:

“Men become accustomed to listening to machines and talking to machines, as, for example, with telephones and dictaphones. No more face-to-face encounters, no more dialogue. In a perpetual monologue by means of which he escapes the anguish of silence and the inconvenience of neighbors, man finds refuge in the lap of technique, which envelops him in solitude and at the same time reassures him with all its hoaxes” (Ellul, 1964, pp. 379–380).

Turkle and Ellul call our attention to a societal crisis: a shift in the nature of human communication. Within such a cultural context, the ecological metaphor draws our attention to the importance and the need for something to restore balance. This project interrogates Jacques Ellul’s work to examine the dialectical tension between the technological society and human relation – to explore if and how his dialogic metaphor of “the word” can serve as a balancing response to dominating aspect of *la technique*.

Ellul’s Project

Ellul’s work primarily investigates what he calls “Technique.” He states, “I try to offer a theoretical explanation for a phenomenon that strikes me as all-encompassing, a phenomenon that covers the whole range of human activities... This all-inclusive view, this framework, is that

of technique (Ellul, 2004, p. 28). And while one of his intellectual influences, Karl Marx, looked at Capital as the explanatory element for interpreting society during the nineteenth century, Ellul looks at Technique as the most decisive factor for explaining the twentieth century (Ellul, 2004, p. 26). His work cannot be accurately interpreted without an in-depth understanding of his concept of dialectic. Early in his life, he read Marx and became convinced that understanding the material forces of our world opened the door to its interpretation. Later in his life, he converted to Christianity and found that Jesus Christ supplied something for him personally that he found lacking in Marx. While Marx could explain his material condition, Marx could not answer the existential questions of life, love, death and the meaning of human existence. Christ, therefore provided an answer on one account and Marx on the other. These two sources, Marx and Christ, became the poles of dialectic tension in Ellul's thought. He states:

I thus remained unable to eliminate Marx, unable to eliminate the biblical revelation, and unable to merge the two. For me, it was impossible to put them together. So I began to be torn between the two, and I have remained so all my life. The development of my thinking can be explained with this contradiction" (Ellul, 1982, p. 16).

Any interpretation of Ellul must recognize this dialectic framework. He explains:

[T]here is a dialectic within my work, and it is entirely central in that I have discovered progressively that in the world we live in there are no means of thinking and acquiring knowledge that are not of a dialectical nature...I became conscious, as I worked and thought, that I needed to interpret all things dialectically." (Ellul, 1982, pp. 201–202).

The same dialectic exists in relation to communication. Ellul's work in *Propaganda* (1973b) investigates the technique of communication on a mass scale and how the "word" in human communication becomes subject to *la technique* in order to accomplish its purposes. Propaganda

is not something “made by certain people for certain purposes” but is rather a sociological phenomenon that can only exist in the technological society (Ellul, 1973b, p. v). He juxtaposed this view of communication with a different perspective in *The Humiliation of the Word* (1985) addressing what he considered a modern crisis in language. In *HOTW*, Ellul explicates how language, and particularly “the Word,” has been subjugated by the predominance of the image in the technological society. He describes a humiliation of language which comes from structuralists with a “pure” view of language who have attacked it as a communicating medium, as well as post-structuralists who attempt to remove the speaker from the speech act (Ellul, 1985, p. xi).

Contrasting these perspectives on language, Ellul’s understanding of the “word” is dialogic and embedded in human relation. It is not something that is merely spoken, but something which must be heard as well. “All human speech is intrinsically connected to a person,” he states, and notes that the objective word, left to itself and separate from the person who speaks it, loses all its weight and even its relationship to truth (Ellul, 1985, p. 33). Though not well recognized as a dialogic communication theorist, Ellul’s understanding of “word” has advanced the thinking about dialogue and convincingly situated him in the conversation. The key to understanding Ellul is best found in chapter three of *The Presence of the Kingdom*, where he frames what he considers the key problem of our time – the problem of the end and the means. Technique has woven its value system into the fabric of our culture in such a way to upend traditional societal ends by turning them into means. The technological society, directed by a totalitarian technical system turns humanity into a means serving Technique and creates a dilemma for human beings: we do not know where we are going (Ellul, 1989, p. 51). The fact

that the human is no longer an end and society is solely concerned with “means” concerns Ellul and his work addresses this issue phenomenologically – as it presents itself to consciousness.

The Dialogic Landscape

Dialogue as an emerging concept in communication research can be said to originate in Johannesen’s founding article *Communication as Dialogue*, (1971) where the author explores the groundwork for an investigation into communication as dialogue in three general areas: the components of the concept of dialogue, the nature of monologue as viewed by dialogic advocates, and questions regarding dialogue for ongoing communication research (Johannesen, 1971, p. 373). Dialogic theory within the literature, is recognized through a variety of lenses. Anderson, Baxter and Cissna (2004b) look at foundational philosophers who include dialogue as a major focus of inquiry: Martin Buber, Hans-Georg Gadamer, Jurgen Habermas and Mikhail Bakhtin. Additionally, Stewart, Zediker & Black (2004) denote Buber, Bakhtin, Bohm, Freire, and Gadamer as "philosophers of dialogue." Regardless of the designation "philosopher of dialogue," each of these theorists has a unique understanding of dialogue that highlights it as an area of focus for communication scholars.

Dialogic theory in a postmodern historical moment must recognize and understand difference. Theorists approach the issue of dialogue recognizing a specific standpoint or perspective and Cissna and Anderson (1994, pp. 10–13) detail four conceptions on dialogue that co-exist within the literature. The first comes out of the work of Martin Buber and looks at dialogue as a form of human meeting and a relationship with the other. The second conception deals with dialogue as an analysis of the intricacies of human conversation and is found in the research of Markova and Foppa (1990) and Deborah Tannen (1989). Third, there is a conception derived primarily from the work of Mikhail Bakhtin (1986; 1981) that sees dialogue as a cultural

form of human knowing. And fourth, dialogue has been examined as a philosophy of textual understanding and interpretation derived mainly from the work of Hans-Georg Gadamer (1960). Other prominent theorists have examined dialogue in multiple communication contexts, and Anderson, Baxter and Cissna give a detailed account of the literature on dialogue from 1990-2004 (see Stewart et al., 2004, pp. 3–15 as well as) (2004, p. 3-15).

The foundations of dialogic communication have also been articulated from philosophical ground and the scholars who adopt this perspective toward communication research typically address four main focal points. First, they recognize in their research the priority of the “transaction,” “relationship”, or “the between” in dialogue as opposed to the communication message or communication effect. Second, they recognize experientialism as a constitutive element in the accumulation of factual knowledge. Citing Williams, Johannesen recognizes that important elements of dialogic communication “present themselves only through the experience of transactional partners” (Johannesen, 1971, p. 378 citing Kenneth R. Williams, “Speech Communication Research: One World or Two?” *Central States Speech Journal*, 21 (1970), 178.). Third, these scholars recognize a focus on self and subjectivity, emphasizing self-awareness, sensitivity, role taking, authenticity and the self as becoming. The fourth characterization is an understanding of holism in dialogic communication. Holism recognizes the “multitude of interdependent cognitive, affective, behavioral, and contextual variables” in dialogue (See Stewart, 1978). The philosophical ground from which these foci develop comes out of hermeneutic and existential phenomenology. “[T]he concept of relationship [is grounded in] the phenomenological notion of relational reality, experientialism in the phenomenological notion of intuition, self-focus in the subjectivity of existentialism, and holism in philosophical anthropology (Stewart, 1978, p. 185). The philosophical grounding of dialogic communication

in phenomenology implies a particular phenomenological understanding of language. Deetz advocates for this phenomenological view as opposed to a representational and an ordinary view of language where both the ordinary and representational views are understood as derivative views that objectify language and tend toward abstraction (Deetz, 1973, pp. 40, 41). Deetz's phenomenological view of language sees (1) knowledge as, by necessity, conscious knowledge (intentional and directed), (2) conscious experience as preceded by a pre-reflective constitution, and (3) conscious knowledge as already housed in language (In Deetz, 1973 Deetz details the phenomenological aspects of his view of language and grounds it in the work of Heidegger and Gadamer).

Dialogue as a phenomenological concept is also addressed by Arnett. In his article *Toward a Phenomenological Dialogue* (Arnett, 1981), Arnett discusses and bridges the relationship between two approaches to communication theory, the dialogic and the phenomenological. It is his intent to distinguish a phenomenological dialogic communication theory from a dialogic theory grounded in "third force" psychology as presented in the work of Carl Rogers and Abraham Maslow (Maslow, 1943, 1959; C. Rogers, 1961; C. R. Rogers, 1951; C. R. Rogers & Stevens, 1967). Arnett's understanding of phenomenological dialogue is one which recognizes the principle of intentionality. As Husserl (2012) noted, consciousness is always consciousness *of*, or intentional and therefore implies "the acceptance of a non-subject/object world view in which the meaning of a communication happening emerges "between" persons, not in each person's internal perceptions or through environmental control" (Arnett, 1981, pp. 206–207). The phenomenological concept of the "between" comes out of with work of Martin Buber and recognizes that meaning in dialogue occurs "between" two individuals rather than *inside* them. This locus of meaning in dialogue is the basic difference between

psychologism's possessive nature and dialogue's interdependence. Arnett's work (Arnett, 1982, 1986, 1994; Arnett & Arneson, 1999) discusses the implications of Buber's contribution to dialogic communication and reveals dialogue in its phenomenological nature.

The literature on Ellul is vast and addresses multiple aspects in Ellul's thought. Scholars have addressed his sociological work (Kuhns, 1971 see particularly chapter 5; Lovekin, 1982; Matos Alves, 2014; Omachonu & Healey, 2009), his theology (Christians, 2006a; Stout, 2006), his critique of technique and technology (Lockhart, 1996; Moore, 1998; Petroşel, 2012; Strate, 2006), and his understanding of communications and communication theory (Christians, 1979, 2009; Gladney, 1991; Karim, 2001; Lyle, 2008; Schick & Posner, 1985; Soukup, 1988; St. John, 2010). More importantly for this project is the research on Ellul as a dialogic communication theorist. Christians (Christians, 1988) places Ellul alongside Martin Buber, Paulo Freire, and Jurgen Habermas as a dialogic theorist noting that Ellul's *la technique* describes the I-Itness in the mass media and that the only safeguard against this is a "steadfast, radical, unrelenting commitment to I-Thou relationships "(Christians, 1988, p. 22). In claiming Ellul as a dialogist, Christians notes Ellul's prioritization in *POK* of the human being. Christians (1988, p. 22) sees in Ellul's work that two modalities (I-Thou and I-It) of dialogue and propaganda are dialectically connected where the ebb and flow of one occurs at the expense of the other. The research on Ellul as a dialogic theorist seems to indicate a need for greater investigation and this project endeavors to examine how his work prioritizes dialogue as a response to the I-Itness of Technique.

Ellul is also considered a seminal thinker within the Media Ecology tradition, having influenced Neil Postman, one of the founders of the discipline. Geraldine Forsberg (2014) outlines Ellul's influence on Postman and notes how Ellul's texts provided a foundation for the

understanding of technology and media in the media ecology program at New York University during the late 1980's. Postman (1979b, p. 244) himself references Ellul as a scholar who illuminates the mediated environment and provides a greater understanding on how technology effects how our thoughts, understandings, and actions occur. Postman (1993, p. xii) positions Ellul as a scholar who had described the sociological context created by technology, as one who has opposed uncontrolled technological development (Postman, 1995, p. 139), as one who recognizes how our technologies affect who we ultimately become (Postman, 1979a, pp. 100–101, 1995, p. 190), as one who understands how our politics are shaped by it (Postman, 1979a, p. 96), and one who has tried to document the psychological and social changes that technology brings to a culture (Postman, 1979a, p. 188). Strate also references Ellul's perspective on the technological society and its relation to identity – that “powerful technologies made possible the creation of the mass society, a society in which a mass of individuals are identical in their anonymity and apathy, equal in their alienation and impotence, and all the same in their indifference” (2007, p. 225). Strate sees Ellul as a seminal thinker within media ecology scholarship having a perspective on media and technology that situates him firmly within the field of inquiry and additionally recognizes Ellul's influence on Postman particularly concerning verbal discourse juxtaposed with image (Strate, 1994, pp. 160, 167). Forsberg (2014) values Ellul, not only for his sociological contributions to a greater understanding of technology, but also for his contributions to a greater understanding of the English language with his emphasis on “the word.” Garrison (2012) argues that Ellul's concept of *la technique* has been subsumed in our contemporary culture by a trend not for rationalized efficiency – as Ellul talks about in *TS* (Ellul, 1964) - but for an evolved efficiency which has resulted in a fourth milieu of virtuality, which he believes could revitalize Ellulian scholarship. Within the media ecology tradition, Ellul

is a scholar who has had a profound impact on thought and scholarship, furthering the conversation on the relationship between humanity, human communication and technology.

Methodology of Inquiry

It also serves a purpose here to detail the method in which I approach this research. In seeking how Ellul can help us to navigate Technique through his metaphor of “the word,” I will be working from a Hermeneutic/Interpretive framework. The Interpretive perspective in communication research is primarily concerned with finding meaning in communication (Cheney, 2000, p. 18). Within this perspective are several loci of interpretation. First is the social actor. The interpreter orients himself toward research and recognizes himself as a subject with theories on the social world and a desire to understand the processes by which meaning is constructed in that world. Within this framework, the interpreter works as a researcher in the active process of finding meaning and considers both the historical moment as well as the context of life experiences that constitute the research. The linguistic turn in philosophy serves as an important moment for interpretivism because it recognized language as a constructor of meaning where the "text" can become the focus of research. Interpretivism analyzes ideas of exposition, explanation, commentary, and representation along with an impressionistic stress on creativity, all with the understanding that human beings hold a capacity to make sense of the world as it is experienced through language and symbolism.

The hermeneutic method for interpretive research has been recommended and used by scholars as a method of research (Butler, 1998) and is defined as the theory or philosophy of the interpretation of meaning (Bleicher, 1980). The need for methodological principles in interpretive research has been indicated by Walsham who notes that “interpretive researchers are attempting the difficult task of accessing other people’s interpretations, filtering them through

their own conceptual apparatus, and feeding a version of events back to others, including in some cases, both interviewees and other audiences. In carrying out this work, it is important that interpretive researchers have a view of their own role in this complex process” (Walsham, 1995, p. 77). There is a need for an interpretive researcher to recognize his/her own bias at the beginning so that researchers can question their own interpretations and recognize how their subjective perspective informs the research.

Paul Ricoeur’s phenomenological hermeneutics (Ricoeur, 1973) presents a methodology for interpreting texts that will guide this project. He defines hermeneutics as a theory of understanding in relation to the interpretation of a text (Ricoeur & Thompson, 1981, p. 43) and his interpretation theory is founded on the dialectics between explanation and understanding. Ricoeur’s phenomenological hermeneutics will direct my interpretive work in order to gain a greater understanding of Ellul’s project and his contribution to a dialogical response to Technique. Additionally, this project works within the framework of a constructive hermeneutic. Deconstruction, as a form of philosophical and literary analysis derived mainly from Derrida, questions the fundamental concepts and meanings within a text and seeks not to build upon what is given in text, but rather to “deconstruct it” and find meaning in the opposition and difference between the signs and symbols outside of the author’s intent. A constructive hermeneutic recognizes an author and seeks to find meaning based upon the intentionality of the author found within the text and the particular historical moment – understanding theory and offering constructive suggestions for implementation. Standing on the ground of a constructive hermeneutic and beginning with an understanding of coherence, comprehensiveness, penetration, thoroughness, appropriateness, contextuality, agreement, suggestiveness and potential, I believe that an interpretive project into Ellul and dialogue can be fruitful and advance the research into

Ellul and provide a greater understanding of Ellul's thought regarding communication, technology and humanity.

Charting the Course

In chapter two, I frame the context for the project by investigating Technique in the sense that Ellul understands it – as an underlying system within society. I explicate the idea of Technique in relation to science and explain their codependent relationship with one another. I then turn to a historical examination in order to uncover the evolution of a technical way of thinking or a “technical mindset.” I begin this historical investigation by seeking traces of its development from the time of the Ancient Greeks and Romans, through the medieval dark ages, the Renaissance and into the modern era. I additionally give consideration to Enlightenment philosophy that grew out of the scientific and Newtonian revolutions. Enlightenment philosophy, represented in the debate between the Continental Rationalists and the British Empiricists, privileged a technical scientific epistemology which then allowed the world of value and meaning to start shriveling away (Christians, 1988, p. 7). Cassirer's understanding of the eighteenth century as a time “imbued with a belief in the unity and immutability of reason” (Cassirer, 1972, p. 6) allowed Sir Isaac Newton to describe the world in his *Principia* (2013) as a lifeless machine composed of mathematical laws and built on uniform natural causes in a closed system (Newton as quoted in Christians, 1988, p. 7).

Chapter three seeks to gain greater perspective on the problem of Technique by examining the contribution of a meta-disciplinary field of inquiry: media ecology. As mentioned previously, media ecology recognizes our media as an environment and inquires about the effects of our media and technology. Media ecology can help illuminate our current technological society by providing scholarship which helps to understand and explain our

ongoing relationship with media. I examine several metaphors which guide media ecology scholarship and give insight to our understanding. I look at media as extensions – that each technology extends one or more of our senses. I turn to media as environment – that we live, breathe, and act within media. I explicate media as species – that within an ecology, each media exists in relationship with other media. I investigate media as epistemology – that every media reconstructs and reorganizes our thought processes and perceptions of our world. And finally, I explore media as information – seeking to understand the relationship between the digital environment and information as commodity. Though Ellul primarily worked as a sociologist, media ecology has claimed him as a scholar who understands and examines technology as “a key phenomenon... that is modifying the structure of our entire society” (Arendt, 1967, p. 47).

Chapter four of this project looks at phenomenological dialogue as a fundamental aspect of human relation and a point of resistance to the problem of *la technique*. In order to understand the phenomenological aspect of dialogue, we examine its evolution through the work of the father of phenomenology, Edmund Husserl and then to Heidegger who established an intentional quality in Dasein, a human being’s mode of Being, and extended it to the intersubjective relationship. Schrag then furthered the concept recognizing intersubjective intentionality as one of the constituent qualities of the structure of moral consciousness. The tradition of dialogic theory, however, includes the work of Martin Buber (1947, 2010) – the preeminent dialogist. Buber’s understanding of dialogue in the primary I-Thou subjective relationship forms the foundation for authentic human communication and is rooted in a phenomenological stance that happens “between” people, and which emerges in ephemeral moments of human meeting. For Buber, dialogue manifests itself as a stance or an orientation in communication rather than a method or technique - the fundamental fact of human existence is “man with man” – a

perspective that constructs meaning and the sense of self in the “between” space in relationships. This chapter investigates phenomenological dialogue and situates the research in order to provide a background for Ellul’s concept of the “word.”

Chapter five details Ellul’s dialogic metaphor of the word as a response to *la technique*. In *HOTW*, (1985) Ellul provides an explication of “the word” as a communicative practice and theoretical concept that grounds humanity in meaning. Though he does not address Buber specifically or develop a dialogic theory of communication, he is considered as a dialogic scholar by Clifford Christians who states that Ellul “follows in the spirit of Socrates and Vico who insist that the human prospect remain the central issue.”(Christians, 1988, p. 22) Christians goes on to note the anthropological priority of Ellul which privileges human freedom, humanitarian ends, and flesh and blood reality. Buber’s two modalities (I-It and I-Thou) are seen through a dialectic lens where one occurs at the expense of the other in an ebb and flow of interaction. This chapter will examine Ellul’s “word” as a phenomenological dialogic principle that refuses to integrate one into a massified, dehumanized, unfree society.

The final chapter of the project looks at some of the implications of Ellul’s phenomenological word for communication scholars and those living in the technological society. This chapter shows how Ellul leads us back to a concern for ethics. It reveals how a dialectic/dialogic hermeneutic can provide necessary balance in a technological society and then offers three metaphors for living within Technique. The “craftsperson” calls us to a life well-lived and cognizant of the importance of process and journey instead of mere destination. The “mutant” refers to someone who can use technologies and at the same time not be used by, assimilated by or subordinated to them. And finally, the “student” helps us to understand the importance of learning. Not simply “technical” skills, but by learning from those who have gone

before us, who have given us insight into the human condition, and provided a foundation by which we can reflectively understand our historical moment and ultimately live authentically within it.

Chapter Two: The Evolution of Technique

Introduction

Since about the advent of the 19th century, scholars have increasingly put the issues of technology and technological progress under a critical inspection (Ellul, 1964; Harold Adams Innis, 2007; McLuhan, 1994; Mumford, 2010; W. Ong, 1982). Of those scholars, few have been more vocal and critical than Jacques Ellul. His textured and focused interrogation of what he calls *la Technique* eschews a more naive understanding of technique as simply an application of science, and suggests the contrary: that technique not only preceded science, but has also superseded it as a defining characteristic of society. The relationship between Technique and science has resulted in a cultural shift biased in the presuppositions of Technique which now effect every aspect of culture. Ellul's perspective of Technique in relation to science rests upon two understandings: (1) in order to progress, technique had to wait for science and (2) without technical means, science does not advance (Ellul, 1964). The relationship of Technique to progress puts society in a position where Technique not only orders the structures of society, but where the technical phenomenon has become the only phenomenon of interest:

"In the first place, there is modern man's collective worship of the power of fact, which is displayed in every technique and which is manifested in his total devotion to its overwhelming progress [and] ... In the second place, there is the deep conviction that technical problems are the only serious ones." (Ellul, 1964, p. 303)

While Ellul addresses the relationship between technique and science, his critique more importantly concerns humanity's attitude and relation to technology. He observes a society which completely welcomes the invasion of technology into human life without any question of its socio-political effects or its future unforeseen consequences. In order to understand the

phenomenon of Technique and the culture which has adopted it so uncritically, this chapter will explain Technique itself, how Technique preceded science, why Technique had to wait for science, and why new scientific advances now depend on Technique. Accomplishing these objectives necessitates an investigation of the historical development of the technical or mechanical mindset, in other words, how did we get to such a place where Technique, and more particularly the technical values and objectives have superseded everything else?

Technique Defined

The current situation of Technique's cultural dominance and the virtually unhindered growth of the technological society which now defines our communicative context did not just recently emerge in the social milieu. Its rise came about through the prolonged development of a system of thought – a particular bias in thinking which provided the framework for its growth - characterized by a mechanistic, methodological, rational and scientific epistemology. Ellul defines this cultural situation as the technological society where everything is considered in terms of the machine. He states,

“Technique...is the totality of methods rationally arrived at and having absolute efficiency (for a given stage of development) in every field of human activity...”

Technique is not an isolated fact in society (as the term *technology* would lead us to believe) but is related to every factor in the life of modern man; it affects social facts as well as all others” (Ellul, 1964, pp. xxv–xxvi).

The majority of humanity (excluding the more primitive civilizations which have up until this point in history escaped modernization) now finds itself in this condition where technology reaches into every human arena; where the tentacles of Technique produce not only the machines we use but also dictate how we construct those machines and how those machines by the nature

of their very existence then govern the rules for our interaction with them. And as Technique monopolizes more and more of culture, its values – values inherent within its very structure – become our values and its priorities become our priorities. Perhaps most importantly, the values and priorities of Technique often counteract and even resist some the values and priorities necessary for our social interactions and how we communicate and relate to one another.

It must be clarified that in speaking of technology, I refer to not just specific technological developments such as the assembly line or the combustion engine. Nor do I refer, since this project concerns communication, to just communication technologies like the printing press, the telegraph, television, and the internet. In speaking of technology or technics, I refer to an underlying system of culture or a specific bias within society. Clifford Christians, in referencing Ellul's understanding of *la Technique*, puts it like this, “[L]a technique refers to the contemporary *Geist*, the spirit, the characteristic consciousness of industrialized societies. It is a systemic notion referring to machine-ness more than machines and formally resembles racism as a defining term.”(Christians, 1988, p. 21) In comparing *la Technique* to racism, Christians sees technology as a systemic underlying bias that affects all aspects of a culture. The technological advancements that produce machines or the systematic processes that benefit the human condition do not solely define Technique for Technique has become a systemic cultural metaphor which now colors and gives new meaning to the entirety of human existence.

Ellul's understanding of Technique, as mentioned, encompasses not simply the technical arena, but the entirety of society. Technique, as we know it today, had its origination in the values of the machine, but we can see its ever reaching arms now extending beyond machines into other areas and processes like science and organization. According to Ellul, the machine defines and exemplifies pure Technique because it represents the end of a series of rules and

systems that operate with utmost efficiency in the completion of a task. However, being that the nature of Technique seems to have become autonomous in the technological society, the values and priorities inherent in it have become the values and priorities of society and, of utmost importance, they now direct and influence every field prior to any critical examination of their effects. The autonomous nature of Technique occurs when “the one best way” to accomplish something guides whatever that process may be. This develops as the constituent parts of any process have been examined, measured, and calculated mathematically so that the final method (or most efficient method) of completing the process comes from the unbiased rational decisions based upon the calculations and measurements (Ellul, 1964, p. 80). This becomes a self-directing and non-personal choice.

Technique has also become independent of the machine to such a point where now the machine depends on Technique. In such a case, machines can only advance as Technique progresses. For example, it was once the case that Technique applied scientific formula to the real world, and as science uncovered new discoveries, Technique then found avenues for the practical use of this new information in the material world. Ellul believed this assumption to be false with the exception of one area – the natural sciences. A review of history shows that Technique in fact preceded science and that ancient cultures were well acquainted with techniques even prior to the Greeks. But as scientifically directed thought incubated in the ancient mind, Technique had to wait for science to “catch up” in order for it to progress. Gille has noted that “Technique, by means of repeated experiments, posed the problems, derived general notions and the four primary elements; but it had to wait for the solutions” which science provided (as quoted in Ellul, 1964, p. 7). Look, for example, at the steam engine which progressed and developed not by scientific theory, but by repeated trial and error

experimentation. The science to explain the phenomenon of steam power came two centuries after its discovery, application, and implementation into new inventions. Technique, having developed as far as it could, had to wait to progress further until science provided new avenues and new discoveries for its application and systematic process. Though at a certain point in history Technique had to wait for science, Technique and science have always had an interdependent relationship that often defies accurate hierarchical attribution.

Today science depends upon Technique to the extent that much of what might be considered scientific research depends upon funding from commercial business whose interests guide the technical application of scientific discovery for profit. Because of this, research that cannot be applied for commercial purposes does not receive funding and dries up. This condition exists with pharmaceuticals, health care, computers (both hardware and software), financial markets (note the advance of high frequency trading and robot financial advisors), politics, business, and even national defense. In each of these cases, Technique has turned science into a machine and has directed and focused it in such a way that strengthens Technique's grip upon each respective field. Technique, by its very nature, systematically turns everything into a machine. In another domain, the organizing principles in business and in human resources also reflects Technique's influence.

In organization, efficiency and procedure for primarily capital ends provide the guidelines by which systems and people are grouped and how they function within a totality. In these cases, Technique itself determines the guidelines for organization based in sets of rules that guide the smooth and efficient operation of business and organizational systems and human resources. The assembly line as an organizational strategy breaks down labor into individual parts, examines the procedures (techniques) that result in the greatest speed and efficiency of

labor, and then institutes those procedures as rules that dictate their operational function. In cases like these, Technique demands that the procedures, guidelines, systems, and rules be regularly re-examined and set against the standard of greater efficiency and speed – for the greater good of “progress.” The operation of Technique in such cases shows how the human being succumbs to efficiency. In this type of organizing process, human resources become the means to the technical end – a means to greater speed, greater efficiency, greater profit, and greater progress.

In contemplating Technique as an underlying cultural bias, its autonomy becomes apparent as does the fact that it engulfs everything in its path – to ingest, process, and spit back upon the culture to further its own efficient ends. In human resources Technique devalues the human and makes him/her another cog in the efficient operational machine - a means to an end, rather than an end itself. Marx’s concern for the human’s devaluation by the advance of capitalism in many ways resembles the influence of Technique in the modern and postmodern world. Technique has employed a similar strategy to that of Marx’s “Capital” in using humanity to further its own ends. Ironically, “Capital” has been usurped and exploited by Technique. Technique now employs and integrates “Capital” to expand, to grow, and to further its dominance upon culture. How did this happen?

Humans as Technical Beings

Tracing history for the development of a technological mindset is quite different than simply examining and recounting historical technological developments. In undertaking this effort, we search for the origins of a methodology or a particular way of thinking more so than simply detailing historical inventions. Though we can readily find instances of technological development in early ancient history such as the development of stone tools for greater

productivity and efficiency in hunting and building during the Neolithic period and the Biblical account of mass labor organization for the building of the great tower of Babel, in general, we must endeavor to scour the history of thought for instances and examples of the particular processes and structures of thought sometimes recognized only by their results. Generally, we can look toward the ancient Greeks for the first documented evidence of a technical type of thinking, particularly the tale of Prometheus (recounted in Plato, 1992, pp. 320d–322a) which introduces the idea of the human as a technical being. According to the myth, when the gods created all the creatures on earth, Prometheus and his brother Epimetheus were tasked with distributing to the creatures gifts that would enable them to survive on the planet. In his wisdom, Epimetheus distributed to all of the different creatures gifts like, fur, wings, speed and others. Having given all these gifts, by the time he got around to man, he found his basket empty. His brother Prometheus, seeing this difficulty, proceeded to raid the workshop of Hephaistos and Athena on Mt. Olympus, stealing from them fire – a symbol both of the technical (since fire is conceived as a technological development) and the power of the gods. Along with the gift of fire, the Titan also taught humans how to use their gift, helping them to learn the skill of metalworking – a technical craft associated with science and culture. The Greek myth reveals the nature of the human being as a technical being, but we might inquire about the origin of this proclivity.

The Technology of Writing

In making this inquiry, we first look to the technology (if it can be called that) of writing. It has been said by the ancients that “speech is the difference of man.” In fact, language, and particularly spoken language, represents the first great leap of intellectual capacity for human beings. The Sapir-Whorf hypothesis, a result of the work of two linguists: Edward Sapir and

Benjamin Whorf, states that our spoken language constrains our thoughts and actions. Particularly, as Whorf has stated, “the world is presented in a kaleidoscopic flux of impression which has to be organized by our minds – and this means largely by the linguistic systems in our minds” (Whorf, 1940). Though the stronger form of the hypothesis which tends toward linguistic determinism has been criticized by scholars, the weaker version suggests a linguistic relativism, that our spoken language influences the ways in which we think. Accordingly, in the same way that speech distinguishes intellectual development, any technology, including the technology of the alphabet does as well. As Breasted has noted, “The invention of writing and of a convenient system of records on paper has had a greater influence on uplifting the human race than any other intellectual achievement in the career of man” (Breasted, 1954, p. 23). In speaking about writing as a technological development and its effect upon human thinking, Harold Innis states, “...the art of writing provided man with a transpersonal memory. Men were given an artificially extended and verifiable memory of objects and events not present to sight or recollection. Individuals applied their minds to symbols rather than things and went beyond the world of concrete experience into the world of conceptual relations created within an enlarged time and space universe... Writing enormously enhanced a capacity for abstract thinking” (Harold Adams Innis, 2007, pp. 10–11).

The development of the technology of writing through the invention of the alphabet reconstructed the way human beings think. This can be seen in the distinct differences between alphabetic languages of the West and the pictorial, imagistic alphabets in the East. There is a great difference in the way the spoken word is visually coded in eastern cultures as opposed to western. McLuhan and Logan make this comparison noting how the western alphabet is used phonetically to visually represent the sounds of words whereas eastern cultures (particularly

Chinese culture) use characters as pictographs to represent the idea of a word (McLuhan & Logan, 1977). In this sense, eastern written languages are less abstract than their western counterparts and consequently, so are the resultant thought patterns in the people who use those languages. McLuhan and Logan argue that within the time frame from 2000 B.C – 500 B.C and within the narrow geographic zone between the Tigris-Euphrates river system and the Aegean Sea, certain innovations developed which constitute the basis of Western thought that did not develop in the same way in the East. These developments include codified law, monotheism, abstract science, formal logic, and individualism. The implication being that the presence of the phonetic alphabet in the West contributed greatly to the thought patterns which then allowed these concepts to arise and come into being in the cultural milieu. The tendency of the Western phonetic alphabet to lead toward a greater abstract thought process as opposed to the pictographically oriented code systems of the East explains, for McLuhan, why science began in the West rather than the East, despite the greater technological advancements of the Chinese culture (McLuhan & Logan, 1977).

McLuhan and Logan also give an explanation for why the phonetic alphabet developed in the West as opposed to the East. They suggest that the spoken languages of the East, being monosyllabic, produce a large redundancy of sounds in the spoken tongue. As an example, there are 239 words with the same sound: “shah.” This being the case, the linguistic distinctive in Eastern languages did not lend themselves to the development of a phonetic alphabet as much as they did in the fractured languages of the West. The phonetic alphabet of the West laid the foundation for abstract thinking and even more so since the very environment of writing serves as a double abstraction. The written word, being a symbolic abstraction of the spoken word (which itself is an abstraction of experience), “is broken up into its constituents of semantically

meaningless phonemes which, in turn, are represented by meaningless letters” (McLuhan & Logan, 1977). The development of unique languages, particularly those who employ a phonetic alphabet tends to structure the thoughts of the people who use them toward a unique thought process which favors a technical perspective in thinking. The techniques of science come to us as a result of the technology of the written word, specifically the phonetic alphabet.

Philosophizing, Rational Thought and the Greeks

With the Greeks, philosophy and reason emerge as major topics of their intellectual focus. Socrates introduces dialectic – an argumentative method of deliberation between two participants whereby a teacher engages a student in a back and forth asking and answering of questions with the intention of coming to greater knowledge and a better understanding of truth. Socrates dialectic functioned as a unique method for discerning truth based in a mindset primed for abstract thought. It represents an example of how a particular thinker constructs and implements a technical method for achieving a particular end. Though probably not intended as a “technique” per se, Socrates dialectic operated somewhat as a systematic process, serving as a method which could be replicated and repeated in multiple contexts to achieve a specific end. The dialectical method employed a rule-governed systematic approach to learning. One interlocutor would ask a question prompting an answer on behalf of the other. This answer would then generate another “deeper” question and lead to greater understanding for both participants. In fact, *elenchus* or the idea of refutation, served as the primary technique of the Socratic Method (Vlastos, 1982). The process begins with the assertion of a thesis, the refutation of that thesis by securing the agreement of a further premise which refutes the original thesis, and finally the claim that the original thesis must be false do to its negation by the secondary premise. There is debate about the *elenchus* on whether it leads to greater knowledge or serves

as just a negative method used solely for refutation, but the fact remains that it functions as a method or technique toward a specific end. And though other philosophers prior to Socrates “philosophize,” his dialectical approach marks the beginning of western philosophy and sets the stage for philosophizing as a rational enterprise.

Aristotle followed upon the foundation of Plato and Socrates and defined the human being as a rational animal (*animal rationale*); recognizing within human beings the rational principle or the ability to carry out rational thought processes (Aristotle, 1985, p. 77). His understanding of *logos* in the *Rhetoric* (Aristotle, 1954, p. 25), reflects a deliberative tendency in the human mind and makes logical reasoning necessary for effective persuasion. Aristotle’s scientific examination of rhetoric reflects a similar sentiment in his teacher Plato who disdained rhetoric in the sophistic tradition for a more rational deductive search for truth. Plato prioritized philosophy as the avenue for the pursuit of knowledge for its own sake and though Aristotle differed with his teacher in many aspects, Plato’s epistemological perspective, in some sense, gets passed down to his student. Aristotle’s systematic investigation (1954) concludes that the highest human happiness comes from the pursuit of “theoretical knowledge or contemplation” and he notes that “intelligence is the highest possession we have in us” (Aristotle, 1985, pp. 1177a11-1179a33). Thus, even Aristotle’s course in ethics is a progression from ordinary ethical beliefs to a “systematic, reasoned body of ethical knowledge” (Curren, 2010, p. 545). For Aristotle, education should cultivate “the power of forming right judgements, and of taking delight in good dispositions and admirable actions (Aristotle, 1932, p. Book VIII 1340a 15-19) based on *reason*.

These Greek philosophers were engaged in a communication debate at the time with another group of itinerant teachers who claimed to be able to teach their students excellence and

virtue. The approach of these philosophers directly opposed that of the Sophists who taught “rhetoric” as the means to acquiring knowledge and that truth depended to an extent upon arguments and deliberation in the city-state. The Sophists attention to rhetorical techniques was condemned by Plato in *Gorgias* (Plato, 1997) and also by Isocrates in *Against the Sophists* (Isocrates, 1929). Bruce Kimball (1995) recounts this conflict for ancient thought supremacy between oratory and philosophy and how it resulted in the development of the idea of a liberal arts education. The philosophic side, represented by Socrates, Plato, and Aristotle was critical of rhetoric as a means of acquiring knowledge. Socrates and Plato, critiquing the Sophists as mere propagandists selling their rhetorical techniques out to the highest bidder, claimed that philosophy by means of the dialectic method provided the pathway to truth and that philosophy’s greatest end was the pursuit of knowledge. Representing a differing perspective, Isocrates and other orators also condemned the Sophists but they viewed rhetoric as important for the development within the citizenry of values for morality and civic virtue. They emphasized the *expression* of what is known, “the crucial importance of language, texts, and tradition – linking to and building up a community of learning and knowledge ” (Kimball, 1995, p. xviii). In this great debate between the philosophers and orators, the philosophers ultimately triumphed. Kimball states the victory in terms of its relation to science and the liberal education:

“*Philosophia* is no longer equated with the seven liberal arts but has risen above them...it is a philosopher’s curriculum of liberal education, dedicated to *scientiae speculativae* inquiring after knowledge. The concern for moral training is de-emphasized, while rhetoric practically drops from sight.”(Kimball, 1995, p. 73)

The philosophers had accused the Sophists of technicizing the *logos* as rhetoric – implementing techniques of communication as instruments of power and persuasion instead of

tools for the pursuit knowledge and truth. Their critique of rhetoric as sophistic persuasion, however accurately it addressed technical sophistry and the power of language in human agency, dismissed the hermeneutic consciousness altogether in favor of a more rational philosophy. Christians notes how the hermeneutic consciousness in the Greeks, represented though linguistic expression as a means to understanding and meaning, became subjugated to a Western philosophical tradition dominated by reason – a tradition traced back to Plato and Aristotle. He states, “Intellection received the emphasis and survived to antiquity in a way that the interpretive capacity did not” (Christians, 1988, p. 5). Though the Sophists taught specific rhetorical techniques as the way to *arête* (moral virtue), the dismissal of the hermeneutic consciousness represented by more nuanced rhetorical perspective and the resultant advance of a more rational philosophy continues the advance of a technical proclivity into the collective consciousness (Stiegler, 1998, p. 1).

Though the advancements of Greek culture mentioned previously resulted in a more abstract way of thinking (and thus the progress of philosophy) might seem to suggest a culture on the cusp of a technological explosion, the Greek culture itself was not a technical culture. Their development of scientific thought processes does not result in new techniques or technological progress. Simply put, the Greeks valued contemplation over utility or application. The Greek citizen placed a high value upon the contemplative life, moderation, and balance; therefore, they considered any technical or utilitarian study unworthy of the intellect. Moral virtue (*arête*) for the Greeks consisted of a scorning of material possessions and practical ends in favor of philosophy and contemplation. The ancient Greek perspective devalued manual labor and technical developments to the level of slaves as opposed to the higher virtues of the citizenry – a virtue system which held societal technical development in check even though thought processes

tended toward becoming more scientific and methodical. And though the victory of philosophy over oratory and the resulting development of Greek thought would eventually change the trajectory of the liberal arts education and result in an epistemology favoring a quantitative and efficient method for finding truth, this did not emerge in the actual practice of the Greek intellectuals. It would still need time to ferment in the social *Geist* before it would gain purchase upon the intellectual landscape and find supremacy in actual lived experience. The orators' loss to the philosophers during this period created a fertile soil in which the mechanistic, methodological, and scientific perspective could grow and eventually achieve dominance.

Technical Development with the Romans

While Greek culture avoided a broad technical emergence due to its particular virtue structure, Roman culture embraced Technique with open arms. In Rome we find social technique developed, both civil and military, through the multiple public and private forms of Roman law (much of the historical research in this section comes from Ellul, 1964). First of all, Roman law based itself in efficiency and progressed from the concept of addressing the concrete situation with the fewest possible (and therefore most efficient) means. Administrative and judicial techniques developed to address situations efficiently, as well as to evaluate and refine those very techniques so they became as perfect and efficient as possible. Secondly, Roman organization sought to reach a homeostasis between technique and the individual, allowing space for individual initiative and responsibility but balancing that with the needs of the collective. The great era of Roman law (prior to the third century A.D.) gave consideration to both the regulation of law and the freedom of the individual. Roman judicial technique did not regulate the minor details of human life until the third century A.D. leaving the individual bound more and more by government regulation. Third, Roman technique had a specific focus directed at the target of

societal cohesion. In Rome, a variety of techniques developed in multiple arenas – religious, administrative, military, and financial – in order to accomplish the purpose of organizing society more efficiently. The Roman military exemplified this aspect of Technique in its organization, its ability to move effectively through the development of the Roman road system, and via military mass strategy in conquest. A fourth element of Roman technique was continuity. In Rome, laws were continually adapted and reorganized for the most effective results. This re-adaptation of laws and procedures to produce a more perfect system sits at the heart of Technique. In re-adapting law, regulation, rules, guidelines, and procedures, Technique controls the outcomes based upon its underlying values: efficiency, speed, and progress. Additionally, in the later Roman era a technical revival took place which sought technical solutions to practical problems, problems created by the advance of Roman conquest. Animal-powered machines, water wheels, the screw press, and other technical developments grew out of an empire burdened with production limitations and the needs of a growing populace. The applicability and continuity so prominent in Roman judicial technique found new avenues in addressing some of these other societal challenges.

Technology in the Dark Ages

The end of the Roman Empire marks what some have seen as a pause in technical development. Barbarian invasions, the splintering of Rome and the rise of Christianity in the medieval period led the West into a period commonly referred to as the Dark Ages. While some have credited the Christian religion with the advancement of the practical soul of the West (See Weber & Tawney, 2003 for a theory of Christianity's influence on rational materialism), this supposition primarily concerns itself with Christianity after the Protestant Reformation and not during the medieval period from the fourth through the fourteenth centuries. During this period

of the “Christian era,” history in some ways shows a marked decline of Roman technique in virtually every area. Roman organization, city development, military advancement, industry, law and transport all decline and this obliteration of technique gets blamed on Christianity as a moral proclivity aimed against human progress (Ellul, 1964, pp. 32–39). Yet other investigations show remarkable technological advances between the eleventh and thirteenth centuries. Linen, towels, knitting, buttons, improved road building techniques, advances in agricultural productivity, wire, whiskey, the crossbow, heavy artillery, the chimney, and even paper came about during this period of time (L. White, 1940, 1974). Even with these advancements, the collapse of Roman influence in Western Europe did lead to a severe decline in literacy (Graham & Hearn, 2010, p. 147) and while the Christianity that defines the early medieval period is a religion concerned more with eschatological issues (namely the end of the worldly kingdoms and the eminent appearance of the heavenly kingdom) than issues of practical activity and the material concerns of luxury and money, the advance of the religion, though accused for the lack of technological progress should not bear the full burden of blame. The destruction of the Roman Empire, the fracturing of communities in the feudal age, and the advance of serfdom as an economic model also play a part in this decline.

Interestingly, however, in the dark ages, we see a particular process or method of thought begin to emerge .(I rely here upon the work done by Graham & Hearn, 2010). The development by Charlemagne of a formalized knowledge monopoly in the University of Paris (recognized as “the parent of the sciences”) led to not only the university’s preeminence as the center of scholasticism, but also to the large number and wide distribution of its students and its influence upon the establishment and constitutions of other universities (Haskins, 1904, p. 1). Through the institutions of the university and the church, knowledge came to be expressed ritually (sermons,

liturgies, articles) and generically in rigid forms. The apex of the scholastic method of knowledge presentation came with Aquinas' *Summa Theologiae* (1981) but we must make the distinction between the "outer, external techniques of presentation," which were organized into "parts," "questions," and "articles," and the "inner spirit" of scholasticism, "of which the technical schema is merely the vehicle" (Makdisi, 1974, pp. 643–645). Law, and not philosophy or theology, provided the basis for the scholastic genre's mode of expression that was both a method of presentation and a way of thought (Makdisi, 1974, p. 642). In other words, in the Dark Ages, we find the development of the scholastic way of thought, another method which finds its roots in Technique dominated procedures of law.

The Renaissance and Technique

Historically, Technique advances toward the middle of the fifteenth century with the prominent technological development of the printing press. The printing press issues in a new era and begins a major societal shift which affects not only the culture of Europe but also the patterns of thought in the general populace. The medium of print creates a bias toward linear thought not present in non-literate cultures (See Eisenstein, 1980 for an explication of the effects of the printing press on European culture) and sets the stage for thinking patterns more favorable to large scale technical development. Though the invention of the printing press ushers in a new literacy for the common person, it would take several centuries before these literate-bias thought patterns would find their full bloom. As an example of this delay in technical thought, an investigation into the literature of the Renaissance shows a predominant lack of logical order. In fact much of the literature on science, medicine, law, history and economics from this time, shows a lack of cohesion and logical progression of argumentation (Ellul, 1964, p. 39). Examples like this show how the rise of humanism in the Renaissance placed greater emphasis

on a broad liberal arts education rather than specialization in particular fields (the marks of a more scientific and quantitative perspective). These humanistic values showed themselves in the literature by authors who, in order to show their broad humanist knowledge, composed treatises that lacked technical specialization and logical order in favor of presenting in their work a broad general mastery of multiple subjects (Ellul, 1964, pp. 39–40). Additionally, books from this time lacked the characteristics of intellectual technique such as tables of contents, sections, indices and references. The lack of the availability of these technical tools reveal a purpose in this literature which privileged reading and pondering the work in its entirety as well as each part's relation to the whole instead of identifying and locating information on specific topics and quantifying particular categories of information.

Though the Renaissance is not a definitive era when it comes to technics, it does reveal a rebirth of processes of rational thought and observation. Renaissance art and architecture display evidence of mathematical precision especially shown in the development of linear perspective and the precise observations and representations of the natural world. The linear perspective art style is generally credited to a goldsmith and architect named Filippo Brunelleschi (King, 2013) who also designed and built the Duomo di Firenze – considered both an architectural and technical marvel. Brunelleschi's linear perspective style derived from his early observations of Roman architecture and his desire to represent the reality and accuracy of that architecture in two-dimensional space. Linear perspective as a more technical drawing style employs the “vanishing point” technique into the painting and in doing so, creates a new relationship between the art and the viewer. In medieval art the images predominantly stood on their own – flat and where the subject within the piece is presented as the object of the art. In the Renaissance, the viewer becomes integral to the painting in the sense that the viewer is considered as part of the

piece along with the object of the artwork. The vanishing point perspective invites the viewer into the piece as a subject instead of just an observer. In linear perspective, the painting involves the viewer from a unique perspective – that of an individual within the landscape of the piece. This artistic technique, which more accurately represents reality, defines a new relationship between art and viewer and continues a technical/scientific advancement in the arts through masters like Da Vinci, Raphael, Michelangelo and other prominent Renaissance artists.

The Scientific Turn

The scientific revolution which begins with Copernicus and continues through Galileo and Newton begins a period that builds on thought processes that emerged out of Renaissance science. Founded on a dualistic understanding of the human (mind/body), Cartesian philosophy finds its pre-Descartes roots with Galileo in the sixteenth century. Galileo's work re-mapped reality by dividing it between primary (matter, motion, mass, mathematics) and secondary (the metaphysical, the supernatural, values and meaning) components. In his concern for the primary components of matter, Galileo had to utilize the tools that gave him the best opportunity to investigate those components. This forced him to prioritize quantitative data in favor of qualitative and in doing so he suggested two basic essences: value and meaning on one hand and matter and quantity on the other (Christians, 1988, p. 6). This separatist perspective and his emphasis on matter and objective reality led to his heliocentric perspective of the cosmos which ultimately revealed a truth about not only the cosmos but the nature of reality and ultimately the nature of the human being. Anything non-material was considered unimportant and outside the realm of science and observation. A world defined by matter and quantity, devoid of the more subjective essences of value and meaning, called into question the medieval structure of reality. For this tectonic change in perspective the Roman Catholic Church deemed Galileo a heretic.

Soon afterward, the Newtonian perspective of the world as a lifeless machine composed of mathematical laws would continue to advance this changing perspective of reality. For Newton, as it was with Galileo, quantification and numeration reigned supreme and their prominence devalued and dispensed with any other perspectives in their path: the mechanistic\technical\quantified worldview began to take its reign. What Galileo and Newton did with the cosmos, Descartes (1993) introduced in the very nature and being of humanity. The human being became a simple Cartesian dualism - mind and body. Descartes famous statement, “*Cogito, ergo sum*” (I think, therefore I am) concluded in the supremacy of human reason. This recognition of rationality called into question subjective knowledge and since the realms of mystery and spirituality could not be objectively measured or analyzed, they were considered unreliable epistemological determinants. Descartes project concerned itself with the investigation of things of precision, mechanism, and measurability in order to better understand and master the mystery of the natural world (Christians, 1988, p. 8). His influence in philosophy and science created in the Western mind the separation of hard facts and subjective values. Rationality and empirical knowledge gained the edge and bias of Western thought.

The Influence of Nominalism

Though a case can be made for the rise of technique out of the advance of the quantitative perspective and the scientific revolution in Galileo, Newton, and Descartes, a word must be said about the realization of an earlier philosophical movement. In the fourteenth century, William of Ockham (1974) proposed the philosophical doctrine of Nominalism, which denied the existence of universals and abstract objects. Weaver says of this “The practical result of nominalist philosophy is to banish the reality which is perceived by the intellect and to posit as reality that which is perceived by the senses. In this affirmation of what is real the whole orientation of

culture takes a turn and humanity now joins the road to modern empiricism” (Weaver, 1984, p. 3). Weaver recognized in nominalism the advance of empiricism and a tendency toward a quantitative, observable value system. In denying universals, Nominalist philosophy denies subjective experience in favor of a sense-oriented reality based on empirical observation and physical evidence. The objectivity in nominalism turned science toward the study of the natural environment. Where nature had once been considered as the imitation of a transcendent model, an imperfect constitution of an ideal form in Platonic philosophy, it was now looked upon as having the principles of its own constitution within itself. The change in perspective allowed for empirical scientific investigation to now reveal the intricacies of the natural world effectively putting an end to Plato’s theory of forms. Scientific discoveries by Galileo and Newton began to remove the mysteries of the natural world, thus showing nature working according to rules and principles governed by a mechanistic process operating without prejudice. Weaver connects this rational mechanistic understanding of nature with a new perspective on the human being:

“If physical nature is the totality and if man is of nature, it is impossible to think of him as suffering from constitutional evil...One comes thus by clear deduction to the corollary of the natural goodness of man.” (Weaver, 1984, p. 4)

This then placed the highest priority upon rationalism as a first philosophy. In removing humanity from any transcendent experience and all of the religious baggage that went along with it, rationalist philosophy no longer considered the question of purpose or value in the world. This question had become meaningless. Instead the question now concerned the working of the world and the understanding of its governing laws and rules - the basis for modern science whose systemization of phenomena became a means not just to an understanding of the natural world but to its conquest (see S. F. Bacon, 2010).

The obvious resultant effect would be the fall of the institution of religion. The world of rationalism and science disregarded religious experience by definition. Religion was something transcendent and outside the constraints of reality, therefore beyond observation, measurement, or quantification. The rationalist assault on religion took its toll and in this vacuum arose materialism and naturalism. If religion could no longer explain the human condition, the responsibility would now fall upon the only reality that was truly knowable – the natural environment. Darwin's *Origin of Species* (2003) provided this opening to the naturalistic explanation for human existence which was not simply constrained to origins but also addressed human motivation by recognizing the biological necessity of the survival of the fittest. Humanity's freedom now reduced to natural laws operating without prejudice also challenged the purpose and development of every human institution. Marx took Darwin's explanations and developed a powerful theory of capital and the human being, noting that humans always act in relation to economic incentive. Freud did the same thing, but regarded human sexuality as the prime human motivation. These theories took responsibility away from the individual and laid it at the feet of naturalistic causations, further removing human freedom and ensconcing Technique.

In such a climate, it was only a matter of time before the materialist/naturalist perspective would progress toward its teleological end – the machine. Rationalist philosophy's disregard for human subjectivity and concurrent privileging of the world of senses changed the traditional understanding about humanity. The human being became nothing more than a biological machine governed by the unrelenting laws of nature, and though different theories attempt to account for how these laws work and which laws have priority, the more important issue concerns the underlying philosophy. A religious/metaphysical explanation cannot make sense in

a naturalist/materialist universe. Science, empirical observation, and quantification become the only tools and models able to explain the universe and humanity, and if humanity is relegated to a law-governed biological system (or machine) then its explanation must be systematic (and mechanistic) as well. The process for the explanation of the machine begins by breaking it down to its component parts – by taking it apart piece by piece and observing it in order to understand it and how it works, and the only method suitable for this type of cataloguing and theorizing is modern science. This shift eliminated all explanations but science because in this universe, science alone can provide the solutions to break the machine down, to observe the machine, to quantify the machine, and to then give explanations for its operation and motivations. A materialistic world must favor and value technical methods.

Technique in the French and Industrial Revolutions

The end of the French Revolution and the rise of Napoleon Bonaparte marks another signpost in the development of Technique as an example of a state given over to it and a state autonomous in things that did not serve its own interest (Ellul, 1964, p. 43). In the Napoleonic period we see the creation of precise military techniques in strategy, organization, logistics, and recruitment; the beginning of economic technique; the rationalized system of hierarchies in administration; the regrouping of national workforces based upon efficiency; and a systematization of law. As Ellul notes, “this systematization, unification, and clarification was applied to everything – it resulted not only in the establishment of budgetary rules and in fiscal organization, but in the systematization of weights and measures and the planning of roads” (Ellul, 1964, p. 43). These examples all demonstrate an adaptation of governance and commerce to a system based upon Technique where reason and quantification preside over other more subjective value systems. The cultural application of Technique after the French Revolution

precedes the greater explosion of Technique in the later Industrial Revolution. Why did an eruption of technical progress take place over a century and a half when prior history showed such slow progress? Mumford states that it had to do with the development of science (Ellul, 1964, p. 44) and how scientists now turned their attention to the practical application of their discoveries and resulted in the enslavement of science to technique (as has already been discussed).

Ellul notes the philosophy of the eighteenth century as a potential element in this radical explosion of invention. Eighteenth century philosophy favored technical progress and sought to exploit nature for the betterment of the human condition. The utilitarian and pragmatic aspects of eighteenth century philosophical thought (Examples can be found in Bentham, 2007; James, 1995, 2003; Mill, 2002; Peirce, 2011) provided an avenue for the application of science to human advancement and connected scientific discovery to material results. This philosophical perspective announces a change in the collective philosophical and intellectual thought. Though this occurred initially among the intellectual elite, it slowly trickled its way down through education into the general populace. These philosophies cannot take credit for the entirety of the technical explosion of this era, however. Credit should also be attributed to the general optimistic atmosphere and state of mind in the eighteenth century as potentially an even greater reason for this advancement – an optimism based on the improvement of the general living conditions for much of the populace due to the exploitation of natural resources and the application of scientific discoveries (Ellul, 1964, p. 47). Regardless of which of these conditions had the greater influence, the combination of both of them together provides an explanation for the technical advancements we find in the Industrial Revolution. Though the philosophies of utilitarianism and pragmatism which grew out of the Enlightenment account for a change in the

way people began to think about the natural world, the benefits of prior technological developments experienced by the general populace created the climate for the application of the technical mindset.

Conclusion

This historical overview shows the slow incubation of a technical or mechanistic mindset (and not simply a history of technological developments and discoveries) which contains a particular set of values. These values – progress, speed, efficiency, rationality – though present in many instances throughout history generally take a more universal hold on culture at the Industrial Revolution and increasingly continue from there to the point where we find ourselves immersed in a culture dominated by Technique. And while we recognize the presence of Technique in almost every epoch of history, not just in the advancement of technological inventions or the application of new techniques of organization, investigation, and operation, but in the general mindset of the culture, Ellul will make the argument that we have reached a point where Technique has ceased to be a means to an end and has now become an end in itself. If this is the case and Technique has become its own end, one result is that Technique has ceased to serve humanity and that humanity now serves Technique. This current autonomous advance in modern technological development and the increasing adaptation of humanity to technique can have detrimental effects, not the least of which is the increased limitation of human freedom. If Ellul's observations are correct and we find ourselves in a culture given over to Technique, we must not simply ignore the facts before us but endeavor to find some solutions that can allow humanity to survive in such a landscape. However, before we can seek these solutions, we might find some enlightenment in a field of inquiry comprised of scholars that investigate the

relationships between technologies that we employ and the people that employ them. The field of Media Ecology can give us insight into the problem of Technique.

Chapter Three: The Value of Media Ecology Scholarship in Addressing Technique

Introduction

Humanity's ongoing relationship with technique came as a result of the slow development of a technical or mechanistic mindset as well as a cultural optimism based upon prior technological developments which made great contributions to the betterment of the living conditions for the general populace. Finding success in practical application as well as a greater purchase upon the prevailing philosophical *Geist* of the Industrial Revolution, technique began to command a greater monopoly over the prevailing culture. To this situation, several scholars have turned their attention in an attempt to understand, explain, and consider the consequences that will undoubtedly occur in a culture given completely over to Technique, and these scholars comprise the corpus of the field of Media Ecology. Media Ecology, as a meta-disciplinary field of study examines media as environments in which we live and investigates the resultant effects that media have on cultures. It makes explicit the environments of media – television, radio, print, etc. – which are typically hidden -and seeks to find out what roles media force us to play and how media structure our thought. Though the field traces its official inception to Marshall McLuhan and Neil Postman, it has a long history of scholarship drawing its theoretical foundations from scholars such as Lewis Mumford, Harold Innis, Walter Ong, Marshall McLuhan, Elizabeth Eisenstein, Eric Havelock, Jacques Ellul, Alfred Korzybski, and others.

We should begin by distinguishing the term “media” as a defining word for the title of the field. Media in this context does not refer to a content within some communication technology nor does it merely refer to the communication technology itself. Although the word medium suggests some object interposed between two subjects, what we usually think of today in terms of media generally centers around terms such as “the news,” “the networks,” “television

shows,” “movies,” or “the internet.” We also tend to consider media in terms of the platforms upon which we view or consume this information – books, newspapers, television, movies, iPods, computers, smart phones, and even “the internet.” Media Ecology, as we will explore, defines a medium quite differently.

The Roots of Media Ecology

In tracing the roots of the field of Media Ecology, we can find a basis for the beginning in the ancient scriptures of the Old Testament. In the very beginning of Genesis, God said “Let there be light” (Genesis 1:3 NIV). Here, God introduces the first and primary medium of speech, and through speaking, God reveals the second – light. Speech (an oral medium) precedes light (a visual medium) for a purpose: language, and not image, is what will characterize humanity’s experience with God. In the New Testament book of John, the writer notes that “In the beginning was the Word (*logos*), and the Word was with God, and the Word was God” (John 1:1 NIV). This comparison again denotes language as the original and ideal form of our mediation with God. Further evidence of this relationship between humanity and God comes later in the Ten Commandments. The command that came down to Moses from God on Mount Sinai specifically states:

“Thou shalt not make unto thee any graven image, or any likeness of any thing that is in heaven above, or that is in the earth beneath, or that is in the water under the earth.”

(Exodus 20:4 KJV)

The command clarifies that God intended his experience with humanity to be characterized not by images or idols but through the deeper abstractions found in language. In other words, the ear and the aural senses are given precedence over the eye and the visual senses in humanity’s relationship to God. Sound takes precedence over light. Orality precedes literacy. The media

ecological reasoning behind this preference for the oral above the visual is in how the nature of the media determine the nature of our relationship with God. The media itself is important.

The scriptures continue, with a reference to why the medium is important and how these “mediums” affect us. In Psalm 115, the psalmist refers back to the making of idols and the effects those idols have upon those who make and worship them.

Their idols are silver and gold,
The work of man’s hands.
They have mouths, but they cannot speak;
They have eyes, but they cannot see;
They have ears, but they cannot hear;
They have noses, but they cannot smell;
They have hands, but they cannot feel;
They have feet, but they cannot walk;
They cannot make a sound with their throat.
Those who make them will become like them,
Everyone who trusts in them. Psalms 115:4-8 (NASB)

Here, the psalmist reveals the power of a medium to form us into its image, to change the nature of the way we experience reality, and to conform us to the restrictions, limitations, advantages, and permissions of the mediums we create and employ.

Other ancient texts reveal similar sentiments regarding human experience with media and technology. For thousands of years, before the invention of writing, cultures communicated orally. The ancient Greeks at the time of Plato and Aristotle were experiencing a tectonic shift from oral communication to the newer technology of writing (see E. A. Havelock, 1963; McLuhan, 2005; W. Ong, 1982 particularly pp. 17-30). Socrates and Plato categorically exemplify this change. Historically, we have no record of Socrates writing anything. As far as we understand, he primarily communicated orally. Interestingly enough, what we do know of him comes to us from the writings of others, mainly his student Plato. Plato’s writings show us Socrates priority on orality, his dialectical style which engaged others through oral debate. In

contrast to Socrates oral communication style, Plato utilized writing and through this medium captured for later generations the wisdom of his teacher.

In Plato's *Phaedrus* (1956), Socrates recounts the story of Thamus, the king of a great city in Egypt, and Theuth, an inventor god. In the narrative, Theuth comes before Thamus to present his inventions. As Theuth presents each one, Thamus inquires of the invention and then expresses his approval or disapproval of it. When Theuth presents the invention of writing, he defends it to the king by reciting the virtues that writing will bring to the people. Specifically, that it will improve their wisdom and memory. The king responds to Theuth by telling him that what he intends the invention to do is exactly the opposite of what actually will occur. Thamus states that writing will not improve memory but will in fact destroy it by providing an easy means of recollection, and the easy recollection of information in writing will contribute to a collective loss of memory, for writing allows access to information by external reference without actually exercising a person's internal mnemonic resources. As for wisdom, Thamus states:

“[Y]our pupils will have the reputation for it without the reality: they will receive a quantity of information without proper instruction, and in consequence be thought very knowledgeable when they are for the most part quite ignorant. And because they are filled with the conceit of wisdom instead of real wisdom they will be a burden to society.” (Plato, 1956, p. 96)

The parable of Thamus and Theuth reflects Socrates' critique of writing, and this critique, while correct in some ways, misses the mark in others. The negative effects of writing made plain in the critique only demonstrates part of the story. Writing has some extremely positive aspects - the obvious one being the recording of human histories for later generations. While Thamus recognized the negative effects of the technology of writing, his mistake was in assuming that the

invention would *only* have a negative effect. As Neil Postman puts it, every technology is both a burden and a blessing (Postman, 1993, p. 5). The greater point beyond the ramifications of any particular medium is the fact that technologies or media force us to play specific roles, to play by *their* rules – rules contained within the structural levels of the media themselves. Media form us into their image and in so doing, they reform *our* world and ultimately *the* world. Media ecology points us to an epistemological revelation – that our knowledge is, in some sense, determined by the media we use to acquire it, that knowledge reforms our own understandings of the world, and ultimately reforms the world itself. There are several basic metaphors in media ecology scholarship that help to clarify some of the basic tenets of understanding.

Media as Extensions

One of the very first metaphors given for understanding media is the metaphor of media as extensions. The idea of media as extension comes out of the work of Marshall McLuhan, who claimed that a medium or technology is any extension of ourselves or any extension of our senses (McLuhan, 1994, p. 7). For certain media, we can easily understand and recognize how this description applies. The technology of the wheel acts as an extension of the foot, the rifle is an extension of the hands and teeth, and the book extends our speech. Each technology functions to extend some aspect of our being further into the world. In fact, in many instances, this provides the basis for the development of the technology. Megaphones, microphones, loud speakers, and sound systems, for instance, were developed to extend and amplify speech so that more people could hear. Cars, trains, and airplanes were invented to make travel easier – to extend the reach of our feet faster, further, and more efficiently. The shovel and then the backhoe extended the limits of our hands to dig, hold, and move dirt. The metaphor of media as extension is plain for some media. However, for other media, this perspective of extension can

remain hidden or difficult to observe and understand. McLuhan notes that electronic media extend not our bodies, but our minds – our central nervous systems. The electronic technologies – the telegraph, radio, telephone, and television – all represent an extension of our minds – our thoughts extended out into the world via electronic pulse over wires and cables.

Additionally, each medium as an extension of our senses, when employed, also affects the ratio between our senses. McLuhan calls this a change in the ratio of our sensorium and states “What I am saying is that media as extensions of our sense institute new ratios, not only among our private senses, but among themselves, when they interact among themselves” (McLuhan, 1994, p. 53). Television, for example, affects our senses differently than radio does and therefore reprioritizes sight above sound- affecting a change in the ration of sight and sound in our sensorium. In effect, media not only engage our senses in particular ways, but they rearrange and reprioritize our sensorium – the totality of our sensory engagement with the world. Each medium hierarchically restructures the way we experience its content based upon its own inherent structure and design, and therefore forces our sensorium to operate in accordance and, we might say in subservience, with its design by prioritizing certain senses above others. McLuhan’s work revealed a revolutionary perspective on how human beings relate to technology and how technologies (or media), in turn, effect and change humans and their symbolic environment.

Media as Environment

In addition to media as extension, Media Ecology scholarship looks at media as an environment – via the ecological metaphor. Any ecology considers balance an essential aspect of a system’s survival and continuity because the complexity and interdependency of systems and their component parts place them upon a delicate fulcrum where even a minor change in one

component can change the entirety of the system itself. Media ecology addresses a balance-centered theory of media as Gencarelli states: “If balance is the key principle underlying the ecology of natural environs, then media ecology is about striking a balance in the ecosystem that is the information or *media environment*” (Gencarelli, 2000, p. 94). The ecological metaphor allows us to recognize an environmental perspective of media – that we live, work, socialize, and relax in media. Media have come to dominate every area of our lives, and in much the same way that a fish lives within a particular environment primarily defined by water, today we live in an environment primarily defined by media. In the same way a fish is unaware of its water environment, we often find ourselves unaware of our media environment as well. Through continual incorporation into our lived experience, these media not only recede from our conscious awareness of their existence, but even more importantly they “are moments that refigure and reconstitute the whole” of our lived body (Anton, 2016).

The environmental metaphor also helps us to recognize a basic principle of any ecology. Changes in any ecological system are not simply additive, they are transformational. Or as Postman put it, “Changes in the symbolic environment are like changes in the natural environment; they are both gradual and additive at first, and then, all at once, a critical mass is achieved” (Postman & Postman, 2005, p. 27). We can look to medieval Europe as an example. Prior to the invention of the printing press, the “media ecology” of Europe had reached a sort of stasis. The social relationships had been brokered through the feudal system and the advance of the Christian religion defined both the authority structure for the society as well as gave insight to the way a person should live. Priests and religious figures had authority simply because they had the power to read, translate, interpret, and communicate the words of God. Harold Innis (2008) refers to this as a monopoly of knowledge.

Monopolies of knowledge occur when one particular class maintains its power through the knowledge and dominance of particular communication technologies. These monopolies derive their power from specific knowledge and tend to polarize societies into two classes, those who possess the knowledge and those who are ignorant of it. Of course those in possession of the power have an interest in preserving their monopoly by any means necessary because the specialized knowledge both gives them power and allows them to keep it. Technological advances in communication media can shift the balance of power because new knowledge produces different experts and results in a disruption of the monopoly. In this instance, priests educated in the ancient languages in which the Holy Scriptures and texts were written possessed a monopoly of knowledge over and against the rest of the population of Europe. Their knowledge of language and their literacy placed them in the hierarchical position as the only medium between God and man—a position of great power. The invention of moveable type and the Gutenberg printing press in the 15th Century challenged the authority of the priests by removing the monopoly of knowledge. No longer did the priest solely possess the knowledge of literacy. No longer could only the priest read and understand the words of God. The printing press placed the Holy Scriptures on the kitchen table of every person and in doing so, gave each person the ability to read and interpret the words of God for himself/herself. The need for the specialized knowledge of a priest as mediator disappeared. Though Johannes Gutenberg was a good Catholic, had he understood that his invention would contribute to the Protestant Reformation and the resultant loss of the authority of the Catholic Church, he might have reconsidered. This change in media resulted in a disruption and transformation of the cultural and spiritual environment of Europe.

Another example is found in Ancient Greece. As a primarily oral culture, the ancient Greeks at the time of Socrates and Plato placed the poet or rhapsode in a high societal position. This group of people who, through their specialized knowledge of the form and content of poetry, possessed a unique power - the appearance of knowledge and expertise. Homeric epic poetry, as Havelock (1963) notes, constituted the entirety of Greek society through oral communication. The Greeks' values, history, and culture were presented and reflected in the public oral recitation of these epic poems which continually reconstituted the societal structure and functioned as a communal encyclopedia through which the citizens of the *polis* understood what it meant to be Greek, what it meant to be a citizen, and what it meant to be virtuous. Because of the common recitation of the Homeric narratives by the poets, the virtue structures in Greek society were "in the air," so to speak. People's lives found meaning in the narratives of the poems and because of this, they understood what it meant to be a "good" Greek citizen.

This poetry also presented a religious perspective and an epistemology that included and affirmed the gods of Greek mythology and their interaction with humanity. In *Ion* (Plato, 1925), Plato has his protagonist Socrates address this epistemology as it concerns the medium of poetry and its public recitation. Socrates encounters Ion, a rhapsode fluent in Homer, who believed that he possessed certain knowledge as a result of his ability to recite Homer—a concept that can only be understood in the context of an oral culture. Ion's belief that all knowledge comes through the memory and recitation of poetry reflects the epistemology of Greek society in its orality and the nature of poetry as a medium of learning and knowing. Socrates critiques this very notion and later in *The Republic*, (Plato, 1991) Plato expands upon the critique and calls poetry a crippling of the mind. His dismissal of poetry sets the stage for a different epistemology found in philosophical dialectic. Of course Socrates' critique had religious implications as well.

In challenging the monopoly of knowledge held by the rhapsodes, and proposing a new epistemology based upon philosophical dialectic, Socrates ultimately challenged the authority of the gods themselves and in privileging philosophical dialectic against the mouthpieces of the gods (the poets), Socrates was accused of atheism and ultimately lost his life.

These monopolies of knowledge contribute to the socio-cultural environment and they are defined by the unique types of media employed by a culture. In more recent times, we have seen similar transformations in our symbolic environment with the advent of digital technologies and new media. Since about the 18th Century, western culture has been dominated by what we might classify “the supremacy of print.” Literacy has characterized civilized culture in the West since the printing press made texts widely available to the public. This resulted not only in the Protestant Reformation, but also in creating new class structures and new monopolies of knowledge. For example, Neil Postman argues (1994) that the very concept of childhood came about with the wide growth of literacy. In primarily oral cultures, children were subject to adult conversation and adult topics as soon as they developed the capacity and ability to speak. The development of print (and with it a greater emphasis on literacy) created a new obstacle for children entering into the adult world – reading. With the growth of print, children now required a specific type of education based in literacy before they could enter into the adult world and engage adult topics. In the world of print culture, adult topics were generally considered off limits to children until such a time when they had completed the necessary requirements, education, and maturity to be considered able to handle those topics. Children were protected from mature topics until they “came of age,” a coming of age that depended upon completing certain educational requirements and attaining literacy.

Additionally, the growth of literacy in the greater populace then created another hierarchical structure based on a monopoly of knowledge. The value of literacy within a culture gave academics a monopoly of knowledge similar to the priests of the Middle Ages. Academics, by nature of their profession, possessed a wide range of knowledge in their particular field and had an authoritative status which gave them a certain power especially, due to their expertise, in the development of public policy and educational curriculum. However, as was the case with the invention of the printing press, the academic monopoly of knowledge is similarly being challenged by the development of a new technology – the internet. The ability to access authoritative information on any topic at virtually instantaneous speeds has had an effect on the expertise of the intellectual elite. The Ivory Tower's monopoly of knowledge has not been completely destroyed because access to information does not necessarily equal knowledge and any information needs to be interpreted, but some cracks in the foundation of the power structure may be appearing.

Media as Species

As McLuhan noted, media not only affect and alter *our* sense ratios, they affect and alter other media as well. Another hermeneutic entrance into the study of media in the field of Media Ecology addresses this - the understanding of media as species. The metaphor of a media *environment* suggests the fact that media do not operate in isolation. In other words, different media live within the mediated environment and interact among themselves and concurrently affect and change each other. This metaphor gives perspective and insight to how different media relate to one another and, in some cases, cause other media to become extinct or to gain greater prominence within the environment. For example, the invention of the telephone made the telegraph virtually obsolete – a media extinction caused by the introduction of a new

technology. What need was there for Morse code communication when messages could simply be spoken. Even though the telegraph eliminated space as an obstacle for communication by allowing information transfer over vast geographical distance, the telephone was simply easier, more user friendly, and more efficient. In *Amusing Ourselves to Death* (Postman & Postman, 2005), Postman reveals how television has similarly affected print. The importance of the relationships between media cannot be overstated because the effects of one medium upon another can have drastic consequences, not only for the media which is being made obsolete, but for the overall culture in general. Part of what Postman argues has to do with what he considers a battle for supremacy between print and television in our educational system. For hundreds of years, the education system has been founded upon literacy as the primary means of attaining knowledge. TV has upset that foundation. The invasion of television into the mediated environment made entertainment a higher priority than education because television captivated the attention of users more easily and for longer periods of time than books could. A generation growing up under the influence of television had difficulty adjusting to a more traditional educational system that used books because they had been conditioned by the television medium to be entertained. And as anyone who has gone to school knows, many times educational reading is anything but entertaining. TV survives based upon its ability to entertain audiences. If a program does not captivate an audience and generate ratings, it is discontinued in favor of one that will. The relation of telegraph to telephone and television to print are only two examples of the media as species metaphor.

Our current media environment now includes multiple new media platforms vying for a greater piece of the proverbial pie when it comes to audience attention and the all-important area of advertising dollars. To extend the media as species metaphor, like species within an

ecological environment, media need sustenance for survival, and in a content media context, that sustenance comes in the form of money and attention. If media do not command attention, they do not generate income and inevitably starve to death. This necessitates that media and media content providers find greater ways to capture and hold the attention of their audiences in order to increase their ratings and command greater percentages of the advertising money. The introduction of new media platforms affects this intermedia dimension within the environment where more players now compete for the same resources. And there are consequences.

Statistics show that over the last five years while media ad spending has increased by an average of 5% per year, print advertising has lost almost 6% of its share of the market. In the same span, the market share of digital media has increased almost 12% with television showing a small loss of 3% (“Total US Ad Spending to See Largest Increase Since 2004 - eMarketer,” n.d.). In understanding media as species, this type of trend should not be surprising, especially when we extend the metaphor to the idea of survival of the fittest. A media as species metaphor can give valuable insight to how media interact with one another. Additionally, a greater aspect of media interaction depends upon user engagement and another focus of Media Ecology inquiry – media as epistemology.

Media as Epistemology

McLuhan understood that a medium communicates a meaning beyond the content or message it contains. In his words, “The medium is the message.” In stating this McLuhan calls us to focus on the medium, to recognize its underlying bias and to realize the message communicated within the medium itself as opposed to the *content* of the message. As a message in itself, each medium has social consequences. Lynn White, in his book *Medieval Technology and Social Change* (1962), details an example of this in how the feudal system became a social

consequence of the technological invention of the stirrup. The stirrup introduced mounted shock combat into the arsenal of military strategy and called into existence an entire new social class – the knight. The introduction of the knight into society had far reaching effects. To mount a knight in full armor demanded extensive resources to cover the costs of multiple horses, plate and armor, and the weaponry needed to supply the knight for battle. In a peasant society, one individual could hardly afford these costs so multiple peasant holdings were later merged together to cover the expenses. This situation created a unique social relationship based in the economics of this new warfare technology. The lord employed knights to protect the serfs who in turn served the lord by working his fields, mines, roads or forests. The relationships provided protection and basic sustenance for the serfs in exchange for their labor; payment and support for the knights in exchange for their military might; and labor and protection for the lord in exchange for his provision and protection. This example shows the social implications of adopting a new medium and reinforces a principle of any ecology, namely that any change in a system does not merely add something to the system but changes it entirely. In this case, the addition of the stirrup changed entire social and economic dynamics of Medieval Europe.

Postman also recognized this aspect of media and summarizes the theoretical base for Media Ecology as it concerned the symbolic communicative environment and culture:

“Every society is held together by certain modes and patterns of communication which control the kind of society it is. One may call them information systems, codes, message networks, or media of communication. Taken together they set and maintain the parameters of thought and learning within a culture.” (Postman, 1979a, p. 29)

Postman attends to how our media – the communication technologies and information systems we utilize – affect our culture by altering the ways in which we think. Each medium has its own

particular definition of reality whether it be speech, print, image, photograph, or video, and in defining reality in their particular ways, each medium also organizes and controls the ways in which we think. In altering our sensory ratios, media change our patterns and ways of thinking. This fact often escapes our notice because we usually concern ourselves with the content presented to us through the medium and not with how the medium itself works to force us to think in its own particular ways and according to its own biases. Postman's focus on media as epistemology provides insight to how technologies affect our thought processes and define our perceptions and understandings of knowledge and truth.

Walter Ong's (1982) research explores not only the cultural effects of the transition between orality and literacy in societies, but more importantly the effects of literacy as a medium to reconstruct and configure consciousness and thought. Additionally, Eric Havelock's (1971; 1963, 1982) work interrogates the mindset and thought structure of ancient Grecians during the period from Homer through Hesiod, the pre-Socratics, Socrates, and Plato; moving from a conception of thought as concrete, situational and personified toward more abstract thought patterns as the transition from an oral to a literate culture takes place (Strate summarizes Havelock's scholarship particularly concerning thought structures regarding the concept of Justice in Strate, 2004, pp. 13–14). Postman addresses this connection between a medium and modes of thought in *Technopoly* when he states:

“Embedded in every tool is an ideological bias, a predisposition to construct the world as one thing rather than another, to value one thing over another, to amplify one sense or skill or attitude more loudly than another.”(Postman, 1993, p. 13)

Lewis Mumford (2010) also alludes to the influence of technology on the thought (and action) patterns of humanity. In referencing the technological development of the mechanical clock by

the Benedictine monasteries of the 12th and 13th Centuries, Mumford states that the invention of the clock ““helped to give human enterprise the regular collective beat and rhythm of the machine; for the clock is not merely a means of keeping track of the hours, but of synchronizing the actions of men” (Mumford, 2010, pp. 13–14). The point being that media do not simply carry content – they *are* a content in themselves with certain biases, predispositions and values that effect the user. The medium is the message precisely because the medium structures our modes of thought in its own unique way (For more on how this happens see McLuhan, 1994).

Recent research in neurology has posited a new model of brain function which features certain principles of neural ensemble (Nicolesis & Cicurel, 2015). Two of these principles—the plasticity principle and the context principle—relate to environmental influence on thought. The plasticity principle of the brain states: “The internal brain representation of the world, and even our own sense of self, remains in constant flux throughout our lives” (Nicolesis & Cicurel, 2015, p. 21). Neuroplasticity is what allows our thoughts to develop and change. It is what enables us to learn. It shows that what we know is not fixed and recognizes that our thoughts and perceptions can and do change as a result of external influences. The context principle states:

“the global internal state of a brain at a given moment in time determines how the brain is going to respond to a sensory stimulus or the need to produce a motor outcome... the context principle postulates that the brain has its ‘own point of view’ and it applies it to make any decision regarding a novel event.” (Nicolesis & Cicurel, 2015, p. 19)

The brain’s “point of view” always comes out of a particular context from which it regards the world and in turn makes decisions and choices. The choices a person makes come from a context, and that context is constantly changing as a result of external stimuli. The symbolic environment dominated by technological media will change a person’s thoughts and perceptions

based upon the principle of neuroplasticity. This in turn will affect the choices a person makes – choices from a context formed by the symbolic environment. This neurological research substantiates the idea that the medium is truly the message, that media are an epistemology.

Medium Bias

Within any epistemology, there are inherent biases. Harold Innis describes media and their inherent biases in his work *The Bias of Communication* (2008). His theory states that each communication medium contains its own particular bias in terms of the organization and control of information the medium allows. His examples show how media contain either a time-bias or a space-bias based upon the nature and structure of the particular medium. The characteristics of durability and constancy inherent in time-biased media (e.g. stone and clay tablets) lend to a greater longevity for the empires who employed them in their communications. However, these same properties prevent easy and quick transportation over large geographic areas. A stone tablet cannot be easily transported and shared. Space-biased media (paper, papyrus), on the other hand, lend themselves to easy and efficient transportation. The portability of a scroll or papyrus facilitates faster communications for easier transmission and sharing of information. However, these media do not endure over time as long as stone or clay tablets. Innis shows that each communication medium possesses some type of inherent bias that allows it to accomplish its own unique purposes while at the same time preventing it from accomplishing others. Postman gave the example of how American Indians used smoke signals to communicate messages and humorously suggested that we can safely assume these types of messages had little to do with philosophical argument and debate simply because puffs of smoke do not contain within them an ability to express complex and abstract ideas about metaphysics and ethics. The

obvious conclusion being that the medium itself (stone tablet, papyrus, smoke signal) allows certain types of messages to be communicated while also limiting other types.

Images and words also have their particular biases. Visual media (pictures and images) directly represent the real world and only call our attention to the object pictured. Words, however, do not represent a distinct reality per se, but the nature of abstraction contained in the meaning of words engages our thought processes in a completely different way than images do. Spoken languages and particularly native languages constitute a context framed by history, tradition, and grammatical structure that places certain limitations on individuals as well as provides possibilities for how and about what that individual can think. In a recent talk (Tran, 2012), a natural born Vietnamese man who grew up from childhood in America details how the lack of a subjunctive mood in his parents' native language of Vietnamese prevented them from thinking in certain ways that the presence of the subjunctive mood in English allowed him, a native English speaker, to think. In his recognition of how the imperative and subjunctive moods forced him and his parents to think differently, he reveals some of the inherent biases in language and how they can differ depending upon the grammatical structures and rules within particular languages. Ludwig Wittgenstein surmised this in his *Tractatus Logico-Philosophicus* by stating that the limits of our language are the limits of our world (Wittgenstein & Russell, 1998, p. 68). The bias of language means that first, we can only know or think about that for which we have words, and second, the grammatical structures of a language can allow and even force our thoughts to be directed in particular ways.

In the same way that stone tablets, papyrus, print, television and language have biases, Douglas Rushkoff argues for a bias of distinction within digital media which trickles up into society from the digital platforms and apps that our cultures uses regularly; a bias based upon a

foundation of digital logic. He states, “digital networks break up our messages into tiny packets, and reassemble them on the other end. Computer programs all boil down to a series of 1’s and 0’s, on or off” (Rushkoff, 2016). This distinction in the digital medium – a polar opposite bias – creates a milieu defined by a greater tribalism, a more pronounced nationalism (or what he calls in a separate interview “anti-globalism” (Timberg, 2016)), and I would add, a more contentious partisanship. He describes the contemporary digital environment where our choices are noticed and acted upon by the algorithms which personalize our news feeds, isolating each of us in our own ideological filter bubble. Rushkoff recognizes in digital media what Wittgenstein, Innis, and others have described in other media, namely that each medium forces its user to think in particular ways and, at the same time, prevents them from thinking in other ways.

The Information Mythology

We have examined some of the effects of new technologies on an environment and how information monopolies (or monopolies of knowledge) rise and fall with each new technological development. Media Ecology scholarship not only investigates the information environment as an ecology but also studies its historical development and its socio-cultural ramifications. Approximately sixty years or so ago, George Bernard Shaw noted that the average person was as credulous as the average person living in the middle ages. An average person living in the middle ages usually lacked a formal education and for the most part trusted and believed in the authority of religion and the church. Shaw’s comment referred not to the lack of a formal education, but rather to the tendency of people to form and hold beliefs based upon tradition and assumption even when those beliefs sometimes defied rational understanding. People need to make sense of their world and they form beliefs based upon the information at their disposal. In the middle ages, the *lack* of scientific information available to the average person contributed to

the common acceptance of superstition and myth as truth. When information is not available to give some structure or meaning to the world, other narratives fill the void. Unfortunately today we find ourselves in a similar situation. Not that we do not have valid information and knowledge upon which to make sound judgments as was the case in the Middle Ages, but rather that the massive amount of information available to us today results in a similar dilemma. In the midst of such vast quantities of information, people can find it difficult, if not impossible, to make any sense of it, find any meaning in it, or determine any truth of it. Additionally, in the same way ancient cultures viewed the gods and their ways as mysterious and beyond our capacity as humans to understand, we view technique and technology similarly. For the majority of tech users, the mysteries of our technologies defy our ability to understand or explain them. We do not understand how computers work and any average person would be hard pressed to explain the coding within the operating systems and the algorithms that give us our information, news feeds, computers, and smart phones. Nevertheless we know that they work and we accept their operation with a somewhat simplistic and blind trust in the science behind the technology.

We can also notice a similar blind trust in the mysteries of ancient religions. Ancient people living in a world of presumed chaos made sense of their world by attributing the unknown mysteries of the universe to the gods. Their ancient religions provided a set of metaphysical assumptions that gave a more or less comprehensive order to the world in which they lived. And while the regular people living in these cultures had difficulty grasping how the tragedies and realities of life fit into the grand scheme of the universe, they still believed in a grand scheme and their priests and shamans were there to make sense of it for them through religious rites, myths, and narratives. Religion as a metanarrative provided a ground for people to stand upon

that made some sense of the world. It gave meaning and coherence to a universe that appeared chaotic and without order. It gave them an assurance of a higher purpose.

Today, technology has become our religion. Society's blind worship of Technique and technology - a mysterious force that can give meaning to the world and make life better – eerily resembles the ancient magical religions. To compensate for the void of meaning in ancient times, magic in religious rites developed as a technique to obtain certain results within a spiritual order. In the ancient spiritual realm, magic acted as a mediator between god and humanity, and functioned to give people a sense of control over the mysterious ways of the ancient gods. If subjects performed the rites correctly or made the appropriate sacrifices, they could obtain the outcomes from the gods that they desired. Thus, human sacrifice can calm the volcano, prevent destruction and devastation, and even bring rain for the dying crops. Of course, when the desired outcome did not occur, the blame went back to wrong technique – the ritual was not performed correctly, the shaman messed up, or the girl was not a virgin. Magic, in this sense, shows how Technique acts as a “cosmic vestment” for humanity; where Technique becomes the intermediary between humanity and its environment. Technique fills the void of the displaced old gods and becomes the means of protection and defense from the unknown and harsh realities of the world (Ellul, 1964, p. 25). It gives us control, provides equilibrium, and give us a sense of order in the world when that order appears to be lacking. Magic, Ellul notes, is the first expression of technique.

Information and “fact” function today in a similar role that magic did for ancient cultures. Information grounds our feet on a supposed stable foundation of truth and gives us a means of comfort that things actually make sense in this world. The modern human worships “facts” and accepts them as the ultimate reality, believing that facts, in themselves, provide evidence and

proof of something (Ellul, 1973b, p. xv). Though empiricism and modern science has convinced humanity of the almost deistic status of facts and information, the cultural problems we have – political, social, and personal – do not typically arise from the lack of sufficient information and, unfortunately, we have not found their solutions even in the abundance of information available to us today. The problems of global terrorism, international conflict, war, hunger and many others did not occur because we did not have enough information. These problems typically come out of ideological disagreements rather than a lack of information. In the same way, these problems will not be solved by acquiring more information despite the chant of the modern technophiles. Information, facts, analytics, and other mechanistic methods of parsing data cannot provide solutions to these types of problems. Postman noted how the metanarrative of religion, especially the church, provided order for the populace of pre-modern Europe and he recognized the void left behind as that narrative was dismantled by science (Postman, 1993, pp. 59–60). In its dissolution, the metanarrative of Progress emerged accompanied by the dazzling inventions of science and technology. And Progress fulfilled its promise and provided an easier way of life and vast improvements in virtually every arena of human society. Yet it brought with it a misplaced trust – the concept of information as savior. Postman states:

“What is the problem in the Middle East or South Africa, or Northern Ireland? Is it lack of information about how to grow food that keeps millions at starvation levels? Is it lack of information that brings soaring crime rates and physical decay to our cities? Is it lack of information that leads to high divorce rates and keeps the beds of mental institutions filled to overflowing?” (Postman, 1993, p. 60)

The situation resembles a similar communication problem writ large – understanding the difference between miscommunication and disagreement. In interpersonal conflict situations,

assuming the problem consists of a simple misunderstanding instead of a more ideological disagreement results in an attempt to provide more information as the solution. However, in ideological disagreements more information does not usually provide resolution and will more than likely result in a greater divide. Even this common interpersonal communication problem reflects the underlying value of Technique prevalent in culture, namely that information is always the solution to any problem. The modern worship of “fact” shows the technological priority placed upon information and data. As Postman noted in *Amusing Ourselves to Death* (2005), at the beginning of the digital age, the lack of information was not a problem that needed to be solved. The printing press had already solved that problem by granting more information than one could ever consume. Now, computer technologies have given us almost instantaneous access to virtually all the information now available in the world, but they have also created the additional problem of too much information, what Postman calls information glut (2005, p. 68). We now have so much information available that we find it difficult to recognize truth and falsehood and have no viable means of making sense of it all. In our current political climate characterized by accusations of “fake news,” Postman’s prediction resonates all too well. Who can know what is fake and what is real when “evidence supported” articles come out on both sides of an issue? Who can know true and false when academic studies show “proof” for both sides? A culture that steeped in a tsunami of data must now deal with the questioning of fact and, most alarmingly, now finds that “alternative facts” can be not only presented and considered, but given equal credence.

The Information Revolution

The information revolution began with the invention of the printing press. Elizabeth Eisenstein’s (1980) work demonstrates how the invention of the printing press changed Europe

by altering the vehicle that provided information to the public. Prior to this technology, information distribution had many limitations. For information seekers, the rarity of written texts demanded a journey to the library or university which possessed the text in order to access the information. The static nature of the text made it valuable - in need of protection and preservation –and prevented the general populace from gaining access to it. The printing press changed that allowing greater distribution of information and removing geographic constraints. More texts available in print gave greater access and availability to the information contained within them. Books could now be distributed and purchased from almost anywhere marking a shift in the availability of information. Additionally, the wide availability of books changed education by making literacy a desired and necessary skill and altered the human being by reorganizing human thought processes around the linearity of writing. Walter Ong (1982) details the epistemological differences between oral and literate cultures. Suffice it to say that though print technologies granted a wider availability of information, geography still constrained access. Information could only be gained at the speed of horse or train. These limitations forced newspapers and magazines to focus on local issues - issues of interest to the geographically local citizen. News of things in Texas generally had no interest to those living in New York, for example. These cultural information biases of print remained predominant until the invention of telegraphy.

The invention of the telegraph removed the geographic limitations of information distribution. For the first time in history, transportation and communication were disengaged from each other. The telegraph enabled instantaneous access to information across the globe, providing the conditions for a greater global awareness and also creating an entirely new type of information, what Postman called “context free” information (Postman, 1993, p. 67). Context

free information removes information from any ties to the functions that information may serve within a local, social, or political context. The telegraph gave equal weight and value to information in Texas as well as information in New York. The telegraph transformed information from something that functioned to enable people to take actions based upon reasoned and informed decisions into a commodity that could be purchased. Because of the availability of the information, it did not matter whether people in New York wanted to know the happenings of Texas, the fact that they now could know this information immediately resulted in the idea that they now should know – an almost deterministic consequence. In this sense, the quality of the information became less important than the quantity and the variety of the information.

The technology of the camera ushered in the third stage of the information revolution and transformed the symbolic environment by introducing the photographic image. Though painting and imagery have been around for millennia, the mid-nineteenth century saw a sudden explosion of imagery and photographs within the symbolic environment. The development of this technology and the corresponding barrage of imagery is what Daniel Boorstin (1961) refers to as the “graphic revolution.” Boorstin explains how the image came to supplant language in popular culture and in doing so, changed the way we construct our reality. The image forces us to think in ways differently than language does. Sight acts as a somewhat selfish sense as opposed to hearing which in its nature must be tuned toward another subject (I rely here on Ellul, 1985, pp. 5–47). For instance, when I look around, I make the space I see my own and I record the images juxtaposed with myself and in relation to where I am. Sight makes me the center of the world, because sight allows me to situate myself in space in relation to all I see and sight respectively situates everything I see in relation to myself. Furthermore, sight objectifies other people.

“Even one person gazing into another’s eyes does not penetrate to his soul... such looking is truly relationship, and is genuine understanding of the other person, but only in his reality” (Ellul, 1985, pp. 113–114). Ellul declares that mere looking transforms what *is* into an object – whether that be scientific matter or another human being. Ellul’s critique of sight and the image exposes how images (pictures in this case) become a substitute for something living, eliminating the personal and existential relationship with the world and cutting one off from relationships with other people (Ellul, 1985, p. 123). Photographic images transformed the symbolic environment, the population and the culture. But the camera served only as a step in an evolving process which led to broadcasting.

The rise of the television, represents the next iteration in the development of our current symbolic environment. Postman (2005) argued that television (and broadcasting in general) created a culture primarily characterized by entertainment. This is not to say that people did not read for entertainment prior to television but that television created a situation where entertainment became a more primary end to content and media. As a medium, television demands entertainment. This has to do with a fact inherent in the system of televised (and broadcast) media - advertising drives programming. If a program does not draw ratings, the network cannot sell advertising on the program and it eventually gets cut from the network schedule. Obviously, more entertaining programs draw larger audiences which then enable networks to sell more advertising increasing their profit and satisfying the shareholders. The economic structure of television/broadcasting demands a product that entertains the audience. Add to this the competition among the networks for viewers and ratings and one can see how a greater push for ratings would lead to more attention getting programming targeted at prime financial demographics.

The introduction and wide acceptance of television and broadcasting, much like the introduction of any technology, transformed culture. Any media or technology inevitably does what it is designed to do, though not always what it was intended to do. Television and broadcasting are no different. The introduction of television into mainstream society eventually led to the removal of literacy as the obstacle preventing children widespread access into the adult world. Information previously available only in print, now became available through broadcasting to everyone with a television. Postman argued (1994) that the medium of television, in removing literacy as the primary marker for entrance into the adult world, destroyed the traditional concept of childhood. In the same way the printing press transformed Europe in the middle ages, the television has created a new socio-cultural environment.

Additionally, the television medium by its nature requires a specific commitment to a particular space. In order to participate in the content, the user must be in front of a television – in a dedicated space defined by the presence of the technology. Of course that place could be in various locations, but a television viewer required a television, and because of size and other limitations of the hardware (need for electric power, antenna for reception, etc.) that meant being constrained to a specific place. The television demanded a particular context for anyone who desired to consume its content resulting in the creation of furniture, meals, times, and spaces designed around the medium. The television dinner, the TV room, TV dinner trays, surround sound, recliner chairs, and other amenities reflect a transformation in the living environment brought about by the introduction of a new medium. Another consequence of television has to do with the health of large media consumers. Several studies have linked child obesity and other health issues to the sedentary lifestyle of the typical television viewer (Dietz & Gortmaker, 1985; Gortmaker et al., 1996). And in another arena, television provided an ideal platform for the

elevation and growth of the advertising industry. The combination of an attentive, sedentary audience with their attention engaged in the medium along with a platform suited to subtle messaging gave advertisers an ideal environment to refine and develop their psychological advertising techniques. And due to the growing television audience both in number and as well as time spent in viewing, the growing number of advertisements resulted in the targeting of ads toward specific demographics as well as the evolution of branding as a means of connecting and relating consumers with products.

Currently, we find ourselves in another transitional period not dissimilar to what happened with the telegraph, printing press, and the television. The latest shift of the information revolution involves digital or computer technology. Like some of its technological predecessors, the computer has once again transformed culture. We might think of the computer, the internet, or the smartphone as portable television sets, but that assumption would be naïve and simplistic. The internet not only connected computers together in a vast, expansive network, it also connected people. McLuhan's sixties era metaphor of the global village seemed to be being fulfilled in the technology of the internet. Through computer and internet communication technologies, the global community immediately became smaller and more intimate simply due to the immediacy of communication between people irrespective of geographical location. Additionally, the computer and internet technologies provide immediate access to just about any information available on the planet. The availability of information became a selling point for greater expansion of high speed internet access and provided a justifiable means to invest millions of dollars in connecting schools and businesses to the World Wide Web. In the span of a few decades, information culture radically transformed. Data that had been previously only available in books became immediately available to anyone with an internet connection. While

the telegraph removed space as a limit on gathering information, the internet removed time and increased both speed and quantity. As has been mentioned, media are not simply additive parts of our existence, they change the entirety of who we are as human beings. The smart phone or computer does not give you the human being plus a smart phone or a computer, it gives you an entirely different human being altogether. (This statement paraphrases Postman's reflection upon the printing press' effect upon European culture in Postman, 1993)

When Marshall McLuhan designated every technology as an extension of man, he specifically mentioned electronic technologies as extensions of man's central nervous system. Though he was an intelligent individual and at the time seen as a Nostradamus of technology, it is hard to believe that he would have been able to foresee just how apropos his central nervous system metaphor would become in light of the internet and the World Wide Web. Today, that metaphor applies on a global level. Mobile phone technologies, text messaging services, the growth of the internet and social media outlets (Facebook, Google+, Twitter, YouTube, etc.) throughout the world have made the world a smaller place and have connected individuals to each other in ways that would not have been dreamed about 20 years ago. The question of the quality of community and interpersonal relationships in light of these advancements, however, is one that has been examined by scholars (Putnam, 2000) as well as the effects that these advancements are having on people's conceptions of themselves (De Zengotita, 2005) and their physical neurological development (Carr, 2012). These technologies, in transforming culture, have created a situation unique from any other time in history.

Conclusion

The exponential advancement of computer technology is the practical result of the continuation of Technique's value of progress and sits at the heart of every technological

innovation. Media ecology scholarship seeks to make this more evident by providing different metaphors through which we can view and better understand media and our symbolic environment. Media have been recognized as extensions of ourselves – technologies that extend our senses into the world; as an environment predicated on a delicate ecological balance in which we live, communicate, and act; as species that affect one another in a complex intermediated interaction; and as an epistemology by which we reconstitute not only the world around us but ourselves as well. Media have biases inherent in their structure and design that both allow and restrict our thoughts and actions. They communicate information and direct and control that information through their unique design structures and programming. And they now comprise a newly defined “space” mediated by the digital technologies that make up our current symbolic environment.

Of course throughout history, technologies have had incredible benefits to humanity and they have vastly contributed to the improvement of the human condition in almost every arena but often these contributions and benefits cause us to overlook and miss the hidden aspect of the toll that technology takes upon the nature of our humanity. This dialectical tension in technology: an unfettered progress and a better future on one hand and the mechanization and disintegration of the vital sources of our humanity – the limitation of our human freedom and the destruction of our moral foundations, mental processes and social relations that make human life worth living – on the other should hasten our desire to understand both sides of the dialectic. Unfortunately, it rarely does. If technology, in bringing about glorious advancements in our quality of life, is at the same time destroying some of the things that contribute most to our humanity, we should turn our attention to those dark shadows and shed some light in an effort to seek possible solutions. In that spirit, I now look to explicate one

area of interpersonal human experience currently being negatively affected by *Technique* in an effort to provide greater understanding and explore some possibilities for providing greater balance in the contemporary technological environment. This area is what I will call phenomenological dialogue.

Chapter Four: Phenomenological Dialogue and Human Relation

Introduction

Human communication through the medium of language is what distinguishes human beings from every other creature on the planet and some might say it has made possible the progress and advancement of the human condition throughout history. As Isocrates famously noted, "We have come together and founded cities and made laws and invented arts; and, generally speaking, there is no institution devised by man which the power of speech has not helped us to establish" (Isocrates, 1929). In this same vein, Ellul notes that spoken language - the relation of language and word – forms a basis of human specificity. Additionally, in ancient Greece, Athenians looked at the art of speaking well (*eu legein*) as a means of self-representation enabling people to present their identities to others within the *polis*. (Poulakos, 1997, p. 50) And while these examples only highlight speech in a general sense, interpersonal communication functions as the cornerstone upon which all human relationships stand because without communication between individuals, relationship does not exist.

Much has been written on the subject of dialogue from a philosophical perspective (Anderson, Baxter, & Cissna, 2004a; Arneson, 2007; Arnett, 1981, 1986; Arnett & Arneson, 1999; Baxter & Montgomery, 1996; Deetz, 1973; Johannesen, 1971; See, for example, Stewart, 1978) and historically, though communication technologies have changed (D. J. Boorstin, 2012; Eisenstein, 1980; Harold Adams Innis, 2007; McLuhan, 1994; for an explication of some of these tectonic shifts in communication technologies see W. Ong, 1982; Postman & Postman, 2005), face to face dialogue has generally been considered the primary medium in human communication. In our contemporary historical moment, however, this is changing. In her book *Reclaiming Conversation*, (Turkle, 2015) Sherry Turkle makes the case that in our current

technologically mediated society, we are losing a skill which has traditionally allowed us to connect with other humans at the most basic level – conversation. Turkle details the decline of face to face conversation due to the greater saturation of electronic technologies within our culture – technologies that make information transfer between humans faster, more efficient, and less emotionally involved. Recognizing this shift, this chapter investigates dialogue as a unique and vitally important form of human communication. I look at some of the foundations of dialogic communication with particular interest to Martin Buber’s phenomenological dialogic theory. I then contrast Buber with what we find happening today vis-à-vis our digital communicative environment. Finally, I give some of the implications of human dialogic communication in our digital environment which will lead into Ellul’s dialogic perspective on human communication found through his metaphor – the Word.

Dialogic Communication

The framework for understanding dialogue extends historically at least back to the Greek *polis*. The term "dialogue" derives from the Greek word *dialogos*, comprised of two Greek words: *logos*, meaning "word" or "meaning," and *dia*, meaning through or across. The Greek word connotes the idea of "meaning through" or "meaning across." The ancient Greek philosopher Socrates pioneered the dialectic method as a knowledge gaining process wherein an individual would engage another through a question and answer dialogue aimed at gaining knowledge and understanding of a particular topic. This Socratic dialectical method functioned as a carrier of information. Gadamer states, "Plato, in his efforts to disclose the facts of the matter, recognized in Socratic dialogue itself the means - and the only means - by which to arrive at a really secure stance toward things" (Gadamer, 1991, p. 20). He points out that through dialogue we come to knowledge. Socratic dialogue "embodies what fundamentally distinguishes

the logos of science, which is speech that exhibits the facts of the matter in a logical sequence" (Gadamer, 1991, p. 20). Plato equates the dialectic with conversation, as Robinson states, "Plato was so absolutely certain...that the supreme method [dialectic] has its being only in conversation, that he could name it from this fact; dialectical method means conversation method" (Robinson, 1966, p. 77). Plato's dialogic written style exemplifies the Socratic dialectical method as a conversation between individuals with the goal of achieving knowledge and understanding – an interpersonal communicative event.

Primarily understood as a back and forth conversation, a broader perspective of dialogue must include the historical moment as well as the perspective and ground of the other person. One definition of a dialogic approach to communication studies states that dialogue functions as an exchange between communicative agents embedded within a particular historical moment, standing on their own ground yet open to the standpoint of the other (Arnett, 2001, p. 323). This unique definition recognizes the issue of historicity (Gadamer, 1960), a privileged metaphor where subjects enter an ongoing conversation, attending to the importance of a background narrative which "gives birth to a given set of social practices, virtues, and understandings of the 'good' that are carried forth in dialogue" (Arnett, Arneson, & Bell, 2006). Dialogue not only operates as a particular method to achieve greater knowledge for individuals, with historicity, it becomes foundational in the ethics and the "good" within a culture.

Though a dialogic approach to communication seems to assume some type of concern by one individual toward another in a communicative event, this assumption might be misinterpreted. In his article *Toward a Phenomenological Dialogue*, Arnett (1981) discusses and bridges the relationship between two approaches to communication theory, the dialogic and the phenomenological. His intent is to distinguish a humanistic psychological dialogic theory

grounded in “third force” psychology as presented in the work of Carl Rogers and Abraham Maslow from a phenomenological dialogic theory represented by the work of Martin Buber and Maurice Friedman. These two “dialogic” approaches both privilege human dialogue as the primary metaphor for studying and understanding human communication, however their primary difference resides in the locus of communicative meaning. For Rogers and Maslow, meaning lies within the individual which leads to psychologism. Arnett notes, “[Psychologism means] man always imagines everything as happening through and in him... the important is seen not in the communication between me and the form to which I strive but in the expression of what takes place *in me*” (Arnett, 1981). This psychologistic approach to understanding dialogue is quite different from Arnett’s phenomenological perspective which gives up the psyche of the individual as primarily important and recognizes that meaning in communication happens in the phenomenological stance of the “between.” Friedman clarifies:

“The unfolding of the sphere of ‘the between’ Buber calls the ‘dialogical.’ The psychological, that which happens within the souls of each, is only the secret accompaniment to the dialogue. The meaning of this dialogue is found in neither one nor the other of the partners, nor in both added together, but in their interchange. This distinction between the ‘dialogical’ and the psychological constitutes a radical attack on the psychologism of our age.” (Buber, 1965b,166a, p. 17)

A phenomenological perspective distances itself from the more psychological approach attuned toward the needs of the individual and recognizes the *relationship* of the individuals involved in the dialogue – that which takes place in the phenomenological stance of the “between.” This phenomenological perspective, while somewhat vague, can be clarified by a greater

understanding of the phenomenological concept of intersubjective intentionality – a directed consciousness from one subject toward another subject.

Intersubjective Intentionality

Edmund Husserl introduced intentionality as a philosophical concept. Husserl, considered the father of phenomenology, regarded the concept of intentionality as constitutive of the basic structure of consciousness. In this sense, consciousness is always a consciousness *of* something, what he calls an intentional experience (Husserl, 2012, p. 67). Moran states it like this: “Husserl took this basic structure of intentionality and ...presented it as the basic thesis that all conscious experiences (*Erlebnisse*) are characterized by ‘aboutness’” (Moran, 2002, p. 16). Husserl’s phenomenological investigation considers the intentional structures of acts and their correlative objects, what he calls the noetic-noematic structure of consciousness. For Husserl, the idea of intentionality - a directedness or “aboutness” of conscious experience – is an ontological reality.

Martin Heidegger, who served as Husserl’s assistant, extended Husserl’s phenomenological project and in his major work *Being and Time* (Heidegger, 1962), he specifically addresses the question of Being from a phenomenological ground. In his examination of the question of being, Heidegger categorizes “being” according to two distinct natures: the Being of human beings (Dasein) and the being of objects that human beings encounter in the world (equipment). Both of these categorizations reflect intentionality. For the being of objects (equipment), the intentionality comes from a person’s directedness toward the object and how it functions as a tool for utility. Heidegger defines Dasein – the Being of human beings - as “that entity which in its Being has this very Being as an issue” (Heidegger, 1962, p. 68). For Dasein, its Being is something meaningful for it.

However, Heidegger defines Dasein not only as Being-in-the-world but Being towards others who have the same kind of being as Dasein. Dasein is by its very nature in an intersubjective position. Heidegger says that Dasein's being is social or relational; its kind of being is a relationship of Being from Dasein to Dasein (Heidegger, 1962, p. 163). In its Being-in-the-world, Dasein is *already* in relationship with others. He states:

“Not only is Being toward others an autonomous, irreducible relationship of Being: this relationship, as “Being-with” is one which, with Dasein’s Being, already is.” (Heidegger, 1962, p. 162)

As with its Being itself, there is an ontological quality between Dasein and Being-with-another in the sense that Dasein's being is constituted in its Being-with-one-another: “So far as Dasein *is* at all, it has Being-with-one-another as its kind of Being” (Heidegger, 1962, p. 163). The kind of being that Dasein has in the world is its being with others – a being within intersubjective relationship. Husserl revealed intentionality as constitutive of the basic structure of consciousness. Heidegger clarifies the ontological reality of *intersubjective* intentionality and places it at the essence of Being (Dasein) itself. Calvin Schrag then advances Heidegger's intersubjective position for intentionality as an element which constitutes the structure of *moral* consciousness.

The Structure of Moral Consciousness

In 1963, Calvin Schrag attempted to provide a phenomenological and existential analysis of the structure of moral experience. His project had at its roots “an attempted ‘dialogue’ between the phenomenologist and the existentialist” to examine the region of moral valuation in order to clarify and understand concrete moral choices that “arise in our immediate experience of being-in-a-world” (Schrag, 1963, p. 255,256). Schrag begins his examination from the fact of

moral valuation as it “shows itself” as a phenomenon in the concrete life-world of individuals. Moral valuation is a given for Schrag. As he states, “to exist in the world is to exist as a valuing being” (Schrag, 1963, p. 257). The argument recognizes that individuals cannot exist without acting in the world, and that action presupposes value judgements which form a basis for choosing one action as opposed to another. Value judgments are seen as decisions which must be made between multiple alternatives that can be placed on a continuum of good and bad, right and wrong, desirable and undesirable. In other words, the very existence of an active agent presupposes some type of moral valuation. Schrag argues that moral valuation can never be separated from the concrete life-world and functions as a given phenomenon which essentially constitutes the life-world. We might say that by nature of one’s existence in a concrete life-world, one fundamentally functions as a moral agent who acts based on decisions that consider and prioritize particular values in relation to others. One never makes a decision without some type of value judgment even if that decision relates to something as simple as a choice between chocolate and vanilla for even here, the liking of one choice as opposed to the other reflects valuation.

Having established moral experience as an ontological reality for humans in a concrete life-world, Schrag goes on to detail several structural elements for moral experience: intersubjective intentionality, historicity, temporality, purpose, meaning, and freedom. These six elements account for the possibility of a moral act and define what he calls the “world-horizon of the moral self in action” (Schrag, 1963, p. 265). These elements comprise a phenomenological structure for moral consciousness elevating moral consciousness to a fundamental aspect of human existence. Schrag moves from simple intentionality to intersubjective intentionality and then to moral consciousness. He also notes that Sartre and

Heidegger broadened Husserl's intentional framework to include pre-reflective as well as pre-predicative experience. A pre-reflective experience's dependence upon an intersubjective relationship establishes the experience within the locus of morality and moral consciousness. Moral pre-reflective acts consider not only the self but other subjects as well. As an example, the experience of shame is determined by an intentional structure in which another self is disclosed as an integral part of one's concrete life-world (Schrage, 1963, p. 258). These type of psychological experiences (shame, fear, love, hate) presuppose the presence of another self as conditional for their possibility. Thus, they presuppose an intersubjective intentionality. Schrage conceptualizes morality as a psychological phenomenon that must consider, acknowledge, and respond to other selves in one's concrete life-world – an intersubjective experience marked by intentionality.

Schrage clarifies intersubjective intentionality as a fundamental structural element of moral experience and his argument places the human self's moral agency within an intersubjective context. "If the self is wrested from the intersubjective context of concrete moral action, then it becomes an abstracted and 'lifeless' self which is neither moral nor immoral" (Schrage, 1963, p. 258). The nature of morality itself is such that it demands an intersubjective context without which it is divested of its meaning and existence. Moral consciousness, as Schrage notes, is "indelibly communal" (Schrage, 1963, p. 258).

Martin Buber's Dialogic Theory

Where Schrage explicates intersubjective intentionality as a foundational aspect for the structure of moral consciousness, Martin Buber attends to the same concept but through a more textured dialogic perspective represented in three distinct metaphors: the concept of the between, the two primary words – *I-It* and *I-Thou*, and the narrow ridge. Buber reveals a more

complex understanding of dialogue as a central aspect of his philosophy of communication. His "dialogic voice" (Arnett & Arneson, 1999) is apparent in his writings - most notably in two works: *I and Thou* (2010) and *Between Man and Man* (1947), and in his work he specifies a common center of dialogue: the relation of the interhuman. For Buber, human life is not simply an individual "trying to find his way," but rather an ontological reality found in relationships between people. Buber's "horizon of the between" is situated in the historical moment and refers to an understanding that "human existence is ... rooted in one being turning to another as another, as this particular other being, in order to communicate with it in a sphere which is common to them but which reaches out beyond the special sphere of each"(Buber, 1947, pp. 202–203). Buber's philosophy of communication shows the intersubjective and interconnected nature of human existence and roots dialogue in the common center of conversation between people and not the psyches of each individual (Arnett & Arneson, 1999, p. 128).

The Between and Intersubjective Intentionality

Buber's concept of the between represents a distinct perspective on intersubjective intentionality both as a conditional foundation for dialogue and more particularly as a moral foundation. The between arose as an alternative to two polarizing landscapes – that of collectivism and that of psychologism. These extreme positions he considered the base for the demonic and the destruction of society because they both hinder the idea of the "human" in individuals. He states:

“The name Satan means in Hebrew the hinderer. That is the correct designation for the anti-human in individuals and in the human race. Let us not allow the Satanic element in men [/women] to hinder us from realizing man [/woman]. Let us dare, despite all, to trust.” (Buber, 1957, p. 239)

Both the collectivism of his historical moment seen in a nationalistic Nazism and the individualism reflected in a greater emphasis on the psychological devalued the authentic human being which Buber believed could only be realized *in relation* between people. For Buber, the fundamental fact of human existence is neither the individual nor the aggregate which, considered by themselves, he sees as abstraction. In noting the non-psychological nature of the interhuman, Buber states:

“It is basically erroneous to try to understand the interhuman phenomena as psychological. When two men/women converse together, the psychological is certainly an important part of the situation, as each listens and each prepares to speak. Yet this is only the hidden event fraught with meaning, whose meaning is to be found neither in one of the two partners nor in both together, but only in their dialogue itself, in the ‘between’ which they live together.” (Buber, 1965b,166a, p. 75)

In refusing to ground meaning in the psyche of the individual or in the collective, he deliberately turns away from the two extremes of individual “me-ism” and the collectivism of group tyranny and recognizes that the “good” in life is found in the between.

The intersubjective relationship forms a basis in Buber’s understanding of the between. First, this relationship is intentional in that it is only available through invitation - an invitation which presupposes intentionality. In other words, the invitation to participate in dialogue comes via a particular focus of attention – an intentionality - directed toward the other person. Even though with invitation the focus of attention rests upon the other, in Buber’s understanding of dialogue, the focus of meaning comes between individuals. In speaking about the focus of attention, Buber relates a story from his youth of stroking the head of his pet horse (see Buber, n.d.) When he would go in to feed his horse and stroke the horse’s massive head, the horse

would respond with a gentle signal back – the slight raising of its head as if in acknowledgement of the connection between itself and the young boy. On one day, however, young Martin became conscious of how much he enjoyed stroking the horse and his focus of attention shifted from the horse to his own hand. He noticed that things went on as before, yet something about their relationship had changed. He notes that the next day, when he stroked the horse’s head, the horse did not respond by raising its head in acknowledgement. Buber recognizes how focus of attention affects our relationships and that something changes qualitatively when that focus moves off of the other person and onto ourselves. In intersubjective intentionality, the focus of attention is directed to the other person and we mostly forget about ourselves as we seek to find meaning in the relationship, or as Buber would say in the “between.”

Additionally, Arnett and Arneson note six particular connections (Arnett & Arneson, 1999, pp. 133–134) between the phenomenological concept of intentionality and Buber’s notion of the between. First, both have a nonpsychological emphasis. Intentionality is a directedness toward a particular noema without a psychological concern for what meaning may be gained within the act of the individual. For Buber, meaning is found not in one individual or another, and not in some therapeutic understanding of one’s self in dialogue, but rather in the space between individuals in discourse. Second, both imply an ontological understanding of relation. As Heidegger noted, the ontological reality of *Dasein* is that its being is constituted in its Being-with-one-another. For Buber, relation is the uniquely definitive characteristic of the human – an ontological aspect of humanity. Third, each points to a reality beyond the common everyday understanding of the empirical. Husserl’s phenomenology moved beyond simple Cartesian dualism to a more textured approach of the understanding of being and called into question approaches from both psychology and empiricism. Buber deliberately wrote in a poetic,

ambiguous and non-systematic way in order to move beyond a technical positivistic perspective which would concretize relation rather than provide the necessary space for its authentic reality. Fourth, each approach shows the importance of the intersubjectivity of phenomenological otherness and the subject. Intentionality recognizes both a noema and a noesis – not distinct in themselves as in a subject or object, but rather two sides of the same coin. Similarly, the between is a phenomenological space not defined by one person or the other but by a space between them both where meaning emerges. It takes both – two sides of a coin – for meaning to come about. Fifth, each reveals an alternative focus of attention beyond self and object. In interpreting Husserl, Buber notes how Husserl specifies a focus of attention beyond the individual:

“Humanity in general is existentially the existence of man/woman in entities of mankind/womankind which are bound together in generations and in society.”... In these words Husserl says that man’s/woman’s essence is not to be found in isolated individuals, for a human being’s bonds with his/her generation and his/her society are of his/her essence.” (Buber, 1947, pp. 159–161)

The focus of attention in the between additionally provides a focus beyond self and object – a phenomenological space that arises between the two. It is not simply both subject and object, though it is part of both, but it becomes a space entirely different – a third alternative. Finally, both intentionality and the between announce the ontological nature of the interdependence of the seer and the seen, the knower and the known, the listener and the heard (Arnett, 1986). Intentionality connotes a particular interdependence between the individual and the focus of that person’s attention – they are related in a specific way with one another and necessarily defined by one another. In the same way, the between reflects the connection that arises when two

people come together in relationship with one another. Each of these six points shows the phenomenological character of Buber's between and its connection to the concept of intentionality.

In the same way, the between forms a moral base for consciousness because it is defined by relationship between two persons. Though the metaphor of the between can be recognized outside of the interhuman context, such as in the relationship between the historical moment of a person and event, the primary context for the emergence of the phenomenological space of the between arises between persons. In this sense, it focuses on a concern for the other which naturally evolves out of an intersubjective relationship. Additionally Buber's understanding of the "sphere of the between" has four main characteristics and implications: (1) it is an ontological reality and part of being human, (2) it is a metaphor for communicative life pointing to a relational rather than individualistic or collectivistic view, (3) it is within a phenomenological space available in dialogue only by invitation, and (4) it is a reminder of the human story – together life is to be lived well for us (Arnett & Arneson, 1999). It is important to note here the moral implication. The "good" of lived life is found within the sphere of the between in a relational view which is constituted in an intersubjective relationship.

Buber's Two Primary Words and Human Relation

The between provides one avenue into Buber's philosophy of communication. Additionally, Buber's two primary words, the I-Thou and the I-It give greater clarity to his understanding of dialogue especially in revealing how individuals encounter other people in the world: these two primary words "do not signify things, but they imitate relations" (Buber, 2010, p. 3). To understand this, he distinguishes between the two primary words. The I-It mode of existence is engaged in experience, where the "I" acts as an objective, rational, observer toward

the “It.” The It is an object to the I and it “occupies space and time, and has its nature and constitution” (Buber, 2010, p. 7). This is a communicative representation of monologue where an individual speaks not with another subject - a "Thou," but to an object - an "It." Alternatively, the Thou is encountered by the “I” in *relation*. When one encounters a human as Thou, he is not merely a thing nor does he consist of things. It is in *relation* that we encounter Thou as an active participant rather than an objective observer. This encounter is dialogical – a conversation where meaning takes place “between” subjects (Buber, 2010, pp. 27–28). Again, the emphasis is on intersubjectivity - relationship is encountered in a dialogical space "between" subjects.

The Narrow Ridge

An additional metaphor that enlightens us to Buber’s dialogic voice is the metaphor of the narrow ridge. According to Friedman, the “narrow ridge” metaphor most aptly describes not only Buber’s existential philosophy but also his dialogic or “I-Thou” philosophy which he presents as an alternative to the either-or philosophies of our age (Friedman, 2004, p. 3). For Buber, the narrow ridge signifies a path not of sure statements about the absolute, but rather one that moves precariously between the gulfs “where there is no sureness of expressible knowledge but the certainty of meeting what remains undisclosed” (Buber, 1947, p. 184). His textured metaphor echoes Ellul’s dialectical perspective of the world, the fact that while logical conceptions of truth seem to suggest an either-or - that two opposing perspectives cannot be simultaneously true – reality shows a unity of contraries. We cannot escape the fact that opposites exist in reality. Thus we walk this path understanding in many instances the abyss on each side – the tension that resides in the dialectic. The danger from Buber’s perspective resides in the either-ors. In other words the true danger lies not necessarily in the *polarization* of cultures and the intolerance of societies based in divisions of race, gender, nationality, and so on,

but rather in what Buber would see as the falsification of truth. A demand that every person fit their thinking and way of life into the extreme camps and a refusal to recognize possibilities and alternatives that do not succumb to the extreme positions. The narrow ridge is an acknowledgement of the complexity of human existence that cannot be reduced to static theoretical camps, individual temperament, or objective cultural relativism (Friedman, 2004, p. 5).

Buber provides an entrance into a particular perspective of human being based in existential phenomenology. He shows through the metaphors of the between, his two primary words I-Thou and I-It, and the narrow ridge, that life consists of an interdependence between people. He shows that life is more than mere subjects and objects, that it is more than individualism or collectivism, that life itself – authentic human life - is best lived in relation defined by intersubjective intentionality. His work calls us outside of ourselves, beyond our own perspectives and into a space where meaning occurs between individuals. His work points to a reality not defined by simple definitions and techniques but one recognized through the complexity of relationships within a particular historical moment.

Technological Mediation

Considering Buber's dialogic approach to human relation and the ethical/moral implications that come out of it, we must attempt to reconcile that with our current technologically mediated communication context. Before we examine *how* digital technologies effect human dialogue, we look at, more generally, the powerful impact a technology can have upon a culture. In doing so, we refer to both the cultural effects that can be anticipated prior to a technology's introduction and those ramifications that cannot always be foreseen. Let us first look at the introduction of print.

The technological development of the printing press provided great advancements for human civilization. Print technology allowed books to be widely distributed among the populace and led to a greater emphasis in education on literacy. Knowledge spread leading to advancements in science, economics, business, and much more. Prior to the invention of the printing press, for the vast majority of the human population, the ability to read was not a great priority. The skills necessary to scrape together a life depended primarily upon one's physical abilities and craftsmanship. That doesn't mean that people shunned literacy but simply that the necessary conditions for a literate education were not widely available and the need for sustenance demanded that lower class, illiterate citizens primarily relied upon physical labor to provide for their families. Literacy was available to the higher classes of citizens because their means allowed them access to the materials, tutors, and texts necessary to learn. The distinction between classes of people who could read and write and those who could not led to certain monopolies of knowledge (as previously mentioned) and established a hierarchical power structure in society based upon this knowledge. The invention of the printing press and thus a wider availability of written texts created a greater demand for literacy beginning the destruction of literacy's monopoly of knowledge. Monopolies of knowledge work based upon the principle of scarcity. As in any economic situation, a scarce resource will command a higher price and elevate those who possess it to a higher societal and economic level. Prior to the widespread education system, the ability to read and write represented a scarce, specialized knowledge and gave those who possessed it great power and influence over the culture. The skills of reading and writing remained scarce primarily because important texts remained inaccessible to people without the means to travel to them or to pay to have them copied and brought back for their own library.

When the printing press made texts and information more easily accessible to the population, it created a greater demand for literacy and not simply a greater desire for the consumption of information. It made literacy a necessity for economic viability. Information is power because as a commodity it distinguishes the have's from the have not's. Those who possess the information hold advantages over those who do not. One obvious example is in terms of financial upward mobility. The possession of information allows people to capitalize upon what they know economically, to leverage information for financial benefit. This has always been a part of the competitive capitalist system thus the need for trademarks, copyrights, patents, and laws regarding intellectual property. Literacy became a necessity because, socioeconomically, without it people were less likely to succeed and even economically survive in the culture. At a certain point, the lack of the ability to read and write became such an economic disadvantage that the need for education was obvious to everyone. Governments began to recognize this and the establishment of an educational system based in literacy grew and ultimately solved the problem. The introduction of new technologies create these monopolies of knowledge that people within the monopoly capitalize on for money and power. In this case, the introduction of the printing press radically transformed first Europe, and later the entire world, moving the world beyond agricultural societies, into the Industrial Revolution, and ultimately the information age.

Wide dissemination of information through the invention of the printing press was not the only effect of this technological innovation. We have already established how the introduction of any technology additionally changes our cognitive processes. Literacy and advanced education allows individuals to think in different ways than non-literate individuals. The ability to think abstractly and in linear, methodical ways are all strengthened and enhanced by the literate

mind. The growth of literacy among a greater portion of the population during the time of the Reformation made possible certain thinking processes available to literate minds that in a previous non-literate times were not possible. This does not mean that people could not think economically prior to the invention of print, simply that it was not as widespread and did not take a hold on the culture until literacy became prominent. In this same vein, the introduction of print also introduced a system of standardization not previously known, and in so doing, began a transformation in the cognitive processes of both the printers and the readers. The theme of standardization colored every aspect of typography from the precise measurement of the pieces of type to the subliminal impact upon the readers who now engaged repeatable type styles, printer's devices, and title page ornamentation (Eisenstein, 1968, p. 12). Eisenstein addresses the impact of standardization on the "brainwork" of the people who both created the standards (printers) and those subject to those standards (readers):

"Many early capitalist industries required efficient planning, methodical attention to detail, and rational calculation. The decisions made by early printers, however, directly affected both toolmaking and symbol making. Their products reshaped powers to manipulate objects, to perceive and think about varied phenomena. Scholars concerned with "modernization" or "rationalization" might profitably think more about the new kind of brainwork fostered by the silent scanning of maps, tables, charts, diagrams, dictionaries, and grammars." (Eisenstein, 1968, p. 12)

The standardization of moveable type now contained in the medium of books would transform how people would think about themselves and the world around them. We should also expect that if a technology like print could affect the cognitive process of a culture, technologies would also impact the nature of intersubjective experience as well.

Digital Technology and Intersubjective Experience

Dialogue in the Buberian sense is defined by intersubjective intentionality – a directedness toward the other in conversation - and having witnessed some of the other effects of a technology on a culture, we now turn our focus on the effects of digital technologies on the interhuman relationship. How does mediation through our *electronic communication technologies* affect our relationships with others? While technology promises to connect us in greater ways through newer electronic communication media the reality tends to contradict that Pollyanna promise and we actually find that our human social interactions are growing more distant. Sherry Turkle’s work in *Alone Together* exposes this distancing in our technological media. Ellul (Ellul, 1964, pp. 379–380) also noticed the same problem, albeit years earlier. We see through the prescience of these scholars some of the impact of digital technologies upon intersubjective experience. Technological mediation, while promising to provide a greater access and efficiency in human dialogue has more to do with and is better suited for information transfer than the interpersonal dynamics involved in authentic dialogue. In this sense we might say that technological mediation, while enhancing what Buber would call technical dialogue (Buber, 1947, p. 19), may be having a detrimental effect upon the intersubjective experience he called the between. We can see these effects more clearly as we examine some of the particular structures of the media themselves.

Distance and the visual medium

Understanding how digital media create greater interpersonal distance requires an explication of the differences between a visual and an oral medium. Technologically mediated communication that comes about via texting, email, social media posts, etc. usually comes to us visually. Texting and email are visual media – characters written in a word processing program

and electronically transmitted to another individual. There resides a distance in this type of communication that disconnects us from our relationships with others and releases us from a basic human obligation to the other. Ellul explains that the more visual the medium, the greater the distance between subjects. In *HOTW* he distinguishes sight as a sense relative to the individual as opposed to hearing which in its nature must be tuned toward another subject. Sight centers “me” in the world because I see everything in relations to ourselves. As Buber would note, in a visual medium, the focus of attention rests not upon the other, but rather upon the medium itself and our own interaction with it. For example, in looking at a piece of art we typically focus on the medium, on the artwork itself, and then form our interpretation of the piece – an individualistic endeavor. And though we “engage” the artist in a sort of dialogue through the piece, the dialogue more accurately represents an internal dialogue with ourselves about the piece. The visual medium places the focus of attention upon ourselves.

Not only does sight situate an agent as the center of his/her reality, sight communicates pure information – data. Imagistic communication media codify information in such a way that points to the reality of what they signify. The image of a person in a picture represents the reality of the person themselves because the picture refers to that particular person—the image is analogous to the reality. Postman says that these imagistic forms “have direct correspondences to the structure of nature itself” (Postman, 1979a, p. 53). Contrary to these visual codifications, other symbolic forms of communication, like language, are abstract. They do not necessarily point to the reality itself and have no intrinsic relationship with the reality for which the symbol stands. In language, for instance, we cannot know what the word *man* references without knowing the particular semantic code, as well as the rules of that particular semantic code. The grammatical structure of these semantic codes form the basis for how we derive meaning from

our sentences and we understand that by changing the structure within the code, we can also change the meaning. Moving words within a grammatical sentence structure will change the meaning of a sentence. The semantic codes we use in written language contain specific needed structures that image based forms do not. Different types of media, particularly image based and symbolic, structure our thinking, our perceptions of reality, and the world around us differently. Television structures thought and meaning differently than a book, a text, or even an oral presentation (McLuhan, 1994; Meyrowitz, 1986; Postman & Postman, 2005).

Understanding how particular media uniquely structure our thought patterns also reminds us of Buber's delineating of the three different forms of communication. In *Between Man and Man* (Buber, 1947), he outlined three basic forms of communication: monologue, technical dialogue, and dialogue. He states:

“There is genuine dialogue – no matter whether spoken or silent – where each of the participants really has in mind the other or others in their present and particular being and turns to them with the intention of establishing a living mutual relations between himself/herself and them. There is technical dialogue, which is prompted solely by the need of objective understanding. And there is monologue disguised as dialogue, in which two or more men/women, meeting in space, speak each with himself/herself in strangely tortuous and circuitous ways and yet image they have escaped the torment of being thrown back on their own resources.” (Buber, 1947, p. 19)

We live in a time where technical dialogue is the primary vehicle of communication between individuals. It focuses on information exchange and is reinforced through the digital media of communication that hold a bias toward simple information transfer. Today's digital media, both in their distancing of relationships and in the way they direct us to think about the world lean

away from Buberian dialogue by nature of the biases within their very structure. Though dialogue in the Buberian sense is rare and uncommon in our day, of the three forms of communication, it offers a moral ground and an entrance into genuine human freedom. Monologue turns us back to ourselves where we enjoy hearing our own voice instead of attuning our attention toward the other and technical dialogue privileges the information over the person. Only dialogue can provide the necessary philosophical base for an ethic based in intersubjectivity.

Greater Tribalism through the Digital Medium

As mentioned in a previous chapter, the biases inherent in a medium affect the ways in which we think. I detailed Rushkoff's perspective on how digital media have biases based upon digital logic. How digital code (defined predominantly in 1's and 0's) is inherently antithetical to subjectivity and influences a particular way of thinking about the world. What Rushkoff recognizes as a bias within digital media acts as a self-reinforcing feedback loop exploited by the algorithms that control the information we receive. McLuhan referenced this phenomena decades earlier in his explication of the myth of Narcissus. In using a medium - in this case the technology of a mirror in the pond - Narcissus "became a servomechanism of his own extended or repeated image" (McLuhan, 1994, p. 41). A servo mechanistic device corrects the performance of a mechanism by means of an error-sensing feedback. This type of auto-correct can have benefits for the speedy and efficient operation of machines but can also create a closed loop system that excludes certain types of feedback which may be of critical importance especially in an inter-human context. In so readily adapting to our technologies without question or criticism, we run similar risks of entering into a state where we continually receive the same

feedback based upon the algorithms of our technologies, leading to a type of sensory paralysis - a "closed system."

We realize not only how particular types of media (and not simply the content the media presents) serve to form and direct how we think and what we think about, but also how particular media can possibly prevent us from seeing perspectives other than our own leading to a more partisan culture and in so doing, limiting our freedom and autonomy. In digital media, this type of situation does not happen accidentally though it may not necessarily be deliberate.

Programmers and engineers design technologies to not only present us with aesthetically pleasing content, but also to examine our content choices and then select other content for us that fits with what we like. The technology chooses the ads we see when using Google as well as the stories presented to us in social media news feeds and while we do have choices regarding our consumption of content regardless of the perspectives or sites from which it originates, we have already seen how media giants like Facebook have engaged in the suppression of certain political content from their trending topics feed based upon the programmer's partisan political bias (Nunez, 2016). Though in this case human editors intentionally censored and blocked content opposed to their political leanings, we can easily see how partisan censorship could be written into the code of the algorithm of a user's news feed creating a situation where the user simply would not see a particular story show up in their news feed because the algorithm, acting upon programming, excluded it. These algorithms now determine what users see, how we learn, and ultimately affect our choices and decisions in life. Through their total incorporation into our mediated experience, they limit our understanding and force our decisions based upon their inherent structure which has been established by Technique.

The Problem of Empathy

Even in this mediated environment, where we find human beings growing more and more apart, studies show that people still report a greater preference for spending time with others than being alone (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004). This preference is nothing new and the historical tales of social gatherings from Greek symposia to Renaissance festivals and contemporary raves and parties are numerous and well-known. And while we realize the importance and priority of social relationships, people also regularly cheat, lie to, manipulate, steal from, and intentionally hurt others. Again this is no revelation and any examination of the historical record will show the devastation and destruction of human relationships caused by these types of activities by one person against another. But what has traditionally contributed to the ability of people to relate to others in mutual cooperation and unity is the characteristic of empathy.

Empathy has been defined as a cognitive mechanism through which people have the ability to imagine the internal state of someone else (Borke, 1971; Deutsch & Madle, 1975), a range of emotional responses that people have to what others feel or experience (Maibom, 2014, p. 1), a manifestation of sympathy toward another person (Hoffman, 1984), the tendency to react to other people's observed experiences (M. H. Davis, 1983), and an emotion of "feeling for" another person (Maibom, 2014, p. 5). The ability to empathize with another has been described as a key component of a person's emotional intelligence (Goleman, 1996) and has been considered an important emotional aspect of morality especially considering how emotions and feelings toward others contribute to moral values and moral behavior. We can say, as Schrag and others have noted, that moral concepts are value judgments that deal with issues of right and wrong, good and bad, justice and injustice (Harman, 1977, p. 5; Schrag, 1963, p. 257). While the

purpose of this project is not to comprehensively define morality and ethics, we should establish the connection between morality and empathy since it plays at the very center of the idea of intersubjective intentionality and phenomenological dialogue. Batson and Powell make the connection between altruistic (moral) motivation and empathy stating that empathy has been the most frequently proposed source of altruistic motivation – an “other-oriented emotional response congruent with the perceived welfare of another person” (Batson & Powell, 2003, p. 474). The empathy-altruism hypothesis, espoused in various forms by Thomas Aquinas, David Hume, Adam Smith and others claims that empathetic emotions “evoke motivation with an ultimate goal of benefiting the person for whom the empathy is felt – that is, altruistic motivation” (Batson & Powell, 2003, p. 474). Scholars have shown that feeling empathy for someone in need leads to an increased helping of that person – a connection between empathy and moral (altruistic) behavior (See Batson et al., 1991; Eisenberg & Miller, 1987 for further review).

Empathetic behavior and feelings toward another individual is a cornerstone of morality in a civilized culture and finds its basis in the concept of intersubjective intentionality. To have empathy for someone first demands an intersubjective relationship - that one sees another as “subject” and not “object.” That one sees another, in the words of Buber as Thou rather than It. And empathy must be directed – it must be intentional. Empathy is, in the words of Husserl, a particular type of consciousness *of* another. It is *directed* and *about* the other. As previously mentioned, mediation in its very structure distances our intersubjective relationships. In doing so, mediation contributes to the objectification of the other such that in mediation, a person is objectified – a person becomes an “It” rather than a “Thou.” A common phenomenon in the social media era is the trolling that takes place on social media platforms and often society vocalizes the horror at some of the vitriol that occurs at the expense of other people, in some

cases for no apparent reason. We also recognize that people who say those things are less likely to say them when engaged in face to face communication. Digital mediation constructs an environment fertile for online disinhibition, otherwise known as the Gyges effect (see “Internet trolls and the Gyges effect,” 2013; Iverson, 2011; Lapidot-Lefler & Barak, 2012; Suler, 2004), which is directly linked with anonymity and the facelessness of the other (Marche, 2015).

In light of this, I refer to Emmanuel Levinas’ concept regarding the *face* of the other not only as a characteristic of identity, but also one of obligation. “Responsibility is elicited, brought about by the face of the other person” (Levinas, 1994, p. 43). Levinas concept of *face* realizes an intentional directedness towards another individual and establishes a relationship between ethics and intersubjective intentionality. In morality, we are called to responsibility, an obligation to the other, through intersubjective relationship – through a call from the face of the Other. For Levinas, the face of the other is the call to morality. The distance in digital communication fostered by mediation contributes to the objectification of the other and it is this distanciality that disconnects us and releases us from a basic human obligation to others.

Conclusion

Levinas reinforces Buber’s notion of the interhuman. That each of us has a responsibility to the other – to see them as a “Thou” rather than an “It.” To recognize the “between” as the phenomenological space where meaning exists instead of within our own individual psyche. The obstacle, as I have noted through this explication, concerns our digital communication media, and more specifically Ellul’s concept of Technique. In Technique, we lose the interhuman. We lose our connection with others, we lose a part of the structure of moral consciousness, and we lose human freedom.

It is too easy to simply state that digital media is degrading our culture. However, an introspective examination of Technique and its resulting digital culture presents a compelling case for the argument Postman made in *Technopoly* (1993, p. xii) when he stated that the uncontrolled growth of technology was creating a culture without moral foundation that undermines our mental processes and social relations. In light of this current cultural context and the resultant effects on dialogue and human communication, I now turn Ellul's philosophy of communication as a dialogic response to Technique. His metaphor of the "word" opens up a new perspective on our relationship to Technique allowing for a moral and interhuman communicative experience and the possibility for greater human freedom.

Chapter Five: The Word as a Response to Technique

Introduction

Having defined Ellul's understanding of Technique and its historical development as a cultural system; having explicated media ecology as a meta-disciplinary field of study which examines technique and both its foreseen and unforeseen consequences on humanity; having explicated dialogue particularly as communication grounded in the phenomenological concept of intersubjective intentionality and referenced some of the affects Technique has had upon the interhuman relationship, I now turn to Ellul for a response. Ellul's critique of Technique has been detailed in a subset of his works dubbed "The Technological Trilogy" (See C. Troup, 2016 for a more in depth explication) which consists of *The Technological Society* (1964), *The Technological System* (1980), and *The Technological Bluff* (1990). Though much of his work has focused on the examination of Technique as an underlying system in society - a lens through which contemporary culture must be interpreted, he has rarely provided definitive solutions to the problem he addresses. His course of action must be extrapolated from fragments (Christians, 2006b, p. 157) that sound a resonant chord throughout his corpus and can be found in various iterations of a similar theme. In order to consolidate and organize these similar echoes, I look first to his work *The Presence of the Kingdom* where he establishes his understanding of the primary issue with a world given over to Technique – means and ends. From Ellul's vantage point, this primary issue results in a problem of communication reflected in the preeminence in our technological society of *image* over and above *word*. This communication problem leads to an interhuman response which cannot be separated from his Christian faith – one of being before doing. His response prioritizes the Word - a dialogic metaphor that refuses to integrate humanity

into one massified, dehumanized, unfree society and stands as a beacon of hope against the oppression of a world subject to Technique.

Means and Ends

As mentioned, Ellul sees the biggest problem with Technique's cultural domination as an inability to distinguish ends from means, and in the third chapter of *POK*, he details what he considers the major tragedy of our day. In order to understand Technique, we must see more clearly the problem of ends and means. Though this problem has ancient roots and has been examined for centuries, in our current technological society the problem has changed and must be considered not from philosophical or abstract perspectives but from a perspective which understands technics and technical facts. What is this problem? For Ellul, in a culture so completely dominated by Technique, everything has become a means and there is no longer an "end" (Ellul, 1989, p. 51). In reconsidering this problem from a perspective which has been informed by the pervasive influence of Technique, Ellul intends to show us that what has traditionally and historically functioned as *the* end of civilization, namely the human being, has now been turned into a means by Technique. The Technological society has remade humanity in its own image. With its predisposition to machine-ness and its values of efficiency, progress, and speed, Technique has upended a cultural hierarchy, turning human beings into servomechanisms of itself - a means toward more means. Once, techniques were constructed and established to provide faster and more efficient ways to greater human progress and the improvement of the human condition; achievements which would hopefully result in better lives for human beings. But when Technique reigns unchecked and supreme within a culture, it transforms everything based upon its own set of values, tyrannizing everything to serve itself to the point that humanity – once the end of techniques – has now become a means.

For example, techniques have always been a part of economic systems but historically more so since Taylor (1911) showed the great economic loss due to inefficiency and proposed the remedy through a *science* based on clear laws, rules, and principles for the most efficient means of accomplishing every task. Because of their incredible success in growing profit, over time, techniques morphed into Technique, transforming economics by directing all policies, procedures, and actions so that every aspect came under Technique's dictatorial rule. Every stock tick, company purchase, and advertisement is now guided and directed by analytics – data applied to technical examination. The products a store features, the hours an employee works, and even the amount of profit that can be expected all submit to Technique's strict gaze and become subject to the dictates of its algorithms. Technical analysis now determines every decision because who can argue with the data? The numbers do not lie. In light of big data, the limited capacity of human beings when it comes to sheer processing power prevents the complicated analysis necessary to guide decisions at such a scale. The overwhelming tsunami of supporting data analysis forces most of these monumental business and economic decisions. As a result, the human being is removed from the decision process, has become paralyzed to the data, and now functions only to implement the guidelines the machine analysis has directed. Within a parallel arena, humans also serve economic technique by doing their part within the system - spending, laboring, and consuming. The traditional understanding of the economic ideal – a system meant to serve humanity – has been upended. Human beings become both producer and consumer in order to satisfy an economic system transformed by Technique.

What happens in a culture when this seismic shift from ends to means takes place? First, since the end no longer inspires, means mutually reproduce themselves, suggesting a form of technical determinism. Once Technique entwines its tentacles into the fabric of society and the

culture reaches a certain state of technical domination, ends are no longer necessary to demand means. When ends become obsolete, means beget means and the next discovery or invention follows automatically, if not inevitably, with no concern for the concept of “should.” The idea of “should” can only occur in response to a legitimate end. “Should we develop this technology?” can only be asked when the question points to a valid end. In other words, having an end gives input and directs the answer to the question. But without an end, moral valuation does not exist. Ethics and moral valuation become compromised in Technique because Technique is its own end. Progress becomes the standard for any action while at the same time satisfying any ethical dilemma or question of morality. After all who can dispute the astounding discoveries and accomplishments brought about through technological development? Who can disagree with a jet that goes 600 miles an hour? Who can refute penicillin? (Ellul, 1989, p. 60) And these magnificent technologies now justify themselves because the inherent values that undergird Technique have come to direct our understanding of “the good.” If it is faster and bigger, if we can apply the adjective “more,” if it is efficient, than it is good. In its sovereignty over culture, Technique defines ethics according to its own values and forces traditionally held understandings of the “good” to submit to the values of means rather than be measured against an end.

Second, without a legitimate end, humans can no longer master their means. Since the end typically governs the means, the removal of humanity as end deposes humanity from choosing their means and subjects the choice to Technique. In choosing between means without any particular end, Technique chooses for us and with its values embedded in the culture, how can anyone choose a path against progress, efficiency, or speed? And after all, why would they? Why would anyone choose the less efficient direction when all of the metrics and analytics point in the direction of speed? Why choose a slower route when Technique displays the final

evidence of the best method achievable? In the technological society, this extends to all aspects of life. Technique has revealed incontrovertible evidence of the best and most efficient way to go about anything. From medical procedures, to economic policies, to the kind and amount of food we should eat, and even to the best techniques applied to our most intimate relationships. The application of Technique to communication has resulted in the development of digital platforms that do a better, more efficient job of transferring information. Why visit someone in person when an email or text is quicker and accomplishes the same objective?

Third, the continually automatic reproduction of means and the loss of humanity's mastery over them results in a total repression of humanity. A culture governed by the technical system no longer has freedom to choose its own way since the way is chosen for it by Technique. This type of society finds itself confined within narrow limits where the social machine controls everything and in so doing, represses humanity (Ellul, 1989, pp. 63–64). The unfortunate result of this type of condition is that it goes unseen and so never produces a protest or any attempt at revolution.

“It is as though we were confronted by an enormous machine, equipped to prevent man from becoming aware, to drive him into a corner to an unconscious refusal or to a flight into the unreal.” (Ellul, 1989, p. 82)

And if we cannot even comprehend our own repression by the technical machine, we then unconsciously become subject to it. Instead of realizing our condition, we fail to see it and find ourselves captivated by the new inventions and technologies presented to us as the answers to our deepest questions. Huxley's (2014) premonition has now become reality as Technique narcotizes us from the reality of our condition.

Consider as an example the implementation of computers and algorithms in the area of stock trading. In the past, stock traders would buy and sell stocks based upon their speculation of the direction of the markets in the short term or long term future. Day traders traded upon speculative news and technical analysis – using particular analytic tools like moving averages, stochastics, and trend lines – to locate buy or sell signals which would determine an action by the trader. If the stock broke below the fifty day moving average, it would generate a sell signal on that particular stock. Technical analysis attempted to remove human emotion from the speculative and risky venture of stock trading by relying upon techniques and data signals which would determine the course of action in lieu of someone having to make a speculative, and many times emotional decision. Another type of stock investment strategy based decisions upon a fundamental analysis of the particular company. Analyzing corporate balance sheets and taking a deep dive into the fundamentals of a company along with its potential for future profit and expansion determined the course of action when it came to buying or selling a particular stock. Both of these strategies rely upon data analysis. Technical analysis applies techniques to investigate and draw conclusions based upon the stock chart – an attempt to quantify and analyze the human psychology of the market for that particular stock in order to predict its future direction. Fundamental analysis applies techniques of analysis to some of the more fundamental aspects of a company, but the technique remains the same. In the era of computers, however, the analysis once done by human beings has been taken over by machines. Computers have data analysis to be completed through a faster and more efficient process. Algorithms make the trading decisions and buy and sell signals all result in an action – a trade made by computers without human interference. The speed of computers allows for high frequency trading (HFT) – high speed trades which outperform human decisions, enabling computers to make decisions

faster, to make trades faster, and to take advantage of speed in order to make staggering profits from traders limited by their human faculties. High frequency trading is just a faster means to a means, hidden from our awareness and removing human freedom in the process.

The Lack of Awareness

Humanity's inability to see its current condition as a means subject to the means of Technique does not prevent the condition from having its psychological effects. Subconsciously, humanity recognizes a dissonance, something amiss in the world, and searches for a way to make sense of it. In our search to find meaning and explain the feelings of unrest, in our attempt to make sense of our world, we oscillate between one of two explanations, the phenomenon and the explanatory myth (Ellul, 1989, p. 83). What Ellul means by the phenomenon is the external presentation of the fact – the interpretation of our condition given to us as propaganda through various media. When an event occurs, because of the underlying conditions set by Technique, the population needs an explanation of the event – a “media” interpretation to give the meaning. This external presentation along with the power of “the media” (here I refer to media as the instruments of propaganda) has so framed our current life experience that it supersedes our own interpretations and we cannot believe our own judgment. So in any action – political, economic, or informative – we wait for the “interpreters” to tell us what it means. The power of the microphone dictates our interpretation because, for the most part, our experiences are limited and we can have no experiential information outside of what we are told.

What comes to us through these media comes as facts of which we will never know the reality. As an example, consider the war in Iraq under President George W. Bush. Our government through the media presented indisputable facts to the American public about Iraq's possession of weapons of mass destruction. These facts justified the American invasion, only to

find out later there were no weapons of mass destruction. In the moment of presentation however, who could have known the validity of the facts given? The public had to trust the trustworthiness of the reporting, especially in such a tenuous historical moment. Various media present us with these “facts” and based on the power of the microphone, the media, and influential propaganda, we are forced to accept them as accurate representations of reality. However, due to the sheer mass and the flood of information presented to us to, we have extreme difficulty verifying them – we cannot “master them” (Ellul, 1989, p. 83). This is the phenomenon. Postman called it – information glut (2005, p. 68). Humanity overwhelmed by a flood of images and facts, the validity of which it can never know. Images and “facts” which quickly succeed one another in the Mach speed news cycle as a deluge of information that we have no possibility of ever completely understanding or comprehending. The phenomenon is countered by the other “explanation” – the explanatory myth.

If we do not accept the phenomenon – the “facts” presented to us through the technological system - the other option is the crafting of a myth which gives coherence to what we experience in life. Narratives serve to provide meaning for individuals and give them an answer to the question of who - who are they and how they fit into this world (Ricoeur, 1990). The explanatory myth supports our entire intellectual system by providing an explanation for the incoherence and confusion created by the phenomenon of the external presentation. The explanatory myth which functions as an “intellectual key which serves to open all secrets, to interpret all facts and to understand what is happening in the tempest of phenomena” (Ellul, 1989, p. 85). These myths, known differently in different cultures serve as guiding narratives to give meaning to people in the midst of information glut. Ellul gives some examples: the bourgeois myth of the Hand of Moscow; the Socialist myth of the Two Hundred Families; the

Fascist myth of the Jews; the Communist myth of the anti-revolutionary saboteur. Today, explanatory myths such as the American Dream or even Technology as Savior function to provide meaning, to give direction and order to humanity in the midst of a chaotic world. These narratives do not necessarily make order out of the glut of information that we strive to comprehend, but they do provide a path of meaning in the midst of it. The explanatory myth fulfills this purpose - to give some ground upon which to stand, a sense of stability when we cannot make sense or find any purchase in the middle of the mass of information.

What accounts for this situation which makes the explanatory myth and the phenomenon necessary? Why does humanity fail to see the reality of its situation in the world? Ellul gives four reasons. First, there is an extraordinary complexity to our world. As we advance in scientific investigations of the world and as technology provides us with the tools that enable a more thorough examination of natural phenomena, we find that each new discovery creates more complexity making our explanations of the natural environs even more difficult. As an example, think of the debate around man-made climate change. The complexity of the multitude of variables involved with planetary weather systems, not to mention the potential interstellar factors outside of our own planetary system presents a huge amount of data that must be analyzed, understood, and interpreted without bias in order to achieve a comprehensive understanding of potential causalities for the problem of climate change. In fact, considering the complexity of the relationships between systems and the vast amount of potential variables, some might say that an accurate understanding of causality will forever be impossible. Of course scientists and researchers can and should examine the evidence, develop theories, make assertions, and take preventative actions based upon what we can understand and what we do know, but we must also realize that no one can never know with absolute certainty the actual

reasons behind something so complex. In light of the politicization of the debate, we might consider both explanations, both sides of the debate as explanatory myths which function to give meaning to the differing cultural factions seeking justification of their perspective on something they cannot understand. In ancient times, people would simply ascribe these occurrences – volcanic eruptions, tsunamis, hurricanes, erratic weather, hot temperatures, cold temperatures, etc. - to the explanatory myth of the gods and offer sacrifices in order to make some sort of sense of it all. But our naturalist world, having stripped the supernatural of existence, now creates another explanation that makes more sense and proposes a technical solution. Where the gods failed, technology will succeed. Society promises that eventually, through greater technical implementation and discovery, we will finally tame the planet. The complexity of our world demands an equally complex, yet “realistic” explanation and Technique provides it. Yet complexity itself does not account for our current situation. A second reason has to do with the influence of media.

Media influence comes in two forms: social and state sponsored. Regardless of which of these presents information to us, the underlying technical aspect of knowledge means that its mechanical character can only be attached to the external aspect of facts (Ellul, 1989, p. 86). Some things can be represented technically through media and some things cannot. Media consumers living within the context of Technique can understand only one aspect – that which can be technically communicated through facts, and facts denote an either/or context. Either facts are true, or they are not. What this eliminates are any shades of meaning and the idea of contingency that a more rhetorical understanding of representation allows. The mechanized communication context negates probabilities and contingencies in favor of certainty, inevitability, and facts. Additionally, the two forms (private and state) determine which “facts”

get communicated. Financial obligations of privately owned media companies both contribute toward and restrict what gets communicated. Ratings, upon which the financial support of the company rests, guide the content. So the financial interests of the companies function as a technique to determine what the audience hears. If it does not operate according to the absolute best method for providing the necessary outcome – in this instance producing ratings which can be sold to advertisers – it does not get on the air. State sponsored media operate the same way. Technical objectives (what is best for the state) determine what knowledge gets communicated which in turn affects what the audience or population at large hears and then understands. Ellul's book *Propaganda* (Ellul, 1973b) explains how this type of communication can only happen, how propaganda can only work in a technological society.

The third explanatory factor comes from the sheer mass of information communicated. By nature of the fact that information is communicated at all, it holds legitimacy among the people. Who can deny information when it has been given to us in such a beautiful and authoritative package? And in the midst of such a mass, how can we know what to believe? Neil Postman once shared in a speech an experiment he would test upon his colleagues in Academe. He would develop a preposterous hypothesis and inform his friends that a “recent study by MIT” had stated that this ridiculous supposition was true and backed by scientific research. Inevitably, his colleagues would respond not with a critical inquisition, but rather with a nod and an acceptance of the ridiculous proposition suggested. With the reputation of MIT behind the study, the fact that the information existed meant it had legitimacy. Possibly this experiment shows more about the trust of Postman as reputable individual than the gullibility of his colleagues but another more recent example (Bohannon, n.d.) is that of Johannes Bohannon, a Ph.D. in molecular biology. In 2015, he and some of his colleagues conducted a clinical trial

on bitter chocolate as a dietary supplement setting the research up to deliver false positives on the results. They then published their research in a pseudo-journal and had a massive press release stating the results of their study showed that eating chocolate could help people lose weight. Some of the most popular media picked up the story - including The Huffington Post, The Daily Star, The Irish Examiner, Prevention, and Shape - and broadcast it out to their audience without any critical investigation. The technological environment produces two qualities which allows for this. First, the mass of information works against critical investigation – media simply cannot “fact-check” everything or they will never publish - and second, the speed of information and the necessity of audience attention requires that media outlets report it first – as quickly as possible. The environment of speed creates a value system that devalues accuracy in favor of primacy, and the nature of the light-speed news cycle prevents retractions because the world has “moved on” from the story. Essentially, these underlying factors contribute to what has been termed “fake news.” When news outlets compete for a “scoop” in a ratings driven environment, checking the accuracy of a story, while still held as a standard of journalistic ethics, can become a time consuming burden which could result in the loss of precious media share for not being the first to report. Though “fake news” has been trumpeted as a blight on the industry, even fake news holds some legitimacy simply because it has been reported and in the mass of light-speed information, the word of the media cannot be questioned. When media outlets report something, the legitimacy can come in the fact of the reporting more so than in the accuracy of the content.

Finally, Ellul talks about “distraction” in the sense in which Pascal (1995) uses it as the last explanatory aspect of our current cultural situation. Pascal reflected on the human condition and our inability to deal with the reality of our impending death. Similar to other philosophers

who recognized the finality of death as an integral aspect of understanding human existence, Pascal shows how in an effort to defer the unease that accompanies any reflection on mortality, humanity seeks distraction.

“The only thing which consoles us for our miseries is diversion, and yet this is the greatest of our miseries. For it is this which principally hinders us from reflecting upon ourselves, and which makes us insensibly ruin ourselves. Without this we should be in a state of weariness, and this weariness would spur us to seek a more solid means of escaping from it. But diversion amuses us, and leads us unconsciously to death.” (Ellul, 1989, p. 118)

In light of this perspective, the immersing of humanity in a mass of information of which men and women can make no sense or establish any coherence and then providing explanatory myths to give some type of meaning upon which they can gain some sense of stability contributes to prevent the only potential remedy to the problem - meditation and reflection. In order to prevent the remedy, the underlying system of Technique “has arranged everything in order to achieve distraction” (Ellul, 1989, p. 87). Again, we seemingly encounter the autonomy of Technique operating as an underlying system within the culture. The reason that we give credence and authority to the phenomenon and the explanatory myth is because we have already been distracted by the system of Technique. Throughout history, we have developed distracting technologies which entertained us and prevented us from thinking deeper about our human condition. Books served to turn our attention away from our present circumstance and allowed us to enter into new and foreign worlds. Newer technologies continued the same process – radio, television, cable television, satellite television, internet – all advancing forward in their distracting capabilities. Now virtual reality allows almost a full immersion into a world outside

of reality – an escape from the mundane and troubling world in which we live into a fantasy filled with attractions that will occupy our thoughts. Accordingly, we find ourselves in an intellectual paradox: though we know more things and possess knowledge about mechanical methods, knowledge comes to us via questionable information and this provides the underlying conditions for a new problem: the absence of communication.

The Problem of Communication

For the intellectual, as well as for the layperson, communication functions as one of the reasons for life itself. Communication helps us to understand one another and our world, and in order for this to happen, we must possess common knowledge, ideas, prejudices, and values which we all share with one another. This does not mean that we all agree on them, but rather that we are unconsciously aware of them together since we live within the same culture. Information destroys this commonality in our communication with one another by creating other prejudices and other common ideas that become new myths which then are pushed into a culture through propaganda. With such a diversity of new information, we cannot meet another within a given horizon of meaning, or as Ellul says, within “a given trend of civilization” (Ellul, 1989, p. 94). When we cannot meet another, communication does not exist. Postmodernism has destroyed these metanarratives which once gave coherence to cultures and in the destruction, has left nothing behind of substance to fill the void.

The problem or absence of communication arises out of a lack of awareness to our cultural situation: the enslavement of human intellect to the technical. This condition creates a culture of information and facts that restricts communication between individuals and subjects it to the biases of technical communication – namely information transfer. Note the consequence:

“We can no longer communicate with man, because the only intellectual method of expression is a technical one. The fact that the intelligence is obligated to use the technical channel breaks personal relations, because there is not possibility of contact between two human being along this line. Communication transcends technics because it can only take place where two human beings are fully engaged in a real conversation. Now this is precisely what the intellectual technique of the present day both avoids and prevents.” (Ellul, 1989, p. 95)

To summarize this situation Ellul states, “There never was a time when people have talked so much *about* man: there never was a time when so little has been said *to* man” (Ellul, 1989, p. 94). Ellul’s description of human communication resonates deeply with Martin Buber’s (2010) dialogic perspective. He sees in Technique a debilitating force that prevents human communication (or speaking *to* another person), and as human beings, it should then become our duty to react against this “will-to-death.” Technique serves as a mediation which prevents human face to face encounters, a type of “non-communication.” Ellul comments on Technique and mediation:

“The form of non-communication is particularly pernicious, particularly invisible; for the men of our day, when they want to meet one another, put their trust in the post office, the railway, or the newspaper – that is to say, precisely in that which breaks and kills the very power of finding each other as human beings, in the reality of flesh and blood.” (Ellul, 1989, p. 96)

How do we address the problem of communication brought about through the mediation of Technique? First, in order to understand oneself and the world (which are inseparably connected), we must destroy the myths which have come to guide our understanding of reality.

Second, we must strive to find an objective reality in the midst of our culture immersed in a mass of information. We must find ways to rediscover the facts – facts led by the *people* who we live amongst. Third, we must find ways to grasp reality on the human or interpersonal level. Technique detaches us from this reality and developing awareness means avoiding this detachment in all its forms. We must avoid evasion. We avoid thinking of others in the abstract and endeavor to think of them as neighbor – personally and concretely. Fourth, we must look at situations to see them as they are, and then to see them as situations we are placed in as human beings. The common factor in all four of these steps is the human being. Communication has been broken because we are no longer “neighbor” to anyone (Ellul, 1989, p. 104) and this idea of being a “neighbor” references a particularly interpersonal and “interhuman” context. The technical world breaks those personal relations by objectifying and symbolizing people into abstractions, destroying human freedom, and discounting truth.

Ellul’s Dialogic Metaphor of The Word

The root of the problem of communication boils down to the relationship between Technique and human relation. Ellul shows us that the concern lies in what Technique ultimately does to humanity – turning humanity into a means rather than an end, destroying interpersonal relations, repressing human freedom, and devaluing truth. The remedy to these symptoms lies in what he calls a new style of life - a revolution which:

“attacks the bases of a civilization...a rediscovery of the meaning of human activity, of the relation between means and ends, of their true place in a world which is given up to the love of power, to disorder, to the pride based on a sense of limitless power over the external world.” (Ellul, 1989, p. 118)

This revolution rests on the foundation of communication:

“We need a new form of communication between human beings, in order that the relations between them, distorted by their conditions of life, by class feeling, by prejudice, may, by a renewal of their intelligence, be recreated upon a personal and living plane.”

Technique has infected culture by usurping power and taking total control over civilization to the point that human relations, distorted and destroyed, need to be renewed. But what does this new form of communication look like and how would it work in practice? Ellul shows us a glimpse through a dialogic metaphor he calls “the Word.”

The word represents language and speech in a mysterious and organic way which opposes views of and approaches to language which favor a scientific approach and a method of investigation defined by the values of Technique. It is a perspective on language which reflects an ambiguity and mystery that leans away from views of language informed by scientific and technical analysis. The dialogic metaphor of the word rejects a view of language where each word would have a mathematically accurate meaning – one that could be known with scientific precision (Ellul, 1985, p. 18) - and Ellul critiques those who would approach the study of language like one would study algebra, from a formulaic and quantifiable perspective that gives each word one, and only one meaning. This type of approach, technical in its method, puts a straightjacket on language, removing the ambiguity which qualifies the unique character of human communication. These approaches to understanding language - scientific and structural approaches - are incapable of describing what actually happens in communication:

“The scientific analysis of language replaces communication. One analyzes in great detail and with increasing depth the system of signs, for the reason that they no longer mean anything, and man is going all out to restore value to a dead instrument. All he can

do is substitute a system for sense. But after he has completely elucidated the sign, that which signifies, the thing signified, the phonemes, the morphemes, the language, the speech, the word, the codes, the metalanguage, and the referentials, after he has demonstrated the possibilities and dismantled the system, nothing is any better transmitted by the language than before. No communication is established.” (Ellul, 1973a, p. 93)

Ellul’s critique of Saussure’s (1998) structural linguistics and other semiotic approaches to language analysis reveals the priority he places on the richness of language which comes not from scientific precision in understanding the meaning of words but in the connection or “relationship” established by language *between* people. Structural approaches to language sound similar to Buber’s understanding (Buber, 1947, p. 19) of the difference between what he called technical dialogue – that which seeks objective understanding – and dialogue in its phenomenological understanding – that which references an intersubjective intentionality reflected in “the between.” Though Buber believes technical dialogue functions as *an* aspect of communication, he does not value it in the interhuman relationship as he does dialogue. Arnett and Arneson note the similarity between Buber and Ellul regarding the technical aspect of approaches to language:

“Martin Buber would have agreed with Jacques Ellul in his warning about the misuse of technique that seeks to live life prior to the needs of the concrete moment...Buber’s dialogue rebuffs answers that appear too neat and clean, but are actually abstract and miss genuine connections to a given situated moment.” (Arnett & Arneson, 1999, p. 138)

Their critique of the misuse technique makes a distinction of value – one which fails to recognize the concrete moment values the abstract ambiguity in dialogue. The value of the word comes

from the ambiguity and mystery of language which inspires human creativity and contributes to the richness that can be found in the interpersonal relationship. The structuralists “humiliate the word” – treating it scornfully as an object for the rigors of the scientific discipline and in so doing, establish a general contempt for it” (Ellul, 1985, pp. 165–166). Ellul’s critique of structural and semiotic approaches to language, on the contrary, elevates the word to a place of prominence in the interhuman relationship. Where structuralists want to limit language, Ellul shows us how language opens the possibilities and provides the opportunities in dialogue for greater human intimacy. He shows us the value of the human being.

In addition to critiquing scientific and technical approaches to understanding language, Ellul also sets his sights on postmodern rhetorical theorists who attempt to depersonalize discourse and make it *anonymous*. Thinkers such as Barthes, Derrida, Lacan, and Foucault stand as a canon of postmodern theorists representing a post structural entrance into communication theory and who primarily focus on the anonymity of language in writing and texts as opposed to the personalization of speech and discourse (C. L. Troup, 1998). Barthes and Foucault have famously argued for the anonymity of texts (Barthes, 1989; Foucault, 1989) and, along with the rest of that canon, share a prioritization of the written text over the spoken word (R. C. Davis & Finke, 1989, p. 718). This contrasts with a dialogic perspective which presupposes both speaker and listener as necessary for communication, a philosophy of communication which requires a *relationship* between people as a prerequisite for dialogue: “There is a poetics of language and of *relationships* also” (emphasis mine) (Ellul, 1985, p. 18). The relational presupposition in dialogue requires an investigation into approaches which seek to make the speaker anonymous. This characteristic of depersonalizing subjects in a communicative event reflects more on the postmodern interpretation of society rather than giving any insight into the nature of language.

“When language theorists take their analysis to its logical conclusion, they declare that no person is speaking, nor is there any content to communicate... They are wrong to present this as something permanent. For our society and our epoch, for our intellectual or bourgeois groups, they are correct, but this is a sociological observation rather than something linguistic or psychoanalytic” (Ellul, 1985, p. 157).

Ellul illuminates the very personal aspect of the word which cannot be removed from the participants in dialogue and he shows how connected the meaning of language is to the speaker. The word is not anonymous, disconnected, and disassociated from a person, but rather mediates an interhuman experience – a dialogue of meaning between individuals which values them both.

The word cannot be limited by scientific and technical methodologies, it is not anonymous and detached from the subjects who employ it, and it is also not image (here, I rely extensively on Ellul’s work particularly in chapter 1 of Ellul, 1985). The distinction between image and word becomes a key theme in *HOTW* (Ellul, 1985) shown not just in the differences between media types but in the underlying qualities which define each of them and their resultant effects upon human communication. I have already detailed how the image functions as a selfish medium, how it creates greater interpersonal distance, contributes to greater tribalism, and hinders human empathy (see chapter 3). However, in thinking about Technique, sight provides the underlying conditions for Technique to manifest itself in the world. Vision primarily allows for the accumulation of information. Through sight, we see the world around us and we get precise information about reality rather than abstractions, ambiguity or metaphor. Through our vision we access the dimension of the present without accessing any others. In sight, there is no past or future, there is only what we see at the present moment when something appears within our field of vision. Consider the camera which can provide snapshots of the reality before us but

does nothing to interpret that reality. It only reveals the world it as it exists before us. Our sight conveys certainties that we can rely on without questioning them; certainties which give us a sense of security. When our vision is obstructed, clouded and dark, we feel a sense of unease which can prevent us from acting in the world. The certainty which allows for action has been taken from us in the removal of our sight. We fear the darkness because without vision, the world loses its center – the very ground that provides a foundation for our action. Sight gives us space and without space, there is no room for action.

The image, however contains a contradiction. First, it presents reality as certain and without ambiguity. When we see something, unless our sight has been altered by some unusual phenomenon – a drug or a mirage – we see what is the case. Yet again, even in this certainty, the image has no significance without interpretation. What appears to us in our sight, though unambiguous, can have multiple meanings depending upon our historical moment, culture, background, or perspective. So we learn to interpret the images that come into our spectrum and we then must decide what action to take, if any. We cannot question the images we see – they are incontrovertible and irreversible. But though we cannot change the image in front of us because it shows us the reality of the world and situates us as central and within that reality, in the present moment, we must find meaning in it. We must interpret it in order to act.

The image reveals certainty but also presents us with objects which in turn have an effect upon us. Unless we accept Solipsism, the objects that we see represent a reality outside of ourselves that we can turn away from and expect to return to again. The visual image constitutes the object as something that is thrown before us and exists because we *see* it. Because of sight and the relationship between ourselves and the objects of our sight, our vision creates a world that we possess. Our sight presupposes “a universe-for-me” (Ellul, 1985, p. 10) In this world,

we cannot separate ourselves from what we see but we are continually refashioned by the images based on our point of view. We all approach the visual world from a unique perspective, a locus from which we see the world around us and then must interpret. The interpretation – the “meaning” - leads us to action which defines to a certain extent who we are. Through this process, we are refashioned in terms of the image. The process of technique depends upon the image:

“Sight alone is not enough to accomplish it, but without sight, no technique is possible...A human being’s sight commits him to technique. The visual image points out the totality of my possible life in a world where I am both master and subject. All techniques are based on visualizations and involve visualization. If a phenomenon cannot be transformed into something visual, it cannot be the object of a technique.”

(Ellul, 1985, p. 11)

So the image presents to us a visual world, one which makes Technique possible thus allowing for the “imaging” of language itself reflected in scientific and technical explanations of communication. When we “image” language, it reconstitutes our being, reforming us according to the values of Technique; we objectify the world and the people in it instead of engaging in an interhuman experience through the complexity of word.

The critiques of structuralist and post-structuralist approaches to language reflect a qualitative distinction between technique-driven approaches and Ellul’s dialogic metaphor of the word. Like Buber (1947), Ellul’s philosophy of communication arises out of a perspective that recognizes the mystery, ambiguity, and one might even say the spirituality that occurs when two people engage in dialogue. Postman (Postman, 1984) described Ellul as a “story-teller” and “moral theologian,” noting that the stories he tells through his exposition of society’s relationship

with Technique provides us an entrance into understanding the human condition, giving explanations that attempt to make human life better. “[T]he purpose of social research is to rediscover the truths of social life; to comment on and criticize the moral behavior of people; and finally, to put forward metaphors, images, and ideas that can help people live with some measure of understanding and dignity” (Postman, 1984, p. 32). Ellul shows us through the word that in moving away from purely “scientific” or technical understandings of communication we enter into a unique interhuman experience which gives life meaning

In contrast to the visual and the image, speech and hearing are qualitatively different. Whereas we can close our eyes to the image or even turn away, we cannot easily shut out the sounds that come to us. Where images fall into a spatial pattern in relation to one another as we see them, sound comes to us as a cacophony – arriving in our perceptions from a multitude of locations simultaneously. Sounds assault us all at once but they also contradict one another, cancel each other out, or distract us from other sounds. Sound does not constitute a “universe for me” as sight does. Although we hear sounds, they are not as clear and distinct as images. Sounds do not represent reality the way images do. Sounds bring questions along with them – where does it come from? What does it say? What is going to happen? Sounds are vague and abstract creating a world of ambiguity, uncertainty, and mystery. Where sight primarily relates to space, sound relates to time. Sound “inserts us within a duration rather than an expanse” (Ellul, 1985, p. 13). In hearing a sound, we ask what will come next. A question of temporality. Speech locates us within temporality because it comes to us in a linear fashion. As we listen to someone speak, we must wait for meaning. We must wait for the sentence to end until we can understand what is being said. And languages differ in the grammatical structures which declare things like past or present, subject or object, modifier or modified. The temporality of speech

suggests that we cannot fully know until all has been said. Sight gives us immediate perception of reality while sound subjects us to ambiguity forcing us to wait in temporality for knowledge. Additionally, in contrast to the image, the word can never be an object. The word can never be thrown before us as the image can be. We must wait for it. Before it is spoken, we anticipate it. And after it has come to us, it exists only as long as we hold onto it. For a word to become object, it needs to be written or recorded in some way and yet then it has ceased to become speech.

The Word as Metaphor and Medium

Having distinguished the word from image and explicated the critique of structuralist and post-structuralist approaches to understanding language, we now turn to understanding the word as a phenomenological dialogic metaphor and a medium, as necessary for establishing human freedom, and as critical for providing humanity the opportunity to experience truth. As already mentioned, Martin Buber distinguished what he called the dialogical as the sphere of “the between” from the psychological, or that which happens within the soul of each person (Buber, 1965b, 166a, p. 17). Additionally, Arnett and Arneson (1999, pp. 133–134) connect the sphere of “the between” to the phenomenological concept of intentionality (See chapter 3) describing it as a phenomenological space not defined by one person but by a space between them both from which meaning in communication emerges. The phenomenological space of the between in Buber finds a counterpart in Ellul’s understanding of the word. First, language constituted in the word calls us to construct, exhort, console and enable a person to edify themselves in their *relationship* with others. Language acts as the *only* means of making a connection *between* two people. And where different sounds are of different orders, human speech holds rank as the highest order of all:

It ushers us into another dimension: relationship with other living beings, with persons. The Word is the particularly human sound which differentiates us from everything else. In this connection a fundamental difference between seeing and hearing is immediately apparent...When I hear speech, however, the human being becomes qualitatively different from everything else.” (Ellul, 1985, p. 14)

The spoken word brings us into the dimension of the interhuman and into the phenomenological space – even establishing it – of “the between.” The spoken word forms the very basis for human relation, it functions as the medium which establishes the conditions for relationship. In human communication, “a kind of electric current is established *between* us...There is a poetics of language and of relationship also. We must not limit this poetics to language, which must be constantly rewoven, but remember that the relationship is also involved. Language requires that we recommence this relationship which is always uncertain” (Ellul, 1985, p. 18). The word provides a hermeneutic entrance into understanding human communication as unique and important. Ellul reminds us why communication constitutes human relation and he also shows how this takes place.

The Word functions as a phenomenological dialogic metaphor describing human relation, but also as a medium or tool used to establish the potentiality for human relation constructed in the phenomenological space of “the between.” In communication, language acts similarly to how Heidegger (1962) describes the being of objects in the world. Heidegger classifies the being of equipment (objects) in two ways. First, equipment *is* as an *object* that we experience in the world. Heidegger describes this type of being as present-at-hand [*Vorhandenheit*] or “occurrent” (Dreyfus & Wrathall, 2005, p. 4). The present-at-hand of an object is its being in the world as an object that we see or experience. It is before us. It is equipment that we recognize and see. This

is a mode of being for things where things are constituted in properties that they possess in themselves rather than in their relations to how they are used. In Heidegger's famous example, the hammer is there before us and we see it as an object – it is present-at-hand. The being of equipment changes when a person employs or uses it. In this state of being Heidegger classifies it as ready-to-hand [*Zuhandenheit*]. Equipment is “ready-to-hand” when it is put to use. When we put the object to use in the way that it is intended to be used, our concern with the object subordinates itself to the “in-order-to” of the purpose in using it. It is in our employing of the equipment that its being changes; the more we begin to use or employ it, the equipment becomes veiled to our recognition of it and our concern is not in the awareness of the object, in its being there, but only in what we are doing – the purpose for which we are employing its use. In readiness-to-hand, the equipment disappears from the scope of our attention. So in examining the “being” of the Word, we recognize it in both senses – as present-at-hand in the metaphor which establishes the potentiality of the co-constructed phenomenological space of “the between” and as ready-to-hand when employed as a tool which forms the “electric current” establishing human relation.

The Word as Freedom

Not only does the word function both as metaphor and medium, but it serves as the only thing which can provide any type of human freedom in a Technique-dominated culture. The totalizing character of Technique has resulted in the subjugation of humanity, the enslavement of human beings toward its own technological ends; an enslavement which requires a new freedom necessary to live humanely. Such a freedom, however, can only be possible transcendentally – through the Word (Christians, 2006b, p. 152). To understand this transcendent quality requires a prior knowledge of the influence of Ellul's Christian faith as well as his dialectical thinking. As

one of his best interpreters put it, “Any attempt to understand his thought that concentrates excessively on one of the two strands or ignores the relation between them is liable to distort his thinking” (Andrew Goddard, 2002, pp. 53–54). The two strands include his sociology and his theology:

“These two levels cannot be combined, nor do they go together naturally and objectively. For the person who lives on both planes, the two proceedings are mutually consistent. As a sociologist and as a Christian, I can pursue this twofold quest. I am able to say that man is doing harm and that he is a sinner, that he is unfortunate and that he is separated from God. But that correlation is already established in my own thinking, by my own life experience. It is not something impersonal which can be passed around.”(Ellul, 1973a, p. 158)

Sociology does not provide the totality of an explanation for the condition of society. Ellul shows us that sociology needed to be “answered by a biblical or theological analysis” (Christians, 2006b, p. 150), one which provides insight into the relationship between word and human freedom. These two “poles” of interpretation, though seemingly at odds with one another, must be considered dialectically, working together and existing at the same time in unresolvable tension with one another.

Speech and word act together in harmony with one another. Similarly, God expresses himself, acts, and is only manifested in his word. In fact, humanity cannot grasp God anywhere except through word because the *only* channel of revelation is the word – intelligible and specifically addressed to us containing both meaning and power. God makes himself known through word and in this, in speaking to us, he shows that he is not a far off and distant stranger,

but that he is truly with us. Through the Word, God creates, not in abstraction, but by means of a relationship:

“The Word is the essential relationship. The God who creates through the Word is not outside his creation, but with it, and especially with Adam, who is made precisely in order to hear this very word and create this relationship with God. Having received the Word himself, Adam can respond to God in dialogue.” (Ellul, 1985, p. 51)

Additionally, the Word is not mere language, it is a person: the Word is spoken by God and also incarnate in Jesus Christ. This does not present a contradiction because in both cases, the word reveals God. God speaks through the incarnate Christ – the *logos* or Word made flesh.

Additionally, the word emphasizes freedom because Christianity primarily is a message of liberation (Christians, 2006b, p. 153) which finds its fulfillment through the word. God is the Liberator (Ellul, 1976, p. 107), and the word expresses that freedom, it presupposes freedom, and it invites the listener to express his/her own freedom by speaking (Ellul, 1985, p. 58). God speaks and therefore manifests his freedom and invites the listener to the freedom involved in answering. God summons humanity through the word and invites us to speak in dialogue, but not only with God, with one another.

Freedom through the word allows us to “encounter” our neighbor – to go and meet others in dialogue (Ellul, 1976, p. 322). The concept of meeting our neighbor, the notion of “encounter,” echoes Buber’s (2010) understanding of “the between.” In order for “encounter” to happen, dialogue must begin and this dialogue must move beyond preliminary conversational remarks which may be predetermined by social conventions or societal norms. For true relational encounter, “[t]he dialogue has to stop being a mere exchange of words and become the engagement of the one with the other. This encounter or relationship gives the words we

exchange irreplaceable value” (Ellul, 1976, p. 324) but the encounter itself requires the freedom which comes to us through the word. The word liberates us from a mode of technical communication so that we may enter the phenomenological space of “the between” so that we can experience “encounter” through dialogue.

Communication technologies have provided greater efficiency in communication as well as the possibility for greater information transfer but in so doing, they restrict and limit human relationships. A book, for example, only allows for a limited message, and though we engage with the author’s argument, this process essentially constitutes an internal dialogue with ourselves. The opportunity for greater clarification or explanation of the meaning does not exist because the words on the page are static. Similarly, television and radio present a one-sided monologue that expresses ideas but provides no opportunity for interhuman communication. Digital technologies also limit meaning because they provide no outlet for the nonverbal messages which scholars say constitute anywhere from 60-90% of the meaning in a communication message (Mehrabian, 1972). Telephones allow for vocal tone, but visual technologies such as SMS messages, internet posts, and email cannot account for the richness and depth of meaning which happens via the nonverbal message. These technologies realize the values of Technique – speed, efficiency, and progress – but they restrict and limit meaning and encounter. They negate “the between.” And by virtue of their dominance in the culture, they restrict and limit human communication – preventing a more nuanced and intimate relation. The word frees us from these limitations of Technique. It allows us to encounter our neighbor, to enter the phenomenological space of the between, and to meet the other in common horizons of meaning. The word liberates us to step into the full potentiality of what it means to be human and what it means to be “neighbor.”

The Word as Truth

The word functions as a metaphor and a medium, it provides for genuine human freedom and finally, the word alone allows humanity the only possibility of truth. From at least the time of Plato, philosophy concerned itself with epistemology – true knowledge. Platonism established the philosophical sovereignty of sight as the means to true knowledge and for Plato, true knowledge is the knowledge of ideas - of the *form* (See particularly Plato, 1956, 1989, 1991). Even the word idea (*eidōs* in Greek) comes from the verb *eidō* which means “to see.” While Plato defined perception as the key to knowing the essence of a thing – what we can see – Descartes (see particularly 1993) continued with this visual motif by using the model of intuition as the means for discerning truth. But again, the Latin *intuiri*, the word from which we get intuition also means “to see.” Kierkegaard recognized the influence of the visual on philosophy (see Gouwens, 1988; and Soren Kierkegaard, 1992) and broke away from it:

“The speculative individual wants to touch everything he sees... Why doesn't he respect the distance imposed by Being? Why doesn't he deal carefully with the difference between himself and the other person, in order to understand who he is? In order to understand, he must give ear: hasten to listen. You must learn to listen.” (Kierkegaard as quoted in Ellul, 1985, p. 37)

Though the visual nature of philosophy dominates the ancient perspectives, Socrates stands as an exemplar of one who “speaks truly.” Rather than engage the image, Socrates attuned himself to the inner voice, his *daemon*, which provided him guidance and wisdom. He *listens* to that secret voice we all hear and from that framework, he engaged in a dialogic method of investigating and discovering truth – one which happens through conversation with another person.

Ellul sees truth as the absolute or eternal and he shows us how it depends upon language and the word. In truth, we find a paradox consistent with a dialectical perspective. Truth exists as an absolute beyond our human limitations. We do not construct it and yet, through language, we access and transmit it. Through the word, a most uncertain means open to variation, doubt, and ambiguity; an ephemeral medium which evaporates just as it is uttered; the thing in which we are the most uncertain has to do with that which is most certain. Our most changeable means communicates the unchangeable. Truth is distinct and different than the reality we perceive through our senses. Our senses tell us the reality of the world around us and provide the means through which we access that world, interpret it and take action, but this is not truth. Our senses give us the guarantee necessary for living in the world but they cannot give us truth. Quantifiable knowledge can provide judgments and understandings of reality but it cannot produce truth because truth and reality exist in different realms altogether. Consider what happens when we eat something that tastes good. The chemical makeup of the food can be determined scientifically through a quantitative analysis. It may even be possible in the lab to reconstruct that food from its constituent parts. But the analysis and reconstitution of that food has no effect upon the pleasure one may get from eating it. These two aspects – the scientific makeup and the enjoyment – exist in different arenas.

And just as our sight and perception of reality cannot speak to us of truth, the opposite is also the case. Truth itself cannot be certain. If truth could be quantified and expressed with exact perfection and no uncertainty, the situation for humanity would be untenable. We could not live in a world where everything would have been said, “closed up, and finished: perfect” (Ellul, 1985, p. 41). In fact, history has shown us the results when persons or groups have claimed certainty in the expression of truth. Ideologies like Nazism, Communism, and Fascism

have resulted in some of the most horrific tragedies humanity has ever experienced. Even Christianity cannot escape this claim to absolute certainty. In its claim to being “The Truth,” Ellul responds: “this word is conveyed through human language: witnesses who pass it on to other witnesses” (Ellul, 1985, pp. 41–42). Does this diminish the truth of Christianity? Not in the least. He continues, “on the contrary, in this way I respect it and recognize its special dimension and the depth and permanence that make it truth. If I claim to grasp and express it in its entirety, then it is no longer truth” (Ellul, 1985, p. 42).

Conclusion

Ellul’s work reveals to us a world dominated by the image, one which reduces humanity to a means in service to Technique. His insight into the consequences of such a world astounds by its accuracy and prescience. The problems in our world today regarding human freedom, the domination of Technique and the reduction of truth to the order of reality have consequences of which Ellul makes us keenly aware - societal ramifications which hit at the heart of the human condition. While endeavoring to better the state of humanity in the world, Technique creates unintended consequences which open up the possibility for greater human suffering, individual psychological feelings of panic and despair, and a reformation of the human being in the image of the machine. As the ancient psalmist so presciently noted regarding idols:

“Those who make them will be like them, and so will all who trust in them.” (Psalm 115:8 as cited in McLuhan, 1994)

Unfortunately, humanity has been seduced by the rhetoric of technology to the point that we seek technical solutions for the problems created by Technique. Instead of seeking to understand Ellul and liberate the word from the restrictions and limitations we have placed upon it, instead of seeking to engage in “encounter,” entering into the dialogic arena of “the between,” we

instead look to the gods of technology. The deeper issue that Ellul's work illuminates concerns the future of humanity. The underlying societal system of technology, along with its own value system and moral code reforms the human being. It distances us from one another, redefining social relation in terms of quantification, efficiency, and speed. Having seen our present condition from his own historical moment, Ellul seeks a solution couched in the dialogic metaphor of the word. He calls us back to its reprioritization, but not just for the word to replace the image, or even to assume a position of superiority over it. Ellul understands Technique, that we will never be rid of it (nor should we necessarily) because Technique itself is a distinctly human experience. The human being is a technique-seeking being – a technical animal we might say. But Ellul recognizes the different arenas of image and word, of technique and human relation and he then seeks to engage each of them according to their proper place:

“I have not...intended to claim that hearing and the word are *superior* to sight and image... [But that] in our present condition, in which we can no longer ‘see’ truth, the word is the only locus of truth for us, and we cannot dispense with truth.” (Ellul, 1985, p. 41)

From here, we must investigate how to go about this reconciliation of technique and humanity. How do we “walk the narrow ridge,” as it were? How do we embrace and live within the dialectical tension between man and machine? How do we seek truth in a world of information and find ways to free humanity from service to means. Ellul's work leads us into some potential solutions.

Chapter Six: Implications of Ellul's Dialogic Response to Technique

Introduction

The ubiquity of Technique presents unique challenges for humanity now and in the years to come, and in light of these challenges, we can look to Ellul for some direction regarding how we might address them. As we have seen, Ellul's concept of the word differentiates between two perspectives or epistemologies. One, based in image sees the world through a lens of actuality and prioritizes a Technique-driven value system of speed, efficiency, and progress. The other, based in word, presents the opposition to a world of definitude and allows for abstraction, ambiguity, and human interpretation. How do we reconcile both realities while recognizing the greater imposition of image and technology in our world today? How can we find human freedom under the domination and control of Technique? How can we live authentically as human beings in the technological society? Ellul gives us guidance by providing insight in several areas. First, his work calls us back to a recognition and reconsideration of ethics. Second, the nature and development of his thinking gives us a dialectic/dialogic hermeneutic by which to engage these oppositions. And finally, he provides three metaphors by which we can better approach our historical moment – that of craftsperson, mutant, and student. Before addressing some of the more practical areas, we first turn to scholarship which engages these questions concerning the relationship between humanity and Technique with a reconsideration of ethics.

The Ethics of Technique

In discussing the founding of the Media Ecology program at NYU, Neil Postman stated that 'from the beginning, we were a group of moralists [...] understanding how and if our media ecology was making us better or worse '(Postman, 2000, p. 11). Although Postman noted that

McLuhan believed in a morally neutral perspective, for his part, he thought there was no point in studying media unless one did it from within a moral or ethical context. Ellul himself, as we have seen, wrote extensively pointing out the humanistic and/or anti-humanistic consequences of Technique and in so doing, he calls us to consider the question of ethics within our technologies. But what do we mean when we talk about a humanistic context? As with all value judgments, people will disagree on how we might define those judgments. What is humane when it comes to the study of our media ecology? The question can have multiple answers depending upon the person asked. Take for example McLuhan and Innis – two major contributors to medial ecology scholarship. Even though McLuhan personally supported a morally neutral perspective, in attempting to understand the relationship between media and people he believed it was better for people if the media they used promoted a balance in the sensorium (McLuhan, 1994; Norden, 1969; Postman, 2000, p. 13). Here, his “neutral” perspective reflects a value-based approach, one which sees choices on a continuum moving from worse to better. Innis fully embraced an ethical hermeneutic worrying about how media create imbalances in our perceptions of space and time and how that imbalance related to military conquest (Harold A. Innis, 2008; Postman, 2000, p. 13). For his part, Postman never shied away from the ethical and moral consequences of our interaction with media and he even addressed these humanistic issues through a series of four questions: To what extent does a medium contribute to the uses and development of rational thought, to what extent does a medium contribute to the development of democratic processes, to what extent do new media give greater access to meaningful information, and to what extent to new media enhance or diminish our moral sense, our capacity for goodness (Postman, 2000, p. 13). Ethical concerns regarding humanity’s relationship with media, however, find themselves in opposition to the dictates and directives of Technique which

disregard ethics in favor of the pragmatic values of speed, efficiency, and progress. I do not want to suggest an intentional conspiracy by an elite cabal of technophiles who desire to see a technological paradise which elevates the machine as god and relegates humanity to technological servitude (Ironically, this has already started. See Mailonline, 2017), yet the trend of civilization seemingly continues to move in direction of a greater technical domination. Instead of calling it conspiracy or determinism, we might describe technology's advancement in terms of "necessity." A world where means have triumphed is a world of necessity (Christians, 2006b, p. 154) and though Ellul never carefully defined necessity, he gave a general description in *Violence*: "Necessity is definable as what man does because he cannot do otherwise" (Ellul, 1969, p. 128). Necessity provides the aim for Technique and functions as the converse of human freedom in the world, and in our current era of pervasive technology, *la technique* has become the all-encompassing feature of necessity (Christians, 2006b, p. 154). Necessity has guided the development of the technical mind (See chapter 1) resulting in Technique's dominant stronghold in society. As a result, Technique creates its own ethic and then subjects humanity to it, forcing us to adapt by the sheer power of its all-inclusion and the glorification of its apparent success. And yet, we must question this ethic because, as Ellul (1989) has shown, the ethic of Technique has resulted from an uncritical examination of the problem of ends and means. The ethic of Technique is one of utility over morality. It is one of reality over truth (Ellul, 1985, pp. 39–41). It is one of machine over human being. How might we account for the situation Ellul so clearly and presciently observed and in which we now find ourselves? If, at this current historical moment, we find Technique as the standard by which we measure good and bad, we might, in seeking to understand this dilemma, consider investigating Technique's role in the evolution of

ethical thought. After all, no conspiracy exists without a conspirator, and we might wonder exactly what part Technique itself has played in our arrival at this current destination.

Part of the issue stems from humanity's proclivity to Technique. Life itself is naturally mediated for to be human means, to an extent, to be the site of nature open to technological extensions (I rely in this section on Anton, 2010). "Man is an extension of nature that remakes the nature that makes the man" (McLuhan & Nevitt, 1972, p. 66). And while some might claim the independence of Technique as an agent in and of itself (as I seemingly did in calling it a conspirator), humanity is ultimately complicit in Technique. McLuhan's observation of media as "extensions of man" (McLuhan, 1994) made clear the human being as a "technical animal" with a predisposition for engaging in thoughts and practices which seek its own benefit found through greater efficiency, faster speed, and more progress. The rational principle (see Aristotle, 1985) in humanity has led to the development of procedures, processes, tools, and techniques which have provided great benefits to human civilization while at the same time providing the necessary conditions for the development and evolution of humanity's conception of ethics. In his introductory chapter to the edited work, *Valuation and Media Ecology* (Anton, 2010), Corey Anton presents a cogent analysis of the transitions from ethics to morality to legality based upon the evolution of technological epochs from orality to writing to print.

The idea of ethics developed within an oral culture, where human concepts of morality existed seemingly without question and where people were pre-reflectively immersed in truth-keeping practices (Thayer, 1997, p. see). In orality, morality existed in the collectively felt "ought" instead of finding expression in ethical choices based upon individual concerns. These collective morals were assumed by the group – they were in the air, passed down through oral tradition, recited in public through the narratives of epic poetry (for more on this see E. A.

Havelock, 1963) and enforced through familial and cultural tradition and pressure through ridicule, shame and/or banishment from the community. The conditions of orality – spoken words which come to people with an air of omnipresence, from a space defined as a “vast interior in the center of which a listener finds himself along with his interlocutors” (W. J. Ong & Ong, 2000, p. 164) - prevented people from thinking of themselves as objectifiable and under self-conscious control (Anton, 2010, p. 9) and thus unable to actualize the individualism necessary for a personal morality. Ethical standards in early orality were enforced by communal life – the collective standing watch over right and wrong; norms handed down through oral tradition. Additionally, the cognitive power necessary for the critical and abstract reflection to establish a philosophy of personal morality had been usurped in orality by the necessity of memory. Mnemonic capacity required noetic energy which could not be applied to imagination, exploration, and critical analytic questioning (E. Havelock, 1978; E. A. Havelock, 1963). In time, however, the technology of writing freed up the necessary noetic energy by providing a capacity for easily accessible information storage, thus providing the increased mental power needed for novelty and originality (Anton, 2010, p. 11).

The technology of writing provided a means of capturing information in a form that could be readily accessed and opened up the possibility for greater moral reflection resulting in advanced philosophical and religious doctrine. Havelock (E. A. Havelock, 1963) describes how writing made the Platonic quest for abstractions such as “the good,” “justice,” and “beauty” possible, but more importantly, the effects of the technology of writing separated the individual from the collective. Writing provided opportunity for the extended analysis and reflection of a text, thought, or idea because the individual, through writing, could enter into an internal dialogue with the author as well as engage their own thoughts on the subject of inquiry. This

interrogation of ideas which written texts allowed, freed up mental capacities previously committed to memory to ruminate upon and reconsider the ideas, dictates, and doctrines outlined in a text. As a result, the possibility for individuals to experience guilt increased because writing made possible the proof of when an individual did not measure up to a standard. Anton notes, “Most broadly stated, the development of writing signified a major shift toward the existing individual, to possible self-legislation, which implies movement away from the embedded web of collective life” (Anton, 2010, p. 11). The move from the ethic of the community to the morality of an individual comes out of the development of the technology of writing and the tectonic shift in culture from orality to chirography.

The modern concept of legality results from the context created by the inevitable advancement of chirography to print which transformed the ancient city-state to a bureaucratic entity with individual citizens subject to the laws and dictates written down and enforced by the governmental powers. And while writing ultimately created the environment which fostered greater self-reflection on subjects like morality and ethics, the printing press exponentially expanded that capability through the widespread growth of literacy. Print gave society easier access to knowledge and a greater centralized understanding of what norms would govern civil life among the citizens. With literacy, laws function as human constructions which separate the bonds between command and obedience by making commands more arbitrary, anonymous (Anton, 2010, p. 12), and less personal. Therefore what once may have been thought of as morally wrong must be reconsidered since under the legal system, the same action may not technically be considered illegal. Additionally what is legal under the law, depending upon the circumstances may or may not be morally right. Under legal systems, ethics are reconstituted in

socially constructed laws which attempt to give guidance but can never completely account for all of the nuance and ambiguity of human interaction.

A cursory examination of the evolution from ethics to morality to legality shows the influence of Technique in and throughout the process and as media ecology scholarship makes plain (E. A. Havelock, 1963 and others; Harold A. Innis, 2008; McLuhan, 1994; W. Ong, 1982; Postman, 1993), technological advancements change things, not only by introducing new inventions into the cultural milieu, but by altering our cognitive processes and reframing the way we think about some of the most important concepts of our existence. How we understand ideas of ethics, morality, and legality, like everything else, depends upon the framework which guides our thought processes, and that framework has been, to some extent, molded and directed by Technique. Ellul reminds us of the dialogic response – we encounter the contraries, oppositions, ambiguity, and conflict in a dialogic manner with the intent of understanding ethics and morality in a legal world. The word enables us to explore the mystery of truth without devaluing it into imagistic ideology. Ellul (1989) exposes Technique’s predisposition to devalue humanity and makes plain a world guided by the principles the machine. He details Technique’s limitation of human freedom and implores us to address the ethical question - whether or not our media ecology is making us better or worse.

A Dialectic Perspective

A second implication of Ellul’s concept of the word as a response to the technological society is a dialectic/dialogic hermeneutic. Ellul’s work provides a rich and contextual interrogation of the world that does not seek simplistic answers to complex problems but engages them with full knowledge of the difficulties and obstacles that a technological society presents to human freedom. In addition to an ethical hermeneutic, perhaps the most interesting and even

enlightening aspect of his scholarship is his dialectical/dialogical thinking. Dialectics can be understood both ontologically and epistemologically. In thinking of dialectics as ontology, we understand it as a view of reality containing a dynamic interplay of opposing forces, whereas dialectics as epistemology refers to a method of reasoning by which one seeks knowledge through the back and forth of opposing arguments (Baxter & Montgomery, 1996, pp. 18–19).

Regarding Ellul’s dialectical thinking, Ellul scholar, David W. Gill, states:

“If there is one characteristic which permeates every thought and every analysis rendered by Jacques Ellul, it is that his work is thoroughly dialectical. . . . Contradiction, opposition, and paradox are ever-present in anything Ellul has in view. Axiomatic-deductive, linear logic is rejected. Rationalistic “scientism”—the worship of empirically demonstrable facts (and nothing else)—is damned. Understanding, whether of Christianity or society, results from a true perception of the various antithetical factors and forces at work.” (Gill, 1984, p. 157)

For Ellul, dialectics provides more than an academic entrance into his scholarship and the problem of Technique, it also grounds a fundamental aspect of his own personal life experience. In his youth, Ellul lived in Bordeaux, France, the child of parents who grew up wealthy aristocrats but came upon financial difficulty in the years of their marriage. He recognized early on the plight of, not only his own parents, but that of the exploited longshoremen and sailors who worked out of the port of Bordeaux. While studying at the university, Ellul’s study of Marx opened his eyes and explained for him his father’s unemployment as well as the condition of the greater world. Marx allowed him to see the unseen systems that undergird societies and influence the most important aspects of life, namely, how human beings are reformed by those very systems that they have developed. In Marx, he found an explanation of *the* human

condition that resonated with his own experience but he could not reconcile Marx with the questions that arose out of his own personal experiences. He could not explain “*my* human condition, *my* mortal nature, *my* capacity to suffer or love or *my* relationship with others (italics mine)” (Ellul, 1982, p. 15). In his search to find meaningful answers to these questions, at age 22, he converted to Christianity. What he found in his faith experience provided the answers to problems which haunted his personal experience. He describes it:

“Through the Bible I was led to receive a word which was not invented or created by my intelligence and yet which I recognized as being the truth. From that, my conception of the world and of humanity was totally different.” (cited in A. Goddard, 2002)

Though his conversion to Christianity provided meaning for him personally, he began to recognize the irreconcilable differences between Marxism and Christianity - the two perspectives could not be integrated with one another - and this paradox provided a ground from which his dialectical thinking began to take shape. He explains:

“[I was] unable to eliminate Marx, unable to eliminate the biblical revelation, and unable to merge the two. It was impossible for me to put them together. My thinking can be explained by starting with this contradiction.” (Ellul, 1982, p. 16)

Marx’s dialectical thinking influenced Ellul substantially, but more so than Marx, Ellul’s dialectics primarily came out of his interaction with the work of Soren Kierkegaard. Throughout his writings, Kierkegaard constantly emphasized the dialectical relationships between the various aspects of reality: subjective and objective truth, time and eternity, God and humanity, the crowd and the individual, and many others (Van Vleet, 2014, p. 17). For Kierkegaard, dialectics served as a hermeneutic entrance into understanding both the nature of reality as well as an individual’s place within it. He recognized the fact that reality is constituted in opposing

categories of existence (faith and reason, free will and determinism, etc.) and thus required individuals to live within this constant existential tension. An example that both Kierkegaard and Ellul reference is the perspective on the human as a combination of freedom and necessity, spirit and matter, material and immaterial (Søren Kierkegaard, 1967, p. 4:250). These opposing elements coexist in a dialectical tension and represent a paradox – an apparent contradiction containing a truth. Kierkegaard’s idea of paradox makes a distinction between quantitative knowledge and qualitative knowledge. Quantitative knowledge referred to logic limited to observable and verifiable results while qualitative logic referenced a reasoning that transcended the physical reality and embraced mystery, subjectivity, and paradox as elements within human experience (Søren Kierkegaard, 1985, p. 37). It is easy to see how this perspective influenced Ellul’s critique of the scientific values within Technique – values that prioritize the empirical and devalue the humanistic – as well as his perspective on language and how quantitative knowledge (facts) based upon reality and “the image” has been valued over the more ambiguous and mysterious “qualitative” medium of language and word.

Though Ellul’s dialectical thinking shares many similarities with that of Marx and Kierkegaard, his perspective advances the concept dialogically. For Ellul, the external world (reality) is something with which humans must enter into a dialogue. Reality exists as knowable and unknowable at the same time. It is comprehensible and incomprehensible; separate from humanity and non-separate; logical and illogical; rational and irrational. Thus the opposing natures of reality are connected and at their basic structure – dialectical. As an example, if one looks at the world from the perspective of a rationalist twentieth century scientist, the world is seen as causal, linear, and orderly. On the other hand, if one views the world from the perspective of an existentialist philosopher, one sees the world as noncausal, nonlinear, and

disorderly. The world contains both perspectives, as he puts it, the “yes and the no” (Ellul, 1981, p. 293). One of the ways dialectics can best inform a perspective of reality is by seeing it as “destructive of neat systems and ordered structures, and compatible with the notion of a social universe that has neither fixity or solid boundaries” (Murphy, 1971, p. 90). Mikhail Bakhtin’s idea of dialogism can provide further insight.

Bakhtin’s dialogism represents a dialectical perspective of social interaction directly associated with language and he sheds greater light on Ellul’s perspective of the word, and the ambiguity of language and human communication. From a dialectical framework, Bakhtin’s project was a critique of theories which reduced the “unfinalizable, open, and heterogeneous nature of social life to determinate, closed, totalizing concepts ” (Baxter & Montgomery, 1996, p. 24). He additionally critiqued monologic human experience and viewed social relationships as an open dialogue which brought together multiple perspectives while maintaining the uniqueness of each. Dialogue is multivocal and in a dialectical sense, exists as a product of “a contradiction-ridden, tension-filled unity of two embattled tendencies,” the *centripetal* (i.e. the forces of unity) and the *centrifugal* (i.e. the forces of difference) (M.M. Bakhtin, 1981, p. 272). As Ellul emphasized the word as a hermeneutic entrance into human communication, Bakhtin also believed that social life happens through the interaction, the “talk” between people. Within that communicative process, Bakhtin prioritizes the “utterance” as the place where this multivocal dialectic between centripetal and centrifugal forces takes place. He states:

“Every concrete utterance of a speaking subject serves as a point where centrifugal as well as centripetal forces are brought to bear. The processes of centralization and decentralization, of unification and disunification, intersect in the utterance.” (M.M. Bakhtin, 1981, p. 272)

Bakhtin's perspective recognizes the dialogic, multivocal quality of every speech act: the dialogue of the present utterance with the distant past, the dialogue of the present utterance with the proximal past, the dialogue of the present utterance with the anticipated response of the listener, and the dialogue of the present utterance with the anticipated response of the generalized superaddressee (Baxter & Montgomery, 1996, p. 29). Ellul's recognition of the complexity in dialectic echoes the multivocal aspect of Bakhtin's dialogism, that at any given moment, multiple dialogues are taking place in an interplay – a back and forth of contradiction and opposition. Possibility includes both freedom and necessity as the essential components of reality which prevent deterministic outcomes in the future.

Understanding the evolution of Ellul's dialectical thinking and his dialectical/dialogical ontology gives us a different perspective on the reality of our technological society. Essentially, a dialectic/dialogic hermeneutic sees and reckons with the contradictory and oppositional elements we find within our culture. On one hand we recognize the benefits that Technique has brought to humanity. Advanced technologies have provided incredible opportunities, a generally better quality of life, as well as vast advancements in scientific knowledge. On the other hand, Technique has opened the doors to some more destructive elements. We might lay at the feet of Technique the atomic bomb, the gas chambers of Auschwitz, biological and chemical weapons, propaganda, and the anonymity of bureaucracy. In culture we find people desiring to connect with one another in meaningful social interactions and communicative events and at the same time using technological instruments which obstruct and prevent the meaningful and intimate relationships they seek. We recognize the importance of human freedom – that individuals possess a freedom to encounter life authentically and yet find an underlying system working in direct contradiction toward that end – turning humanity into a means which serves Technique. A

dialectic/dialogic hermeneutic suggests that both aspects are true and exist in a multivocal world full of oppositions and contradictions that find synthesis and propel humanity to change, and yet also sometimes cannot be reconciled or brought into a synthesis and must live together in a contradictory tension. It presents a world of contraries and seeks a unity in the difference. Ellul calls us to see the reality of the technological society, to recognize the system of Technique which undergirds it, to understand its complete domination of culture, and that we must live within this overarching structure. At the same time, there exists an opposition to Technique that enables us to search for and find freedom from the bondages and limitations which subjugate us. Ellul shows us the world of the image, of linear logic, of reality and efficiency and progress but at the same time he gives us the world of the word, of ambiguity, of mystery and interpretation and human meeting. He shows us a world where humanity has become a means to a means but also a world where humanity is the end. In *TS*, Ellul describes the role of Technique in the modern world, and he argued that it was a phenomenological work which aimed at presenting the negative effects of Technique as they appeared to him. And though its predominantly negative perspective can seem one-dimensional, from his dialectical understanding we recognize that Technique can never be fully understood outside of the forces of its opposition which exist in tension with it. Technique robs humanity of freedom and sets up a system of efficiency and necessity but necessity's opposition is free agency. The problem for humanity is that in a determined system, humanity's search for freedom is forced back to Technique for its fulfillment: human freedom propagates Technique while at the same time limiting itself to the realm of necessity (Ellul, 1981, pp. 26–42). In his book *Hope in Time of Abandonment* (Ellul, 1973a). Ellul presents the idea of hope as the dialectical link between the “closed” realm of Technique and the “open” realm of the transcendent. Hope is not an emotion, but serves as a

living reality which should be embraced and lived out. A dialectic/dialogic perspective helps us to see both truths existing in a chain of tension but at the same time recognizing the link of hope – a lived reality, a “new style of life,” and a new form of communication between human beings (Ellul, 1989, p. 118). In addition to ethics, a dialectic/dialogic hermeneutic gives new perspective to the human condition in the technological society. But perspective is not enough. Freedom requires action and Ellul calls us to this action through three metaphors: the craftsperson, the mutant, and the student.

The Craftsperson

In looking at Technique with a reconsideration of ethics and through a dialectic/dialogic lens, we see another side – an opposition to the system of Technique which presents hope as a lived reality. But we must take the next step and examine what a new style of life looks like and how we might implement or consider a new form of communication between human beings. The first entrance into this questions comes through the metaphor of craftsperson or artisan. One distinctive of Technique is that it subsumes humanity into its machine-ness. As mentioned in another chapter (4), Technique makes humanity a means to a means and in so doing, transforms humanity into its own image. Marx (1867) critiqued the capitalist system for its exploitation of lower class laborers by higher class capitalists who traded capital for labor in order to gain more capital. Marx recognized within the industrial machine the disparity among classes and believed that oppression would eventually lead to a revolution, an overthrow of the ruling capitalists which would result in a new socialist system. The totality of Marx’s critique will not be addressed here, but what he does reveal is how a technical system transforms humanity into means. The industrial system functioned as a technical marvel built upon the values inherent in Technique. In his work *The Principles of Scientific Management* (Taylor, 1911), Frederick

Taylor set out to accomplish three purposes: (1) to point out the great loss that the country was suffering due to inefficiency in daily acts, (2) to convince the reader that the remedy for inefficiency is in systematic management rather than the search for an extraordinary man, and (3) to prove that the best management is a true science resting on clear laws, rules and principles as a foundation. Taylor's scientific management served as a technical process designed to discover through observation the most efficient procedure for every task. This included the rules for each motion completed by a laborer, the perfection and standardization of the tools and working conditions, the deconstruction of the task into its component parts and even the selection of the best laborer for each job. Taylor recognized inefficiency as the greatest hindrance to production and profit and set out to not only create the most efficient process for production but to secure the maximum prosperity for each employee. Though he believed that improved "technique" would serve to benefit the employee and improve his/her quality of life, ultimately he developed a system whereby employees became little more than parts of the machine. Additionally, Max Weber's theory of bureaucracy (Weber, 1978; Weber & Henderson, 2012; and Weber & Tawney, 2003) outlined six characteristics that contributed to the ideal organization: (1) task specialization, (2) hierarchical authority structure, (3) formal employee selection, (4) rules and requirements for uniformity, (5) impersonal relationships between employees, and (6) a career orientation inherent in employees. All of these factors contributed to the depersonalization of the worker in relationship to the organization. Against this systematic dehumanization which makes laborers into component parts stands the metaphor of the craftsperson or artisan. Ellul mentioned the tension between Technique and human freedom and the necessity for human beings embedded in a technological society to seek freedom by turning to Technique. We become what we create (see McLuhan, 1994) and the social construction of our mode of being in

Technique prevents us from escaping the environment to which we have become so accustomed. However, we can actively oppose this tendency of “becoming like unto them” (See the explication of Psalm 119 in McLuhan, 1994, p. 45) by thinking and engaging in craftsmanship.

Ellul says, “While crowds of people adopt all the technological developments, we can act only on individual levels. Hence, this is a true artisan’s work (Ellul, 2004, p. 82). A craftsperson or artisan functions as an individual instead of a part within a larger collective, and craftsmanship differs from skilled manual labor by valuing a basic enduring human principle, the desire to do a job well for its own sake. Craftsmanship exposes Technique as a totalitarian system which places all value on the collective at the expense of the individual. In the Greek myth of Pandora, Hesiod describes her in *Works and Days* (Hesiod, 1993) as the “bitter gift of all the gods,” a goddess of invention sent to earth by Zeus as punishment for Prometheus’s transgression who, when she opened her box of new wonders, “scattered pains and evils among men” (See “The Making of Pandora,” in Warner, 1996, pp. 214–219). Greek culture came to believe that Pandora stood for elements of their own natures, but culture founded on man-made objects risks continual self-harm (Sennett, 2009, p. 2). Hesiod reveals the dangers of Technique and the consequences of opening up a box without a consideration of the potential consequences. But that box has already been opened and we now seek ways to stand against the seemingly deterministic forces that Technique employs against us. The craftsperson, as an antithesis to Technique utilizes dimensions of skill, commitment, and judgment in contrast to the mechanical technical process and in a way that focuses on the connection between hand and head. “Every good craftsman conducts a dialogue between concrete practices and thinking; this dialogue evolves into sustaining habits, and these habits establish a rhythm between problem solving and problem finding” (Sennett, 2009, p. 9). Technique prevents this type of connection between

hand and head focusing rather on a thoughtless processes of efficient production. Note the distinction typical of “work” in the Technological society:

“Never before has the human race as a whole had to exert such efforts in its daily labors as it does today as a result of its absorption into the monstrous technical mechanism...The tempo of man’s work is not the traditional, ancestral tempo, nor is its aim the handiwork which man produced with pride, the handiwork in which he contemplated and recognized himself...how today’s work is less fatiguing and of shorter duration, on the one hand, but, on the other, is an aimless, useless, and callous business, tied to a clock, an absurdity profoundly felt and resented by the worker whose labor no longer has anything in common with what was once traditionally called work...[Today’s work] calls for different qualities in man. It implies in him an absence, whereas previously it implied a presence. This absence is active, critical, efficient; it engages the whole man and supposes that he is subordinated to its necessity and created for its ends.”
(Ellul, 2004, p. 86)

Craftsmanship, on the other hand, presents a metaphor which brings us back to a consideration of what we do when we act in this world. It calls us to thoughtful action as opposed to mindless repetition and begins as a bodily process of skill development and a mental act which includes imagination. The idea of imagination starts in language which shows creatively how to do something in an attempt to guide and direct bodily skill (Sennett, 2009, p. 10). The word guides the imagination and provides the freedom and openness to explore possibility which opposes in dialectical tension the necessity found in Technique. Ellul’s metaphor of the word and commitment to the liberation of language forms a ground for craftsmanship as a dialogic response to the idea of the technician. Indeed, the phenomenological embodiment found in

craftsmanship, in the head and hand connection, has been lost in Technique. Of course the technical process often requires physical “hand” processes but the technical process is designed to take “the head” out of it, standardizing action and eliminating human choice and value judgment. The craftsperson, on the contrary, presents thoughtful human action – praxis – as an inoculation against the technological society.

How, then, can we assume the role of craftsperson in the technological society? First, we must attend to the amount of technological mediation that we allow ourselves. Craftsmanship engenders the idea of an intentional, thoughtful, directedness not only to the object of our attention, but to the process of its creation. When we engage in craftsmanship we find value in the process by which we reach the end rather than simply in the end itself. Technological mediation replaces the process with a “black box” – something we do not always understand – which allows us to reach the end faster and easier. The telegraph, telephone, television, computer all employ technologies we do not fully comprehend to achieve our ends more efficiently. Mediation always values destination over process, a perspective which discounts the importance of the work itself. In her work, *The Human Condition* (Arendt, 1958), Hannah Arendt makes an important distinction between labor and work. Labor was “enslavement by necessity” in the inherent conditions of human life, whereas work leaves behind an artifact and is inherently public – creating an objective and common world which stands between human beings and unites them together. Work took labor out of the household necessity and made it into a significant value for humanity. In his/her activity as worker, Arendt names the human being *homo faber* – the builder, architect, craftsperson, and artist which creates and constructs the public world. Arendt’s critique of modernity addresses a world created by *homo faber* threatened with extinction due to the rise of *animal laborans* – those emboldened by technology

who favor the values of life, productivity, and abundance instead of permanence, stability, and durability. In technological mediation, we lose sight of the distinction between work and labor because Technique refuses to make a distinction. Technique addresses each with the same question – how can it be accomplished faster and more efficiently - and when we choose to employ mediation, we can easily lose sight of that distinction as well. Choosing when to use mediation and when to refrain enables us to reconsider in each activity the value of the work itself. It allows us to find value in the process instead of just seeking to arrive at the destination.

Secondly, we must give more attention to the creative aspects of human life.

Craftsmanship is defined by creativity. As Arendt noted, *homo faber* is a creative being which builds walls, both physical and cultural, to divide the distinctly human realm from that of nature and provide a context in which meaningful human life can unfold (Arendt, 1958, pp. 136–173). Art, music, design, aesthetics, and creativity all give meaning to life and provide a distinctive between the instinctual world of animals and the higher order of human activity. The ability to create involves imagination and abstract thought. The creative process forces us to think outside of Technique and concern ourselves with something more than utility. When we practice a musical instrument, paint a landscape, or build a table, we engage life on our own terms and refuse to be directed by the values of Technique. We can create for no other reason than to create. We can build for no other reason than to engage in the process. Creativity functions as a mysterious process below the surface of consciousness and beyond the aspect of utility and when we engage it in any form, we allow ourselves the opportunity to escape from the busyness and necessity of the technological world in which we live. The role of craftsperson allows a dialogic perspective of Technique and enables us to live life outside of its domination and tyranny.

The Mutant

In addition to the metaphor of craftsman, Ellul presents the idea of mutant. Typical ideas conjured up at the mention of that phrase revolve around grotesque creatures ostracized by society due to genetic mutation which have indisputably established their difference from normal human existence. Television and movies have expanded upon this caricature to establish mutants as antiheroes who, through their mutation have achieved special powers which set them above humanity. Marvel's X-MEN franchise tells stories of individuals who, by nature of their genetic mutation, have been granted special powers – telekinesis, the ability to fly, the ability to manipulate and control metal, the ability to teleport, and many others – yet face social pressure and exclusion from society. These “mutants” are required to keep their powers a secret so as not to bring upon themselves the rejection and wrath of a society who fears their power and worries about the potential danger of mutants who hold the power of life and death. In the X-MEN, one continual narrative theme revolves around the “otherness” of the mutant. The mutant is not like the rest of us and, therefore, necessarily “other.” It is a commentary both on how society views the other and the dialectic between inclusion and exclusion. Accordingly, a mutant must accept its otherness, the authenticity of its being, and find a way to remain true to its own nature, living within a culture that sees it as different. Naturally, this narrative confronts the idea of racism as well as addressing the tension between the desire to conform vs. the desire to remain authentic. In one of the movies, the “normal” humans create a mutant antidote which allows mutants to cure the X gene responsible for their mutation. The story revolves around the tension between mutants who want to be “normal” and accepted by society, those who want to remain authentic and true to their own being, and a power structure who, for reasons of control, want to inoculate them all. The stories of X-MEN and mutant beings have been around since first appearing in

comic books in 1963. It is not clear if Ellul had these narratives and characters in mind when doing his research though it may not be out of the question to assume his general familiarity with the stories. Nevertheless, in addressing how one should respond to the technical world, he chooses to use the metaphor:

“To use big words, confronted with the technological phenomenon and the new milieu we live in, we must have ‘mutants.’ Not the mutants of science fiction – the technological human being with a robot’s brain – but quite the opposite. To be a mutant a person needs to become someone who can use the technologies and at the same time not be used by, assimilated by, or subordinated to them.” (Ellul, 2004, p. 82)

Similar to the antihero narrative, Ellul suggests becoming “other” to the inclusion of Technique. He calls for people who will embrace a superpower of sorts - one which stands above the technical power structure - and know how to use it and operate within it without being used by it. The mutant as antihero fully understands its power and accepts the responsibility that goes along with it. In X-MEN, there exists a conflict between “good” and “bad” mutants. The “good” mutants recognize the power they hold along with its responsibility, and seek to exist in a dialogic relationship with the rest of humanity. They seek to do good for the human race even while recognizing their rejection from normative culture. At the same time, “bad” mutants realize their peril in a culture seeking to eliminate them and attempt to take power over humanity in their desire to protect their existence. In a sense, there exists two sets of tension – that between mutants and normative human culture, and that between two mutant factions with differing perspectives on their roles: the responsibility they have considering their powers, and their perspectives of power and control. To turn the narrative back to Ellul, we face similar tensions. Normative human culture is encapsulated in Technique. Ellul calls for the mutant –

the antihero to stand outside of and above this system – to know it, to use it, and to employ it with an awareness of its existence as a system of domination. The mutant also exists within another tension – one with “like-minded” mutants who seek to destroy the system for the purpose of gaining control back and making the world as they would have it.

In the early 19th Century, a group of textile workers and weavers began to recognize the technological invasion into their livelihood. The invention of automated textile equipment threatened to replace these skilled workers with cheaper and less skilled alternatives. This threat to their jobs prompted protests which, outside of any formal union or organization, resulted in members of the group destroying the machinery threatening their employment and income. The Luddite protest concerned the circumventing of fair and standard labor practices but in destroying the machines, they were painted as individuals hostile to technology and progress. Interestingly enough, this group recognized what the introduction of new technologies meant for their future earning potential and their ability to provide for their families, and they decided to take action against a system which sought to dominate, subordinate, and oppress them. Similar protests happen all the time – unions which bully independent contractors who can “low ball” construction bids and, most recently, taxi drivers and hotels who are losing business to technological giants Uber and Airbnb. Yet the narrative around Luddites as hostile to technology, though most likely a false narrative, points to someone who cannot live above the system. Ellul points out:

“I know that it has in fact happened that when historical societies organized, small groups of sometimes individual people absolutely refused, saying ‘We want to keep living like monkeys in the forest.’ Of course they could do so, rejecting the development of society.

But this was no solution. Those who continued living in the forest became extinct.”

(Ellul, 2004, p. 83)

We cannot go back to a pre-technological society and I do not believe we would want to even if we could. We must, however, concern ourselves with the possibilities and challenges of living within the current technological culture. In *Technopoly*, Postman echoes a similar perspective in offering the idea of a “loving resistance fighter.” One which:

“understands that technology must never be accepted as part of the natural order of things, that ever technology – from an IQ test to an automobile to a television set to a computer – is a product of a particular economic and political context and carries with it a program, an agenda, and a philosophy that may or may not be life-enhancing and that therefore require scrutiny, criticism, and control. In short, a technological resistance fighter maintains an epistemological and psychic distance from any technology, so that it always appears somewhat strange, never inevitable, never natural.” (Postman, 1993, pp. 184–185)

The mutant role is inherently dialectic – offering an opposition to the all-encompassing system of Technique - while at the same time dialogic – entering into a conversation with culture to determine the way forward. As a mutant, one employs the superpowers of recognizing Technique in all its facets and learning to live thoughtfully within the system and, at the same time, avoiding the constant pressure to conform to it.

So how does one live as a mutant in the technological society? First, I think to live as a mutant we must adopt a critical perspective of Technique. When I say critical, I do not mean antithetical. A critical perspective does not mean that we should unilaterally discount all new technologies, become technophobes, or employ the strategies of the Luddites. Living as a

mutant means living with Technique, yet not being consumed by it. Admittedly, in a technological society, this might be impossible but the potential impossibility of our situation should not preclude us from attempts at mutant living, as difficult as they may seem. In this case, the cliché applies – good things never come easy. A critical approach toward Technique attempts to “understand the relations among power, language, social/cultural practices, and the treatment and/or suppression of important conflicts as they relate to the production of individual identities, social knowledge, and social and organizational decision making” (Deetz, 2004, p. 85). We must understand Technique as an underlying system within our society that directs the current of human history. We must ask questions of Technique that determine to unmask power structures and socio-cultural practices which contribute to social division, inequality, and partisanship. Technology functions to both give and to take away, and as Postman and Innis (Harold A. Innis, 2008; See Postman, 1993, pp. 10–11 and) both recognized, new technological developments have consequences. With each new technology, there are winners and losers. And as has always been the case, the winners utilize any and all means to convince the losers that they are actually winning. We must investigate to whom the technology will give greater power and freedom and at the same time, whose power and freedom will be reduced by it? We must not accept without reflection and attention the rhetoric of technology which claims untold benefits without significant consequence. We must approach Technique with a wary eye, because Technique always shows its value but rarely reveals its dark side. We must question numbers and statistics given as proof without understanding the questions which prompted those numbers. We must not fail to recognize the difference between information and understanding. We must question jargon which can be used to distract us from real consequences. We must recognize the values of technology but not be lulled into thinking that technological

developments represent the highest possible form of human achievement (Postman, 1993, p. 184). We must realize and accept that some of the biggest difficulties we face as human beings in the world, the challenges of the human condition, will never be solved through technology. We must not accept Technique uncritically.

Second, we must be intentional in our engagement with technology. This intentionality requires thoughtful practice which understands the benefits as well as the consequences. The drive for the implementation of new technologies without careful consideration of the consequences is ubiquitous in our culture. The recent example of the mishandling and leaking of user data by Facebook serves as a wakeup call to mutants (Kharpal, 2018). As with any corporation, Technique guides and functions as the underlying value to the detriment of everything else. To believe that corporations hold to ethical standards when it comes to users vs. profits is to sink into a dangerous naiveté and believe in the inherent goodness of people against the overwhelming power of Technique. A recent internal memo by one of Facebook's longest serving executives illustrates the point:

“We connect people. That can be good if they make it positive. Maybe someone finds love. Maybe it even saves the life of someone on the brink of suicide. So we connect more people. That can be bad if they make it negative. Maybe it costs a life by exposing someone to bullies. Maybe someone dies in a terrorist attack coordinated on our tools [...] We connect people. Period. That's why all the work we do in growth is justified. All the questionable contact importing practices. All the subtle language that helps people stay searchable by friends. All of the work we do to bring more communication in. The work we will likely have to do in China some day. All of it.” (Lovejoy, 2018)

We can no longer assume the integrity and ethics of technology companies and must realize that these technologies use us as the primary mode of their existence. And that realization must propel us to proactively employ technologies to our own ends instead of allowing ourselves to become subject to the ends of the technology. We must strive to find ways to enter a dialogic relationship with Technique as mutants who live within the technological system and use the technologies inherent within it, yet refuse to be used and dominated by it.

The Student

The final metaphor that gives us insight into a dialogic response to Technique is the idea of student. Education has always served dialectically to move culture forward. Knowledge is powerful. As Voltaire once said in a letter, “To hold a pen is to be at war” (Voltaire, 1748) The intimation is that knowledge is dangerous. History is rife with examples – Darwinian Theory, the Protestant Revolution, the Enlightenment, Galileo, and the Scientific Revolution. In each case, education resulted in a revolution that transformed the world. A revolutions, however, that was not without its costs. In Galileo’s case, his invention of the telescope and observation that the earth was round and not flat called into question, not only the current epistemology, but leveled charges which upset the current hierarchical power structure. He was put in jail by the Catholic Church for heresy. Education upsets the monopolies of knowledge which derive their power from traditional understandings. Addressing a response to Technique, Ellul notes the importance of education:

“This implies a development of the intellect and a development of consciousness which can come about only for individual, but it is the only development possible. This leads, obviously to the problem of educating children.” (Ellul, 2004, p. 83)

When we consider a curriculum for education in the Technological Society, it must be a dialectic/dialogic endeavor. On one hand, we must recognize the fact that our children and grandchildren will be living in this system of Technique and we cannot allow ourselves to believe that we could, even if we would so desire, keep them from having contact with it. We cannot go back to the 19th Century. Today's digital natives will never experience a world outside of Technopoly. It is the constant and will remain so. Yet at the same time, we cannot hope for them to be pure "technical experts, making them so well fit for the technological society that they are totally devoid of what has until now been considered human" (Ellul, 2004, p. 83) We must educate dialectically/dialogically.

What do I mean by this? To educate from dialectic means that we understand the tension of living *within* Technique but at the same time living *against* Technique. We teach our children whatever is necessary to live in this system and, at the same time, to develop the critical thinking skills necessary to recognize the system they must live within. To re-invoke the metaphor, we must teach our children to study the water in their own fishbowl. Additionally, Postman (See 1993, pp. 187–189) suggests coherence in the educational process. One of the psychologically destructive aspects of education in this world is the lack of awareness and the sense of being lost and overwhelmed in a vast ocean of information. In such a state, nothing makes sense. In the late 20th Century, the effort was made in the educational system to connect all classrooms to the internet so that students could have access to more information. And the internet has provided just that all the information in the world at our fingertips. But who can grasp it all? The human brain is incapable of it so we turn to the technological savior to make sense of it for us. Google gives us the answers we are looking for based on computer algorithms which make the decisions about what information we get when we inquire. This "technological solution" only masks the

problem. Postman's suggestion is an educational process that includes things such as virtue, a sense of purpose, meaning, and connectedness. Even potential metanarratives such as learning for the glory of God or the love of country can serve as unifying educational principles. Possibly even themes such as emotional health or a quest for the "real self" (Postman, 1993, pp. 186–187). Not that any one of these is necessarily correct or even realistic, and it is not my intention here to outline a curriculum, but mainly to illustrate the point that education should reflect some overall sense of purpose, coherence, and structure which addresses the problems of the technological culture and provides the intellectual training that can give students the critical thinking skills necessary for living dialectically.

One other potential avenue is a dialogic philosophy of education. Ellul's metaphor of the word and his emphasis on the liberation of language as dialectical opposition to the culture of image calls us to reconsider a dialogic hermeneutic entrance to education. In *Pedagogy of the Oppressed* (Freire, 2000), Paulo Freire establishes dialogue as a central to his idea of an interpersonal pedagogy. He connects the idea of dialogue to "reflection" and "action" with a recognition that through praxis, dialogue can transform the world (Freire, 2000, p. 75). Dialogue in education liberates the individual from the oppression of society. In his historical moment, Freire showed how dialogue could liberate people by fighting for the literacy of the oppressed people through an interpersonal pedagogy. He showed how to uphold the dignity of the human being in the face of oppression by engaging in a dialogic learning process. Dialogue necessitates a love for the other person, a humility to learn from them, and a belief that the co-constituted dialogue can shape the world (Arnett & Arneson, 1999, p. 185). Additionally Freire's position resonates with Ellul's dialectic link of hope:

“[D]ialogue [cannot] exist without hope. Hope is rooted in men’s [or women’s] incompleteness, from which they move out in constant search – a search which can be carried out only in communion with other men [or women]. Hopelessness is a form of silence, of denying the world and fleeing from it. The dehumanization resulting from unjust order is not a cause for despair but for hope, leading to the incessant pursuit of the humanity denied by injustice.” (Freire as quoted in Arnett & Arneson, 1999, p. 185)

A dialogic education can provide coherence, meaning, and a solid ground upon which students can stand in an avalanche of meaninglessness.

Additionally, education must not succumb to the values of Technique and should attend to history and the humanities to provide guidance and wisdom for students. As has been stated many times, “those who cannot remember the past are condemned to repeat it” (Santayana, 1980). For some, it is a revelation to say that every subject has a history – a past, present, and future in the development of knowledge within that subject. This history applies to biology, physics, mathematics, literature, and art as much as it does to social studies. To teach a subject without reference to the history of that subject – what we once knew about it, what we thought we knew about it, what we know about it today, and the fact that we will know more about it in the future, that our knowledge of that subject though vast, is and will always be, incomplete – is to reduce that subject to a commodity (Postman, 1993, p. 189) and works to create an elitist perspective in the mind of the student – the idea that their “current” knowledge is the best. To teach every subject as history creates a different epistemology – one that recognizes the evolution and development of knowledge rather than its finality. One that recognizes interpretation – that there is not *one* history, but *histories*, human interpretations that give multiple perspectives and multiple answers depending upon the questions asked. Second, we

must also not fail to teach the humanities. Obviously in a technological society, the STEM programs will be most valued. This suggestion does not mean that education should neglect STEM in favor of the humanities but that we should recognize the differences and values of each, and give each their due. An education which fails to address the humanities fails to account for the corpus of human knowledge especially concerning our interpersonal relations. Interestingly enough, some major tech gurus have recently recognized the importance of the humanities in education (“Google finds STEM skills aren’t the most important skills,” 2018; Jackson, n.d.) in thinking about the technological future of employment and the training which will be most beneficial for employees. We should remember the work of Cicero (1942), Quintilian (2002), Augustine (2009), and many others – to understand that we stand on the shoulders of those who have gone before us and that the world, though guided by scientific principles, is also constructed of human interpretation to which the humanities can give insight. Finally, education systems should endeavor to make technology itself - as a philosophical system – a focus of inquiry. In order to live as a student in the technological society, we must engage in a dialogue with Technique itself. We must endeavor to understand it – its underlying philosophical dictums, its effects upon human cognition and psychology, and the methods and modes of its operation and incorporation into human culture and society. Any education which fails to investigate Technique condemns humanity to the consequences of the machine.

Conclusion

In conclusion, we harken back to where we started. How does Ellul’s work enable us to respond to the technological society? First, he directs us to a dialogic relationship with ethics. The problem of our culture concerns a misguided perspective on ends and means due to the societal infestation of Technique. Ellul highlights the value of human freedom which has been

subjugated in the technological society. He helps us to reconsider whether our media ecology is making us better or worse. Second, Ellul presents us with a dialectic/dialogic hermeneutic into this problem. We see through his eyes the inevitability of the oppositions that exist and how we engage in the unity of these contraries. He enables us to enter into a dialogue with these contraries, to seek understanding rather than mandate, and to understand that life means wrestling and living within the tension. Finally, he gives us three dialogic metaphors for action that can help us to live authentically within this technical culture. The craftsperson shows us how to differentiate the process from the destination and to concern ourselves with good work instead of seeing everything as labor to be reduced through mediation. The mutant gives us a perspective on how to use technology but not be used by technology – to see Technique critically and to employ it intentionally. The student enables us to recognize the value in education – to understand the importance of the historicity of subjects, to see the relevance of the humanities, and to reframe the philosophy of technology as a focus of inquiry. Though we engage the technological world and perceive the ever-present, all-encompassing, dominating nature of Technique, Ellul gives us hope. Hope that we can live transcendentally within this system and still find the freedom we ultimately seek.

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