A WEAPON OF TECHNOLOGY: HOW THE INTERNET HAS CHANGED THE CONFLICT LANDSCAPE IN THE AGE OF INSTANT INFORMATION

by

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A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at George Mason University, and the degree of Master of Arts at the University of Malta.

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Dedication

I would like to dedicate this thesis to my grandmother, LaRue Scalese. I promised that I would. Thank you for always reminding me I can do it. I love you, Gram.

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I would like to acknowledge and thank my family for being supportive through my academic endeavors, especially my most recent adventure in Malta. My Mom and Dad always made sure I was keeping up with my work and they never let me lose focus on my goals of finishing this project. I want to acknowledge my little brother Casey, thank you for embodying determination and achievement and constantly reminding me there is always more to be done. To Jessica, my best friend and proverbial trench-partner, I honestly could not have done any of this without you. Thank you for listening to me even when I made no sense. To the MEDAC and S-CAR faculty, thank you for investing your time and energy in this program to create a truly unique academic experience. Lastly, I would like to acknowledge Dr. Jamie Price and thank you for your expertise and wisdom regarding the material in this thesis and for your evident passion and interest in understanding my thesis topic from the start. When everyone else looked at me with worry, you looked at me with enthusiasm.

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Abstract

A WEAPON OF TECHNOLOGY: HOW THE INTERNET HAS CHANGED THE CONFLICT LANDSCAPE IN THE AGE OF INSTANT INFORMATION

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This thesis aims to answer the following question: How has the Internet and auxiliary technologies influenced the decision-making processes of human beings in conflict settings? Through research and analysis of related literature, this thesis examines the current discourse on the Internet and it's affects on the human mind, human interaction, and societal influences and builds on the framework of Bernard Lonergan and Cheryl Picard's Insight Approach to conflict analysis and resolution. There are also two case studies that serve as a basis for analysis of human decision-making in conflict settings and also the influence information technologies have on that process. This thesis serves to augment the conflict analysis and resolution theory and practice by introducing technology as a common pillar for understanding conflicts in the age of instant information.

Introduction

This thesis aims to deepen the understanding of the root causes of conflict in the modern world by augmenting common theory and practice in the conflict resolution field by understanding the role information technology plays on the stage of human interaction. The School for Conflict Analysis and Resolution (S-CAR) defines itself as a "trans-disciplinary" academic body ("Who We Are"). In contrast to a "multi-disciplinary" field, S-CAR fluidly adapts and modifies it's practice and theory to meet the fluctuating expectations of the world within which it exists. Understanding human rights, basic human needs, several forms of dispute resolution including mediation and facilitation, culture, religion, identity, governments, international diplomacy, and human security is purely the crust of conflict analysis and resolution. It seems as though a detailed picture could be painted by pulling details from each category mentioned to analyze contemporary and protracted conflicts regardless of whom or what is involved. However, in modern society, especially in industrialized nations, another critical piece of that picture would be undoubtedly left out. There are many assumptions that this thesis will hold to be true for the purposes of this study. One of those assumptions is that human beings use their brains to make decisions and to understand the world. Another assumption is that in order for human interaction to occur, people must decide to communicate with one another. The medium that humans use to communicate has

undergone several extreme shifts over the past one hundred years. There are those who argue that the medium remains irrelevant to information sharing, and those who argue that the medium is largely important regarding the reception of information. In order to fully understand the spectrum of conflict and the reasons people engage in them, an additional category must be analyzed. The field of conflict analysis and resolution, along with human security, must begin to understand how information and communication technologies like the Internet and cellphones influence human decision-making processes.

Technology has played a massive role in the intensification in human interaction since the appearance of the spear. Conflict exists where and without fail when humans interact for a multitude of reasons (i.e. culture, identity, religion etc.). The ideas and findings this thesis present are going to bring technology to the forefront of the discussion, supplementing common practice in the conflict resolution field that currently brings emphasis on the individual. There are many problems that occur when discussing the medium or channel for information and not the sender or the receiver. Most of said problems occur due to the perception that the medium cannot be changed and is seen as stagnant and concrete, thus placing the blame and or glory on the human subject. However, technology – the medium for information sharing since the advent of the alphabet – has evolved and changed at an unprecedented rate. Evidence of the advances can be seen throughout the history of modern civilization with a simple look at the progression of how humans engage in the theater of war. However, technology becomes increasingly evident, and a cause for discussion when analyzing human interactions and

conflict over the past ten to fifteen years with the introduction of the Internet and auxiliary technologies which share an analogous goal – the distribution of information.

At the foundation of human interaction, we must assume that humans *decide* to relate to one another. Humans also interact with the physical world. The ways in which humans interact with the physical world can be explained with science or, in other words how humans describe physical attributes of the world in ways the objects that exist within it relate to each other. For example, how rainfall affects the growth of forests. The ways that humans interact with the physical world can be categorized in the knowledge of common sense. The study of the differences between what constitutes common sense across cultures within society is astutely termed social science. The reason that conflict analysis is an amalgam of a variety of said social sciences is because conflicts begin from a mixture of causes that churn within or between cultures for significant periods of time. Obviously there can be many definitions of conflict, and a conflict can be seen as a catalyst for change, a buffer against change, or a substance for a societal, personal, or global shift in perception. Yet, at the foundation, the decisions humans make influence all of them. Humans tend to be practical when making decisions. Whether they make decisions about what to eat for breakfast, or where to send an MGM-140 Army tactical missile, the process through which the person follows to arrive at said decisions can be assumed to be the same.

The particular aim and focus of this thesis will be to answer questions concerning the permanently forged, contemporary relationships between humans and technology and how said contemporary technology affects how humans perceive conflict through the

decisions they make. How has the development of the Internet and similar technologies affected the human decision making process in conflict settings? How is bias linked together with how humans perceive conflicts? Do particular technologies aid or diminish the conflict resolution processes? Can the Internet aid in conflict management? The plan for this thesis is to conduct an analysis on a selection of social science and technological studies. Gathering information based on human's involvement and integration with technology at a household or personal level is not difficult. Gathering relevant data within that set to properly argue for an augmentation of conflict resolution practice and conflict management is reasonable, but only when the data is meshed together and unified. That is going to be the main challenge throughout this thesis. The meshing of data, backing these ideas with Lonergan's philosophy, and interpreting real events, and bringing the three ideas and different sets of data together is going to be the main goal. It is not accurate to assume that technology is the cause for all the world's problems in the 21st century. There are truly inexplicable events and atrocities that occur on an unvarying basis. Technology has increased human's awareness of said events, however technology cannot help explain, defuse, or support the causes for them all. This thesis will attempt to answer key questions in correlating technology into the analysis, resolution and management of conflict.

The meanings of a number of technical terms need to be defined at the outset. These include conflict, conflict landscape, information technology, and culture. The terms will be outlined, described, and given a context for operation in relation to this thesis research.

It is necessary to define what form and function the term *conflict* will take for the purposes of this thesis. Due to the fact that all other terms will operate within the field of conflict studies, conflict will thus be defined as, "…when people perceive an actual or perceived threat to their desires, disruptions of their expected patterns of co-operation, and/or value based judgments of decline. These experiences of threat drive the intensity or tenacity with which parties in conflict maintain a position or seek to overcome or defeat the other" (Sargent, Picard, Jull, p. 4). A conflict can be seen as a catalyst for change, a buffer against change, or a substance for a societal, personal, or global shift in perception. The notion of perception begs the question "Can there be conflict if only one party is conscious of said disagreement?" and the answer is yes, however two or more parties are still necessary for change to occur, thus are able to resolve the issues that materialized or were latent therefore causing the conflict.

This thesis is a study of reality, technology, social interaction, and decision-making. As conflict studies is a trans-disciplinary field that includes many social sciences, this thesis will be analyzing social interaction and the affects technology has changed and made different the culture that exists today. *Culture* will be defined with the help of Kevin Avruch and his addition to Sandra Cheldelin's book *Conflict: From Analysis to Intervention* in chapter 8 titled "Culture". Avruch takes a definition from a social psychologist, Shalom Schwartz, who defines *culture* as "consisting of the derivatives of experience, more or less organized, learned or created by individuals of a population, including those images or encodements and their interpretations (meanings) transmitted from past generations, from contemporaries, or formed by individuals

themselves" (Cheldelin, p. 142). Avruch uses the direct quote from Schwartz but goes on further to explain culture as a meshing or fabric that is loomed constantly, being fed by individual agency, the contemporary environment of experience, and lastly by past generations' influence. This vertical and horizontal interweaving of culture will be crucial in giving perspective for the contemporaneous discussions of technology shaping humans' social interactions.

Another term to be defined is *technology* and how such a broad and masking concept can be relevant in answering the research questions for this thesis. The definition that will allow this research to operate though is quite simple. The term must operate within a definition referring to information and communication technologies. *Technology* can be defined as *any medium or channel used as a vehicle to supply human beings with information*. This can include, but is not exclusive to, cellular phones, personal computers, iPods, the Internet, television, radio, or written text in books. The environment in which this technology operates will be of importance given the embrace society has had for technology over the past twenty years. The age of instant information will be used to describe said era and consists of technologies that provide humans with information at unprecedented speed, with unique variety, without restraint, and most importantly the capacity of that technology to *receive* and *distribute* new information back across those channels for others to interact with, as well. It is important to note, that information technologies like those listed, act as extensions of the human being. They provide humans with information and allow the restrictions of time and space to be lifted

in order to allow humans to receive and distribute information. The technology itself is not generating nor distributing information on it's own.

Another important term to come to understand for the purposes of this thesis is the *conflict landscape*. Since technology was to be defined as operating within a particular time in history, so too must the *conflict landscape* be discussed. The term *conflict landscape* will be defined as *the arena in which all interpersonal and community-based conflicts exist particularly focusing on how individuals interact with one another within each arena.* This study will grossly focus on interpersonal interactions, giving opportunities for discussion on community-based interactions as well. For the purposes of this thesis it is necessary to define this term because, while any and all conflicts are situational and exclusively dealt with as such, there must be a way to postulate said group collectively regardless of individual issues relating to each specific conflict. The term will act as a reference to the body of conflicts concerning the individual at both the interpersonal and organizational levels of conflict analysis. It would be a gross generalization to arrive at conclusions based on analyzing one or two interpersonal conflicts, however referring to the conflict landscape as a collective of interpersonal and organizational conflicts grants the ability to provide discourse around said collective. The term will be used as a rally point for discussion, not for conclusive arguments.

It is necessary to understand what specific decision-making operation is being referred to for the purposes of this thesis. Bernard Lonergan, in his work titled *Insight: A Study of Human Understanding*, outlines an unambiguous process providing an objectified framework in order for something to change i.e. how human beings

cognitively decide to understand, verify, value, and cognitively create a decision through which actions are carried out. Thus, *decision-making* can be defined as *the process, objectified by Lonergan, through which humans understand, verify, value, and decide to act or not to act*. A deeper definition of Lonergan's Insight theory as it pertains to this thesis, will be given accordingly. This model for decision-making provides a coherent cognitional operation that aids in providing a clear map of the ways technology has affected conflict, and shows the reverse can be true as well.

Lastly, the term "data of consciousness" must be defined and understood. Lonergan's theory explains how the individual can become aware of his or her own mind. The substantive awareness, or information gained by this cognitional process can simply be defined as the mind at work (Tekippe Loc. 127. Kindle Edition). The data of consciousness are the mental activities that occur throughout cognitional process.

Lonergan, Conflict, and Technology

Due to the innovations in information technology that have caused social shifts in perspective, it would be appropriate to map or model how those changes have influenced individuals. Due to the fact that humans comprise the social gamut no matter culture or creed, meaning humans interact on a social level with humans and humans alone, a way to measure how individuals interact with each other on a social, but also on a personal scale is both necessary and helpful to gauge this shift appropriately. A theory that deals with data readily available to those who can recognize that that data exists within experiences across the globe is needed to express these shifts. Insight Theory furthers this discussion, and provides a grounded, introspective look at the individual and society.

In order to demonstrate how ingrained information technology has become within the daily lives of a growing number of human beings, and also to circumvent particular difficulties with examining different cultures, socio-economic dynamics, and political structures a distinctive theory is needed to include anyone who has been exposed to the weapon of technology. Bernard Lonergan, a Jesuit priest, theologian, and philosopher from Canada, provides an imitable philosophy that will be the basis for analysis in this thesis. Lonergan is not an archetypal philosopher in that his philosophy is not based on a set of axioms (Price, *Methods* p.17). Dr. Jamie Price says of Lonergan's work, "The lynchpin of his thought is the twin recognition that human beings have minds and that we use them, and the focus of his philosophical analysis is what he calls the "data of

consciousness" – the activities, patterns, and norms that mark the inner operation of our consciousness" (Price, *Methods* p. 17). This "data of consciousness" is the primary data with which Lonergan constructed his influential work *Insight: A Study of Human Understanding*. With the help of Lonergan, Price, and Terry Tekippe, this thesis will offer a new perspicacity of what could be the cause and resolution of conflicts in the age of instant information. It is apparent that Lonergan is not a conflict theorist, nor a social scientist. How can his philosophy add to an already complicated discussion without seeming relevant at all?

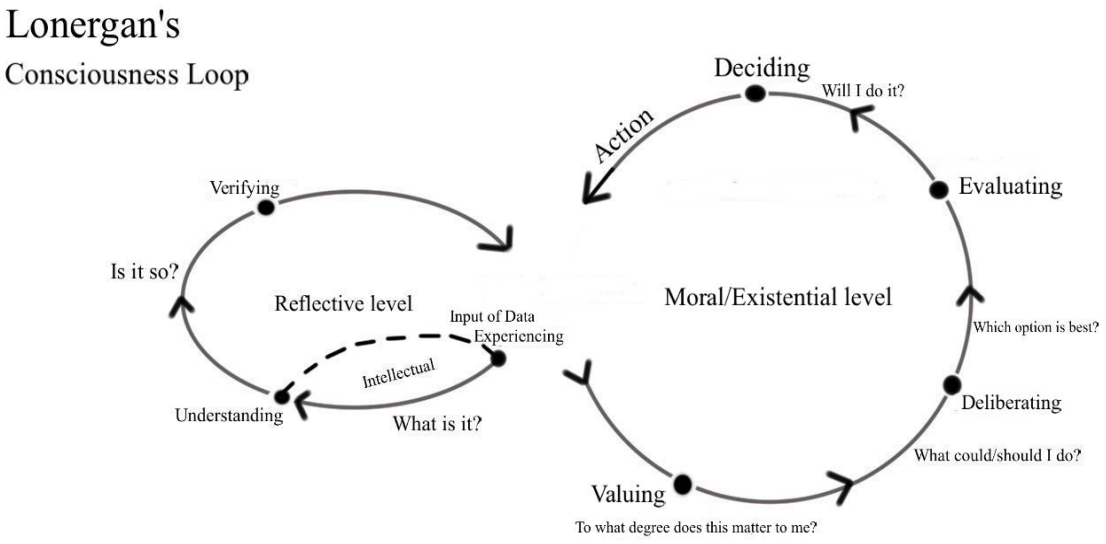
At the root of conflict theory, social science experiments, and psychological evaluations, one variable never changes: the pattern of operations in the flow of consciousness. This is where Lonergan's theory allows for integration into a number of disciplines, including conflict analysis and resolution. What is Lonergan's Insight Theory? How is it relevant in studying conflicts? Cheryl Picard and Kenneth Melchin provide a definitive relation to conflict and how they see Insight Theory being helpful to the resolution process. "What Lonergan adds is a focus on the role of insight in the transformative process. Insights have a curious shape and texture to them; they come in different types, each with its own distinctive role in the learning process. They affect our cognition as well as our feeling and valuing. They are deeply personal experiences, yet they occur in social contexts and their import is profoundly social" (Melchin and Picard, p. 21). Where are insights? Are they quantifiable? Are they physically noticed similar to a smirk, grin, or a frown? Terry Tekippe, author of an extremely valuable book called *An Introductory Guide to Insight*, notes that Lonergan's philosophy is complex, a jungle but

he describes the process of understanding and noticing insights according to Lonergan. Tekippe provides a helpful analogy to describe what Lonergan calls insight into insights. He explains,

> A video camera scans everything that passes before it. But the video camera can never focus on itself; by its physical construction the camera itself can never enter into its field of vision. But the mind is *not* like that. The mind does have a certain ability to be aware of its own action, to understand itself and to know itself…In most of our living, we are probably like the video camera, reflecting on what is passing before us in the carnival of life. But, unlike the video camera, we are also dimly aware of the workings of our mind, and it is that dim awareness Lonergan would call attention to and heighten. (Tekippe, Loc. 137. Kindle Ed.)

It is this self-appropriation, as Lonergan refers to it, that makes that makes his philosophy appropriate for the discussions to be had in this thesis involving conflict and technology, because humans are inevitably needed for both to work properly. Melchin and Picard refer to insights as the feeling of "catching ourselves" (Melchin and Picard p. 21) in order to understand conflicts and their learning process. However, there is another process that deserves to be addressed prior to delving in to Melchin and Picard's comprehensible work on Insight Mediation that will be discussed later.

Lonergan describes a process throughout his vital work *Insight: A Guide to Human Understanding* that is the result of acknowledging insights. It is explained easiest in the graphic below, Figure 1.



Credit: Dr. Jamie Price. George Mason University, University of Malta. October 2011

Fig. 1

The looping design represents the constant importing and exporting of experiential data through experience and action. The "data of consciousness" is analyzed through a series of points along the loop, and these points are important in understanding why humans act and behave in certain ways. It is imperative to understand this objectified view of consciousness as a reflexive operation that can be performed by any individual to obtain empirical data. The sagacity of understanding and recognizing that these cognitional processes take place fortifies the results as empirical. Thus, creating a decision-making model founded in the data of consciousness. Through the increased use of information and communication technologies, this loop will play a large role actualizing how consciousness is altered through those mediums. Lonergan always begins with experience (Tekippe, Loc. 394. Kindle Edition). Insight Theory states that

there are different forms of experience, however for the purposes of this thesis, the experiences will remain in "sensory" or physical experiences disregarding the spiritual aspect of belief experience (Tekippe, Loc. 394. Kindle Edition).

Elizabeth Morelli discusses the different forms of consciousness as explained by Lonergan. "By 'consciousness' Lonergan further means self-presence, the awareness of oneself that is immanent in all intentional operations. While he writes of different degrees of consciousness, namely, empirical, intellectual, rational, responsible and the consciousness of the fifth level of love. If one is on the intellectual level, for example, one is intellectually conscious as performing operations such as inquiring and having insights" (Morelli, p. 97).

The direction that consciousness moves from experience to understanding can be called the "intellectual" cycle; humans constantly see, hear, taste, smell, and feel things occurring in the world. It is in this step that people register the sensory data of their surroundings. When humans ask, "What is it?" they understand their surroundings. Next, consciousness moves around the reflective portion of the loop and the person can verify the sound or taste to be true. Arguably the verification step is one of the most important, substantiating the thing they named to be true in the previous step; "Is it so?" After the experience is verified, consciousness transitions to the moral or existential piece of the consciousness loop and the individuals begin to give this experience value – they apprehend reality. The way that reality apprehension occurs is through feeling. Robert Fitterer, in his work *Love Objectivity and Virtue Ethics,* explains this transition from value judgments to the next phase, deliberation. Fitterer first explains the differences

between fact judgments and value judgments explaining that in asserting fact judgments, there is a condition that must be met by a previously determined set of criteria (Fitterer p. 81). In contrast, for value judgments "…there is no present state of affairs to which one may advert as a sufficient condition for assent" (Fitterer p. 81). He then explains deliberation as it is related to fact judgments by saying, "The reason for this is that fact judgments concern what is, and deliberation concerns what is not yet, but what is desired to be. Thus, the insight that would indicate a possible good choice or action must be affirmed in another way: by being invulnerable to reasons *not* to so choose or act" (Fitterer p. 81). Through the understanding or comprehension of that feeling, whether it is good, bad, or inapt, humans are able to therefore apprehend value for the reality of a situation. This portion of the loop is crucial to dealing with Lonergan's different types of bias, which will be explained later. Moving along toward decision, a deliberation must be made upon the value that was apprehended in the data. A person could ask, "What should I do or *not* do about the front door slamming?" after they had already apprehended a value for that question in the previous point. The person would either have a physical reaction, a shutter, or an emotional reaction of anger or confusion, thus apprehending the value through feeling. Elizabeth Morelli calls these "feeling states" (Morelli, p. 96). Through the second to last destination before a decision is made, the person must evaluate the experience, taking into consideration everything they have come to realize about the data of consciousness already. After understanding, verifying, valuing, deliberating, the person must ask, "Am I actually going to do anything?" Finally, a decision is made, action is taken (regardless if physical action is taken, because the

absence of action can be seen as an act in and of the act of refraining from acting) and consequently, the person decides.

This process happens all day and all night, each day for people around the world. For the data of consciousness is common to all who are conscious, intelligent human beings. It is through this chart, this objectification of consciousness that an analysis will be given for the ways humans interact with technology either creating conflict as a consequence, or dealing with the consequence of conflict through the channel or medium of technology to reach a resolution. There will be discussion based in literature around the increasing influence technology has upon the individual, and there will also be two case studies regarding the use of technology in conflict settings. For the purposes of this thesis, each part of this looping model will be called on to analyze a particular example or case, and the model will serve as a reference throughout.

Given the model of the patterned flow of human consciousness, questions arise from viewing this model and applying it to varieties of situations or conflicts. Intelligence would lead one to ask, does the data move through each point for every experience? Or can certain points be avoided or skipped over? Letting the loop account for any and all experience within the complex and interconnected contemporary world, it would be difficult to account for cultural nuances or traditional ceremonies. What can be said for experiences that are taken for granted? This objectified view of consciousness answers those questions by falling back on the operative process that it creates. By attempting to answer those questions about the chart above, one would prove the operations that the chart displays take place. The ways through which humans engage with their

environments cannot be explained by the consciousness loop. The looping model provides the opportunity to pay perspicuous attention to the flow of consciousness related to the variables that lead humans to act. The cognitional operation of becoming aware of this movement of consciousness is, by Lonergan's definition gaining insight to Insight (Tekippe, Loc. 140. Kindle Edition).

Lonergan provides definitions and examples for common sense that achieve appropriations for the peculiar and the particular. To further the discussion of the cognitional operations linked to decision-making, a reference to common sense must be made. Because the nature of conflicts are particular and relevant specifically to the parties involved, a connection must be made between the seemingly general cognitional operations in the looping mechanism to the specific nature of individual experience. There are many different experiential patterns in reality, thus leading to an exponential amount of possible outcomes present in the flow of consciousness (Fitterer p. 87). Common sense happens to be one of those experiential patterns that humans share.

Lonergan examines common sense as a subject to communicate a broader analysis of what exactly the difference between common sense and scientific method is, and does so by making broad remarks about different experiences that society creates for the individual. He states:

> Common sense, unlike the sciences, is a specialization of intelligence in the particular and the concrete. It is common without being general, for it consists in a set of insights that remains incomplete until there is added at least one further insight into the situation in hand; and once that situation has passed, the added insight is no longer relevant, so that common sense at once reverts to its normal state of incompleteness. Thus, common sense may seem to argue from analogy, but its

> analogies defy logical formulation (Lonergan, Loc. 4359. Kindle Edition).

Immediately the distinction becomes clear because common sense eludes logic, thus rendering it a separate entity than scientific method, yet still is used as a tool to understand the world to create understanding of one's immediate environment. A contemporary example can be used to further the understanding of this dissimilarity. For example, if one finds a comment that was posted to their Facebook page that one finds upsetting, responding directly to the comment would be an operation of common sense. It is true that one need not know the absolute science behind how that post arrived on their Facebook page in order to know that they would respond to it. The above section concerning the existential levels of consciousness expresses the operations behind understanding why the post was distressing and how a decision to arrive at the action of responding occurs. The act of responding to that post on Facebook is an act of common sense, not science.

The significance of this notion of common sense from Lonergan is not revealed from the definition of common sense as a subject alone. When humans communicate with one another, sharing insights, thoughts, emotions common sense becomes explicitly available as a tool to gain further insights. This could not be clearer in relation to technology in this era, but also more importantly to understand why conflict can easily be created when shifts in common sense occur due to modulations in technological mediums.

> For common sense not merely says what it means; it says it to someone; it begins by exploring the other fellow's intelligence; it

> advances by determining what further insights have to be communicated to him; it undertakes the communication, not as an exercise in formal logic, but as a work of art; and it has at its disposal not merely all the resources of language but also the support of modulated tone and changing volume, the eloquence of facial expression, the emphasis of gestures, the effectiveness of pauses, the suggestiveness of questions, the significance of omissions (Lonergan, Loc. 4390. Kindle Edition).

The creation of certain disagreements by misunderstandings in simple communication streams, it is easy for people to get lost and confused in the fog created by information and communication technology. Common sense loses its main associations. Yes, communication still flows between two people, yes a sharing of information still occurs, and yes the use of language is still employed. Yet through an instant message, tone is lost. Facial expression is extinguished through a cellphone call, gestures are forbidden, and the pauses are at the discretion of the receiver through interpretation of punctuation in a text message (if any is used at all). The meaning of omissions is vital in apprehending value for the individual. In order for channels of information to flow adequately, the breadth of said channel must not be breached as to include an exorbitant amount of information, thus confusing the receiver. However, the argument can also be made the significance of omissions also works in the reverse, meaning leave too much information out of a conversation (whether inadvertently or purposefully) and the common sense understanding becomes shifted again.

Lonergan uses an example to demonstrate how important common sense can be, but also how fragile it is to daily interaction within ones environment and how, if shifted or changed, creates opportunities for understanding to fall apart.

> At a given place, in a given job, among a given group of people, a man can be at intelligent ease in every situation in which he is called upon to speak or act. He always knows just what is up, just the right thing to say, just what needs to be done, just how to go about it. His experience has taken him through the cycle of eventualities that occur in his milieu. His intelligence has ever been alert. He has made his mistakes, and from them he has learnt not to make them twice. He has developed the acumen that notices movements away from the familiar routine, the poise that sizes them up before embarking on a course of action, the resourcefulness that hits upon the response that meets the new issue. He is an embodiment of the ideal of common sense, yet his achievement is relevant only to its environment. Put him among others in another place or at another job, and until they become familiar, until he has accumulated a fresh set of insights, he cannot avoid hesitancy and awkwardness. Once more he must learn his way about, catch on to the tricks of a new trade, and discern in little signs the changing moods of those with whom he deals (Lonergan, Loc. 4442. Kindle Edition).

It becomes even clearer now than before, that in this age of instant information and technological facades for communication that, when one "…must learn his way about, catch on to the tricks of a new trade, and discern in little signs the changing moods of those with whom he deals." can create severe acrimony without harnessing common sense as Lonergan describes.

Lonergan also posits there is common sense as an object, too. Throughout his argument, he touches on key themes that aid in the explanation of his insight theory as a whole by explaining how man relates himself to his environment. Lonergan says:

> It [common sense] seeks knowledge, not for the sake of the pleasure of contemplation, but to use knowledge in making and doing. Moreover, this making and doing involve a transformation of man and his environment, so that the common sense of a primitive culture is not the common sense of an urban civilization…" (Lonergan, Loc. 4997. Kindle Edition).

Lonergan describes a "practical common sense" to explain how the evolution of these common ideas leads to progress and the advancement of society. Technology is at the heart of this discussion. Lonergan discusses how, in primitive cultures, the essential interaction with the environment was to satisfy hunger by hunting or fishing. However, primitive man, being practical and using common sense, begins to fashion nets and spears all the while creating something that a person could not eat to satisfy their hunger. Linked to the subjective notions of common sense, this is not logical. One should spend all time and energy searching and gathering food and preparing to eat it with his group or family. But, because common sense operates outside of logic, and still supplies ingenuity and yields a positive conclusion, fairly, making spears and nets to use to aid in the process of hunting and fishing is common sense. In doing this, man absolutely changed the ways in which technology interacted with the environment that man existed within. "The new inventions complement the old only to suggest further improvements, to reveal fresh possibilities…" (Lonergan, Loc. 5002. Kindle Edition). Adhering to this chain of technological insight, invention, new technological insight, better invention, a pattern evolves just as the foci man exudes on technology evolve. Thus, the technological vehicle is born. Similar to the reasons man created the net and the spear, though he did not hold a specific desire to hang a nicely woven net or a strong, sharp spear in his home, the Internet and electronic communication are vehicles to meet the desires of humans in a different way than physical desire as spears and nets do not defeat hunger.

Lonergan begins to exemplify conflict and social unrest without ever mentioning a specific case study or point of reference within economics or international relations.

The argument can be made that attempting to summarize all human affairs and interactions in one sweeping statement calling it Insight and believing it will apply globally, but that argument would not be correct. Lonergan constantly reminds the reader that his statements and his philosophies are to be tested within the individual, in the conscious mind, not to broadly define human interaction with a strange conceptualization about war or violence. Accordingly, Lonergan discusses the state, revolutions, and violence at a conscious level; he makes sure not to accuse or deny that particular situations need particular attention. It is important to discuss how Lonergan understands individual action on a broader social scale. The discourse on revolution becomes relevant because it takes a cognitional operation of the collective society to create a revolution. The common sense of a group of individuals must be articulate, understood, cohesive, and must be valued as principal by every individual (or a strong majority) in order for collective action to take place. This thesis discusses the potentiality for information technology to play a massive role as a coagulant for that process to take place. However, an understanding of common sense, bias, and societal change and interaction must be obtained. Lonergan takes this argument further. Johan Galtung's notion of structural violence meshes with Lonergan's "dialectic of community" as described henceforth.

"Yet a revolution is merely a passing stroke of paralysis in the state. There are deeper ills that show themselves in the long-sustained decline of nations, and in the limit in the disintegration and decay of whole civilizations" (Lonergan, Loc. 5091. Kindle Edition). Noting that, while Lonergan discusses revolutions quite broadly, he is making reference to the technological skill and intelligence of humans and what could possibly

happen if the dynamic structure is shifted or discontinued by one reason or another. This is interesting and further relates conflict analysis and resolution to a more personal, individualized ideal. Relating this notion to the discussion of Lonergan and conflict studies, there are obvious links between what Lonergan describes as the "deeper ills that show themselves…" within a society, and what Johan Galtung describes as "structural violence". Galtung says that structural violence is violence that is preventable at an institutional level, giving rise to trepidations within an administration, thus causing physical or direct violence to citizens within a given society (Galtung, "Violence, Peace" p. 167-191). This is directly linkable to a political revolution, or civil rights violations. It is true that conflict can bleed through to a visible level in societies that experience great amounts of change, neglect, tyranny, or lack of intelligence leading to a lack of new insights creating stagnation within a state, but why and how does that relate to the advancement of technology?

Lonergan makes his argument plastic by stating a relative principal, not only about one geographical region to another, but across periods of time, as well. He regards the evolution of the state and the advancement of technology as "not only intelligible, but also intelligent" (Lonergan, Loc. 5011. Kindle Edition). Therefore, regardless of where or even *when* this advancement and evolution are taking place, technology and communication are the drivers in sense making amongst groups.

> What possesses a high probability in one country or period or civilization may possess no probability in another; and the ground of the difference may lie only slightly outward and palpable material factors and almost entirely in the set of insights that are accessible, persuasive, and potentially operative in the community. Just as in the individual the stream of consciousness

> normally selects its own course of the range of neutrally determined alternatives, so too in the group commonly accessible insights, disseminated by communication and persuasion, modify and adjust mentalities to determine the course of history out of the alternatives offered by the emergent probability (Lonergan, Loc. 5052. Kindle Edition).

Lonergan also describes a "tension of community" that relates to conflict theory in that of John Burton and his *Basic Human Needs* theory. Lonergan says that within a community, there is predictable and inevitable "intersubjectivity". Given the nature of the spontaneity of "intersubjectivity" the individual has extemporaneity causing him to be "…subjected to needs and wants, pleasures and pains, labor and leisure, enjoyment and privation" (Lonergan, Loc. 5073. Kindle Edition). Similar to Burton, Lonergan explains that this tension that lies within a community is due to constant interaction with other individuals, each individual wanting and needing things to exist. Lonergan describes these wants and needs in constant *tension* with others, always relating labors or experiences to those of others within the community, all the while behaving intelligently, gaining and comparing insights, thus resulting in the generation of "common ways, common manners, common undertakings, common commitments" (Lonergan, Loc. 5131. Kindle Edition).

Given this tension of community, it is now necessary to discuss the "dialectic of community" and Lonergan defines this notion, for the sake of "greater precision" by saying, "…a dialectic is a concrete unfolding of linked but opposed principles of change" (Lonergan, Loc. 5172. Kindle Edition). Consequently, Lonergan has arrived at a fitting description of what a conflict is, relating it to a group of people, bound by common understandings, becoming realized by insight. And this understanding of conflict is what

allows for an analysis of conflict and information technology within the conflict landscape to be possible. The purpose for examining common sense and the dialectic of community is to better understand how the data of consciousness can be used to gain a better sense for how individuals relate to the greater group of society and, consequently, realizing the role that information technology plays in manipulating forms of common sense.

To further the relation of the experiential pattern of common sense to technology and human interaction, it is necessary to examine how different forms of bias can be associated with how humans have increasingly associated themselves with technology, causing a shift in their decision-making processes. At this point, two variables have been examined to better understand humans cognitional operations in order to gain insight into why humans interact with the environment in particular ways through common sense, and also the objectified view of the proper function of consciousness within those patterns. There is another way to build on the two previous notions of cognitional process. The concept of bias comes into the discussion here. It is appropriate to begin the discussion of bias here because with the understanding of the flow of consciousness through the looping mechanism, and building common sense on top of that argument, a new question arises. Why do people form a common sense relative to their environment? Understanding bias can help answer that question and further the argument of associating how information technology plays a main role in affecting decision-making processes. It is important to note that throughout his explanation of bias, Lonergan is attempting to convey a sense that bias serves to restrict cognitional operation at a high level of

abstraction. The function of bias serves as a detriment to the inquiry process by limiting it and constricting the scope of inquiries that are made within the consciousness loop. For example, bias works to "grease" the inquiry process by quickening the flow of consciousness from point to point. Fitterer has an explanatory definition for bias as it relates to Lonergan. "Bias is *not* a presupposition, so it cannot simply be a matter of holding the wrong one. Rather than consisting in an error of fact, bias is an emotional and reactionary response to social interrelations" (Fitterer p. 82).

There are four different forms of bias that Lonergan describes, but for the purposes of this thesis "general bias" is the most applicable followed by "group bias". The other two forms are individual bias, which relates all inquiry to the individual disregarding others and the environment, and also dramatic bias which concerns a constant comparison between the individual and others rooting biases in the dialectic of community (Lonergan, Loc. 4666. Kindle Edition). To Lonergan, bias is where common sense is constructed and deconstructed. "Basically, social groups are defined implicitly by the pattern of relations of a social order, and they are constituted by the realization of those dynamic relations" (Lonergan, Loc. 5268. Kindle Edition). Accordingly, through the introduction of social networking, smartphones, the Internet, and the many other diverse forms of advanced communication technology in contemporary society, it can be suggested that the bias has shifted to accommodate those forms of communication, consequently creating a new bias. Fitterer gives an example of general bias as "…favouring common sense pragmatism over all other modes of thinking, be they intellectual, religious, artistic, or some other mode" (Fitterer p. 82). Fitterer also explains

that in no matter what form bias is expressed, it does not effect merely one decision or situation, for it is a usual characteristic of one's emotive response (Fitterer p. 82).

Lonergan associates this notion of bias with how humans make decisions. "In a school, a regiment, a factory, a trade, a profession, a prison, there develops an ethos that at once subtly and flexibly provides concrete premises and norms for practical decisions" (Lonergan, Loc. 5278. Kindle Edition). Each of these societal places, physical locations, trade offices, educational structures have been affected by the shift in technological advances. They are places where tradesmen, wardens, and teachers must make decisions affecting those around them. When conflict occurs, it occurs in a different form due to the advances in communication technology and has changed the inflow of information, thus as Lonergan describes, changing the bias within each physical place.

To supplement the connection and understanding of Lonergan's common sense to the research questions outlined in this thesis, another example of how bias affects social development, and therefore creates a schism causing new conflicts, is needed. This schism is important to discern the relevance new information technologies have in becoming implemented in the conflict management and conflict resolution scheme. It is also important to note that, even though most of this discussion focuses on technology and the incursion of information technology to society over the past few decades, humans and the decisions they make in order to satisfy their wants and needs are at the foundation of this thesis. Just as conflict resolution and conflict management theory and practice are focused on understanding revolutions and violence, intergroup misunderstanding, and

personal struggles, it should also attempt to understand how and why humans have come to make increasingly faster and more connected decisions than ever before.

Lonergan's discussion on bias continues. He states, "For the bias generates unsuccessful as well as successful classes; and the sentiments of the unsuccessful can be crystallized into militant force by the crusading of a reformer or a revolutionary" (Lonergan, Loc. 5307. Kindle Edition). The implications of group bias spread far and fast, and they also affect everyone. As was stated earlier, the study of Insight is able to engage in discourse of human interaction and societal change due to the nature of insights being introspective. Lonergan explains,

> The bias of development involves a distortion. The advantage of one group commonly is disadvantageous to another, and so some part of the energies of all groups is diverted to the supererogatory activity of devising and implementing offensive and defensive mechanisms. Groups differ in their possession of native talent, opportunities, initiative, and resources; those in favored circumstances find success the key to still further success; those unable to make operative the new ideas that are to their advantage fall behind in the process of social development" (Lonergan, Loc. 5306. Kindle Edition).

The idea of group bias quickens the flow of consciousness significantly. The offensive and defensive mechanisms become catalysts in a group conflict. Lonergan concludes, "Thus group bias leads to a bias in the generative principle of a developing social order" (Lonergan, Loc. 5297. Kindle Edition). Consequently, the individual's cognitive processes are directly affected by the bias they hold against another group. It is essential for the argument in this thesis to identify how information technology alleviates or potentially burdens this type of bias in conflict settings. Any combination of bias serves as a vice for inquiry. Any fundamental inquiry made about a group, an individual,

or the self is severely limited by these different forms of bias. Thus, creating a shift in the flow of consciousness. The inquiry process through the Insight approach allows the individual to potentially understand bias, realizing it exists and to understand the role bias plays in influencing the data of consciousness.

The goal of conflict studies is to make sense of things that seem irrelevant, misleading, confusing, or unintelligent to one party or multiple parties involved in a conflict. The use of a singular, unified model is unfitting due to the nature of conflicts being particular and relative. The first step in making sense and gaining insight into the resolution of a conflict seems to be to examine the root causes of said conflict, analyze the agreement or agreements the parties have made in order to prevent or extinguish said conflict, and thus perform some form of existential algebraic equation to determine what worked and what did not work during the mediation, peace talk or resolution technique of choice. However, there are a few individuals that have turned mediation on it's head and are attempting to understand exactly what happens during a resolution process using Bernard Lonergan as a roadmap to insight.

Kenneth Melchin and Cheryl Picard have tapped into *Insight* and have begun studying how it can directly be applied to conflict resolution practices, particularly mediation. Ten years ago, Picard, based out of Carleton University, found herself in a dilemma of sorts. Unable to find a fitting theory to explain what was truly happening when she was mediating disputes, she began searching for answers in a different field. Kenneth Melchin, a professor of ethics at St. Paul University, suggested that Lonergan's philosophy could offer a baseline for interpreting the mediation work Picard was

conducting. (Price, *Methods* p.16) After years of research and in depth analysis of Picard's mediation process based in Lonergan's philosophy, Melchin and Picard wrote *Transforming Conflict through Insight*. For the purposes of this thesis, examining the relationship that Lonergan's *Insight* has with conflict resolution in order to create a tangible, practicable method will be the reasoning behind understanding what Melchin and Picard did to make sense of Lonergan's philosophy in a different field altogether.

Melchin and Picard needed to adjust how they were viewing the mediation process, and also shift their arsenal of questions to create a new stage for method and practice. An important question that was asked in their book, also conveniently applicable to this thesis is, "Do we expect conflicts to be handled by professionals, or are we becoming more involved personally?" (Melchin and Picard, *Transforming Conflict* p. 24) In either case, the notion that "learning" must occur in order to resolve said conflicts. "Understanding the transformations involved in this learning is essential for enhancing our involvement in the conflict resolution that is at the heart of our personal and public lives." (Melchin and Picard *Transforming Conflict* p. 25) That same shift in understanding is taking place through the use of information technology that is evolving the way humans communicate, gather and process information, and arrive at a particular decision based on gaining new insights through said learning.

A key piece of *Transforming Conflict through Insight* that is helpful in reminding practitioners and theorists in the conflict resolution field how deep and complex conflicts can be. After describing many different social theories from the diverse fields of communications studies, culture studies, and economics, Communication theory, Interest

theory, and Game Theory do an exceptional job at explaining human interactions within their respective disciplines. Insight theory does something more important. It accesses the individuals who comprise those groups within society that economics, communications, and culture studies do well to explain. The process through which this access is granted arises from the core idea behind the Insight approach to mediation. Picard explains this idea through the notion of "threats-to-cares". Picard explains what "cares" are in an essay written in June 2011. "The word "cares" connotes more than the act of "caring"; it includes all the things we have come to value over time. Cares exist at different and hierarchical levels. At the lowest level are personal desires such as interests, needs and goals. Personal desires are superseded by expected patterns of interaction, which, for instance, might include what it means to be a good, or not so good, parent, partner, co-worker, neighbour, teacher, friend, pastor, and so forth" (Picard, p. 3). It is important to note that the process through which value is placed on these cares happens over time. The data of consciousness and the looping mechanism provide an objectification within the moral/existential piece of the model. Picard explains that certain threats to these "cares" elicit defense mechanisms that hinder the mediation process (Picard, pg. 4). Furthermore, she explains that these threats do not necessarily have to be real. The perception of threats-to-cares also elicits defense response in social interactions (Picard, pg. 5). Dr. Jamie Price comments on the relationship between threat-to-care and the importance understanding consciousness as it relates to conflict settings. "They use this technical term [threat-to-care] to denote a predictable pattern of consciousness: the cognitive and affective grasp of a link or a causal connection between the presenting

situation and a set of dire future consequences, which the individual now concludes must be prevented from happening. The problem, they argue, is that the inner apprehension of threat-to-care takes place so quickly, and the sense of certainty it generates is typically so strong, that most individuals have little reflexive ability—and even less felt need—to be curious about the decisions they make or the positions they take" (Bartoli and Price, *Spiritual Values*, p. 10).

It demands the respect and willingness to achieve a new sense of learning that Melchin and Picard exemplify in their Insight Mediation model. They explain, "Communication in conflicts is not simply the exchange of information, interests or needs. The dynamics of conflict shape the parties sense of reality." (Melchin and Picard, *Transforming Conflict* p. 47) According to Melchin and Picard, because conflict, at any level of understanding, is persistently dynamic learning about the other party, but more importantly becoming exponentially introspective throughout the conflict and it's resolution process is fundamental to arrive at said understanding. The form of learning they are referring to is not the generally accepted learning, nor strictly knowledge or educationally based learning. Melchin and Picard explain, "What we discover is that learning is not a single action that can be explained either as a passive reception of information, or as an active construction of meanings, ideas or systems. Rather, learning takes place through a sequence of operations, each of which involves both passive and active dimensions." (Melchin and Picard, *Transforming Conflict* p.22) It is through this shifted understanding of what learning can be, and how important it is in comprehending a capricious subject such as conflict, it becomes increasingly apparent that in the age of

instant information, the rate at which humans learn about things has increased exponentially, giving way to an altered process of decision-making. The relationship between the looping model explained above and conflict behavior is linked together by the Insight approach to mediation and general outlook on conflict. The definition of conflict used in this thesis is purposefully similar to how Picard defines conflict. She explains, "In the Insight approach conflict is defined differently than in other mediation approaches. Instead of viewing conflict as arising from the perception of incompatible goals, needs or interests, the Insight approach views conflict as emerging from an interpretive experience of threats-to-cares" (Picard, pg. 3). The interpretive nature of the experience of threats-to-cares comes from the individualistic nature of the objectified flow of consciousness displayed in the looping mechanism. It is through this lens that this thesis will examine case studies and arrive at conclusions regarding the implementation of information and communication technologies by the individual in conflict settings. The significance of value judgments will be critical in understanding how individuals react in a conflict setting. The consequence of bias (general or group) will be analyzed and understood as a product of increased *and* decreased implementation of technology, as well.

Melchin and Picard have followed Lonergan's directives, gazed inward, asked questions about their environment, made insights into the practice of mediation, and begun to explain what is actually happening during Picard's mediation process through introducing Insight Mediation in to the practice of conflict resolution. Just as Melchin and Picard have done with understanding the conflict resolution process at a different level

through Insight Theory, this thesis aims to bring a thorough understanding of how and why information technology is causing humans to interact with their environments differently, creating different biases, causing different experiences, thus resulting in different actions that accordingly cause a different kind of conflict resulting from continuous and unprecedented interaction with new technology. How does this relate to conflict analysis and resolution? Due to the shift in communication practices of individuals who engage socially in the workplace, at home, and in leisure a new factor must be added to the conflict management field. This thesis aims to provide substantial evidence that the conflict landscape is shifting due to said individuals interacting with one another on a different stage, thus causing conflicts that need to be approached differently. This is not bad or negative at all, however in order to accurately address these "instant information engagements" better, technology must be brought to the front of conflict analysis in the age of instant information.

To apprehend the idea that technology has become increasingly influential on daily life, thus influencing decisions humans make, data on the subject of Internet usage across the world can be examined to exponential growth in the last eleven years. For the purposes of this thesis it is important to understand, in detail the adoption of information technology across the United States and the rest of the world. It is important to note that when combining the two areas of conflict analysis and resolution and information technology one impression that lingers is that both topics are relatively young. The spread of information technology, speedy sharing of information, and news media outlets have taken on new forms and moved closer to the forefront of dialogue in everyday life.

According to the US Census Bureau, as of December 31, 2011 there were an estimated 6.9 billion human beings on the planet. According to the latest data reported by Nielsen Online there are 2,267,233,742 Internet users across the globe.

The increase in number of users per continent over the last eleven years has been well over 100% for each region, however the most significant data is regarding the Middle East and Africa due to their comparatively low numbers at the outset of the new millennium (Internet World Stats). The number of Internet users in Africa has increased nearly 3,000% since 2000 and in the Middle East that number has grown by 2,244% ("World Internet Usage"). According to reports released by Nielsen Online and the International Telecommunications Union the global increase since the year 2000 has been 528%. More interestingly, still within Africa, Egypt has grown from four hundred and fifty thousand users in 2000 to over twenty million Internet users at the end of 2011. In Kenya the numbers are exciting as well. In 2000 there were only about two hundred thousand Internet users. That number has grown to almost eleven million people who access the Internet at the end of 2011 ("World Internet Usage"). In the Middle East, the total number of Internet users has grown from just over three million in 2000 to over seventy-seven million users at the end of 2011.

Internet technology has seen a gross expansion, however the mobile phone market has breached 50% of the global population according to the U.N. Telecommunications agency, in 2010 the number reached 4.6 billion and in under two years has grown by another one billion subscribers to mobile phone companies across the planet. At the end of 2011, the number of cellphone users in the world eclipsed 5.6 billion people.

This data represents a significant shift in information technology use as a medium for acquiring news and experiencing communication in ways not possible, or less efficient and more expensive and at an openly slower pace, than ever before. A connection must be made. Given the substantial rise and emulsion of communication technologies and also the creation of a structured, trans-disciplinary field like conflict analysis and resolution, an opportunity to blend the two presents itself. Again, this is not a critique of the sound practices of conflict analysis and resolution. This is a call for a shift in focus. The advancement of technology simply outpaced the expansion of conflict resolution theory and practice. It would be unwise to not refocus and reimagine human interaction in the age of instant information. There is a surfeit of literature that expresses the addiction, unprecedented consumption, disorientation, and enlightenment that has come from bonds humans have soldered with the Internet and other communication mediums.

In an effort to ultimately convey how important the Internet has become to human interaction, the United Nations Human Rights Council has released Resolution L-13 titled "The Promotion, Protection and Enjoyment of Human Rights on the Internet" that includes seventy-one countries stating that freedom of expression on the Internet can be considered a human right ("HRC Affirms…"). The council affirmed that "the same rights people have offline must also be protected online in particular freedom of expression, which is applicable regardless of frontiers and through any media of one's choice…" would be protected under the Universal Declaration of Human Rights ("HRC Affirms…"). Also it recognized "the global and open nature of the Internet as a driving

force in accelerating progress towards development in various forms…" ("HRC Affirms…") Lastly, and arguably most importantly the draft resolution calls upon "all States to promote and facilitate access to the Internet and international cooperation aimed at the development of media and information and communications facilities in all countries…" The international bodies have declared access to the Internet a human right ("HRC Affirms…"). The promotion and cooperation needed to increase the number of active users of the Internet is gaining momentum to potentially increase Internet users from 2.3 billion people to meet and exceed cellphone users above 80% of the global population. Conflict analysis and resolution as a trans-disciplinary academic body must adapt for this age of interconnectivity.

This thesis will explore and analyze how these trends match and pair with trends in the peacemaking and conflict resolution arenas. Then, it will examine two case studies that show shifts in the conflict landscape due to the apprehension of these new forms of communication causing shifts in decision-making processes.

The Internet as a vehicle for change

The Internet serves as a vehicle for information and communication to travel between human beings across the world. Associated technologies like cellphones, smartphones, and personal computers serve as mediums for humans to consume information. This portion of the thesis will serve as a platform for discourse on a variety of topics ranging from interpersonal communication to societal shifts. This information is relevant to analyzing the relationship between conflict and the Insight approach to resolution because, as Picard claims, human action is a response to meaning making. In other words, conflict develops from attempts by humans to derive understanding from every day life (Picard, pg. 4). That same desire is potentially leading humans to adopt technology that alters their decision-making. But are human's decision-making skills changing? Do people need to remember the same facts and information like volume or weight conversions by rote as they did before the marriage of the Internet and one's pocket? Is there a conception that too much information is unavoidably bad? This thesis chapter provides acumen into the discourse being had around the good and the possibly bad ways information technologies are impacting the actual processes of human behavior. There are four common themes that will be used to describe certain aspects of said impact. The foremost important theme will be addressed in understanding an overall shift in perspective, focus, and cognitive research being done around the influence of the

Internet. Another theme, addiction, will show if the newest and most technologically immersed generation of young adults will be slaves to computer screens and social networks. The third will answer questions about the bigger picture of societal impact; what are people doing with all of this information? Lastly, it will discuss human interaction studies conducted on various social networks through the work provided by Zizi Papacharissi. The aim of this section is to provide literary evidence through social science research and discourse showing not only that humans are behaving differently, but also exactly how differently they are behaving and what the consequences could be if this different behavior continues. Logical conclusions will be drawn from this information as it applies to conflict studies, mainly for proper diagnoses and resolution practices for the age of instant information.

An Overall Shift in Perspective

The argument that there indeed has been an overall shift in perspective can be made from two perspectives. Those who believe humans are subject to technological advancement, and those who believe technological advancements create subtle yet important shifts in human interaction. These are not mutually exclusive viewpoints, as social situations tend to be highly particular and not overarching, meaning every human being does not engage in the same exact social interaction every day at the same time. Nicholas Carr, Marshall McLuhan, and Clay Johnson posit from each side of this argument. They discuss why a shift is taking place, when the shift began, and most importantly what is being shifted, and the potential dangers and benefits of where society is headed due to the shifts in acuities about how humans communicate.

Nicholas Carr, the author of *The Shallows: What the Internet is Doing to Our Brains*, discusses a variety of topics attempting to figure out exactly what information technologies, the Internet specifically, are doing to the cognitive processes that have been outlined in this thesis by Lonergan, Melchin and Picard, and Fitterer. For Carr, the shift takes place at the same level that Lonergan uses to examine cognitions: the individual level. There are a few instances where Carr takes from what Marshall McLuhan has said about media and technology. Perhaps one of the most important connections McLuhan made in his 1968 book written with Quentin Fiore titled *War and Peace in the Global Village* that Carr did not comment on are the connections between literacy and

civilization. McLuhan writes, “It helps to know that civilization is entirely the product of phonetic literacy, and as it dissolves with the electronic revolution, we rediscover a tribal, integral awareness that manifests itself in a complete shift in our sensory lives.” (Fiore and McLuhan, p. 24-25) McLuhan not only argues that speech and the phonetic ability of humans to coordinate action through language has been the driving force in shaping society, he claims that since the onset of the “electronic revolution” it has nearly pushed the species back to pre-literacy levels of interaction by *shifting* sensory experience, thus causing the brain to experience consciousness differently. Drawing on what Lonergan says about the data of consciousness being sourced through sensory experience, it can be argued that the further entrenched use of technologies used as a medium for communication are shifting how humans arrive at performing an action, otherwise known as making a decision.

Carr joins the discussion by reiterating a point that McLuhan makes and says, “What both enthusiast and skeptics miss is what McLuhan saw: that in the long run a medium’s content matters less than the medium itself in influencing how we think and act. (Carr, Loc. 127-128. Kindle Edition.) At a surface level this point seems unsubstantiated. How can the message be less important than the medium for delivering that message? Why does the medium matter at all? Some argue that, for a long time, the medium did not matter. Clay Johnson, in his book titled *The Information Diet*, tells the story of the printing press that revolutionized the way information was produced and, for the first time in history, produced for the masses (Johnson, p. 21). “Again, society was transformed. Literacy spread along with printing. As books became plentiful and

inexpensive, they could be acquired by any prosperous, educated person, not just by the ruling of religious classes" (Johnson, p. 21). The medium was still irrelevant, though. Regardless of how much information was available, and regardless of how widely available the books that Gutenberg's moveable type-style printing press were made, information was still being distributed through the wide end of a funnel meaning that there were a limited amount of publishers and a great amount of information being distributed. "The modern metropolitan newspaper, radio, television – all were based on the same basic idea: that communication could be mass-produced from a central source" (Johnson p. 21). The underwhelming effect the central source had on society allowed for control. The control over information, even though technology was spreading said information at unprecedented rates, could be translated into control over society. However, today there are five billion people who have cellphones. More than 80% of the planet has access to the largest source for information in their pockets (Johnson pg. 21). Thirty years ago an important relationship began when the personal computer met the Internet. "Anyone with a broadband connection to the Internet has access to much, if not all of the knowledge that came before, and the ability to communicate not just as a single individual but as a broadcaster. Smartphones are pocket-sized libraries, printing presses, cameras, radios, televisions – all that came before, in the palm of your hand" (Johnson p. 21).

As McLuhan and Carr posited earlier, the medium is officially more significant than the message. Also, as Johnson concluded, since the Internet is basically every prior medium mashed and flattened onto a piece of silicon, connected to a satellite, and placed

in the pocket of nearly 80% of humans on the planet, it has earned itself some serious attention in how the Internet has caused an immense shift in perspective. As was mentioned earlier, the medium itself is significant because it influences how humans act and think. McLuhan argues that if these changes in perceptions are not attended to, conflict can occur. The question of *how* these changes happen must be asked. Why have these technologies and influential communication processes become unequivocally powerful in shaping cognitive processes? The answer, just as Lonergan conjectured before, can be found in the individual brain.

In *The Shallows*, Nicholas Carr dives particularly deep into the subject of the brain and how the Internet has altered the physical pathways that carry information around the vast network of nervous cells and electrical signals that make up the brain. In answering the research questions stated and for the purposes of this thesis, what Carr discovered about how technology affects brain function is paramount. After going back a century and a half through the history of neuroscience and psychology, Carr states that prior to the industrial revolution, the brain was perceived by many (including Freud) to be plastic. However that was the contrarian take on the argument. The main argument was that after childhood, the brain's neurons made permanent connections and would remain fixed regardless of experience or shifts in the environment. There were analogies made between the brain and a machine and those connections were only solidified by an invention in the middle of the twentieth century – the digital computer – aptly nicknamed the "thinking machine" (Carr, Loc. 406-455. Kindle Edition).

From this perspective, technology was not aiding in societal evolution, in fact according to a research psychiatrist named Norman Doidge, it was tossing human imagination into dark precipice by "…spread[ing] through our culture', Carr writes, it ended up 'stunting our overall view of human nature. Since the brain could not change, human nature, which emerges from it, seemed necessarily fixed and unalterable as well.' There was no regeneration; there was only decay" (Carr, Loc. 460-463. Kindle Edition). How could this be possible? As Lonergan stated earlier, technological advancement only brings societal change leading to more insights and more intelligent decision-making. But, as with any change, conflict may follow. Similar to how the Protestant Reformation was sparked, but not solely caused, by the invention of moveable type printing during the Renaissance (Johnson, p. 23) the cultural outlook on human nature was changing due to the information of the day being spat out through the wide end of a funnel on to society. The argument can be made that, while not necessarily positive, information technology was still affecting the way humans made decisions in the conflict landscape due to this type of information distribution. However the consequences are dwarfed by modern comparisons. The gloomy outlook on human nature did not go unchallenged.

Carr discusses the work of a young Michael Merzenich, a recent doctoral recipient of physiology from Johns Hopkins. Merzenich was studying brain mapping as part of his post-doctoral research in Wisconsin. It was widely known and understood at the time that the pinching or touching of a person's skin would thus send an electrical signal through the body to the brain's cerebral cortex. However, prior research was subject to rudimentary implements and devices to aid in brain mapping experiments.

Merzenich was using a brand new type of tool called a microelectrode to create more precise maps of the brain. Merzenich was conducting his experiments on monkeys. Nicholas Carr writes of Merzenich's efforts: "He begins tapping that hand in different places until the neuron beside the tip of the electrode fires. After methodically inserting and reinserting the electrode thousands of times over the course of a few days, he ends up with a "micromap" showing in minute detail, down to the individual nerve cell, how the monkey's brain processes what its hand feels. He repeats the painstaking exercise with five more monkeys." In the second stage of the experiment, Merzenich wanted to find out what the brain would do when forced to use a damaged peripheral nervous system. Merzenich used a scalpel and sliced through nerve tissue in the monkey's hand. After a few days, Merzenich found a confused nervous system. When he probed the hand, the brain would think the nervous signal was coming from a completely different area. However, the truly astounding evidence showed up after a few months of healing. The monkey's brains had reorganized themselves and Merzenich was getting true responses to the probing of the monkey's hand. The new neural pathways that had been woven in the monkey's hand created a new map; the monkey's brains had corresponded to the new neural pathways, too. At the time of these experiments, the results were completely contradictory to the mainstream ideas of how the brain worked. The experiment had found that the accepted view of the sensory system being a "hardwired machine" was not true (Carr, Loc. 469-496. Kindle Edition).

The director of the Krasnow Institute of Advanced Study at George Mason University, professor James Olds says "The brain has the ability to reprogram itself on

the fly, altering the way it functions" (Carr, Loc. 514. Kindle Edition). The age-old arguments put forth by Kant and Locke regarding rationalism and empiricism can be seen to compliment each other now. The "tabula rasa" arguments made by Locke actually have harmony with a Kantian perspective that says humans are all born with inscribed information that can be used for evolutionary and survival purposes to make sense of the world. The brain is both plastic *and* unbending at the same time, and for good reason. Carr writes, "Those genetically determined connections form Kant's innate templates, the basic architecture of the brain. But our experiences regulate the strength, or "long-term effectiveness," of the connections, allowing, as Locke had argued, the ongoing reshaping of the mind and "the expression of new patterns of behavior." The opposing philosophies of the empiricist and the rationalist find their common ground in the synapse. (Carr, Loc. 545-547. Kindle Edition).

The study of the brain, experimentations, and diversification of information lead to new insights that can be made about society and technology. These new analyses about the plasticity of the brain carry a definitive shift in perspective and focus that causes a look inward to the individual when discussing the vastness of possibility created by new information technology. Those possibilities can include detriments to humans' decision-making processes. A new understanding of how the brain works in conjunction with the mind can be reached. Thus, allowing for new inquiries to be made about the individual based on those scientific findings. To give Lonergan reprise again, more insights and new levels of inquiry lead to societal shifts and progression. Carr also deliberates about

how one's focus, attention, and overall concentration have wavered from what it used to be before the advent of Internet connectivity.

To express the importance of controlling intake of information, and also to show how important the Internet has become across North America and internationally as well, Carr discusses statistics related to these events. "By 2009, adults in North America were spending an average of twelve hours online a week, double the average in 2005" (Carr, Loc. 1488. Kindle Edition). Noting that since 2008 international figures are also on a steady use increase, too. "A 2008 international survey of twenty-seven thousand and five hundred adults between the ages of eighteen and fifty-five found that people are spending thirty percent of their leisure time online, with the Chinese being the most intensive surfers, devoting forty-five percent of their off-work hours to the Net" (Carr, Loc. 1495-1497. Kindle Edition). Noting that these figures leave out the use of mobile phones, Carr reiterates that communication between teenagers and adults takes place through text messages at alarming rates, as well. "By the beginning of 2009, the average American cell phone user was sending or receiving nearly 400 texts a month, more than a fourfold increase from 2006. The average American teen was sending or receiving a mind-boggling 2,272 texts a month" (Carr, Loc. 1499-1501. Kindle Edition).

Carr speculates, with the help of McLuhan, that due to this marked increase in the use of information technology as a communication medium, the content begins to change. However, Carr notes that it is not the actual content that changes; it is how humans understand that content through the new channel, vehicle, medium. "All these changes in the form of the content also change the way we use, experience, and even understand the

content" (Carr, Loc. 1560-1561. Kindle Edition). Consider Lonergan's consciousness loop and instead of the physical experience of, say discussing politics with an acquaintance at a coffee shop, place a different physical experience of reading that information online through a text message or email conversation. More than half of the imperative points of consciousness along the loop would need to be inferred by the recipient of that information through gaunt text. Valuing, deliberating, and evaluating which exist in the moral/existential level, could be compromised due to insufficient information, thus resulting in a misnomer changing the pace, or perhaps friendship, for the conversation's duration. Carr writes, "The redirection of our mental resources, from reading words to making judgments, may be imperceptible to us—our brains are quick—but it's been shown to impede comprehension and retention, particularly when it's repeated frequently." (Carr, Nicholas (Kindle Locations 2101-2102). Kindle Edition.)

This "redirection of mental resources" can have serious effects on the ability to focus on tasks as simple as reading. In the age of instant information when quick thinking and fast learning are rewarded, having an acute sense of focus is vital. Relating back to Lonergan's consciousness loop and touching on his definitions and explanations of common sense (how humans relate to their environment), not being able to focus coherently on a given task can have implications for a shift in general bias. For example, if an office worker has an area of expertise in financial analysis, conceiving monthly reports of the organization's profits, expenses, gains, losses, and acquires said information from reading departmental reports of the same variety. After reading those reports, the individual must evaluate the information absorbed, sift through irrelevancies

and pen a clean and polished fiscal portfolio to present to his superiors. Those superiors thus take the information supplied in that report and make crucial decisions on where to drive business, make staff cuts, and prioritize marketing arrangements. The financial analyst is quite practiced at their duties. However, over the past few years with information flowing through new vehicles i.e. smartphones (constant connectivity), personal computers, and tablet computers, and the social implications of sharing information on services like YouTube, Twitter, and Facebook, the financial analyst slowly changes how he absorbs information on the whole. When he reads the reports from all other departments, the phase of valuing after verifying can certainly be upset by the styles of Internet consumption. The process through which he apprehends value for certain information changes through the new ways of experiencing created by technology. Thus, causing a shift in common sense. Nicholas Carr writes, "When we go online, we enter an environment that promotes cursory reading, hurried and distracted thinking, and superficial learning. It's possible to think deeply while surfing the Net, just as it's possible to think shallowly while reading a book, but that's not the type of thinking the technology encourages and rewards" (Carr, Loc. 1990-1992. Kindle Edition). Accordingly, after years of repeatedly rewarded "skim-consumption" or perfunctory reading online, the financial analyst then brings that practice to his work reading unconsciously. Sliding elegantly through several points on the consciousness loop, the financial analyst decides to write a murky, mechanical report lacking the discernment that was present years ago. The financial analyst causes a downward spiral that can be inferred resulting from individual carelessness and disregard for quality, professional

work. The argument can be made that there could be many ways to bring down an organization, or that one individual could not possibly affect an entire organization. In contemporary times, though, being constantly connected cannot be overlooked.

Regardless of where it happens, in an organization of fifty thousand employees or at a school of twelve hundred students, lack of focus in decision-making processes can cause a shift in perspective. Clay Johnson writes of a shift in focus in his book *The Information Diet* saying that the term "information overload" should be replaced with the words "information overconsumption". (Johnson, p. 12) Humans make tiny choices every time they click around the Internet. "The need to evaluate links and make related navigational choices, while also processing a multiplicity of fleeting sensory stimuli, requires constant mental coordination and decision making, distracting the brain from the work of interpreting text or other information. Whenever we, as readers, come upon a link, we have to pause, for at least a split second, to allow our prefrontal cortex to evaluate whether or not we should click on it" (Carr, Loc. 2098-2101. Kindle Edition). It is important to note the supreme aftereffects of this type of shift in human interaction between groups *and* individuals. That will be addressed later in this chapter regarding social network sites.

Technological Addiction

The days of strict consumption of information are over. Humans can now produce content online just as easy as they are able to download a newspaper article. Examples of how truly deep-seated information technology has become are interminable. From iPads to pirated audiobooks to social networking tools to text messaging, humans have an unnerving number of reasons to be bonded to computer screens and QWERTY keyboards more than ever before. Since there has been a shift in "the right way" to communicate, how much tech is too much? Can too much cause legitimate mental disorders? Clay Johnson and Larry Rosen are among the growing number of professionals who are calling for a cushion and cause for a purification of information. It can be said that situations that are being created through the misuse of these channels and implements can indubitably conjure conflict.

The topic of addiction seems out of place when discussing conflict analysis. Being addicted to a substance, like drugs or tobacco creates conflicts if consumption of that substance is abused or overtly consumed in an erratic manner. To begin this discourse on technology and the conflict that is created through the unprecedented implementation of technology in everyday life, examining exactly what problems can and have already surfaced due to fevered use of technology is appropriate. The topic of human addiction to technology seems to be the most prevalent in the media. Due to the

sensationalism attached to the words “addiction” and “disorder” or “information obesity”, there have been many articles and opinion editorials focused on the topic of addiction to technology alone. There have not been many successful ways to resolve said addiction, however merely giving a state-of-the-union on technology addiction seems to be at the forefront of studies and newspaper articles. Comparisons to usage rates currently to those of five to seven years prior are matched by surveys and statistics of how many gadgets are in each American household compared to ten years ago are everywhere. Dr. Larry Rosen, a psychologist by trade, has written a book called *iDisorder: Understanding Our Obsession with Technology and Overcoming Its Hold on Us*. Rosen takes a different look at human’s increasingly complex relationship with information technology by comparing a particular psychological disorder, say narcissism, and draws connections to the fad of social networks and arrives at a diagnoses of original nature at the conclusion of each section of the book. Narcissism is the example that will be used in this thesis, however Dr. Rosen describes many different psychological disorders and correlates them to modern technological use.

While treating this relationship negatively and labeling the use of separate technologies like text message systems and Facebook as a sickness or “iDisorder”, Rosen points a finger at society, blatantly calling people and their addiction to technology crazy. However, being a mental health professional, he offers pieces of advice on how to recognize and dial back each set of addictions for different mediums. Rosen says, “ In my opinion, it is a complex interplay between the technology and our own human needs that provide the cues for our maladaptive behaviors” (Rosen, Loc. 242-243. Kindle Edition).

The maladaptive behavior that Rosen discusses throughout the book arises again and again to describe a new and unparalleled interaction with the systems humans use to communicate.

Rosen also describes ways these new interactions are causing humans to behave quite differently, allowing people to move through murky situations with a cloak of anonymity that was never available before new mediums for communication took over human interactions. These new behaviors can cause new types of conflicts.

> When you are sitting behind a screen, whether it is a computer screen, a tablet screen, or even a small smartphone screen, you cannot see the person at the other end. You may actually feel somewhat anonymous even though the person at the other end might be a good friend. It is a phenomenon born of our electronic generation that we are seeing more and more of in our research. A student who is quiet and meek in class e-mails the professor to vociferously complain about her test grade or the confusing lecture, something she would never do face-to-face during or even after class. Rosen, Loc. 279-283. Kindle Edition)

How can the professor properly address the students' issues? Do they reply and correspond digitally keeping the conversation solely online? The student obviously does not feel comfortable enough to address his or her issues face-to-face. Would the conflict get resolved? Rosen quotes MIT professor Sherry Turkle from her book *Life on the Screen: Identity in the Age of the Internet* and says that people are more inclined to "pop off" and say things in our "screen life" that people would never decide to say in "real life" (Rosen, Loc. 286. Kindle Edition). So, would the student have voiced their opinion to the professor at all if e-mail did not exist? It is obvious that contemporary avenues for conversation, rooted in digital communication technology, allows for issues to be voiced, which can be considered a positive thing. However, the argument can be made that hiding

behind a veil of plastic and copper wire does not lead to resolution. The exchange of communication through e-mail is designed for a "send and receive, read and digest, send and receive" cycle. That process has replaced sending physical memos or letters, which in turn replaced face-to-face conversation some time ago. But, can the e-mail "conversation" be called a sound replacement for actual communication? Rosen weighs in and says, "…when we are communicating with people while sitting behind a computer screen or even a cell phone screen, there is a feeling of safety and anonymity, even with those people we know, which compels us to act uninhibited and say things that we might not say in a face-to-face setting or even on the phone, when the person at the other end has the ability to interrupt the conversation and display cues of upset and anger (Rosen, Loc. 498-501. Kindle Edition). It can be said that interruptions and displays of emotion in the forms of anger *or* sincerity *or* content are the true qualifiers of a conversation. When people act uninhibited as Rosen describes, new conversations take place and different information gets sent *and* received. Thus, changing the outcome of the exchange resulting in different forms of conflict that practitioners are used to seeing. It can be said that the root issues of these conflicts can compare to traditional conflicts based on physical communication follies, however the sense that something has gone awry does not present itself until much later potentially causing more rifts in understanding.

In a section titled "A Generation of Narcissists", Rosen describes a segment of society that uses social networking for narcissistic purposes alone. Jean Twenge, San Diego State University, and Keith Campbell, University of Georgia conducted a study of 16,000 scores of students who took the same measurement tool, the NPI, between 1979

and 2006. The results from the iGeneration, those students born after 1980, scored considerably higher than their older cohorts. Twenge and Campbell's research also stated that more than 60 percent of college students agreed with the statement: "People in my generation use social networking sites for self-promotion, narcissism, and attention-seeking" (Rosen, Loc. 560-569. Kindle Edition). Twenge and Campbell made the argument, according to Rosen, that "the narcissism epidemic is important because its long-term consequences are destructive to society. American culture's focus on self-admiration has caused a flight from reality to the land of grandiose fantasy." Further, they said, "permissive parenting, celebrity culture and the Internet are among the causes of the emerging narcissism epidemic" (Rosen, Loc. 573-575. Kindle Edition).

Narcissism was merely one of multiple psychological disorders Rosen related to people's increased and skewed usage of information and communication technologies. Through the work of Rosen, Campbell and Twenge, and many other social scientists works, there are new and clear issues that began to rise through society at about the time the Internet and other vehicles for communication came about. But many others argue that problems started long before the advent of the Internet. Rosen says, "Another possibility is that Internet and technology addiction are part of a larger pattern of technology obsession that goes all the way back to the introduction of radio in the 1930s. With radio, people began getting information and engaging in quasi-social activities through technology mediated sources" (Rosen, Loc. 1271-1273. Kindle Edition). This notion of marked increases in sheer consumption of information dates back far beyond the introduction of cellphones and e-mail messages. If that is the case, and shifts in

human interactions began when people were "engaging in quasi-social activities through technology mediated sources" what happens when nearly *all* social activities take place *through* the vehicle of the Internet? Information obesity happens.

Clay Johnson, author of *The Information Diet: A Case for Conscious Consumption*, argues that there is discernibly issues with the amount of information people are consuming at exceptional rates. However, Johnson goes four steps further than Rosen in merely "diagnosing" the problem and pointing fingers at information over-consumers. Johnson writes about a plan, an "information diet" that, like food diets, does not call for a termination of consumption all together, but merely a controlled and deliberate system for *smart* consumption given the situation technology has created. This thesis is aiming to answer the question of *how* the Internet has changed human's decision-making processes and consequently how that has affected the realm of conflict resolution. Clay Johnson makes his case early on in his book that information and how people handle that information can certainly cause shifts in decision-making processes. He writes, "…both the fields of cognitive psychology and neuroscience show us that information can have physiological effects on our bodies, as well as fairly severe and uncontrollable consequences on our decision-making capability." (Johnson, pg. 5)

Just as Rosen argued that information plays a role in shaping "quasi-social activities", Johnson states, "Our information habits go beyond affecting the individual. They have serious social consequences." (Johnson, pg. 6) Addressing this shift in decision-making can be difficult for conflict resolution practitioners because often times, the individuals are not aware of their misconceptions. Johnson blames the media

companies and says, "…media companies learned that affirmation sells a lot better than information. Who wants to hear the truth when they can hear that they're right?" (Johnson pg. 6) Relating to Rosen, Johnson makes a case for a narcissistic atmosphere in which people find themselves constantly being reaffirmed for their beliefs and practices while carefully steering clear of describing strictly political belief systems and processes. Johnson says, "Driven by a desire for more profits, and for wider audiences, our media companies [television, radio, news, and Internet providers] look to produce information as cheaply as possible. As a result, they provide affirmation and sensationalism over balanced information." (Johnson pg. 6)

Regardless of the causes for the skewed systems of distribution for information, Johnson and Rosen are attempting to accomplish the same goal: awareness. Johnson makes this apparent by constantly comparing information consumption to food consumption. He wisely associates the act of consuming information to a cognitive and conscious experience. Like Lonergan's "data of consciousness" and the resulting looping mechanism to analyze said data, Johnson posits that information consumption can be watched and weighed.

> The first step is realizing there is a choice involved. As much as our televisions, radio, and movie theaters would have us believe otherwise, information consumption is as active an experience as eating, and in order for us to live healthy lives, we must move our information consumption habits from the passive background of channel surfing into the foreground of conscious selection. (Johnson, pg. 6)

As easy at it seems to blame corporations and organizations for shifts in society, it is a futile exercise. As conflicts distort and as practitioners begin to understand new causes for different conflicts, it is important to remember that the root issue or cause for

these shifts lay in the same places as they do in conflicts sans technology even though technology is effecting how humans decide and interact with each other. Johnson explains, "Blaming a medium or its creators for changing our minds and habits is like blaming food for making us fat. (Johnson, pg. 24) Throughout *The Information Diet*, Johnson hints at what other authors address forcefully in other works on the subject. There has been an overall shift in perspective, a just modification that society has made throughout time to accommodate their needs and wants to stay unambiguously social. "…New technologies do create anthropological changes in society." (Johnson pg. 23) Nevertheless, Johnson attributes the cause for said changes to be inertly personal, thus making them submissively social. This idea relates to Lonergan's argument for social change through biases. As Johnson argues, there are unprecedented amounts of information being consumed. The large amounts of information allow for different forms of inquiry, thus leading to new insights. Like Johnson says, a ton of information is not necessarily a good thing for the individual. Relating this to what Lonergan says about biases, it can be said that an influx of bad or unhealthy information can lead to construction of biases leading to great limitations for inquiry. Thus, leading to less insight halting social progress.

Those anthropological changes in society have to mean something. The shifts in perspective of how communications are transmitted, how the human brain is processing things differently, and the new "iDisorders" that are being diagnosed must be indomitable for a huge cultural and social change to happen. How can one define said change as being caused by such events and shifts as being different from political policies, religious

beliefs, structural violence, or any other contributing factors that cause conflict? Clay Shirky, the author of *Here Comes Everybody: How Change Happens When People Come Together* (2008), and *Cognitive Surplus: Creativity and Generosity in a Connected Age* (2010), has some striking insights about how people are changing as a group. The societal impact of individual decision-making processes is prodigious.

Societal Impact

People are coming together. The age of instant information cannot be defined simply by the consumption of vast amounts of information alone, nor does this influx of information made available by the Internet and information technologies make up the only reason why the flow of consciousness is being tampered with. The way that this new age can cause such immense shifts in perspective, spark new types of addiction, and impact society as a whole is by bringing people together like never before. Regardless if one adopts the arguments made by Johnson disregarding the medium, or if one chooses to believe Nicholas Carr accepting that the medium is important more so than the content, one cannot dismiss the fact that people are coming together by the vehicle of the Internet to achieve good things and to spark conflicts. Shirky sums things up nicely in *Here Comes Everybody* saying, "When we change the way we communicate, we change society. The tools that a society uses to create and maintain itself are as central to human life as a hive is to bee life" (Shirky, *Here Comes Everybody*, p. 17).

It is important to note that the ways people are coming together are drastically different and more important than ever. Logically, this causes different types of conflicts because people are able to side step traditional ways of doing things. One can argue that, even in the traditional sense, conflicts can arise from things humans thoroughly understand, say global politics for example. However, since the social tools people are

using to connect were born in industries and labs, commercial application of these tools are spreading beyond those locations. Shirky writes, "…we are living in the middle of a remarkable increase in our ability to share, to cooperate with one another, and to take collective action, all outside the framework of traditional institutions and organizations" (Shirky, *Here Comes Everybody*, pg. 21). The most important, but also the most frightening, of those new abilities granted by social technologies is the ability to take collective action all the while operating outside of traditional institutions and organizations.

Cognitive Surplus, published in 2010, attempts to unravel what exactly humans are doing with their free time. Shirky postulates that since people came together at an unprecedented rate online, and since changes happen when people do come together differently than they have before there *must* be a collective or shared trait that all of these people have. They could not be meeting in chat rooms randomly or crossing their fingers hoping that someone would read their email messages, nor could the people be substituting their online activities with time spent at work or otherwise. "Since the Second World War, increases in GDP, educational attainment, and life span have forced the industrialized world to grapple with something we'd never had to deal with on a national scale: free time" (Shirky, *Cognitive Surplus*, pg. 4). How the majority of people were spending this interestingly novel resource was staggeringly similar – strict consumption from watching the television. "The cumulative free time in the postwar United States began to add up to billions of collective hours per year…" (Shirky, *Cognitive Surplus*, pg. 5). This growing amalgamation of free time makes up Shirky's

"cognitive surplus". It is important to note, though, that during the time of strict television and radio media consumption, there were not necessarily any major impacts or shifts taking place, according to Shirky. Thus, when the world of media was flipped on it's head, consolidated, and distributed to a wider audience faster and with an ever growing number of sources, pages, web publishing tools, blogs, and social networks, the immense potential became apparent that could be released from decades of growing this cognitive surplus. The Internet made it possible for this surplus to be tapped.

Recognizing the surplus on a national scale is interesting. With the global communication and sharing made possible with the introduction of modern information technologies, the surplus is tremendous. Shirky discusses the consequences of cognitive surplus on a global scale with the introduction of production and the sharing of information. "The world's cognitive surplus is so large that small changes can have huge ramifications in aggregate. Imagine that everything stays 99 percent the same, that people continue to consume 99 percent of the television they used to, but 1 percent of that time gets carved out for producing and sharing. The connected population still watches well over a trillion hours of TV a year; 1 percent of that is more than one hundred Wikipedias' worth of participation per year" (Shirky, *Cognitive Surplus,* pg. 23). When the scale moves to global levels of consumption, production, and sharing the allusions for change need less of a chunk of the collective available free time. How does this immense amount of potential for change effect the conflict studies field? Since the world is made up of individuals, Insight theory can show how important something like cognitive surplus is when understanding how humans make decisions in the age of instant information. It is

obvious that the input of data has evolved and changed in contemporary society. One simply obtains information and experiences the world differently due to new information and communication technologies. The shifts for group bias are also equally important. The mere fact that Shirky has written two books displaying multiple forms of evidence that people are organizing and communicating in very different ways than ever before in history should catch the attention of conflict studies practitioners and theorists alike. Regardless of the level of concentration in the conflict analysis field (individual, group, or international), the imposing impact instant-information culture indicates for any one of those concentrations is worth exploring. After all, humans create conflict when faced with change by constructing cares, as Picard explains. Denise Wilson, a Masters Degree Candidate at Columbia University writes about the societal impression digital devices are having on dependence issues in an article titled "Intelligence in the Age of Smartphones".

> Most of us living in developed economies carry one or more devices around each day. Any combination of a phone, digital music player, electronic reader or laptop is quite common. Consumer Electronics Association, a Virginia-based trade group, recently reported that the average American household of 2.6 people now has around 24 gadgets. With more gadgets in our homes, we are also watching more TV, movies and both our Internet and data usage through wireless networks are at an all-time high. (Wilson, "Intelligence in the Age of Smartphones")

To ratify Shirky's argument for speculating "what would happen if" changes were going to occur, Wilson reports that people have already recognized the available resources, are capitalizing on the technology's connectivity and consuming differently, and through more mediums than ever before at a rate never seen before. Could it be possible that these data are only rising to the surface in the United States of America and other developed or industrialized countries? Wilson says absolutely not. She quotes the

International Telecommunications Union report for 2011 that shows 35% of the world's population is now online, nearly doubling in five years from 18% in 2006. Perhaps a more interesting statistic is that, from the people accessing the Internet, 62% are from the developing world, a few steps up from 44% in 2006. Lastly, she reports that roughly 11% of the Internet users are getting online from developing countries that are *not* India and China (Wilson, "Intelligence in the Age of Smartphones").

The facts and figures that represent the spread of Internet usage and communication breadth are prodigious for understanding the fact that Internet usage and cellphone usage is spreading. But why are people using these technologies? To answer that question, and one of the main research questions in this thesis, "How has instant information shaped the conflict landscape?" Clay Shirky must be referenced once more. He associates the motivations for using tools like social networking and harvesting huge amounts of data from immense databases to be antediluvian.

> The means for harnessing our cognitive surplus are the new tools we have been given, tools that both enable and reward participation. Our motivations for using those tools are the ancient, intrinsic ones, motivations previously remanded to the private sphere but now bursting out in public. To be turned into something real, however, all of this raw capability still requires opportunity. (Shirky, *Cognitive Surplus*, pg. 95)

To simply say, "people like to talk to one another" strictly disallows any kind of further insights into the why's or how's the Internet and communication technologies are creating a shift in group biases. Also saying, "people enjoy knowing things" does not permit insights. An unexpected number of social scientists are surprised by how many people are adopting information technologies so quickly. The literature involved in the discourse of the Internet and society is scarce, thus leading a researcher to believe that

people are being underwhelmed by how unprecedented these interactions and subsequently the speed of communication is. Another factor could be that people are imagining that these technologies are in fact *causing* these shifts in perception. Lonergan may agree with Clay Shirky for constantly referring back to the individual. "Human character is the essential component of our sociable and generous behaviors, even when coordinated with high-tech tools. Interpretations of those behaviors that focus on the technology miss the point: technology enables those behaviors, but it doesn't cause them" (Shirky, *Cognitive Surplus*, pg. 98).

Since technology is not the catalyst but merely a vehicle for change in human decision-making processes, it is then appropriate to analyze *how* humans have changed or are changing the ways they interact with each other through the use of information technology. Because the root cause of change, found in the depths of human character, is difficult to analyze on the whole as society can be, the focus will be shifted away from society as a whole and this analysis will turn to social networking, decision-making in identity formation (both group and individual identity formation) and the ways in which people decide to join groups has shifted in the age of instant information. Human interaction online and human interaction in real life (IRL) is decidedly different. In order to understand exactly *how* different, Zizi Papacharissi's collective work titled *A Networked Self: Identity, Community, and Culture on Social Networking Sites* serves as a solid base to gain insights into how humans are interacting differently online, thus forcing a change in the way they interact in real life or face-to-face conversations.

Human Interaction

Due to technology enabled interactions that are new or different from antiquated or slower forms of communication, new or different forms of relationships form when humans interact with one another as a result from said enablement. The first step in understanding that there is such a phenomenon occurring, one must understand what has been discussed in this section thus far. However, the broad spectrum of society need not focus on individual relationships and queries resulting from such. An analysis of how the information is received through the medium or channel of the Internet is necessary. In *A Networked Self*, Papacharissi and associates address this in chapter one. Discussing an unforeseen development in technology, Papacharissi notes that while said developments were unforeseen, the changes that would befall on relationships on a large or interpersonal scale could not have been understood or considered, either.

> More specifically, some new communication technologies are changing the manner of reception by which individuals acquire information from institutional, interpersonal, and peer information sources. Technology changes the temporal and contiguous presentations of these sources, and may in fact change the information processing and social influence dynamics among these sources; that is, the sequence with which sources are sampled or the simultaneousness with which they appear may have potent effects on the information processing filters and biases. (Papacharissi, p. 17. Kindle Edition)

Bringing this idea back to Lonergan's data of consciousness loop, and understanding that with the acceptance and usage spike in communications technology it is apparent that the decision-making processes are being effected almost directly through

the "information processing filters and biases" that Papacharissi and associates discuss. To further this discussion, Papacharissi understands another important notion regarding the motives at work once the individual consumes the information, saying that motivation will have "much to do with" the resultant interactions between individuals or a group (Papacharissi, p.18. Kindle Edition).

Epistemologically speaking, a noticed paradigm shift in defining a new mode for communication between individuals was happening. In 1986, a pair of communications researchers named Cathcart and Gumpert explored a "new typology" for mass/individual communication mediums. Coining the term "mediated interpersonal communication" which was defined by saying it was "any person-to-person interaction where a medium has been interposed to transcend the limitations of time and space" (Papacharissi, p. 20. Kindle Edition). Cathcart and Gumpert were sensible with how humans were beginning to interact with each other through a mediated vehicle. "They argued that new analytics are needed for such forms since the interposition of media changes the quality and quantity of information exchanged, influences personal behaviors and attitudes, and shapes an individual's self image. Some 20 years later, without a new typology per se, the study of computer-mediated communication (CMC) has done much to flesh out a number of issues that Cathcart and Gumpert identified" (Papacharissi, p. 20. Kindle Edition). All of the ways the "interposition of media" affects human communication are important in understanding conflicts that result from these newly influenced behaviors and attitudes. Logically, Papacharissi and Cathcart and Gumpert's argument or theory makes sense. If someone is listening to a verbal dispute between their neighbors through the apartment

wall, some words may be muffled and misunderstood, also the person listening would not see any facial expressions or any type of non-verbal communication that is happening in the apartment next door. Oppositely, if the same individuals arguing were in the same apartment as the eavesdropper, the conversation would unfold differently for *all* parties involved. Not only would the observer fully understand what each arguing party says (assuming all parties speak and understand the same language), but the parties in conflict would now notice someone was watching them argue undoubtedly changing how they physically present themselves and perhaps also effect their tone of voice, etc.

Is it worth understanding fundamental differences and changes in communication theory for the purposes of conflict analysis and resolution? The answer to that question can be explained by asking another question; Does it matter if two parties engaged in an argument speak and understand the same language? If communication theorists are understanding and adapting to change, it makes sense for conflict studies theorists to recognize that these paradigmatic shifts have been and are still occurring in society. It is important to note that there are two processes at work when discussing the wide spread acceptance and use of digital communication, or "computer-mediated communication" (CMC). One process, described above, focuses on understanding how the information changes form and is received differently by the participants in a conversation or online engagement. Another, perhaps more important process to the field of conflict studies, focuses on realizing that CMC allows participants to keenly adapt the presentation of themselves to adhere to certain expectancies of others engaged in conversation with them; a process that simply would seem ridiculous in physical conversation. "Studies

show that CMC allows users fluidly to adapt their self-presentation to their expectations or observations of a conversational partner in order to facilitate impressions and positive interactions, in both asynchronous statements and adaptive synchronous interactions…For these reasons, it is important to improve understanding of how these Internet-magnified motivations affect message processing" (Papacharissi, p. 32. Kindle Edition).

The idea that exponential change was happening due to a reconfiguration of information distribution was noted earlier by Shirky when the Internet changed the media world by adopting television, radio, and print media processes and flipping a switch to allow for two-way distribution on a massive scale. This is important in understanding societal impact, but in understanding human interaction on a personal level, too. In the earlier days of the Internet, there was widespread information distribution from a variety of websites bringing different information to a massive amount of consumers. It was faster and more variable than television, radio, and print media. However, it was merely a different form of distribution through the skinny end of a funnel. The introduction of Web 2.0 changed everything from mass communication, publishing, and most importantly individual communication. "Web 2.0 sites [Facebook, Twitter, Youtube, Linked-in, Tumblr] are by nature interactive environments, not just site-to-user, but user-to-user and user-to-public as well. Consequently, the way people learn to interact may also be evolving" (Papacharissi, (p. 34). Kindle Edition). The notion of user-to-user interaction plays a massive part in unearthing the newly forged relationships humans are able to have with one another in *any* discipline, concentration, or interest group in society

thanks to the World Wide Web. Yes, it is definitely possible that these interactions could still possibly occur without the mask of CMC, however, as described above, a large amount of information is changed when bringing these discussions online. Papacharissi and associates continue to postulate that another essential bedrock concept in addition to the sources of information "…is the recognition not only that interpersonal contacts motivate media information-seeking, but that an expanded range of particular interpersonal goals may be found to affect information processing in potentially different ways; different relational motivations such as status seeking, maintenance, or relationship initiation may bias information sampling from various media and affect the ultimate interpretations derived from them" (Papacharissi, (p. 34). Kindle Edition).

A third and perhaps self-explanatory feature of social networks, or networked communication sites in general is that they restructure how information is distributed and how individuals interact with the new forms of information, thus forcing a changed pattern of interactions with one another (Papacharissi, p. 41. Kindle Edition). It is important to note that the changes and shifts that are being discussed do not automatically denote negative or inappropriate behavior conducted by the individuals online. Yet, this idea of restructured, networked information reveals a new venue for gathering together for people of common, and also dissimilar interests. Papacharissi and associates call them "networked publics". "Networked publics are publics that are restructured by networked technologies. As such, they are simultaneously (1) the space constructed through networked technologies and (2) the imagined collective that emerges as a result of the intersection of people, technology, and practice." Additionally, "…they allow people to

gather for social, cultural, and civic purposes, and they help people connect with a world beyond their close friends and family" (Papacharissi, p. 39. Kindle Edition). Again, the nature of online networks creates a dismissive attitude at a surface level. Through the lenses of conflict analysis, these digital domains may seem quaint and appropriate for alternative dispute resolution techniques that would allow parties to come together in a truly neutral arena to have it out about a number of issues. At the core of conflict resolution, communication and common understanding are paramount, and what better a place for distraction-free, honest, raw conversation to take place. These ideas must not be the ideas this thesis conveys. While a fantastic and truly revolutionary tool, the Internet and social networks often cause more trouble than they can solve, even though the idea seems wonderful. "Comments are not simply a dialogue between two interlocutors, but a performance of social connection before a broader audience" (Papacharissi, p. 45). Kindle Edition). While providing instant access to friends, acquaintances, and colleagues, social networks provide a catalytic process that can serve as kindling for a conflagration of conflict. In order to understand *why* this happens, observation of real life conversations compared to networked conversations online provides evidence to a number of factors. Physical conversations are face-to-face allowing participants, any number of which can take notice of facial expression, notable pauses, tells for lying, etc. One must engage and continually remain engaged throughout the duration of the conversation for one to be taken seriously or to be heard. Also, one can possibly be engaged in multiple conversations, but while that is a highly unlikely probability, those conversations must be mutually exclusive. Online, in networked publics, and on social networks the stage

changes completely in conflict and out of conflict. Tone, body language, facial expression, pause, active commitment are *all* invisible to *all* parties. "Networked publics force everyday people to contend with environments in which contexts are regularly colliding" (Papacharissi, p. 50. Kindle Edition). The argument can be made that the anonymity of interacting online in networked publics creates the tension, not the environment itself. But anonymity is not always a variable when engaging in CMC. Email messages and text messages are two examples of mediums in which, presumably, people know who the other person is and may in fact be close friends or colleagues with one another. If people tend to know whom they are having conversations with most of the time, why do contexts evaporate so quickly in networked publics? "Maintaining distinct contexts online is particularly tricky because of the persistent, replicable, searchable, and scalable nature of networked acts" (Papacharissi, p. 50-51. Kindle Edition). Basically, while networked publics and CMC provide a great venue for exchanging information and communicating, they also allow for intense scrutiny of any and all acts committed online. If someone says something in person, they could easily deny that later perhaps by accusing they were misquoted pitting the receiver's word against the sender's. On the Internet, what is said (typed) is more often than not concrete, unmistakable history. In physical conversation if someone claims a statement is fact, the others involved (presumably without smartphones) in that conversation could debate, but again it becomes one person's word against another. It is important to note the significance of networked publics and social networks on the broader spectrum of society. "The changes brought on by networked technologies are more pervasive than those by earlier media.

Because content and expressions contributed to networked publics is persistent and replicable by default, the possibility of acts being scaled, searchable, and thus viewed is heightened. Physical spaces are limited by space and time, but, online, people can connect to one another across great distances and engage with asynchronously produced content over extended periods" (Papacharissi, p. 53. Kindle Edition). The contrasts networked publics have against earlier media cannot go overlooked when discussing the importance these new information and communication technologies have regarding conflict theory. In the contemporary networked world, human interaction is changing the way that world looks. In turn, as conflict analysis grows, it must assume accountability, just as it did after the end of the Cold War for this new world.

Papacharissi moves away from networked publics to a more individualized analysis. The shift in focus is logical. After defining where people are gathering to interact, touching briefly on the follies and potential misrepresentations of information slung across the Internet, she concludes by attempting to understand the true "networked self". She defines self-presentation in late modern societies as "…an ever-evolving cycle through which individual identity is presented, compared, adjusted, or defended against a constellation of social, cultural, economic, or political realities" (Papacharissi, p. 304. Kindle Edition). This relates similarly to how Lonergan understands insights through the data of consciousness. As a person experiences and makes decisions, acts, and learns all the while that person is presenting themselves outwardly to society comparing and adjusting said self-presentation to accommodate a number of reality-based variables found in local society. An understanding of how the individual acts and makes decisions

in a connected world is of growing importance to many academic disciplines since the breadth of the Internet and associated technologies grows. Does this growing immersion and involvement in social networking and networked publics mean that people will never leave their homes or offices to meet with people in physical space again? Papacharissi and Shirky conclude unvaryingly, no. Papacharissi says:

> The growing popularity of social network sites frequently leads scholars, the media, and the public to ask what sorts of individuals these networks produce: More or less social? Research typically reveals that, following an initial phase during which avid use of a new medium displaces other habits, individuals return to their everyday routines, which now include a healthier integration of the new medium. Therefore, for most people, new media contribute to, rather than permanently dislodge, social and other routines. (Papacharissi, p. 308. Kindle Edition).

The phase of avid adoptive use is slowing down. The novelty of the new connectedness is fading away, however the Internet is still playing a major part in shaping the physical interactions, still. Shirky discusses how, even though there are new behaviors made possible by technology, those behaviors are not going to replace engrained antediluvian interactions. “Those bits of new behavior, though, are extensions of, rather than replacements for, much older patterns of our lives as social creatures” (Shirky, *Cognitive Surplus*, p. 101).

In the progression toward gaining insights to the research questions posed, a more illustrative example must be given. The context, perhaps muddied by discourse regarding the different ways communication technologies are reshaping human interaction, shall be redeployed. After the conversation regarding a brand new perspective, potential mental ailment and dynamic attachment, mutable impacts on society, and analyses of changes in human interaction, two case studies will remove any vagaries that may have materialized

to this point. The two case studies will be similar, but will convey two different ideas about how technology is influencing the conflict landscape. The first, a case study on protests in S. Korea, will display how technologies can affect decision-making processes in conflict settings. The second, a case study on Kenya in 2007, will bring out the potential dangers and disorder possible through the vehicle of the Internet and other communication technologies. Both will analyze individual flow of consciousness and understand shifts of group and general biases in both cultures during conflict.

Case Study #1 – S. Korean beef protests

In April of 2008 President Lee Myung-bak met with President George W. Bush to discuss lifting a ban on imported beef from the United States to S. Korea. The agreement marked the end of a five-year ban between the two governments on U.S. beef trade due to the 2003 mad cow disease scare. Bovine spongiform encephalopathy (mad cow disease) caused severe damage to the U.S. beef export market causing sixty-five countries to impose full or restricted sanctions on the importation of U.S. beef products. From 2003 to 2005, the export sales figures dropped from $3.8 billion in 2003 to $1.4 billion in 2005 ("Mad cow watch goes blind"). A S. Korean university medical professor Kim Yong-sun wrote a thesis regarding Korean's susceptibility to Creutzfeldt-Jakob Disease (CJD), the human form of bovine spongiform encephalitis. The thesis was published in a foreign scientific journal in 2004. Kim argued that 94.3 percent of Korean people carried a specific gene called methionine-methionine (MM), which was common in all 207 documented cases of humans having CJD. Kim continuously reiterated the point that the media twisted his notion absolutely out of proportion ("Mad Cow Thesis Twisted Out of All Proportion"). Needless to say, the lifting of the beef sanction in S. Korea did more than relieve diplomatic stress between the two nations. On April 27, 2008 the Munhwa Broadcasting Company (MBC) televised a program called "Is American Beef Really Safe from Mad Cow Disease?" which, coupled with the news of the recent trade renegotiations with the U.S., caused severe social unrest ("What To Do About Media Fabrications").

By the middle of May in 2008, massive amounts of people had gathered in Cheonggyecheon Park near the center of Seoul. The reasons the protestors were gathering in such large numbers vary from source to source. Some arrived at the protests because they were afraid for their health and hoped to reinstate the sanction on U.S. beef. But others were there because President Lee had made this decision without conferring with the Korean people about the issue. Some protestors said their new president was "arrogant" such as when he referred to himself as the "CEO of Korea" ("Q&A S Korea beef protests"). As the number of protestors gathered, it seemed as though the reasons were becoming less and less specific and turned into general disgust with the government at the time. As May faded into June, the anniversary of the 1987 protests, which brought back democratic elections to the country, approached and an eerie sense of revolution crept over the incumbent President Lee ("Ill met by candlelight"). On said anniversary, Han Seung-soo the prime minister and fifteen cabinet ministers presented their resignations ("Ill met by candlelight"). How could, after one month of intense protests, the Korean people seemingly force the prime minister and numerous other ranking officials to step down? The numbers of protestors reported at the peak of the protests waiver significantly; some report numbers of 700,000 and others report 80,000 protestors were in and around the park. However, the quantity of citizens is not of significant interest for this study. S. Korea has witnessed mass public demonstrations before; they are great at assemblies.

The demographic of these protests was different from the onset of the demonstrations. A majority of the protestors were young teenage girls, most of who were

not eligible to vote (Herskovitz and So-eui). Since the atmosphere seemed to have shifted from a beef rally to anti-governmental mass demonstration, what were these girls doing in Cheonggyecheon Park? S. Korea is and was, in 2008, one of the most connected nations in the world. The Internet infrastructure coupled with the nearly total adoption of mobile devices by the citizens became the base for a massive chain reaction. Still, the reason for these young girls to be present at an immense public demonstration begs the question "How did they become so organized?" Of course there is the possibility that they heard of the protests from the local news coverage, a friend, or family member. The numbers simply would not add up, though. Clay Shirky estimates that the teenage girls, most of whom were early organizers, made up over half of the people present at the rallies in early June. (Shirky, *Cognitive Surplus*, pg. 32) Nathan Schwartzman, writer for asiancorrespondent.com, quotes a Korean reporter, working for Joongang Ilbo, whom attended the rallies in early May.

> Half of them were students in their middle and high school uniforms. Rally leader Kim Pyeong-gun climbed on to a 1-ton truck and asked, "we must stop mad cow. Let's show the fear of our people through our silence." The participants lit the candles in front of them. They sang along to Arirang from the speakers. But they did not carry pickets with political slogans. Most of the participants said they had learned of the vigil through Internet message boards or cellphone text messages. 12-year old elementary student Yun, who came from Incheon with her friends, said, "I saw it on the Internet and came without my parents knowing. I eat beef every other day in school but it's like I didn't know the media is saying there is a danger of mad cow disease." 13-year old middle school student Go, who came to the vigil after finishing an exam at school, said, "on the fan site for Dongbangshingi I saw a message saying let's gather in Yeouido. I'm here because of Dongbangshingi." (Schwartzman)

Dong Bang Shin Ki (DBSK), which translates to "Rising Gods of the East" are a popular boy band that have an incredibly strong following in much of Asia, especially in S. Korea. The fan website operated a message board with the ability to post comments allowing users to talk back to one another, usually about DBSK. Most of the young girls that were present in Cheonggyecheon Park first heard about the importation ban being lifted while browsing tour dates and bios of the Asian pop stars. It is important to note that DBSK is not politically affiliated nor did the band promote any sort of propaganda for *or* against the U.S. beef embargo. Shirky says, "*I'm here because of Dong Bang Shin Ki* isn't the same thing as *Dong Bang Shin Ki sent me*; DBSK never actually recommended any sort of public or even political involvement" (Shirky, *Cognitive Surplus*, pg. 33). The young girls organized through a common interest and were suddenly front and center for the biggest public demonstration in S. Korea since 1987.

The media christened the young teenagers "candlelight girls" because of the all day and all night protests, the demonstrators held vigils hoping to show the government they were not going away until they were heard, or at least consulted when making potentially fatal decisions. The argument can be made that the Internet or articles that are published online can either be blown out of proportion as in the case of Kim Yong-sun's thesis, or simply are fabricated for sensationalistic adoption. Let it be known that the Korean people and, for that matter, most people around the globe are not sprinting out of their homes to hold public demonstrations after reading about estate tax reform. The candlelight girls admitted this to a reporter from Joongang Ilbo.

> 17-year old high school student Jo pointed out, "we don't believe everything that gets written on the Internet. But if there is a

> danger then stopping this from the beginning is the right thing to do." Lee Jae-myeong, a 19-year old freshman at Gyeonggi University, retorted, "there is a lot of wrong information on the internet, like saying that mad cow disease can spread through the air, so I don't understand, but the government hasn't released any detailed information so I don't think a hasty agreement is ok. (Schwartzman)

The collaboration between technology and motives can achieve stunning displays of human character that could never have been accomplished at the speed and specificity that it can today. Before, there was a divide between the online world and the physical world. But now it is becoming apparent that those two worlds are not and will never be different again. Shirky says, "Our social media tools aren't an alternative to real life, they are a part of it. In particular, they are increasingly the coordinating tools for events in the physical world, as in Cheonggyecheon Park." (Shirky, *Cognitive Surplus*, pg. 37) The question that must be posed is "Are the results of coming together and organizing online to be organized in the physical world, always positive?" Furthermore, "Can the Internet be considered a positive influence on the decisions people make in conflict settings?"

In the middle of June, the protests turned violent. Shoving matches between riot police and protestors turned into hundreds of injuries for both the police on the scene and the demonstrators. The police and the Justice Minister Kim Kyung-han had threatened to use liquid tear gas on the crowds ("Scores Hurt in S. Korea Beef Protests"). The media outlets began circulating pictures and video (most uploaded by the protestors themselves via mobile devices) of riot police with batons and water cannons striking young teenage schoolgirls. The rest of the world was introduced to the violence with images of police in riot gear kicking young girls in the head. Surely the young, innocent candlelight girls did

not gather in hopes of clashing violently with the local authorities. What happened when they decided to arrive in Cheonggyecheon Park not a month earlier? How did they decide to do this? What were the influences that made such a large number of girls who were not even eligible to vote in governmental elections mobilize under one idea? An analysis on the potential decision-making process through the use of Lonergan's consciousness-looping mechanism will be given to understand, putatively, how the Internet caused them to willingly put themselves in harms way.

Referring back to Fig. 1 in section one, the data of consciousness (in this case having consciousness of the issue and deciding to act) begins with an experience. The space occupied between the first two points on the loop comprise the intellectual level of consciousness, this level signifies a sense of understanding by asking the question "What is it?" The thing in question for this case is the lifting of the importation ban allowing U.S. beef to be distributed in S. Korea. The source of this information is vital and will be discussed later. The next point on the loop after an understanding of the experience is obtained is verifying that the understanding of the experience is so. After the individual understands that the ban has been lifted, the individual must verify that what he or she had just read or heard is in fact true. Those three important operations take place in the lower half of the consciousness loop that is referred to as the "reflective level". The individual must reflect on the inciting experience, gauge an understanding of what it truly is, and thus verify it to be so. The Internet allows for this level of the consciousness loop to operate swiftly and fluidly, especially for multiple issues. The innovation in information and communication technologies like cellphones and email can affect this

level in many ways, however of arguably less importance than the ways said technologies affect the "moral/existential level" of the consciousness loop.

The first point in the upper loop is "valuing". This is an important point because it forces the individual to apprehend the reality of the situation through feeling and use what they have learned about the inciting experience to relate why this thing is important to them personally. In the beef case, the young girls made the connection almost immediately that the ban would impact them on a daily basis because they consumed beef products at school. They established a clear "care" relevant to their environment. Coupled with the information reported in Kim's thesis about the increased vulnerability of Koreans to CJD, the lifting of the ban was of great value to them; it impacted their personal health. Until this point, the girls' consciousness could have potentially moved through the loop without interacting with anyone else including their peers or parents. Verifying and valuing could have been extrapolated on the basis of personal research; still they would have arrived at the same conclusion of it being a definite threat to their care of personal health. After realizing that the ban is important to them as an individual, they move to the point of deliberating asking "What could or what should I do?" and "What could or should I *not* do?" about the value they have felt. DBSK's message board fills the holes created by time and space and allows the young girls to collaborate, organize, and share ideas about what to do next. Still, the individual must make a decision to take part in whatever plan is suggested by the group. The next point of "evaluating" is where conflicts can potentially be created. Perhaps the consequences or potential dangers of mass public demonstrations were not discussed on the message

boards or text messages, because the evaluating stage of the consciousness loop did not consider things turning violent. One can argue that they were informed that there was a potential danger, and the value of participating in the protests outweighed the evaluation of "Is this good?" The "deciding" point, after evaluating, asks, "Will I do it?" After evaluating the situation and coming to the conclusion to participate in mass public demonstrations until something was done about the beef ban, the actual decision seemed simple. "Will I go to Cheonggyecheon Park and hold a candlelight vigil to attempt to force President Lee to reintroduce the U.S. beef ban because I do not want to get CJD from eating beef at school?" Thus, the result of the loop caused the girls to be put in the middle of a conflict. A large number of young girls arrived. Many were hurt due to being beaten and sprayed with a water cannon. Using the Insight approach to conflict, analysis is objectified through the consciousness loop. By understanding what the young girls valued through reading their interviews and researching the protests, it becomes clear what "cares" the young girls had. The government lifting the beef ban was a direct threat to their care of safety and health, thus leading the girls to organize through the message board.

The source of the information that sparked all of this must be called into question. As was stated, the importance of information being based in fact, not becoming inflated, and being reported as such is vital. An article in the Chosunilbo, a Korean news outlet, titled "What to Do About Media Fabrications" blames the MBC broadcast that aired just a few days before the beginning of the demonstrations started. The "PD Diary" program suggested many of the things that led the Korean public to believe they would almost

certainly fall ill to CJD. In the nights following the initial broadcast, MBC aired 13 out of 25 pieces that focused on CJD, mad cow disease, and anything related to the issue. The main nightly news program, KBS allotted 16 out of 28 pieces for the U.S. beef issue ("What To Do About Media Fabrications"). The article points out that not one of the broadcasts or news networks ever mentioned there was not one confirmed CJD case in the U.S. or anywhere else in the world. But, the barrage of sensationalized news broadcasts coupled with the extremely exaggerated thesis of Kim Yong-sun and gossiping, fearful teenagers in an environment that is the most connected nation on the planet, sound decisions become difficult to make guided by luridness. However, one cannot rely on assumptions that the media broadcasts reached everyone. The behavior of the young girls was mainly driven by the conversations that took place on the boy band's message board. When their behavior is analyzed through the Insight approach, it becomes easier to understand what truly influenced them to act.

The protests were not a total loss, however. After causing most of President Lee's cabinet members and his prime minister Han Seung-soo to issue letters of resignation and attempts to clean up Cheonggyecheon Park resulted in investigations by global organizations like Amnesty International, new agreements were pursued between Washington and Seoul. On June 21, 2008 a new agreement was made. Cattle that were to be imported were not allowed to be more than thirty months old, as cattle older than thirty months are more susceptible to BSE. The new deal also stated that certain parts of the cattle could not be imported, a clause that was not present in the initial agreement

which allowed all parts of U.S. beef to be imported ("Scores hurt in S. Korea beef protests").

The public protest has been a tool for displaying discontent with administrations for a long time. New tools like the Internet and the cellphone have to work in conjunction with the general motives of the public. In the case of the S. Korean beef protests, the Internet brought together a mixed demographic for mass demonstration, thus allowing for a unique message to be heard. The government needed to be reminded that their constituents spread beyond those who could punch a ballot. With the help of the candlelight girls the Korean people were able to influence the foreign policy of their government. The young girls still put themselves in danger even though there were no serious injuries or deaths; information and communication technology aided their cause. They were able to make new decisions based on the connectedness of the population that allowed them to act in ways they would not have previously been able to.

Case Study #2 – Kenyan Election Crisis 2007-2008

The second case to be analyzed will focus on a different aspect of connectedness in the conflict landscape. What happens to a conflict when a government and news outlets simply are not reporting important safety information? This was not the case in S. Korea. For the media reported inflated, sensationalized information which caused the mobilization of an unexpected cohort. However, after a sloppy national election in Kenya in December of 2007 that resulted in severe ethnic violence, the media was too slow to report danger and social unrest. When citizens were afraid, lost, and confused about the results of said election, technology intervened and gave them an outlet not only to be informed, but also to be heard.

On December 27, 2007 a national election was held in Kenya to find out whether or not incumbent Mwai Kibaki would retain the presidency or if opposition party leader Raila Odinga, of the Orange Democratic Movement (ODM) would obtain power. President Kibaki, and his party the Party of National Unity (PNU), was declared victorious over Odinga and almost immediately the ODM and supporters claimed electoral chicanery saying the election was a fraud ("Kenyans Riot after "rigged Election"). This thought ignited large amounts of violence mainly in the Rift Valley and in western Kenya. The Kikuyu people were caught the immediate backlash of the violence. Ethnic violence increased quickly, perpetrated mainly in the Rift Valley

Province ("Kenyans Riot after…"). Since Kibaki was from the Rift Valley and a member of the Kikuyu community, violence was direct and immediate. Retaliation was almost a custom there since the Rift Valley was the stage for political violence in 1992 after election disputes, too. Kibaki supporters targeted Naivasha, Nakuru, Luos, and Kalenjin. While all of this was going on in the west, in Mombasa the Muslim population was showing unrest by looting, though these protests were not ethnically associated as those in the Rift Valley ("Kenyans riot after…"). The long-standing land disputes in the Rift Valley only furthered tensions between the two communities.

In the first four days after the election results were announced and President Kibaki was immediately sworn in, the international community expressed concern. The United States, for example, congratulated President Kibaki on his reelection, but within two days declined to recognize Kibaki's apparent victory due to growing concerns from European Union leaders claiming the results were skewed. President Kibaki had purportedly won by an amount of 200,000 votes. The European Union had a team of "election observers" present who claimed, "the electoral commission had failed to ensure the credibility of the presidential vote." ("Kenyans riot after…") Odinga, backed by the ODM, claimed the vote had been inflated by as much as 300,000 votes ("Kenyans riot after…") which, if found out to be true, would have given Odinga a slim margin for victory. Abruptly after the voting results were announced in favor of President Kibaki, police were responding to large riots in a Nairobi slum called Kibera, President Kibaki shutdown all the live television and radiobroadcasting systems almost immediately after seeing the violent rioting. The Ministry of Information Permanent Secretary Bitange

Ndemo said in a statement, “I am directed by the minister for internal security, John Michuki, that in the interest of public safety and tranquility I order the immediate suspension of live broadcast until further notice” (“Kenyans riot after…”).

Odinga had called for rallies to be held on January 8, 2008, but after plans had been set in motion to hold a formal mediation with African Union Chairman and Ghanaian President John Kufuor. There were accusations from Odinga’s camp that expressed concern about particular meetings held between President Kibaki’s cabinet and President Kufuor prior to arriving in Kenya. In a superficially cooperative move, President Kibaki named new cabinet members while keeping cabinet slots open for ODM members to fill. However, none of the slots that were filled were members of the ODM and the slots left open were of less importance. The Secretary-General of the ODM, Anyang Nyongo said, “It [the cabinet] has absolutely no legal standing, having been nominated by a president who himself is illegitimately sworn in, into office, completely in violation of our constitution.” (“Kenya leader names new ministers”) At this point, the mediations held by John Kufuor were routed away from peace or any notion of a recounted vote.

According to many reports, just a few weeks after the election announcement, almost 600 people were killed and some 250,000 had been displaced from their homes. The violence was not stopping, the looting and unrest continued. (“Kenya leader names…”) With the live radio and television broadcast systems disabled, intense tribal violence, and absolutely no diplomatic traction many onlookers were reminded of past political problems in Kenya. Even if there were a second election held or a recount of the

initial vote and a new conclusion was reached, how could the Kenyan citizens find out about it? With no live radio, television, or media support of any kind, citizens living amongst the riots were left to figure out a new way to report, a new way to become informed *without* the help of government *or* mass media.

Joshua Goldstein and Julia Rotich published a report through the Berkman Center for Internet and Society at Harvard University to be added to an ongoing series called the Internet and Democracy Case Study Series. The title of their report is "Digitally Networked Technology in Kenya's 2007-2008 Post Election Crisis". The report studies the effects of the Internet and technology on democratic processes and civic engagement. Goldstein and Rotich use a continuum described by a political scientist named Larry Diamond to express two forms of impulses in society. The first form of impulse that drives behavior is called "predatory society" in which violence, opportunism, and cynicisms are the norms. The other form of impulse is called "civil society" where tolerance, equality, and accountability drive behavior (Goldstein and Rotich pg. 3). They argue that the Internet and technology effected Kenya post-election in three ways: campaigns to promote violence through SMS text messaging, blogs that challenged the media in opinion and narratives, and lastly caused the immersion of online human rights campaigns to report violence and violations of those rights (Goldstein and Rotich pg. 3). This analysis will focus on two of those ways: the spread of violence through SMS text messages and the creation of online reporting websites for human rights violations. Admittedly, the question of importance of technology to Africa in general is a new question with little supporting data, however as reported earlier in this thesis, Internet and

cellphone use is spreading and technology is becoming cursorily significant. Both uses of technology, one form promoting hatred and violence, and another promoting human rights are important to analyze in the context of conflict analysis and resolution. Yet, the two impulses of society collided violently throughout the Rift Valley causing hundreds of deaths and hundreds of thousands of displaced people due to escalation caused by technological tools. How does one decide to use technology for predatory purposes in comparison to civil purposes? Goldstein and Rotich provide evidence for this particular case. "Much of the violence in this region is motivated by *majimboism*, which is a Swahili term referring to the aspiration of a type of federalism composed of semi-independent regions organized by ethnic group. To many in the Rift Valley, however *majimboism* legitimizes violence against Kikuyu's who are seen as encroaching on the ancestral land of other ethnic groups" (Goldstein and Rotich pg. 4).

The word for "witness" or "testimony" in Swahili is *Ushahidi*. On January 9, 2008 Kenyan tech and human rights blogger Ory Okolloh teamed up with Erik Hersman, an Africa tech-blogger and a few other able-minded individuals to develop and release a new kind of crisis reporting tool (Adewumi). The idea behind Ushahidi.com was to create an environment that allowed for crowd-sourced crisis mapping of violence, looting, etc. in order to circumvent the information roadblocks put in place by President Kibaki. Information was simply not traveling fast enough for local media to report accurate crisis information allowing for NGOs in the area to assist where needed. The stories that were being reported only reported death and chaos adding nothing of substance in order to help soothe tensions or offer assistance. The idea of crowd-sourced information allowed for

fast, accurate reporting that would be verified by volunteers working with the website. Ushahidi.com was a hybrid concept. Even though Web 2.0 technology had been around since before 2008, displaying crowd-sourced data on a visual, clickable map (provided by Google Maps) in real-time through the website interface or through SMS text messaging was unique. After being active for only five days, the website had generated over 13,000 page views with almost thirty reports documented (Adewumi). Goldstein and Rotich claim, "The Ushahidi platform is revolutionary for human rights campaigns in the way that Wikipedia is revolutionary for encyclopedias; they are tools that allow cooperation on a massive scale. Yochai Benkler describes this phenomenon as 'commons-based peer production,' and argues that it has a central place in rethinking economic and social cooperation in a digital age."

Patrick Meirer and Kate Brodock coordinated a project that analyzed and compared the information reported by Ushahidi, the mainstream media, and citizen journalists' blogs during the crisis in Kenya in 2008. The project was to be part of the Harvard Humanitarian Initiative at Harvard University. The study was conducted over a thirty-day period. Their methodology for analysis were "reports on both violent and peaceful events following the Kenyan elections were hand coded using the following parameters: Type of Event, Description, Causalities, Time of Report, Location of Event, and Source of Information" (Meirer and Brodock).

The preliminary results of the study found that over the time of the study Ushahidi covered a wider geographical range than both other information sources. Also, Ushahidi reports documented cases of violence that were not reported by the other two information

sources. In direct contrast to citizen journalist reports and news media, Ushahidi consistently had accurate location data accompanying the crisis-report. Though the mainstream news sources did report deaths before citizen journalists, the news media did not report on any seditious events leading up to the direct violence (Meirer and Brodock).

While SMS text messaging allowed for Ushahidi to accurately report location of violence quickly, the short message service could also be blamed for the spread of "viral hatred" (Goldstein and Rotich). "Fellow Kenyans, the Kikuyu's have stolen our children's future...we must deal with them in a way they understand...violence" and "No more innocent Kikuyu blood will be shed. We will slaughter them right here in the capital city. For justice, compile a list of Luo's you know...we will give you numbers to text this information" (Goldstein and Rotich) are two examples of SMS text messages that spurred an infection of bad feelings in the region following the election announcement. SMS text messaging provides a service that allows for "multi-directional communication" meaning that the senders of the message can reach an extended audience while that audience can, in turn, either reply to the sender, forward the exact message to one or many recipients, or construct a message of their own and send that message to one or many recipients. The recipients of those messages can thus conduct the same operation thousands of times over. Earlier in 2007, before the post-election violence, three Ugandans were killed due to an attack organized via SMS text messaging (Goldstein and Rotich).

Safaricom, Kenya's largest mobile phone provider has nine million customers (Goldstein and Rotich). If violence can be easily organized through this medium, why not monitor the data closely and shut down the service? One can assume there are many

reasons why shutting down cellular service to nine million people could be detrimental, but Michael Joseph, the CEO of Safaricom, when approached by the government to do just that, recommended sending mass messages reinforcing calmness and peace (Goldstein and Rotich). Joseph understood that, due to the multi-directional nature of the short message service, hatred could just as easily be flipped around and turned in to messages for peace. Or, as Ushahidi has clearly shown, be used as an accurate reporting tool for human rights abuses and serious ethnic violence. But what changed in the individual? What kind of power does a tool as simple as SMS text messaging have to unambiguously effect how peace work or violence can be carried out? The fact remains that human beings have to irrefutably shift from using other forms of technology, perhaps less accurate or too slow to achieve their goals, and decide to send a text message to Ushahidi.com to report violence in their neighborhood. Goldstein and Rotich claim, "In the Kenyan context, reporting an act of violence was perhaps the only outlet for frustrated citizens. As Kenyan blogger Daudi Were writes, "We as Kenyans are guilty of having short-term memories. Yesterday's villains are today's heroes. We sweep bad news and difficult decision under the carpet; we do not confront the issues in our society and get shocked when the country erupts as it did two months ago." Furthermore Erik Hersman says that, "Sometimes there is just nothing more you can do than report what you see" (Goldstein and Rotich). Arguably, the vehicle used to carry that reporting to be understood by the masses greatly affects the impact of the message. People must decide to use a tool in order for it to be useful.

Lonergan's consciousness looping mechanism allows for further analysis on the

suppositious decision making processes of the Kenyan citizens. Of course, this mechanism cannot be held responsible for each and every person who made the decision to send a hateful SMS text message, or for every person who reported violence on Ushahidi.com. It merely provides a lens for analysis on how technology is shaping the way humans make decisions. In contrast to the S. Korean case, the mainstream media in Kenya (i.e. live radio and live television broadcasts) was not playing a massive role. One could argue that the lack of media engagement could have forced the population to explode into violence, thus creating an isolated situation for technological innovation in conflict situations in Kenya. However that was simply not the case. For example in Rwanda in 1994, the radio was used to propagate hatred and violence (Goldstein and Rotich) throughout the genocide. Due to the lack of haste and accuracy of the reporting that was actually being broadcast, the citizens needed a new form of reporting to address the ethnic violence that was occurring. Not only did Ushahidi give a voice to the neighborhoods and villages to report on their own, it utilized a medium that people were already familiar with; cellphones.

Consciousness in the bottom half of the loop moves fairly quickly in this context. Kenyan citizens are sadly, not strangers to ethnic violence. The input of data is quickly realized, understood, and verified. Throughout the first five days of it's operation, Ushahidi.com had over thirty reports of violence. People were starved of a way to achieve a sense of justice. But, as simple as sending a text message is to someone who is familiar with cellphones, the moral/existential part of the loop persists and becomes more important as the conflict spirals outward. For the individual, the valuing stage translates

to the gratification received from feeling that sense of justice once hitting "send" on their mobile phone. The feeling of justice is realized. But still, they move through the upper half of the loop. In the deliberating stage, the question of "What could or what should I do?" and "What could or should I *not* do?" becomes imperative. Before Ushahidi.com was created and made public, when faced with ethnic violence in the past, the individual was left with a few grim choices, none of which gave the citizen any type of gratification or allowed them to feel that value of justice. Now, the technology made the hope of peace closer to a reality. Similar to the S. Korean case, the deliberating stage is arguably one of the most important when it comes to analyzing technological effects on this process. The evaluating stage, asking the question "Is this good?" reinforces the feeling of justice obtained in the valuing phase of the loop. Sending off a text message from a cellphone, or submitting a report on the Internet instead of picking up a machine gun and becoming vengeful can now defend the threat of direct violence. The deciding stage, asking the question of "Will I do it?" is now realized. As long as a computer or cellphone was available, the action of reporting the violence was carried out.

Not only did the individual gain a sense of justice and accomplishment for themselves, as a collective, the citizens of Kenya, with a little help from Okolloh and Hersman, changed how crisis management is sourced and utilized across the world. There are countless other tools similar to Ushahidi.com that use interactive mapping software accompanied by crowd-sourced information to aid in humanitarian relief. "…Ushahidi has significantly lowered the costs of participating in a global civic campaign from anywhere on the planet with only a mobile phone signal" (Goldstein and Rotich).

Conclusions

As is evident in both case studies, conflict and technology can easily be linked together. In both cases there were positive and negative outcomes from technologically influenced decision-making. Whether it was sensationalism consumed up by young girls in S. Korea, or campaigns of hatred spread through SMS text messages in Kenya, paying attention to the affects of those technological influences can shed new light on conflict analysis. Ushahidi.com can be seen as a shining example of how proper crisis management technology can assist a divided nation and bring understanding and awareness to it's citizens. A common interest among a certain demographic can mobilize a population to sway foreign policy decisions. The Insight approach can be used to visualize a step-by-step process to better understand how people construct reality based on their experiences. Melchin and Picard are already using the Insight approach to better understand the conflict process. Consequently, the Insight approach allows the practitioner to objectify the flow of consciousness. Thus, creating a new understanding of the root causes for conflict. Through the analysis of threats-to-cares, one can gain insights about the particular issues an individual feels are threatened thus creating conflict by deploying defenses to said threats. Using a "trans-disciplinary" lens, the field of conflict analysis and resolution borrows from other disciplines in order to better understand it's own process and practices.

The amount of evidence showing the ways technology has impacted both how the individual views the world, and how the individual sees himself is growing quickly. Like the work of Melchin and Picard, Fitterer, and Lonergan this evidence is shedding a new light on the field of conflict resolution itself. Due to the relatively young nature of the study of conflict as a unique discipline set apart from other social sciences, it is an opportune moment to gain insights about how human populations are using technology, and how technology affects human interaction. The development of the Internet and auxiliary technologies has certainly affected human decision-making processes. Carr and Johnson author arguments that bring discourse about paradigm shifts that are happening subtly. Both argue from different viewpoints, one stating the medium is paramount, while the other pushes for individual regulation of information regardless of the medium. Thus, aiding in the analysis of the S. Korea case in particular, but also many other contemporary conflicts. In S. Korea, the medium was irrelevant due to sensationalism and potential facts being blown out of proportion causing mass public demonstration due to the confusion of the citizens. In Kenya though, the medium unquestionably mattered. In the study conducted by Patrick Meirer, it is apparent that Ushahidi.com became the best medium for broadcasting both accurate and time sensitive information above citizen journalism and definitely mass media. Thus, in both cases conclusively affecting the decisions individuals made in both cultures during both conflicts.

The impact information technologies like the Internet have on individual interaction and society, must be understood in order to fully associate the impact they have on conflict. The discourse provided in the second section of this thesis can be

referenced in order to gain insights into shifts in perspective, interpersonal interactions, shifts in general and biases and common sense (societal changes). It can be concluded that since the Internet other mediums of information distribution are in fact shifting perspectives and changing the ways people come together for group activities, the impact is prominently related to shifts in conflict dynamics.

According to Lonergan, an "ethos" exists behind practical decision-making. General bias is a way of explaining how the physical world can interact with that ethos. Group bias consists of social groups relevant to social order. Understanding the groups through social relationships creates that order. Given the spread and acceptance of information technologies, it is clear that the way people communicate in order to understand social relationships has changed. Thus, causing a different understanding of the social order, augmenting Lonergan's definition of group bias. Due to the tight relationships bias has with common sense in society, it can be concluded that information and communication technologies are manipulating the "ethos" of decision-making consequently influencing those exact decisions. The notion of general and group bias is at the core to understanding each case study that was analyzed in this thesis. For both conflicts to become inflated, the citizens had to decide to change their medium for acquiring information. The reason their decision-making processes were affected is due to the shift in bias to lean toward information technologies that would allow them to acquire the information they needed. Therefore, the citizens in both conflicts were able to contribute to the situation differently allowing for a unique outcome.

The field of conflict studies brought a new perspective to interpersonal relationships. By understanding the affects of increased use and adoption of information technologies by the individual, practitioners can begin to paint a fuller picture of how and why conflicts in the physical world occur. Rosen describes negative mental affects that information technology has on individuals. While he attempts to diagnose and "treat" technologically incurred narcissism through fevered use of Facebook or other social networks, it becomes clear that there is definitely much to be said about conflict resolution practices that need to be employed in a digital conflict landscape. Implementing Picard's Insight approach to the online world would be an interesting place to start. Since relationships online consist of textual exchanges of information, it could potentially be easier to pinpoint the threats-to-cares.

It can be concluded that there are particular information and communication technologies that sufficiently aid in resolving conflicts, and also those that invariably reduce the ability to resolve conflicts. It is important to understand the differences between the different forms information technology can take when analyzing a conflict. The differences though, are in the specific application of those mediums. For example, SMS text messaging was used as both a vehicle for peace and hatred in Kenya's post-election crisis. Authors like Carr, Johnson, and Shirky provide a foundation for understanding what information is important in terms of analysis. It is difficult to examine personal identity and culture exclusively before ever trying to figure out what role, if any, information technology played to cause conflict. However, given the changes in how people are interacting with each other on an individual level, thus changing how

people interact on a societal level, it becomes paramount in understanding how and why technology affects the way people make decisions. Shirky's notion of a gigantic "cognitive surplus" provides a basis for analyzing where the shifts in human interaction have come from due to changes in the distribution of time to social and individual activities. Conflict studies can objectify that idea further by bringing the Insight approach to that equation.

The Internet and auxiliary communication technologies have affected the decision-making process of humans by simply becoming part of their common environment. The statistics presented earlier in this thesis represent an exponential growth rate in adoption of information technology across the world. The ways that people interact with their environment takes precedence in discourse of common sense. Lonergan's descriptions of these fundamental relationships humans have with the physical world coincide greatly with the biases people hold. Thus, the affect information technology has on conflict is affected by the breadth of adopted use in a society. The ways humans decide to use said technologies depends on other factors. Avruch's definition of culture can explain this further. The dually constructed notion of culture can account for the disparity of the use of technologies in Kenya post-election. The term *majimboism* used to describe a feud over land-use rights in particular areas of Kenya is an idea that is constructed by vertical and horizontal influences on the Kenyan culture. The vertical influence comes from the historical context of the word, passed down from ancestral practice and a sense of ownership of the land. The horizontal influence comes from the contemporary context placed on land disputes in the area. Technology that was

not present for past generations to exploit is certainly present in Kenya today. This allows for information to be manipulated to the masses via SMS text messages by the sender *and* the receiver. For instance, when the post-election violence broke out a number of hateful text messages were sent out to both parties spreading thoughts of fear and violence. The receiver of the message potentially felt threatened by these thoughts of violence. The receiver of that message then has to decide to ignore it, respond to the message, forward the message to colleagues and spread the message of hatred, or use that information to report ethnic violence to Ushahidi.com. Group bias potentially "greases" the flow of inquiry in the data of consciousness, creating more tension between ethnic groups.

By creating an understanding of the position technology places individuals in, perhaps through sensationalized media, or providing a platform for lightening speed campaigns of hatred, the conflict itself is better understood. However more work needs to be done. As was stated before, tangible data for gauging affects of technology in conflicts is scarce. The purpose of this thesis was to provide a basis for the analysis of that data. However, more questions still surface. In order to accurately speak on the affect technology has on the conflict landscape, research instruments must be developed in order to fully understand the feelings of individuals in conflicts. Instruments can be developed to be able to measure these through interviews and questionnaires in order to research a new hypothesis. There is a specific link between the adoption of contemporary information technologies and the mobilization of individuals to interact in conflict. That link can aid in conflict prevention, crisis management, and also conflict resolution in the age of instant information.

References

References

Adewumi, David. "Kenyan Tech Bloggers Launch Crisis-reporting Site." *VentureBeat.com*. Venture Beat, 15 Jan. 2008. Web. 13 Aug. 2012. <http://venturebeat.com/2008/01/15/kenyan-tech-bloggers-launch-crisis-report-site/>.

Arquilla, John, and David F. Ronfeldt. *In Athena's Camp: Preparing for Conflict in the Information Age*. Santa Monica, CA: Rand, 1997. Print.

Avruch, Kevin. "Chapter 8 Culture." *Conflict: From Analysis to Intervention*. New York: Continuum, 2003. 140-53. Print.

Bartoli, Andrea, and Jamie Price. *Spiritual Values, Sustainable Security, and Conflict Resolution*. Rep. Print.

Baudrillard, Jean. *The Perfect Crime*. London: Verso, 1996. Print.

Carr, Nicholas G. *The Shallows: What the Internet Is Doing to Our Brains*. New York: W.W. Norton, 2010. Print.

"Ethnic Bloodletting Spreads in Kenya." *USA Today*. The Associated Press, 28 Jan. 2008. Web. 21 Aug. 2012. <http://www.usatoday.com/news/world/2008-01-28-kenya-unrest_N.htm>.

Fitterer, Robert J. *Love and Objectivity in Virtue Ethics: Aristotle, Lonergan, and Nussbaum on Emotions and Moral Insight*. Toronto: University of Toronto, 2008. Print.

Galtung, Johan. "Chapter 4 Cultural Violence." *Violence and Its Alternatives: An Interdisciplinary Reader*. New York: St. Martins, 1999. 39-53. Print.

Galtung, Johan. "Violence, Peace, and Peace Research" Journal of Peace Research, Vol. 6, No. 3 (1969), pp. 167-191.

Gettleman, Jeffrey. "Ethnic Violence in Rift Valley Is Tearing Kenya Apart." *The New*

York Times. The New York Times, 27 Jan. 2008. Web. 13 Aug. 2012. <http://www.nytimes.com/2008/01/27/world/africa/27kenya.html>.

Gettleman, Jeffrey. "Kenya's Election Strife Persists as Police Block Rally." *The New York Times*. The New York Times, 04 Jan. 2008. Web. 13 Aug. 2012. <http://www.nytimes.com/2008/01/04/world/africa/04kenya.html>.

Gettlemen, Jeffrey. "Ethnic Violence Spreads in Kenya, with No Sign of Respite." *NYTimes.com*. New York Times, 27 Jan. 2008. Web. 13 Aug. 2012. <http://www.nytimes.com/2008/01/27/world/africa/27iht-kenya.4.9531885.html?_r=1>.

Gettlemen, Jeffrey. "U.S. Envoy Calls Some Kenya Violence Ethnic Cleansing." *The New York Times*. The New York Times, 31 Jan. 2008. Web. 21 Aug. 2012. <http://www.nytimes.com/2008/01/31/world/africa/31kenya.html>.

Goldstein, Joshua, and Juliana Rotich. *Digitally Networked Technology in Kenya's 2007-2008 Post-Election Crisis*. Rep. no. 2008-09. N.p.: Berkman Center for Internet & Society at Harvard University, 2008.

Hall, Brian P. *Values Shift: A Guide to Personal and Organizational Transformation*. Eugene, Oregon: Wipf and Stock, 1994. Print.

Herskovitz, Jon, and So-eui Rhee. "South Korean Internet Catches "mad Cow Madness"" *Reuters*. Reuters, 13 June 2008. Web. 14 Aug. 2012. <http://in.reuters.com/article/2008/06/13/us-korea-politics-internet-idINSEO30506420080613?sp=true>.

"HRC Affirms That Human Rights Must Also Be Protected on the Internet (Resolution Text)" *US Mission Geneva*. N.p., n.d. Web. 12 July 2012. <http://geneva.usmission.gov/2012/07/05/internet-resolution/>.

Hwa-young, Theresa K. "Seoul, Protest Continues: 1,700 Organizations against Meat from U.S." *Asia News*. Asia News, 15 May 2008. Web. 13 Mar. 2012. <http://www.asianews.it/index.php?l=en>.

"Ill Met by Candlelight." *The Economist*. The Economist Newspaper, 12 June 2008. Web. 14 Aug. 2012. <http://www.economist.com/node/11554714>.

Johnson, Clay A. *The Information Diet: A Case for Conscious Consumption*. Beijing: O'Reilly Media, 2012. Print.

Kennedy, Elizabeth A. "Dozens Dead In New Kenya Election Violence." *CBSNews*. CBS

Interactive, 11 Feb. 2009. Web. 13 Aug. 2012. <http://www.cbsnews.com/stories/2008/01/27/world/main3756065.shtml>.

"Kenya Leader Names New Ministers." *BBC News*. BBC, 01 Aug. 2008. Web. 13 Aug. 2012. <http://news.bbc.co.uk/2/hi/africa/7177338.stm>.

"Kenya Police Used "lethal Force"" *BBC News*. BBC, 13 Jan. 2008. Web. 13 Aug. 2012. <http://news.bbc.co.uk/2/hi/africa/7186275.stm>.

"Kenyans Riot after "rigged" Election." *The Age*. N.p., 31 Dec. 2007. Web. 13 Aug. 2012. <http://www.theage.com.au/news/world/kenyans-riot-after-rigged-election/2007/12/31/1198949705836.html?page=fullpage>.

Lonergan, Bernard J. F. *Insight; a Study of Human Understanding.* New York: Philosophical Library, 1970. Print.

Marmura, Stephen M.E. *Hegemony in the Digital Age: The Arab/Israeli Conflict Online*. Lanham: Lexington, 2010. Print.

"Mad Cow Thesis Twisted Out of All Proportion." *The Chosun Ilbo (English Edition): Daily News from Korea*. Chosun Media, 9 May 2008. Web. 21 Aug. 2012. <http://english.chosun.com/site/data/html_dir/2008/05/09/2008050961017.html>.

"Mad Cow Watch Goes Blind." *USATODAY.com*. USA Today, 3 Aug. 2006. Web. 14 Aug. 2012. <http://www.usatoday.com/news/opinion/editorials/2006-08-03-our-view_x.htm>.

McLuhan, Marshall, and Quentin Fiore. *War and Peace in the Global Village; an Inventory of Some of the Current Spastic Situations That Could Be Eliminated by More Feedforward*. New York: McGraw-Hill, 1968. Print.

Meier, Patrick and Kate Brodock (2008). "Crisis Mapping Kenya's Election Violence: Comparing Mainstream News, Citizen Journalism and Ushahidi." (Harvard Humanitarian Initiative, HHI, Harvard University: Boston). URL: http://irevolution.net/2008/10/23/mapping-kenyas-election-violence.

Meier, Patrick. "Crisis Mapping Kenya's Election Violence." *IRevolution*. N.p., 23 Oct. 2008. Web. 13 Aug. 2012. <http://irevolution.net/2008/10/23/mapping-kenyas-election-violence/>.

Melchin, Kenneth R., and Cheryl A. Picard. *Transforming Conflict through Insight*. Toronto: University of Toronto, 2008. Print.

Morelli, Elizabeth A. "The Feeling of Freedom." Rpt. in *Religion and Culture: Essays in*

Honor of Bernard Lonergan. Albany: State University of New York, n.d. 95-106. Print.

Ndegwa, Stephen. "Kenya: Raila Calls for Vote Recount." *AllAfrica.com*. The Standard, 30 Dec. 2007. Web. 13 Aug. 2012. <http://allafrica.com/stories/200712300020.html>.

"Odinga Denies "ethnic Cleansing"" *BBC News*. BBC, 16 Jan. 2008. Web. 13 Aug. 2012. <http://news.bbc.co.uk/2/hi/africa/7192958.stm>.

"Odinga Denies "ethnic Cleansing"" *BBC News*. BBC, 16 Jan. 2008. Web. 13 Aug. 2012. <http://news.bbc.co.uk/2/hi/africa/7192958.stm>.

Okolloh, Ory. "Ushahidi." *:: Home*. Ushahidi Inc., 2008. Web. 13 Mar. 2012. <http://www.ushahidi.com/>.

Papacharissi, Zizi. *A Networked Self: Identity, Community and Culture on Social Network Sites*. New York: Routledge, 2011. Print.

Picard, Cheryl. *Exploring Threats-to-Cares in Insight Mediation*. Working paper. N.p.: n.p., n.d. Print.

Price, Jamie. *Method in Peacemaking*. Rep. Print.

"Q&A: S Korea Beef Protests." *BBC News*. BBC, 25 June 2008. Web. 14 Aug. 2012. <http://news.bbc.co.uk/2/hi/asia-pacific/7457087.stm>.

Rosenberg, Marshall B. *Nonviolent Communication: A Language of Compassion*. Del Mar, CA: PuddleDancer, 1999. Print.

"S. Koreans Protest U.S. Beef Imports." *MSNBC.com*. Associated Press, 25 May 2008. Web. 14 Aug. 2012. <http://www.msnbc.msn.com/id/24818417/ns/business-world_business/t/south-koreans-protest-us-beef-imports/#.UB-3jY49W19>.

Sargent, Neil, Cheryl Picard, and Marnie Jull. *Rethinking Conflict: Perspectives from the Insight Approach*. Rep.

Sang-hoon, Yang. "The Medium Is the Monster." *The Chosun Ilbo (English Edition): Daily News from Korea - The Medium Is the Monster, by Yang Sang-hoon*. Chosun Media, 5 July 2008. Web. 14 Aug. 2012. <http://english.chosun.com/site/data/html_dir/2008/05/07/2008050761023.html>.

Sang-hun, Choe. "Beef Protest Turns Violent In South Korea." *The New York Times*. The

New York Times, 30 June 2008. Web. 14 Aug. 2012. <http://www.nytimes.com/2008/06/30/world/asia/30korea.html>.

Schwartzman, Nathan. "Students Protest American Beef." *Students Protest American Beef*. Hybrid News Limited, 8 May 2008. Web. 14 Aug. 2012. <http://asiancorrespondent.com/22169/students-protest-american-beef/>.

"Scores Hurt in S. Korea Beef Protests." *CNN.com*. Cable News Network, 29 June 2008. Web. 14 Aug. 2012. <http://articles.cnn.com/2008-06-29/world/skorea.beef_1_beef-imports-mad-cow-disease-beef-industry?_s=PM:WORLD>.

Shin-who, Kang. "Citizens, Students, Unionists Start 3-Day Rally." *KoreaTimes.com*. Korea Times, 6 May 2008. Web. 14 Aug. 2012. <http://www.koreatimes.co.kr/www/news/include/print.asp?newsIdx=25402>.

Shirky, Clay. *Cognitive Surplus: Creativity and Generosity in a Connected Age*. London: Allen Lane, 2010. Print.

Shirky, Clay. *Here Comes Everybody: The Power of Organizing without Organizations*. New York: Penguin, 2008. Print.

Singer, P. W. *Wired for War: The Robotics Revolution and Conflict in the Twenty-first Century*. New York: Penguin, 2009. Print.

Smith, Peter. "Cellphone and Internet Access Helps - and Hinders - Accurate Reporting in Kenya." *The Christian Science Monitor*. N.p., 31 Jan. 2008. Web. 13 Aug. 2012. <http://www.csmonitor.com/World/terrorism-security/2008/0131/p99s01-duts.html?s=rel>.

Tekippe, Terry J. *Bernard Lonergan's Insight: A Comprehensive Commentary*. Lanham, MD: University of America, 2003. Print.

The New York Times. The New York Times. Web. 13 Mar. 2012. <http://www.nytimes.com/pages/technology/index.html>.

"Thousands in S Korea Beef Protest." *BBC News*. BBC, 07 May 2008. Web. 14 Aug. 2012. <http://news.bbc.co.uk/2/hi/asia-pacific/7491482.stm>.

"U.S. in Diplomatic Push to End Kenya Violence." *Voice of America*. VOA News, 13 Jan. 2008. Web. 13 Aug. 2012. <http://www.voanews.com/content/a-13-2008-01-02-voa73-66597322/555898.html>.

Wallace, William M. *Techno-cultural Evolution Cycles of Creation and Conflict.* Dulles, VA: Potomac, 2007. Print.

"What To Do About Media Fabrications." *The Chosun Ilbo (English Edition): Daily News from Korea - What To Do About Media Fabrications*. Chosun Media, 27 June 2008. Web. 14 Aug. 2012. http://english.chosun.com/site/data/html_dir/2008/06/27/2008062761027.html.

"Who We Are." *The School for Conflict Analysis and Resolution*. N.p., n.d. Web. 12 Aug. 2012. <http://scar.gmu.edu/who-we-are>.

Wilson, Denise. "Intelligence in the Age of Smartphones." Weblog post. *Huffingtonpost*. Huffingtonpost, 12 July 2011. Web. 8 Dec. 2011. <http://www.huffingtonpost.com/denise-wilson/smartphones-internet-brains_b_1134065.html>.

"World Internet Usage Statistics News and World Population Stats." *World Internet Usage Statistics News and World Population Stats*. Miniwatts Marketing Group, n.d. Web. 12 June 2012. <http://internetworldstats.com/stats.htm>.

Curriculum Vitae

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