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TECHNOLOGICALLY-ENHANCED PRESENCE IN THE
ONLINE COMPOSITION CLASSROOM

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LYNNE M. SMELSER

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TECHNOLOGICALLY-ENHANCED PRESENCE
IN THE
ONLINE COMPOSITION CLASSROOM

By

Lynne M. Smelser

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ABSTRACT

TECHNOLOGICALLY-ENHANCED PRESENCE
IN THE
ONLINE COMPOSITION CLASSROOM

By

Lynne M. Smelser

This study examines the connection between a growing interdisciplinary body of research on the subject of human perceptions of presence, and the increasing need for broadening discussions about how technology affects activities within the computers and writing classroom. One theory that appears particularly applicable to understanding the role of technology within the writing classroom is "social presence theory." Dating back to the 1970s this theory comes from the work of social scientists John Short, Ederyn Williams and Bruce Christie who proposed that the match between communication media and organizational tasks affects efficiency and user satisfaction. Social presence theory in its modern form offers a powerful tool for addressing issues of presence in an era where pedagogy is intertwined with technology and dependent upon student interaction.

Presence research offers Computers and Writing scholars methods for researching and extending knowledge of how people use and understand technologies in relation to writing instruction. In addition, social presence theory is especially significant for those who employ hybrid learning environments because it offers a springboard for researching pedagogical and technological choices that will encourage deep, active learning within this new structure.

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Introduction

This project is about the merging of two bodies of scholarly research: one that

focuses on computers and writing, and one that focuses on human interaction and

technology. Both are composed of a wide range of scholarly interests in and knowledge

of technology. For the group of scholars interested in computers and writing, the issue is

focused on the teaching of writing and how to make the most of technology in reaching

the goal of an effective, democratic classroom in which students are involved in active,

substantial learning. For the group of scholars interested in scientific facets of human

interaction and technology, the issue is much broader, offering and drawing from

disciplines across the campus. For the computers and writing community (C&W from

this point forward) overlap between these bodies can be found in the questions that

appear within the literature of both, questions that address how the introduction of

technology disrupts and/or facilitates tasks that humans attempt to complete via

technology. This study examines the connection between a growing interdisciplinary

body of research on the subject of human perceptions of presence, and the increasing

need for broadening discussions about how technology affects activities within the

computers and writing classroom. Therefore, the goal of my study is to begin clarifying

how the C&W community can gain from and add to the body of knowledge focused on

human perceptions of presence within the computer-mediated classroom.

In many ways, my study is one that extends the boundaries of the Computers and

Writing community to include work done within the social and cognitive sciences. My

project examines work within the sciences as a means of proposing a theory for future

research and begins with the work of a group of researchers in the 1970s. This group of social scientists—John Short, Ederyn Williams and Bruce Christie—proposed what they called "social presence theory," in order to describe the hypothetical construct of "the degree of salience of the other person in [an] interaction and the consequent salience of the interpersonal relationship" (65). The scientists were enthralled by the idea of how technology had entered and transformed workplaces allowing employees to attend meetings via telephone conferencing. Short, et al. wondered if the introduction of technology into a meeting traditionally requiring all participants to be physically present would alter participants' satisfaction, completion of work tasks, and off-line interaction. Based upon the early work of social scientists such as Morton Weiner, Albert Mehrabian, Michael Argyle, and Janet Dean, who had studied and proposed theories on the roles of intimacy and non-verbal communication within human interaction, social presence theory introduced technology into the equation. Deeming social presence as "a quality of the communications medium," Short et al. hypothesized that "communications media vary in their degree of social presence" and that it may, in fact, "determine the way individuals interact" (65).

Social presence theory is a major focus for scholars interested in communication—both written and spoken—because of its potential to facilitate communication via technology within workplace settings. In effect, the theory was developed in an effort to make the best choices for which technology to choose when accomplishing a specific assignment (Rice, "Media," 453). To put this into composition terminology, the major issue for C&W educators should be what technology they should choose in order to support their pedagogy, a task that research by Richard Rice proved to

be more complex than at first assumed ("Task" 475). Pedagogy in C&W classrooms

relies on at least some degree of computer-mediated interaction, and according to studies

such as the one conducted by Mark Palmer, a communications scholar, online

collaboration greatly affects the development of off-line interpersonal relationships (281),

the very thing with which Short et al. were concerned.

Short et al. conducted the majority of their work in the 1970s; however, as early

as the 1950's philosophers such as Alan Turing envisioned a world in which technology-

mediated interaction would make up a significant proportion of humanity's "contact"

with one another (430). What Turing could only imagine is today's reality. Now

humans can meet, interact, and establish relationships while never once being in the same

room. Scholars can debate with literally hundreds of other intellectuals in a conversation

that can last indefinitely with an archive of the conversation readily available in text.

Writers can have access to resources and to one another at the push of a button and the

walls of university classrooms have given way to learning communities spanning the

globe.

However useful it may be, technology is not without complications and even as

early as Turing's day there were scholars who wondered about the ways in which

humanity would change, what it would gain and what it would give up in a technology-

mediated world. Sherry Turkle, a contemporary scholar carrying on many of the themes

found in Turing's work, contends that the "rapidly expanding system of networks

collectively known as the Internet, links millions of people in new spaces that are

changing the way we think, the nature of our sexuality, the form of our communities, our

very identities" (*Life* 9). In recent decades as computer technology has infiltrated their

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lives and their disciplines, scholars from around the globe have generated a body of research concerned with these changes. Whether it be the technological question of how to build bigger and better virtual landscapes or the psychological issue of what makes individuals bond who have only met online, researchers are asking what constitutes a *feeling* of *reality* and what it means for an individual to be *present* within technology. The overlap of goals and issues emerging from scholars interested in human interaction mediated by technology have begun to gather under a common umbrella, the term "presence," which in its broadest form is concerned with how humans perceive technology and one another via that technology. This term arises from the work of social scientists such as Short et al. and from computer scientists who worked with teleoperating systems in which "teleopresence" meant the projection of one's presence into a mechanically created environment (Steuer 37). As scholars from a variety of disciplines have gathered under the term "presence," they have been able to share vast resources from communications theory, interpersonal psychology, biology and sociology to help them understand and answer questions about exploiting and adjusting to the mediated interactions that are the realities of today's world.

My project arises from broader questions of what it means to live in a technology-mediated world. What does it mean to teach writing in this world where more and more interaction—a keystone in current composition pedagogy—has moved into the cyber-landscape? What do teachers and students gain and what do they give up in order to participate in computer-mediated learning communities? After careful consideration of these questions and of social presence theory, I have begun to ask a more narrowly crafted question: What if anything do theories of human presence—as they relate to

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technological mediation—have to offer Computers and Writing scholars in their efforts to improve the composition classroom? First and foremost, I contend that presence is an extremely relevant topic to the computers and writing classroom and that entering into the conversation currently occurring among the interdisciplinary group of scholars who have organized the International Society of Presence Researcher (ISPR) will be of great benefit. Therefore, based upon my analysis of various historical narratives and research studies, I offer the following findings:

1. Presence research offers Computers and Writing scholars a terminology and approach that will help them to improve their use of technology in the classroom.

2. Presence research offers Computers and Writing scholars methods for researching and extending knowledge of how people use and understand technologies in relation to writing instruction.

3. Social presence theory is especially significant for C&W scholars who employ hybrid learning environments because it offers a springboard for researching pedagogical and technological choices that will encourage deep, active learning within this new structure.

There is a need for terminology and research that will allow Composition scholars to address online interaction in more productive ways. Currently discussions of forms of presence in the field are important but often appear to elide or aggregate important issues. For example, often discussions focus upon whether or not students can find their "voice" in the online classroom discussion raising questions of who is being silenced and why. One scholar cites evidence of online interaction as an electrifying demonstration of true

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democratic discussion; another disparages it via research results that highlight isolation and lack of deep, meaningful investment by students. Consequently, scholars attempting to address the issue of student interaction within the technology-enhanced classroom have splintered into discussions with often vastly different terminology. Phrases such as "creating space," "finding voice," and "democratic forums" are common within computers and writing literature, but aside from counting who has spoken and who hasn't there seems to be a lack of a unified direction of research, which has limited the potential for community-wide discussion and sharing of knowledge.

Another common facet within discussions among C&W scholars has been calls to consider the complexities of choosing technology that supports pedagogical goals, a very important step, but scholars have few tools for actually doing so. For example, Galin and Latchaw stress that "pedagogy should precede technology" and remind instructors that technology is not one-size-fits all, but they do little more than encourage instructors to clarify why they are using technology and what pedagogical assumptions underlie their decisions (45). They offer no guidelines for how to clarify these issues or what to do with the answers they arrive at upon completing this clarification. Gruber also instructs educators to rethink pedagogy in terms of how it fits with technology and how this will affect the classroom. Again, however, there is no further discussion about how this might be done aside from celebrating the exciting possibilities that the "confusion of boundaries" creates in allowing classroom diversity (18). Thinking of technology in terms created by the ISPR offers a chance for C&W scholars to step beyond their awareness that there may be conflicts between pedagogy and technology and begin to address the conflict in potentially more meaningful ways. For example, John Pavilk (an

educator and researcher at Rutgers University) has explored augmented reality (a sister to virtual reality, a major focus within presence research) as a means of helping journalism students think about and present news. Pavilk contends that developing this technology as part of his work on issues of presence helped him to address students in a way that stimulated them. He was able to meet pedagogical goals of active learning by addressing modern-day students in a manner that made allowances for individual perceptions. For example, his journalism project involves the recreation of news events using technology that allows each user to adjust the appropriate stimulation and the amount of perception that is comfortable for her, which kept students challenged (ISPR website/examples).

Research on presence and interest in developing its technology for educational purposes gave Pavlik the tools and inspiration for expanding the technology he used within his classroom. These are the very tools and inspiration that would benefit the C&W community. Since the ISPR encourages researchers to begin with a theory appropriate to their particular discipline (meeting the goals and motivations of that discipline) I propose within this project a possible term, "Technologically-Enhanced Presence" (TEP) to provide not only an umbrella for C&W research regarding online interaction but also the potential for improving it. TEP offers the potential to name and study the key elements of the C&W community's struggles with online interaction. Building upon Short et al.'s theory of social presence, I offer the following definition: TEP is the psychological impact felt by an individual while interacting within CMC or other portions of the online writing classroom which affects his/her willingness and/or ability to pursue actively discussions and other required online events. It presumes technology to be a place in which members of the classroom community may conduct

interactions vital to the writing process and the functioning of the writing course in which they are participants. Ultimately, within the hybrid Composition classroom, TEP theory proposes that the ability of individuals to actively participate within all aspects of a particular community of learners is affected by his/her feelings of presence within a particular "place" created within technology for the purpose of working within a learning/writing community. This definition will be developed and supported throughout the remainder of this project through the lens of Hawisher et al.'s statement that the goal of the C&W Community has historically been "to develop a view of how computers could help writing teachers move toward better, more just, more equitable writing classrooms" (2).

I begin this project with an examination of the history of the C&W community (a label that I—like Hawisher et al.—use for convenience within this project while acknowledging that this group is very diverse ranging from the pragmatic practitioner to the technical computer guru). This examination is significant in how it highlights the pedagogical struggles over the role of collaboration and student subjectivity. From there I proceed to examine presence in the broader scheme of how it developed beyond the boundaries of Composition Studies. Within ensuing chapters I narrow my focus to the hybrid classroom, the situation in which the above stated question would be most clearly applicable. Therefore, I will present a broader history of presence research, including the creation of the ISPR, and then address how the development of writing theory—as proposed by recent historical narratives offered by composition scholars in the past decade—coincides with evolving views of social scientists interested in presence. Historical narratives of Composition Studies have traced views of the composing process

from the romantic conception of the lone writer in the garrison waiting for her muse, to the social idea of composing as an act that is greater than the writer herself, to the theories of interpersonal relationships and psychological processes weaving throughout the act of writing. And while not all of these narratives have focused on technology, they create the context in which new technologies were introduced, which opened doors for more interactions between writers and writers and their audiences.

When connective technologies (for example CMC) expand, opportunities for connections within a composition course also expand. This means that writing scholars can no longer simply ask what makes classroom interaction effective and appropriate for the teaching of writing, but also what effect technological mediation will have on this phenomenon. While there has been much debate about whether or not opportunities such as those presented by CMC are truly liberating and conducive to improved classrooms, the theories developed by presence researchers that I have used to develop the concept of TEP focus on the idea of expanding the context of the individual as s/he communicates both verbally and in writing (see Short et al. 1).

My narrative of the C&W community emphasizes the concomitant changes in views of the writing process in general and the changes in how the role of technology in the writing classroom is viewed more specifically. Thus, my definition arises from my finding that there is a need for terminology and research that will allow interested C&W scholars to address online interaction in order to understand better the developing view of technology as place. Joining scholars in the interdisciplinary collaboration under the umbrella of the term "presence" will allow interested C&W scholars another avenue to continue striving towards meeting its agenda (Hawisher et al. 2). C&W scholars have

typically attempted to stretch themselves intellectually frequently. In fact, they have

often led the way in integrating teaching and technology. For example, in the spring of

1998 Jeffrey Galin and Joan Latchaw made the following statements

> The community of computers and writing has probably developed one of the most
>
> comprehensive online professional networks of any discipline other than
>
> information sciences. While listservs abound in most fields these days, few have
>
> integrated computer technology into their teaching and research to the degree that
>
> this community has. (Kairos 3.1)

The C&W community has indeed done much to integrate technology into the writing

classroom, work that has often required difficult confrontations with colleagues both

within the English Department and beyond its departmental boundaries (for example,

Fred Kemp's struggle to legitimize an English teacher wanting an e-mail account). And

within the even more ill defined discipline of Composition Studies (Kemp notes that

during his struggle it became apparent that even the very nature of what Composition

Studies faculty do is often at issue on the university campus) C&W scholars must

struggle to legitimize something as minimal as publishing online (see *Computers &*

Composition special issue on Tenure). Defining a community and creating identity is a

difficult task; however, now that the C&W community has begun to identify and win

significant battles for legitimacy, it is time to stretch beyond the current disciplinary

boundary lines.

A significant component of this project is an examination of C&W historical

narratives, which demonstrates how social views of the writing process and the role of

technology have evolved. In regards to technology this evolution has meant a shift from

seeing technology as a *tool* to seeing it as *place*. In regards to writing theory this evolution has resulted in Composition scholars beginning to see writers within a greater social context within the same time frame that technology allowed for greater connectivity to that context. Collaboration on writing projects was no longer restricted by traditional time and physical locality. There was a new place for students to meet, a place theorized in the 1950's by Alan Turing, who is considered by many in the field of computer science to be one of the greatest technology visionaries ever to live. Turing, who believed that technology would forever alter humanity's perceptions work, created a legacy of theory that would be carried on by many who wanted to better understand these alterations.

While not necessarily drawing upon Turing's work, C&W scholars have always been among those who want to better understand these alterations. It is this desire for understanding that makes scientific views of presence a beneficial match for C&W scholars attempting to broaden understanding of online interaction and thus more effectively addressing issues such as the ones raised by Bridwell-Bowles:

> How can we use computers as a catalyst for positive social and political change in our writing classrooms and our educational system? How can we use computers to help us address the marginalization and silencing of individuals because of race, age, gender, handicap? How can we use computers to promote increasingly egalitarian exchanges among groups of people within our classrooms who have different levels of privilege and power? How can we use computers to promote both collaborative activities among writers and to support dissent in its most productive forms? (88)

These are questions being raised throughout the C&W community, as a review of any current or past journal or conference program demonstrates. They are the issues that will define the C&W community in the future just as they have in the preceding decades. These questions are similar to ones that computer and social scientists have wrestled in recent decades as the amazing capacity of computer technology has rapidly expanded before their eyes. Humans connected in many ways and many disciplines were forever changed. Among those disciplines was Composition Studies, which was itself wrestling with issues of connectivity. These issues related to writing and the context of the writer. During this time, a growing interest in the subject of interaction by Composition scholars began to impact pedagogical theory and theorists such as Bruffee began to raise issues about collaboration and a more social view of the writing process. As writing courses have become more and more collaborative (see Gere, Bruffee and Trimbur) interaction has become a key component in pedagogy. Add to that the growing relationship between technology and the classroom and the questions raised by scholars regarding how much technology facilitates or disrupts the classroom community become more significant within Composition Studies. This significance arose from the desire to incorporate a social pedagogy into the technology that seemed to offer incredible new potential for connectivity. However, it became apparent very early that this would not be a simple process. Lester Faigley, who wrote about early ventures into networked classrooms in the mid-1980's, observed that "electronic written discussions raise some very complex issues for teachers who use this technology" such as who is allowed to speak and what authority discussion participants are willing to grant other speakers (199).

This is where an examination of hybrid course formats (a format which is also known as blended learning) becomes significant because of its growing use within educational environments and its potential for becoming wide spread within the C&W community within the immediate future. Understanding technology's ability to support social pedagogy is vital. From my examination of hybrids, I conclude that one major benefit of considering presence research may be the creation of tools for more effectively choosing which technology would support pedagogy centered on interaction. Social presence theory is especially significant for C&W scholars who employ hybrid learning environments because it offers a springboard for researching pedagogical and technological choices that will encourage deep, active learning within this new structure, which may include synchronous and asynchronous CMC tools including bulletin boards, forums, chat space, e-mail, and online journals.

Research being done by communications scholars in the 1980s and in the 1990s raised issues regarding how online mediation affected what occurred off-line, complexities that directly relate to hybrid courses. Communications theorists such as M. K. Johnson (in the 80s) and Theresa Ditton (in the 1990s) concluded that mediation affects not only what occurs in online interaction, but also what occurs later in non-mediated settings. The work of both scholars concluded that computer mediation appears to affect dramatically participants' interactions off-line. For those who embrace social constructivism, theories of presence which address social context and psychological processes within computer-mediated environments hold considerable potential for understanding how pedagogy previously used only in traditional brick and mortar classrooms might be altered when moved to online environments that are heavily

supported by the use of CMC. Classroom interaction becomes complicated by the integration of technology which has the potential to alter not only online activities but also the interaction of student writers when they meet within the traditional physical setting after having substantial contact online. This means that computer-based communication tools (CBCTs) take on new significance as they become the context for the creation of classroom community. The full effects of online interaction on off-line relationships within the composition classroom require further investigation; however, research is beginning to reveal some interesting possibilities. For example, a study by Yagelski and Grabill suggests that a variety of factors related to course context and to students' and instructors' perceptions of CMC may have played significant roles in shaping online discourse in the two-mixed mode courses they examined. Among these factors, four emerge from the data as especially important:

> (1) the ways in which CMC was assigned and managed by the instructor and perceived by the students; (2) the nature of the course, especially how class time was structured and how the purposes of the course were presented to and understood by students; (3) the students' perceptions in general of CMC as a communication medium; and (4) the students' sense of their roles as participants in course-related discourse, both in-class and online. These sets of factors overlapped and influenced each other in complex ways. (28)

Presence research offers Computers and Writing scholars methods for researching and extending our knowledge of how people use and understand technologies in relation to writing instruction has important potential benefits for the field. One significant insight may be the creation of tools for more effectively choosing which technology would most

encourage active learning within the hybrid format. Composition scholars can no longer afford to ignore Lombard's challenge for academics to consider the interdisciplinary work of the ISPR and how it may assist them in developing future theories regarding the impact of computer-mediated-communication on the students who must negotiate with it to thrive in the classroom.

Since Composition scholars began their initial exploration of technology integrated classrooms in the 80's, hybrids have not only become technologically more feasible, but they have also become more integral to the evolving concept of the *improved* and *more equitable* classroom described by theorists such as Hawisher and Selfe. Noting that hybrids offer "the best of both worlds" many C&W scholars such as Peter Sands have begun to espouse hybrids as the answer to accommodating different learning styles, communication differences resulting from gender and cultural stereotypes, and increased writing and interaction among students (Hybrid Project website).

However, even while the hybrid seems to support the C&W community's ideals, the community's early years could be described as a "land rush"—similar to what North contends occurred in the early years of Composition Studies—where research sprawls in a variety of directions without any clear definitions for what a hybrid comprises or theories to guide its creation. Research and discussions with C&W literature appear to lack any sort of methodological consensus regarding terms and process of understanding the new animal being created. While one wave of publications seem to say that scholars had concluded that CMC (a major component of the hybrid) is liberating for students another declared that it is non-liberating, perhaps even detrimental to the groups that were

silenced off-line, or quite possibly to those who were thriving members of the brick and

mortar community. For instance, Tornow writes in moments of victory over her

energized group of online participants, while Stroupe begins his discussion "at a moment

of crisis" (255). Therefore, as more and more hybrid writing courses begin to develop, it

will become increasingly significant to develop a method for talking about interactions

and for creating productive methods for studying it. Current research supports the

conclusion that the type of CMC used does affect the interaction of its users and that

C&W scholars may find tools being created by ISPR members (for example, methods of

measuring the extent to which users feel comfortable completing tasks within a specific

online environment) to be an effective means for analyzing the development of a

classroom community and ultimately for matching pedagogical goals of the writing

instructor.

In addition, combining ISPR work with studies such as the one by Yougoin Yoo

and Maryam Alavi may guide C&W scholars in interpreting and acting upon research

that questions what is occurring in online environments. Yoo and Alavi's study indicates

that it is possible that the same technology may be perceived and used differently by

different groups "thereby resulting in potentially different outcomes," which means that

technology in the writing classroom is not "one size fits all" (379). This is supported by

Ronald Rice who concludes from his research that communication media are said to

differ in the extent to which they "(a) can overcome various communication constraints

of time, location permanence, distribution, and distance, (b) transmit the social, symbolic,

and nonverbal cues of human communication; and (c) convey equivocal information,"

("Media," 452). Rice's research also highlights the need for understanding how

computer-based communication tools (CBCT) supports specific pedagogical goals. In other words, technology is not one-size fits all, and it is entirely possible that a composition course could be vastly improved by simply considering which CBCT is being employed.

I plan to enter this conversation by drawing upon presence research and add to the growing discussion regarding the role of presence in composition studies and how this body of work has and may continue to inform the field of computers and writing. The significance of my work, therefore, will be in the explication of TEP as a strand within the C&W community's rich history and in broadening the discussion of how technology is applied to the writing classroom. Therefore this project will include the following components:

Chapter 2: Presence within the Computers and Writing Classroom

In Chapter 2, I demonstrate the need for new theory addressing interaction within the technologically-enhanced composition classroom community. While observing that technology has evolved from being a tool (i.e. playing the role of "fancy typewriter," being used for elaborate grammar drills, and demonstrating the concept of revision) to becoming a place (i.e. the newest meeting arena for students to discuss course material, to participate in peer revision, and to generate drafts), I contend that there needs to be new ways of addressing the classroom community because evidence demonstrates that technology has indeed altered the interaction occurring within these groups. And while C&W scholars have addressed issues such as student subjectivity, there has been no clearly defined theory of what technology as place means for the composition community. I begin my argument by first examining several recent historical narratives

of the C&W community in order to support my contention that technology's role has changed and that thus far there have been no clear theories emerging to address these changes.

Chapter 3: Being "Present"

Within Chapter 3, I analyze the development of interest in presence as a field of scholarly research. Within this chapter I explore early technologies that began the interest in technologically-mediated presence and then examine how theories have evolved as more technologies have been developed. In addition, I analyze the six major conceptualizations of presence research presented by Matthew Lombard (President of the International Society of Presence Researchers) and Theresa Ditton (a member of the ISPR board of directors) in their pivotal work "At the Heart of It All: the Concept of Presence" and analyze how scholars have used theories of presence to benefit their particular discipline. The studies I examine will also address Virtual Reality (VR) and Artificial Intelligence (AI) because they are both so closely related to work being done regarding presence.

Chapter 4: The ISPR

Within Chapter 4, I examine the history of the ISPR. Since the focus of my project is on the intersection of the ISPR and the C&W community, I use this chapter to introduce my readers to this group of scholars and the evolution of this organization. I conclude this chapter by addressing issues of debate and disagreement among scholars who study human perceptions of presence. This chapter (along with the previous one in which I examine the history of theories of presence) are significant for laying the groundwork for demonstrating how the creation of the ISPR and the maturation of the

C&W have coincided with larger social forces and technological developments, both of which have produced the need and means for understanding technologically enhanced human perceptions of presence. These chapters support my contention that the ISPR can offer the C&W community a new avenue for understanding technologically-enhanced presence and provide not only an umbrella for research regarding online interaction but also the potential for improving it.

Chapter 5: Hybrids—the Latest Challenge

Within Chapter 5, I examine the hybrid course, a class format in which the theories of "presence" created within the social and computer sciences can most clearly be applied. In fact, the hybrid (which is currently defined as any course in which 25% or more of the class interaction occurs in cyberspace) raises many of the same pedagogical issues Composition Studies scholars have struggled with for decades. Among these issues is the need to understand what space students occupy within the composition classroom and what pedagogical assumptions regarding interaction and collaboration underlie objectives within the course. These issues are complicated by the use of technology as place and highlight the need for understanding how this new *environment* affects the interaction and consequent task completion required of class members. Therefore, I propose that "social presence theory" (one of the conceptualizations of presence described by communications scholars Matthew Lombard and Theresa Ditton) offers an avenue for researching and creating hybrids.

Chapter 6: Concluding thoughts

Within chapter 6, I present my findings on what presence theory means for the C&W community. Based on my study of the histories of theories of computers and writing classrooms and presence, these findings include the following:

1. Presence research offers Computers and Writing scholars a terminology and approach that will help them to improve their use of technology in the classroom because

    a. As societal forces and the growth of technology have emphasized greater connectivity, writing theory has developed a greater emphasis on interaction.

    b. Computers and Writing theory has developed towards a view of "technology as place" thus making the projection of a student's presence a major component in classroom interaction.

2. Presence research offers Computers and Writing scholars methods for researching and extending our knowledge of how people use and understand technologies in relation to writing instruction has important potential benefits for the field.

    a. One significant insight may be why there is so much conflicting evidence regarding the effectiveness of online interaction.

    b. Another benefit may be the creation of tools for more effectively choosing which technology would most encourage active learning within the hybrid format

3. Social presence theory is especially significant for C&W scholars who employ hybrid learning environments because it offers a springboard for researching

pedagogical and technological choices that will encourage deep, active learning within this new structure.

    a. Social presence theory is specifically focused on how technology disrupts or facilitates interaction.

    b. Social presence theory addresses how tasks are completed and to what extent participants are engaged during the task.

In addition to addressing these findings, within Chapter 6 I discuss how the ISPR also will benefit from the C&W community. From there I raise questions that need to be addressed by future research considering such ideas as potential for pedagogical changes based on presence research; the need for understanding political forces affecting computers and writing; and prospective ways to broaden pedagogical opportunities.

Chapter 2: Presence within the Computers and Writing Classroom

In Chapter 2, I analyze the ongoing discussions within Composition Studies regarding the development of social constructivist pedagogies in order to argue that interaction is a significant issue. This supports the goal of this study, which is to examine the connection between a growing interdisciplinary body of research on the subject of human perceptions of presence and the increasing need for broadening discussions about how technology affects activities within the computers and writing classroom. If technology has the potential to facilitate or disrupt interaction more serious study is in order and a need exists for a new theory addressing what is occurring within the technologically-enhanced composition classroom community. This need arises from the evolution of technology from being a tool (i.e. playing the role of "fancy typewriter," being used for elaborate grammar drills and demonstrating the concept of revision) to becoming a place (i.e. the newest meeting arena for students to discuss course material, to participate in peer revision, and to generate drafts). With these changes comes the need to better understand the new relationships created within this new landscape. Although C&W scholars have addressed issues such as student subjectivity, there have been no clearly defined theories regarding what changes occur within the classroom community when that community occurs *within* technology. I begin my argument by first examining several recent historical narratives of the C&W community in order to support my contention that technology's role has changed and that thus far there have been no clear theories emerging to address these changes. Following that I proceed with my narrative, which I break into five phases: Setting the stage, Technology as Tool, Room to Grow, Technology as Place, and Potential and Unrest.

Computers and Writing Narratives

The story of technology in the classroom has been told many ways. For this discussion I have selected three recent narratives that demonstrate the evolution of technology's role within the classroom and changes in writing theory resulting from this evolution. These narratives include Alister Inglis, Peter Ling and Vera Joosten's *Delivering Digitally*, Peter Carino's "Computers in the Writing Center: A Cautionary History," and one of the most well-respected and thorough histories of the C&W community, Gail Hawisher, Paul LeBlanc, Charles Moran and Cynthia Selfe's *Computers and the Teaching of Writing in American Higher Education, 1979-1994: A History*. All three of these narratives follow slightly different paths— Inglis et al. offer a broad picture of classroom technology in general, Carino focuses on the writing center, and Hawisher et al. specifically trace the C&W community's maturation. I have selected these narratives specifically because when they are combined they offer one of the most complete pictures possible of the evolution of technology and the concomitant development of writing theory.

Within their narrative, Inglis, Ling and Joosten, address the evolution of technology in education as a force that has the potential to harm as much as benefit the classroom. They contend that technology has evolved faster than pedagogical theory has been able to keep pace with and, therefore, computers are playing roles within classrooms that may not necessarily benefit students. This situation is compounded by university administrators who encourage the use of technology in hopes of long-term cost-savings (196). The authors examine the relationship between education and modern day technologies in order to convey the message that "the true potential of the knowledge

media lies not so much in lowering costs of educational delivery but in enhancing the quality of the students' learning experience" (196). Inglis et al. describe this relationship in terms of a series of developments that can be traced back over more than three decades. Using this as their focus they conclude that the most important of these developments have been:

- invention of the hypertext concept;

- building of the physical network connections that have given rise to the world-wide Internet;

- adoption of international standards for distribution and formatting of Web documents;

- development of more versatile software took for courseware authoring;

- development of systems for supporting the range of teaching and learning activities of which a complete educational program is comprised;

- and improvements in microprocessor, computer memory and disk storage technology that has enabled the sophistication of the tasks that can be carried out by computers to be greatly increased. (12)

The authors use their narrative as a "call to arms" stressing that "[i]t is the cumulative effect of all of these developments, rather than a single major breakthrough, which has given rise to the situation we see today" (12). The situation to which they are referring is the one in which the rapid changes in technology have made reasons for pedagogical choices in technology murky. Inglis et al. worry that if the bottom line becomes too attractive then decisions will be made for the classroom based on bookkeeping rather than theory.

"Cost-effectiveness" is, in fact, one force that has contributed to the evolution of the role of technology to "place." Since moving a class to cyberspace frees physical space on-campuses and the online classroom does not require the same type of upkeep, it has been in the university's best (financial) interest to encourage a move to more online segments within courses. Another way that online courses help the bottom line is in reaching a larger population of students. As schools have sought to expand their client base, online classrooms have become an answer to reaching more non-traditional students, those who need and value flexibility. The belief that costs for online courses (or hybrids) are often much lower to run (after the initial costs) than traditional courses makes the move outside of the traditional brick and mortar setting extremely appealing (Palloff and Pratt 3).

Peter Carino's timeline of computers in writing centers takes on a somewhat different agenda from Inglis et al.'s and acknowledges emotional aspects as well as technological developments. For example, throughout his narrative, Carino highlights the "problems" of this process including "technological fear" as well as software needs and equipment maintenance (179). He divides his narrative as follows:

- *Fears and Hopes: The Early Years (1982-1986)*: Due to a lack of articles on computers in writing centers, Carino begins his history with the year 1982, several years after computers intersected with Composition Studies. This period is marked by the entrance of computers in writing centers; however, it is also a period marked with conflict as the new technology—which then consisted mostly of computers as style/grammar checkers—"pit grammar-drill-on-screen against word processing, current-traditional versus notions of

process writing" (178). Computer technology was a tool within the writing center during these early years used for both student writing and on helping writing centers "solidify the institutional place of their centers" (180). Initial conflicts during this time result from studies that question the effectiveness of technology in the writing curriculum. Carino attributes the "success stories" that do emerge during this time as being told by people who view technology as "neutral tools" dependent upon the educator's knowledge and experience in implementing them (179).

- *New Technologies, New Pedagogies, New Questions (1987-1991)*: During this period there is a marked decrease in articles published on the subject of computers in the Writing Center which Carino attributes to a lack of funding and the growing use of LAN and hypertext applications which did not lend themselves to one-to-one tutoring (180). New questions arose as Kemp and other theorists challenged others to consider new understandings of the writing process in relation to the technologies that were emerging. Carino contends that while Kemp, Luchte, Partenheimer nor Emmett "directly allude to social notions of writing," they appeared cautious regarding the software of the day fitting with pedagogy, thus reflecting the growing concern over the context of the writer (181). By the end of this period 80% of writing centers reported using computers (185).

- *OWLS, LANS, MOOS and WEBS (1992-Present)*: Carino chooses 1992 for the opening of his third segment because it is the year that WCENTER (the writing center listserv) and Eric Crump's regular column "Voices from the

Net" (which recounts the discussions on WCENTER) both began (185).

Within this section Carino concludes that the very nature of writing theory is changing and so must the ways in which scholars address it (191).

Carino frames the changing nature of technology and the social theories of the writing process that it supports as a situation in which writing center personnel must "assert what we know about live pedagogy to prevent the mere placing of services online simply because they can be, rather than because they should be" (192). His concern about how a writing center will adapt to technology is a very valid one. After all, one of the most significant services a writing center offers is one-to-one interaction. Using technology to conduct peer tutoring thus moves the interaction from the physical space of the writing center to a "space" on the Internet thus making this one of the most vivid examples of how technology has evolved and how student relationships with technology and with their peer writing community have been forced to change. Carino's theme of "tension between technological endorsement and technological resistance" actually highlights the struggles among writing center faculty as they have become increasingly aware of the new role of technology as a place, but with few options for resolving this struggle. Carino, like Inglis et al., writes with an ominous undercurrent in his story of technology. He offers a strong mandate that Composition specialists take action (to control or at least appropriately adjust to the shift that is occurring) or perhaps forfeit the dream of the improved technology enhanced classroom. The advice, with which he concludes his narrative, is similar to Inglis et al.: be vigilant. He ends his narrative with the sentence:

> If OWLs are going to carry us into flight rather than eat us like rodents, if MOOs are going to produce more milk than dung, if we are going to cruise the

information superhighway without becoming road kill, we will need to remain

vigilant against the intoxication of our enthusiasm. (193)

However, the method for this vigilance is neither clearly defined nor appropriately

matched to the task he has offered his readers. Writing Centers of all places emphasize

interaction among writers. Carino lays out this problem, but does not seem to have a

method for addressing how to do this other than through awareness. Presence theory, as I

demonstrate in the following chapters, takes the idea of vigilance one step further

providing an interdisciplinary approach to studying and addressing issues of interaction

within the online writing environment (such as those raised by both Inglis et al. and

Carino).

Awareness is also a prevalent theme in Hawisher et al.'s history, a narrative that

contextualizes a sixteen-year pedagogical history of the technological developments that

opened the door to electronic writing instruction. It provides ample support that warnings

such as Inglis et al. and Carino's are needed because of the evolving role of technology

and changes within writing theory. In addition, Hawisher et al.'s narrative provides a

more focused examination of the ways in which the C&W community has attempted to

keep pace with these changes.

The authors begin their story by declaring that "[c]hanges in technology drive

changes in the way we live and work, and we, agents to a degree in control of our own

lives, use technology to achieve our human purposes" (1). Hawisher et al. then divide

the history into five periods beginning from 1979 through 1982:

- *The Profession's Early Experience with Modern Technology (1979-1982):* Here

   Hawisher et al. address technology's early role as *misunderstood tool,* one that was

little more than a fancy typewriter, that then evolved into an often *misused tool* that facilitated ineffective grammar-drills and style checkers. This segment notes the shifting view from product to process that began in composition at the end of the 1970s and beginning of the 1980s. Highlighting the work of Donald Murray and Roger Garrison, Hawisher et al. state that the writers' workshops that were being put into place laid the groundwork for the computer-writing labs that would appear later in the 1980s.

- *Growth and Enthusiasm (1983-1985):* During this time span, according to the authors computers and composition professionals increased and were now becoming more visible. During this time instructors began to see the potential for using computers to support social constructivism as software and hardware in the writing classroom began to catch up with pedagogy. Therefore, as Composition scholars matured and the core group of those interested in computers grew, so did the potential for effective use of technology as tool. A concern for the writer's context became more prevalent during this time as scholars such as Patricia Bizzell suggested that work considering a writer's mental process (such as the theories of Flowers and Hayes) be complemented by considering work by Lev Vygotsky and George Dillion which emphasized outward factors. Hawisher et al. observe that "part of the writer's context was other writers, other students" (68). This new emphasis laid the groundwork for the increased interaction within composition pedagogy.

- *Research, Theory, and Professionalism (1986-1988):* The authors argue that this period was a time of further growth for computers and writing with 9% of the session at the 1987 CCCC focusing on the topic and increased publication of books on it as

well. Work by Lee Odell, Shirley Brice Heath, and Patricia Bizzell continued to move the field towards consideration of the context of the writer. As social views of the writing process matured, so did technology, which was now able to connect writers.

- *Coming of Age—The Rise of Cross Disciplinary Perspectives (1989-1991):* During this time period, according to Hawisher et al., technology continued to advance, but classroom practices lagged behind as a result of lack of training and/or funding putting the community out of touch with many of the developments occurring beyond the composition boundaries. However, scholars continued to politicize and theorize the area of computers and writing in keeping with the shift from the individual writer of process pedagogy to the politicizing and contextualizing of all acts of composing in social pedagogies.

- *Looking Forward (1992-1994):* Here the authors contemplate technological developments (such as computer-mediated-communication, next generation processors, multimedia, and the internet) as they address a fragmentation in the field. Yet even as concern for the writer's context grew, literature during this time demonstrated a continuing question about the writer's personal voice and the lack of agency that individuals experienced as a result of the contextual emphasis.

Throughout their narrative, Hawisher et al. demonstrate both the changing role of technology and the increasingly prominent question of the writer's role in within Composition theory. It is not coincidental that as technology has allowed for greater connectivity, writing theory has expanded to consider context. Yet at the same time this technology also has allowed greater possibilities for personal expression. Thus as the

1990s conclude (within Hawisher et al.'s narrative) there is a division, a widening gap between the potential of technology and the need for theories that address a writer's relationship to that technology and to the other writers she encounters *within* this technology.

The authors present their story from the perspective of members of a community (Computers and Writing) that has a

> need to develop a view of how computers could help writing teachers move toward better, more just and more equitable writing classrooms and, by extension, to a better more just, and more equitable system of education—and, insofar as education incubates culture—toward a better society. (2)

Without developing this understanding of how technology should be integrated into teaching, according to the authors, it is "certain" that those with motives that differ from the community would most certainly do so (2). One thing at stake is the very pedagogy that Composition scholars work so hard to match with the new technology. If they are to achieve a "better, more just, and more equitable system of education" they need to be in control of both how this was defined and the role technology is to play. In order to do both of these things, Composition scholars would need to be aware of the gravity of the situation as well as educated and skilled enough to address it.

Within the narratives I have examined, all three have identified problems and struggles that have resulted from the integration of technology into the Composition classroom. One of the most prominent has been the role of the student within the new technological landscape. Carino and Hawisher et al.'s narratives, which both focus on composition issues, especially highlight the ongoing debates centering around

maintaining interaction within the student writing community (within classrooms and writing centers) while using technology to the fullest potential (Inglis, et al. addresses interaction within the general educational context). Carino's narrative constantly returns to the "fears" of writing center personnel and the ongoing debate between them regarding whether or not technology was a cold and impersonal landscape that supported or disrupted the business of the writing center. Hawisher et al.'s core question is not significantly different as they relay debates between student subjectivity within the new terrain. In fact, in the final pages of their narrative Hawisher et al. contend that coming to terms with computer-supported communication is one of the three greatest challenges for the C&W community. There is a need among C&W scholars to find another way to identify and address the problems plaguing this field as technology matures at an incredible rate. If, as all three of these narratives has demonstrated, technology is no longer just a tool but rather a *new place*, a cyber-landscape in which to hold class, then there is truly a need to understand how this affects students and the role their composition teachers ask them to fill.

Another View of the Computers and Writing Community

Within the following section, I offer a new narrative, one that tells a similar story as the above but with the inclusion of work being done outside of Composition's boundaries. My goal is to offer a history that both demonstrates the evolving relationship between Composition pedagogy and technology (which I extracted from the above histories; however, those narratives were not written with this emphasis in mind) and highlights how this struggle evolved in the social and computer sciences, a struggle which may offer possibilities for addressing the challenges Composition Studies now

faces. Therefore, while I will include some of the markers noted by the above authors, I will first of all be focusing on artifacts and events in which issues of interactivity are primary concerns and secondly, I will include what has occurred beyond the discipline of Composition Studies. I have divided my narrative into five phases:

1. *Phase 1: Setting the Stage.* This section examines the early years of writing theory in the United States and theories of some of the pre-technology issues of presence that existed during this time.

2. *Phase II: Technology as Tool.* This section includes the early years of NCTE and CCC that set the stage for the creation of C&W, concluding in the 1960's.

3. *Phase III: Room to Grow.* Perhaps the most significant of the phases, here changes in the views of the writer in the field of composition and the developing understandings of the connectedness of humanity—thanks to changing technology—are considered.

4. *Phase IV: Technology as Place.* Beginning with the rapid developments of software for the writing classroom of the 1990's, this section will analyze the changing role of technology and the gap created by these changes. Within Phase IV, I will also examine some of the most significant efforts to address the evolution of technology both within and without Composition Studies.

5. *Phase v: Potential and Unrest.* Within this section I address recent developments within the computers and writing classroom as well as some of the continuing struggles addressed by scholars.

Phase I: Setting the Stage

In the middle part of the 1800's American culture was in the process of creating its own identity, and from 1820-1860 a secular literary-intellectual culture was rising. Correct language usage became vital as part of creating this identity (Connors 114). In fact, Robert Connors contends that it is no accident that the time period around 1860, which was labeled as "the heyday of grammar," coincides with "the first great American linguistic insecurity" (115). American education underwent dramatic changes, (transformations that would eventually lead to the creation of College Composition and Communication). Reflecting the new emphasis on correctness, American higher education would find itself in crisis over the results of the Harvard entrance exam in 1874, which would demonstrate the "flaws" of freshman writing and leave a dark legacy for those scholars who would labor to create writing theory during the next century of study (Connors 11). Another facet of this dark legacy would be the struggle to understand the place students would occupy within the writing classroom. During this first phase of teaching writing at the college level, students were "present" as broken writers needing to be fixed (Connors 140). There was little concern regarding anything beyond solving the perceived crisis of flawed writing except perhaps the growing problem of superficiality as students struggled to find something to say in the new artificial context of the composition class. Instructor to student interaction was almost none existent due to the teacher's workload and the general idea given to students was that their writing really didn't matter in any context other than as a way to demonstrate that they were able to avoid errors. This also created a climate that squelched any opportunity or desire for student interaction or the building of community (Connors 140).

Writers worked alone and as long as their texts could pass the red pen, everything w[as]

place because in the pre-1940 world it was unimaginable that students could have

anything to say that was significant (Connors 161).

However, this is not to say that collaboration among students was not occurri[ng]

outside the classroom. Ann Ruggles Gear, in her examination of writing groups, con[tends]

that during the colonial period students often formed literary groups in which they c[ould]

debate issues and critically examine compositions. These groups were usually all-m[ale]

and instructor input was usually non-existent or quite small. Although their member[s]

were students, the groups were usually formed outside of the classroom, which affor[ded]

them the autonomy to pursue their own interests (Gere 10-11).

Within the writing classroom, however, mechanical correctness would guide

composition courses for several decades creating classes that were distasteful to mos[t]

students and a huge burden to the newly created "underclass" of instructors compose[d of]

graduate students and new Ph.D.s who were waiting for their chance to escape. The

general perception of the flawed writer needing to be "fixed" by the teacher within t[he]

confines of a writing course would create a consuming burden for those who taught

writing. It would overwork instructors—Connors notes that it was during this time

period in which the first professional complaints regarding workload were recorded—

no choice but to resort to error marking. Student writers and their instructors were

isolated within limited contexts and possessed very few tools for accomplishing wha[t]

academic institutions and society required. However, during the 1930s a "motley cr[ew]

of linguists, educationists, and rhetoricians" began to struggle against the mechanica[l]

classroom methods of the time. Interest in English pedagogy was taking root and

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thriving (Connors 159). After 1944 rhetoric began to reappear and the refreshing idea of

teaching writing as something more than a set of rules found a vehicle in the newly

formed Conference on College Composition and Communication (Connors 160). This

idea began to appear in several publications of the days. For example, in *College English*

in 1940, Marie Drennan wrote an essay called "Workshop Methods in Freshman

English," in which she explored interaction within the writing classroom. Her main

argument was that there is too much lecture and not enough action within the

composition classroom. Setting up her class so that students are actively interacting, she

describes her efforts as follows:

> I try to make them [students] see that we are all good friends working together
>
> and that individuality—even eccentricity—must be tolerated, but that no one
>
> person is going to be a star...Within a week we know one another's names and
>
> something of one another's personal histories. (533)

Drennan stresses, as do many other scholars during this time, that the composition

classroom must have a format that encourages at least some degree of community

building. In other words, student interaction and feelings of presence within the

classroom are significant.

Yet even as the predecessors to Composition scholars labored as isolated error

markers, humanity in general was moving towards a more connected world. In 1872 Bell

would patent the telephone, which would be considered by many social scientists (such as

Short, et al.) and communications scholars (such as Frank Biocca) as the very first moves

by humanity into technologically mediated experience (Farley 2). Almost 50 years later,

humanity would again have the potential to connect via two revolutionary technologies:

the television and the radio. While there was not a concerted effort to understand what this connectedness meant for humanity, there was a realization that this was something new and initially many people were unsure of how to react to these technologies. Therefore, the initial emphasis by scientists was far less sophisticated than modern day efforts to understand the psychological ramifications of technological mediation. Instead, the goal was simply to assist the average person in responding to hearing a voice, but seeing no person after picking up the telephone, or turning a knob on a box and seeing people who could not see them when using the television (Biocca, Kim and Levy 3).

Phase II: Growing Pains

The conclusion of the 1940s and beginning of the 1950s marks the formal starting points of both Composition Studies and scientific efforts to understand the impact of using technology to "transport" humans and create connections that defied traditional physical limitations. It was also during this time period that collaborative student groups at British medical colleges began to be documented. According to Bruffee these groups would eventually influence collaborative groups in the American classroom (Bruffee 636). In the scientific world researchers began developing simulators and sophisticated radar screens at the request of the United States government. Military officials needed radar screens that could deliver real-time warnings that were easily read by technicians in an effort to defend the country against nuclear attacks. This resulted in the development of screens with graphical interfaces that would become the predecessors to today's computer technology. Scientists also began intense work on simulated experience (the beginning of serious efforts to create VR) in an effort to create safer, more effective training for pilots (science website). These efforts became the foundation for today's

technology and served as the first serious efforts towards expanding the relationship between humans and machines. Artificial Intelligence also became an area of serious interest for scientists and philosophers. In 1956 a group of intellectuals interested in how humanity could create artificial intelligence met at a conference at Dartmouth. This meeting would be hailed by social and computer scientists as the birthplace of AI as a serious field of study (Turkle, *Second Self* 241). These were the beginnings of interactive media, technology that would change the way people related and eventually the way they viewed knowledge creation because they allowed for new ways to connect and new ways to learn.

While the scientific community developed and theorized the tools for interactive media, writing courses also began to evolve and become more interactive. Many writing teachers began to move beyond simply teaching a set of rules. The 1949 creation of CCCC was a victory for those who taught writing with the conviction that it could be more than rules and a new generation of teachers confronted the idea that students were best served by grammatical corrections that bloodied their papers (Connors 205). In 1951 Jeffrey Fleece not only confronted this idea but also offered a rather unique suggestion that teachers acknowledge that they were the audience for student papers and respond to the essays accordingly (Connors 160). Interaction within the writing classroom continued to appear in literature during this time period. For example, in this 1960 article "An Approach to Freshman Writers" Alexander Karanikas addressed the inhibitions of students entering the composition classroom and the responsibility of teachers to attempt to create a space in which everyone could feel comfortable. He argues that the writing teacher must strive to help the class generate "a spirit of its own," which then creates an

"atmosphere that pulls everyone forward" (55). So here once again is the idea that a writing classroom must encompass more than desks and textbooks, it must become a community in which students have a sense of presence and belonging.

Student presence was also an issue for evaluation within the writing classroom. A nine-member Commission on English formed in 1931 sought to analyze writing evaluation, a process which according to Lester Faigley ultimately mirrored activities in the 1980s in which the major focus appears to be on the evaluation of the self presented to the writing instructor (114). In other words, the presence of a student within the text and within the course becomes the primary source for evaluation. Faigley argues that "shared assumptions about subjectivities—the selves we want our students to be—still shape judgments of writing quality" (114). Ultimately, then, the deeply held belief of instructors as to the purpose of the writing classroom and the value of what a student brings to that classroom guided the creation of the classroom community and the student's space to speak within it.

Modern composition-rhetoric began to move towards *an acceptance* of personal writing during the 1940s. Not that personal writing did not exist previously, in fact, in the later part of the 1800s there is a noticeable shift from students writing about abstract subjects that were outside of the realm of immediate personal and cultural experience to compositions focusing almost entirely upon these topics (Connors 64). I say "almost" entirely because there were many efforts—such as the development of the research paper—made to refocus writing courses and the subjects about which students wrote (Connors 321). Educators were obviously conflicted about the role of personal writing and questions in general about the approach to teaching writing began to take center

stage. According to Connors this came as a result of the "feminization" of composition. However, while the entrance of females into higher education and the desire to shift from a less antagonistic academic atmosphere did coincide, the changes in technology (noted above) that were occurring during the 1950s and 1960s while the Writing Process Movement was gaining strength, is another possible factor in composition heading in this direction. Technology began to encroach upon humanity in ways that philosophers such as Turing began to see as significant in understanding how individuals learned, related and created. The "process" of creation and the role of humanity within the general scheme of knowledge management were issues undertaken by the scientific community during much the same time as Connors contends that the idea of writing as a process and views of the student writer's role and context became prominent issues (Connors 67).

In the 1950's linguists were leaders of CCCC, but their influence on Composition did not last. As Faigley states they were "swept away by the movement toward understanding and teaching writing as a process" as teachers sought ways to improve their classrooms and make writing matter (84). In 1966, ten years after the explosion of research begun by the AI conference, Dartmouth would host another very significant meeting. This time, however, it would consist of scholars interested in language, individuals who came from English Departments and who wrestled with the question "What is English?" (Harris 1). Participants began with the question "What is English?" and from there, following new educational models for math and science (both areas feeling the initial growth of computer technology) that were prevalent during this time period, they attempted to define what English offered students. Ultimately they were attempting to define just what their pursuit for a better writing classroom involved. The

participants struggled with these very difficult questions and disagreements abounded, some such as views of voice, authority and community, continue to this day (see Harris). The most obvious conflict that came out of Dartmouth was one between growth theorists and those who took more traditional views. James Britton, John Dixon and James Moffett presented views of English studies beginning with the language that students were most familiar with as a frame on which to build language skills. Personal experience presented a vehicle for doing just that (Harris 1). As debates grew between traditional compositionists and growth theorists questions about the nature and content of English as a discipline escalated. The goal of growth theorists in Composition was to use personal stories and experiences to begin to frame the development of writing, an objective very similar to those scholars who began to study how technological mediation framed an individual's perceptions of presence. During this time period, many social scientists, mathematicians and philosophers aimed their efforts at ways to understand the presentation of information within technology. In corporate American the work of these social and computer scientists translated to which advertising most effected decisions made by consumers to purchase particular products (Lombard and Ditton website).

By the late 60's/early 70's conditions were ripe for technology to begin to gain the "toehold" described by Hawisher et al. Political and economic forces were converging in this post-sputnik era and—as a result of curriculum reforms and new initiatives in math and science leading to the creation of computer-assisted instruction (CAI)—the progenitors of later composition computer software were created. Society in general bounded towards the information age at a furious pace and as computers moved into the professional world offering grammar and spelling checkers, Composition

professionals faced uncharted territory. Composition was slow to adopt the new technology, but perhaps with good reason. For a discipline already fragmented by divisions of practitioners and scholars trying to come to terms with the supposed paradigm shift from product to process, technology that offered little more than drill and practice hardly seemed like an answer (Hawisher et al. 34).

During what I have labeled "Phase II" I have traced the early roots of Composition's argument within itself over foundational pedagogical issues. These issues would bring up terms such as voice, authority, subjectivity, and ethos as scholars would struggle to clarify what Composition was really about and how this could best be addressed. Although computer technology had yet to become prominent in the composition classroom, the discipline debated how students should be present within texts and within classroom communities during while scientists were wrestling with how humans could/should position themselves in regards to machines and virtual environments. Technology would enter the composition classroom and exacerbate the questions of composition scholars regarding pedagogical theories. Only by understanding what was being taught and the pedagogical theory behind it could Composition scholars use the new tools at their disposal. This will be addressed within the next phase "Technology as Tool."

Phase III: Technology as Tool

Between the mid-1970s and early 1990s Composition Studies was a discipline in turmoil. The cover story of the December 9, 1975 issue of *Newsweek* magazine (titled "Why Johnny Can't Write") created a writing crisis that would impact Composition Studies forever, marking what Hawisher et al. claim as the beginning of the modern era

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of the discipline (19). However, as calls grew louder for educational reform budgets grew smaller and the circumstances under which technology would enter English Departments became precarious. Meanwhile within the classroom itself, struggles with a presumed paradigm shift were under way. One of the signs of this shift was a movement towards collaborative learning within the American college classroom, a connection Bruffee states began in the 1970s as a way to help failing students but ultimately worked well within the process-oriented classroom (Bruffee 636).

Process theorists may have brought forth new ideas as they attempted to transform writing pedagogy, however, as the authors of many of the recent histories of Composition Studies have observed, paradigm shifts are never as unified or complete as their label would imply. North contends that discussions of paradigm shifts assume that Composition Studies has had a paradigmatic structure, which would imply that there have been unified responses by members of the discipline to the complex issues that have arisen during its development (321). Hawisher et al. contend that "the paradigmatic shift may have occurred in the pages of our journals, but it had not occurred in many, and perhaps not in most, American Writing classrooms" (30). Again the question of what role students were allowed to occupy within the classroom became the center of debate because of intense pressure to create better students and thus the need to define what better might mean. Student "presence" both within the classroom and within their own texts became a matter of political and social pressures.

As Composition Studies faced increasing pressures to produce better student writers, literature during this early period reveals that technology typically exacerbated the tension as new technology appeared at odds with the emerging paradigm. In 1983

Don Payne lamented the conflicts with the computer science majors who were assigned

to develop programs for his writing center because he felt he was losing control of his

pedagogy (242). While at the Midwest Writing Center conference that year, Dennis

Moore rallied against the overzealous acceptance of technology displayed in an issue of

College Composition and Communication. Moore took aim at Carolyn Dauite's article in

which she attributed almost magical features to the cursor, which she claimed

reminded/encouraged writers to write more (8). These conflicts as well as many others,

demonstrate what Hawisher et al. conclude are the two ways in which the computer

entered the composition classroom: as fancy typewriter or as "tools that would magically

and mechanically improve students' writing through style- and grammar-check

programs..." (71). Oddly enough, the new technology appeared to be little more than a

new tool for the old idea because early computer programs offered a continued emphasis

on product. According to Hawisher et al. computers as style checkers was of significant

interest to members of the field (71), an observation that supports what Connors argues in

his discussion of the time period, in which he states that the current-traditional paradigm

and an interest in product was far from dead (105).

Hawisher et al. argue that "the new paradigm—as well as older more traditional

ways of viewing and teaching writing—framed the ways in which the young field of

computers and composition would understand and use the new technology" (31).

However, it could also be said that while the ways of understanding and teaching writing

framed the way technology would be understood and used, technological possibilities

may also have framed the possible ways of understanding and teaching writing. What I

mean by this is that technology created new ways to work with text and to collaborate

with other writers, which may have thus framed ways in which to understand pedagogy. For example, in her book *Writing and Learning with Computers*, Carolyn Dowling addresses the possibilities presented by hypertext. While noting that it fits into current understandings of writing instruction, she adds that it may indeed even offer the possibility of creating new avenues that would lead to the expansion of existing paradigms (34). This also became apparent in the years 1979-82 when compositionists began "helping to define the use of computers in writing instruction by creating the software that shaped the technology" (Hawisher et al. 45). However, programs such as WANDAH, which paired computer-assisted instruction (CAI) and word processing, was dismissed by David Partenheimer and Bill Emmett who critiqued the program as cumbersome and intrusive, encompassing "only a fraction of the skills involved in effective writing" (53). Fred Kemp in his article "Getting Started with Computers: Computer-Aided Heuristics for Student Writers" published in the early 80's offered one of the earliest calls for Composition scholars to see computers as neither threat nor panacea. Instead he argues that "computers can do marvelous things for us in our classrooms and our learning labs, but only if we are imaginative enough to forsake the anthropomorphic prejudices of robotry and develop truly innovative instruction based upon characteristically computer abilities." He thus aligns himself with many AI theorists who call for considering differences between human intelligence and artificial as "theoretical not practical" (9). Composition teachers across America found themselves faced with the difficult decision of just what role technology would play within their particular classroom. The difficulty, which many of these instructors were unprepared to face, lay with clarifying pedagogical beliefs as to whether technology should be used to

"free writers from some of the mechanical and trivial aspects of writing...or should technology be used for drill and practice" (Hawisher et al. 109).

Somewhere in the late 1980s a dramatic transformation began that included but yet surpassed the boundaries of traditional technology/paradigm debates, as technology became gathering place on the academic horizon. Early researchers in VR theorized that modern technology's greatest potential could be in its role as a virtual gathering place with no boundaries or other spatial limitations allowing people from around the globe to gather in one environment (Lanier and Biocca 1992). By the late 1980s that potential was making its way into the composition classroom. Within the span of a few years the computer went from stand-alone machine to being the "information superhighway" with the introduction of computer-mediated communication, "the most tangibly social of all writing media" (Hawisher et al. 149). Very quickly scholars began moving from writing about the lone composer at her computer to how collaboration would look within the curriculum (see *Computers and Composition* article topics from the late 80's for example). According to Hawisher et al. "the view of writing as social process, already beginning to inform teachers' ways of viewing word processing classrooms, found a more-than-comfortable fit with the communal cyberspace of computer networks" (150). During this time, WANS began to expand and assist in the connectivity. With the computer no longer a stand-alone machine, the writer, her context and her presence within this context came to the forefront. Writing began to be seen as far more complex than had originally been thought as Marilyn Cooper stated in her 1986 article "The Ecology of Writing." Cooper contends that "...writing is an activity through which a person is continually engaged with a variety of socially constituted systems" (367). The following year, Ann Ruggles Gere would address the issue of collaboration among writers in her book *Writing Groups: History, Theory and Implications*. Observing that

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the development of writing groups has been anything but linear, Gere states that the history of writing groups confirms

> the double truth of [their] novelty and longevity. New writing groups form continually as interest in them burgeons, but other groups can trace their ancestry back to the early part of this century. Writing groups did not spring from a single source; rather, they emerged from several institutions and intellectual traditions. (10)

Interaction within the composition classroom was coming to the forefront and so were ideas of the complexities of the individuals within these classrooms. They would be carried forward by writers such as Mary Louise Pratt, who offered "contact zones" as a possible way to view the composition classroom, and by David Bartholomae, who would take issue with the academic community's invitation to freshman writers. Stanley Fish would offer the idea of interpretive communities and a rather large debate would ensue for years to come over whether the writing classroom was a discourse community and what that would mean. These questions of community and its purpose within writing pedagogy are the debates that would shape the off-line classroom and the teachers who would ultimately create the environment for the online classrooms.

With the growing interest in computers and composition, professionals aligning themselves within this area began to seek stronger connections to one another during the 1980's. In 1983 *Computers and Composition* would publish its first issue, a newsletter that would later lead to a journal, although the early issues would focus on software, most articles addressed software as a vehicle for improving the writing classroom (see for example, articles in the second issue of 1983 in which software was considered as a way of facilitating the teaching of writing. The fact that "software" was the most predominant

category in Computers and Writing, demonstrates the tensions experienced by composition teachers who were curious enough to seek out technology, but yet still in the mode of having to prove its worth for the writing classroom. Also, in 1983 the first Computers and Writing conference was held, thus signaling a growing strength in a movement that would ultimately lead the way in the implementation of technology in the writing classroom. This conference was preceded by a growing number of tech oriented presentations at both CCCC and NCTE annual conferences. Composition scholars who were interested in technology were beginning to come together and realize that technology was not simply a passing side interest. It was a way to begin considering a new type of classroom.

Phase IV: Technology as Place

The early 90's saw a rise in connectivity unlike any previously seen as the Internet and multimedia technologies burst into the public domain. This is the time period where technology most clearly shifted from being merely a tool within the composition classroom to being a place. Class members were now able to "meet" in cyberspace to accomplish the tasks for which they once relied upon face-to-face physical environments. Here is where the true significance of understanding technologically mediated presence comes into focus. During this time period networking was becoming more available to a wider audience and the Internet "information super highway" was ready for traffic. In 1991 those hoping to make it an even playing field for all who wanted to use this resource formed the Internet Society out of concern for the future direction of the Internet. The major focus was on guiding the Internet to become a global meeting place and maximizing the collaborative potential of this incredible technology

(Lanier et al. Website). Although Hawisher et al. deem 1993 as the "Year of the Internet" based on their study of connectivity (183), 1995 marks a much more significant milestone due to the Federal Networking Council's resolution [see appendix A], passed on October 25 of that year defining the Internet as a "space...accessible either publicly or privately" for communication to be supported by a networking Infrastructure (Leiner et al. Website). The resolution was the first "official" attempt at defining this new technology in social terms.

In the early 1990s, the conversation about the role of community within writing theory seemed to be intensifying as several scholars published their theories on this issue. For example, in 1991 Mary Louise Pratt published her essay "Arts of the Contact Zone" in which she introduces her concept by defining her concept as "...social spaces where cultures meet, clash and grapple with each other, often in contexts of highly asymmetrical relations of power..." (34). This idea was promoted several years later by Patricia Bizzell who stated that "contact zones" offered a new way to view and discuss what occurs within the classroom and within the discipline's theories of pedagogy. Once again it becomes apparent that the scholars within the discipline see the space of the writing classroom as something that requires an understanding of the presence of its members and how space is created for those members.

During this time Lester Faigley published his work *Fragments of Rationality*, a work focused on "postmodernity and the subject of composition." Within its pages he addresses student subjectivity, a topic he asserts has been at the heart of the major disagreements within the field. His work is, in effect, a discussion of presence. He focuses upon debates over the place that composition scholars wish or believe that

students occupy. In other words, how are students "present" within the composition curriculum? Ultimately, Faigley focuses on the question of what space (to use Robinson's terminology) instructors allow/insist students occupy? The search feature for the *Kairos: a Journal of Rhetoric, Technology and Pedagogy* website reveals that during the time period that I have designated Phase IV more than 200 works referenced presence. *Computers and Composition* articles abound in which authors raise questions regarding how teachers and students are "present" within technology-enhanced writing courses. For example, Craig Stroupe addresses the "compositional voice" in his recent Computers and Composition article on how composition classroom members are "present" within a course he designed. Stroupe argues for viewing online class participation as "performance" (255). Mary Hooks talks about female "presence" in her study of online power struggles and Roxanne Kent-Drury examines the "presence" of students and teachers in an online classroom in which all course participants negotiate authority. Much of the debate raised within these texts do not explicitly rely upon the work of social and computer sciences, but they nonetheless represent Composition's struggles with much the same issues as those being experienced across the campus framed within the context of technological mediation.

Scientific research on the impact of technological-mediation was growing and communications scholars Matthew Lombard and Theresa Ditton argued that there was a need for organizing scholarship in order for scholars to share and expand on work being across the campus. Therefore, they began to catalogue the conceptualizations of presence, most of which arose from the social and computer sciences. Their work would be completed in the late 90's bringing some order to the vast amount of work being done.

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The 90's was also a time in which social presence and media richness theories began

receiving renewed attention as the social aspects of technology were becoming a major

focus for scholars in many disciplines. Short et al.'s social presence theory from the mid-

1970's began receiving more citation and direct references in journals such as "Presence"

and in CMC related literature (such as Biocca and Levy's compilation of essays in

Communication in the Age of Virtual Reality). Media richness theory, which is closely

tied to social presence theory, received renewed interest in the early 90's when

communications scholar Ronald Rice presented his research which demonstrated the need

to better match communication media and organizational tasks to maximize efficiency

and satisfaction (481). Meanwhile research on what would become the best known of the

presence conceptualizations (the "you are there" concept) was coming to prominence as

VR games hit the market. Studies such as M. Slater and M. Usoh's "Representations

Systems, Perceptual Position, and Presence in Immersive Virtual Environments" offered

a look at presence as division between body and mind, declaring presence to be a

"suspension of dis-belief" that technology users were "in a world other than where their

real bodies are located" (222). Sherry Turkle's study of the technology induced identity

crisis for humanity was on the bookshelves in the mid-90's opening dialogue about the

startling changes faced by culture as the millennium ended, as was Howard Rheingold's

exploration of the Internet in which he marveled at its incredible potential for connecting

humanity and at the "form of out-of-the-body experience" that was possible via modern

technology (256). Rheingold also presented the Internet as a revolutionary tool that

needed to be watched and guarded by the general public in order to keep it from being

turned against them by "Big Brother." He added this warning: "The wise revolutionary

keeps an eye on the dark side of the changes he or she would initiate" (Virtual

Community xxxi). Much like the authors examined at the beginning of this chapter

(Inglis et al., Carino, and Hawisher et al.), Rheingold believed that connectivity was a

powerful tool that needed to be studied and understood if it was to be kept from being

used to silence voices.

In the business world physical travel was beginning to be replaced by video

conferencing, distance learning and even legal testimony from remote locations

(Muhlbach, Bocker, and Prussog 291). Virtual reality may have begun with military

training and flight simulators, but by the 1990's it was finding a place in everything from

arcade games to architectural and interior design to new kinds of exercise equipment, to

sexual encounters to underwater exploration to the training and assessment of surgical

skills. Even the cinema experience was being altered as production companies explored

presence as a way to enhance audience experience (Lombard and Ditton website). These

changes were in part based on research by scholars such as M.A. Shapiro and A. Lang.

In their study of television in the early 1990's, they questioned whether or not a non-

interactive technology does indeed elicit startle and defense responses. They concluded

from their study that once attention has been engaged,

> processing will be affected by the viewer's perception of the reality of the
>
> stimulus. In other words, once attention is focused on the event the conscious
>
> mind tries to make sense of the stream of information. (693)

With the rise of hybrid courses in the late 80's and early 90's, scientific views of

presence became relevant to education. For example, psychologist M.K. Johnson (in the

early 1980's) and communications scholar Theresa Ditton (in the 1990's) raised many

questions about how computer mediation affects participants' interactions when put into

situations where they were required to interact with one another both online and off-line.

This was roughly the same time that the term "hybrid" was appearing within educational

circles. The term hybrid was originally used to refer to distance learning courses in the

1980's, which was following by usage in regards to publishing to refer to publishing

efforts that would be both online and off (Rich Rice e-mail). (Hybrids will be addressed

in greater depth in Chapter 5.)

Education began to change immensely during this time as hybrid courses began to

rise in prominence and more academic programs than ever before moved totally online.

The University of Phoenix (which was founded in 1976 as a traditional university) began

to offer its totally online program in 1989 and in 1998 Western Governor's University

became the first completely online, competency-based university to receive regional

accreditation. Both stressed words on their websites that would become education's

catchwords for the new millennium "unparalleled convenience and flexibility in the

pursuit of …education" (University of Phoenix website). They proudly declared how

they were changing the face of education and the educational community. In fact, WGU

in their job postings, state that faculty must maintain an online presence, but will only

need to physically set foot on WGU's campus a few times a year (WGU website).

Turing's dreams had become a reality: humans were "moving" into the computer screen.

In 1990 MBU (Megabyte University) was founded offering professors, teachers

at all levels, graduate students and administrators with an interest in Rhetoric and

Composition an opportunity to engage in dialogue online (Doherty website). Three years

later in 1993 blogs were invented opening new doors for writers and for those involved

with Composition Studies (Writing Program website, Rutgers University). As technology became more refined, C&W theorists were seeing a greater potential for using computers within the writing classroom. In the section entitled "Looking Forward," Hawisher et al. state that "the new processors should supply the power required to run programs that include sound and video files and should make possible desktop implementation of 3-D interfaces and virtual reality" (228). Computer capabilities were able to accommodate VR, thus opening new possibilities for the classroom. During this time period there was an increased interest in hypertext and CMC which can be seen by the growing number of articles in *Computers and Composition* that were devoted to both of these subjects and the boon in book publishing o the topic. This would continue to grown and in fact, in 1999 the only issue of *Kairos* that was published (typically the journal appears twice in a year) was devoted to hypertext and how it was changing the writing classroom. "Presence" became a prominent topic within C&W literature as community members entertained the new possibilities for creating classroom communities beyond the traditional brick and mortar setting. C&W studies began to be released in which the amount and length of responses from women and minorities (groups often silenced within traditional classrooms) were counted. Qualitative studies of the types of discussion and ways in which faculty were included or excluded also began to appear. Rhetorical issues such as the teacher's ethos or the pathos found in chatrooms were examined. All of which point to the C&W community's interest in presence and all of which represent very significant contributions that the field can offer to the ISPR's body of work. However, what it lacked were the components so vital to the ISPR's work

such as research on the effects of immediacy on task completion or the perceptions of engagement that result in active participation.

As the technology opened doors for this new connectivity within the broader context of society, members of the C&W community were once more discussing issues of voice and the context of the student writer. Hawisher et al. argue that in the early 1990s voice began to re-emerge as a significant topic in Composition Studies in reaction to social context pedagogy (221). However, in 1992 Faigley asserted that changes in how voice is viewed within Composition Studies has never been smooth or complete because of the different views held by composition teachers regarding the subjectivities that they want their students to occupy. He contended that composition studies had refused to "surrender its belief in the writer as an autonomous self even at a time when extensive group work collaboration is practiced in many writing classrooms" (15). The debate would continue in composition literature even as dreams of an improved, more equitable classroom moved towards increased interactivity and collaboration online.

Connectivity opened doors to considering in an even broader context how groups were socially constructed and even Composition Studies as a discipline demonstrated via journal articles and conference topics that it was beginning to do this as well. Journal articles from the early to mid-90's demonstrate that the discipline was beginning to take a closer look at how it was socially constructed and CCCC conferences centered around the idea of Composition Studies as a community within the larger community of society (see programs for 1992 and 1993 in particular). Anthologies such as *Social Issues in the English Classroom* began to be published and CCC had issues—such as May 1992—

devoted to political and social issues. Changes also could be seen in scholarly views of the writer's subjectivity:

> The process movement of the late 1970s and early-to-mid 1980's began to be seen as inappropriately centered on the individual, autonomous writer thus obscuring the social aspects of composing; and as inappropriately assuming a monolithic 'student writer,' thus obscuring the complex assortment of differences among writers. (Hawisher et al. 173)

In 1977 the focus had been on error-analysis, according to Harris, in the 1990's this changed and student writers were then seen to be struggling within a context, struggling to maintain and define their own voices while also fitting into the framework of the institution surrounding them (39).

During the late 1990s Harris published a work in which he reviewed some of the most prominent debates within the field. He devotes entire chapters to both voice and community, two aspects that also refer to the "presence" of students and instructors within the writing classroom. Harris contends that scholars have struggled with student voice and with looking beyond the individual writer to see how interaction and community affects the writing process. Both of these issues have long and complex debates behind them and the significance both for Harris and for myself is that the conversations have occurred, something which demonstrates the discipline's priorities. Historically the discipline has frequently discussed what it meant to teach writing and how the idea of classroom community with its complications of student presence affected it. The discipline may not have always embraced on a wholesale level one unified view

of student presence and interaction within the community (or even what community means) but its scholars have never been silent on these topics.

Another significant discussion occurring during the 1990s occurred on a global level, C&W community members were beginning to realize that old methods would not fit new technology both in regards to pedagogy and professional pursuits. In the Spring 1997 issue of *Kairos*, Seth Katz would describe the awkward position in which he found himself when asked to help re-write tenure guidelines, standards that would decide his own tenure. The trick, of course, was finding a way in which to measure the new pedagogies and professional practices of faculty in the emerging world of technology that meant that the document created by the committee was "a temporary revision". His observations from the situation reflect what was going on within the community at the time:

> ...the best we can do is to openly recognize, first, that many fine teachers and
> bright researchers are doing good and interesting academic work with computers;
> second, that in the course of time...the whole field of computer-related activity in
> English studies will take shape for us; and third, that through arguments,
> conversation, and compromise, a consensus will develop as to how that activity is
> to be evaluated and rewarded. (Website)

During the decade of the 90s, technology became more integrated into Composition Studies than at any time previously in its history. Not only did this bring new questions and debates to the discipline but it exacerbated questions of student presence within the classroom and the role of interaction among class members. As both technology and the C&W community have matured, there have been growing possibilities for how technology could benefit scholars and how scholars could guide technology. C&W scholars have indeed addressed issues of presence as a result of both

ongoing debates within writing theory and the addition of technology to those debates, they did not formally contribute or draw upon the body of work coming together as studies of human presence. However, many of the issues and struggles faced by the discipline could have benefited from being framed in terms being used by the researchers catalogued by Lombard and Ditton. Instead, the issues fragmented during this time period into questions that ultimately brought the very value of technology into question.

Phase V: Potential and Unrest

I have selected the late 90's as the starting point for this final phase, one which I have labeled "Potential", because of the incredible advances in technology and the C&W community's maturation into new arenas of class formats (most especially the hybrid class). But I have also added the word "unrest" because along with potential comes critical questions and problems as new ways to teach writing conflict with old ways of thinking.

On the larger political front technology was becoming a centerpiece in the national education agenda. The Clinton/Gore administration called on corporate America to join with the educational system in "creating digital opportunity" ("Initiative" website). President Clinton issued a technological agenda for the country seeking to draw together Americans in a move for supremacy in the area of technology. In 1995 President Clinton issued a technological literacy agenda with the four main "pillars" being:

1. Connect every school and classroom in America to the information superhighway;

2. Provide access to modern computers for all teachers and students;

3. Develop effective and engaging software and on-line learning resources as an

   integral part of the school curriculum; and

4. Provide all teachers the training and support they need to help students learn

   through computers and the information superhighway. ("Agenda" website)

In another press release posted on the White House website, Clinton calls for

participation in the agenda labeling it a "high-tech barn raising" ("Agenda" website). His

agenda, which was carried on for the most part by the ensuing administration, highlights

the new educational landscape in America, one in which the preside himself mandates

integration into every level of education.

The composition classroom, as yet another venue for this integration, became a

place in which technology was expected to create great possibilities. Restraints that once

stifled such groups as women and minorities could be thrown off and all technology-

enhanced classrooms would become the vibrant place that Joan Turnow describes in

Link/Age. However, not all classrooms would become that place and positive change and

neutral environments did not exist, even online. Instead, as the 20th century concluded

and the 21st began, the C&W community displayed not only a growing awareness of the

potential for CMC as a vital tool in expanding the writing classroom, but also the need to

critically address agency. Among the books to come out during this time period, for

example, was Bolter and Gruisin's book "Remediation" in which they addressed the later

issue. In it they argue that

> [i]ntroducing a new media technology does not mean simply inventing new
>
> hardware and software, but rather fashioning (or refashioning) such a network.
>
> The World Wide Web is not merely a software protocol and text and data files. It

is also the sum of the uses to which this protocol is now being put: for marketing

and advertising, scholarship, personal expression, and so on. These uses are as

much a part of the technology as the software itself...New digital media are not

external agents that come to disrupt an unsuspecting culture. They emerge from

within cultural contexts, and they refashion other media, which are embedded in

the same or similar contexts. (19)

Debates about agency within the context of computers would become prevalent during

this time period as other books (such as Bromley and Apple's compilation of essays in

the book Education, *Technology, Power: Educational Computing as a Social Practice)*

and journal articles (such as Takayoshi's article "Complicated Women: Examining

Methodologies for Understanding The Uses of Technology" and Duffelmeyer's "Critical

Computer Literacy: Computers in First-year Composition as Topic and Environment")

asked questions about what was occurring. The need to understand, critically explore and

adapt to new technology has always been a part of the role of educator. All the way from

the technology of writing itself that gave Plato pause, to Channel One that brought

television into the classroom, to the now global CMC, technology has presented

complexities for educators. During this time period debates abounded regarding the

forces of the community of human beings who control, implement, and apply meanings

to it that it has the potential to bring both freedom and democracy or simply exacerbate

current problems (Starkey 177) and societal inequities (Addison and Hilligoss 33).

There would also be many other debates about whether or not CMC was living up

to its potential for creating a democratic classroom. The ending of the 1990's and

dawning of the millennium would see a conflict arising from what Joel Forman and

Sharon Widmayer argue is the complexity of adding technology to the writing classroom. They contend that asking a group of student to collaborate in the writing process is a difficult task that the integration of technology may mask. Thus while struggling with typical group formation processes—such as the creation of trust, focus and communication—students are also being asked to complete an assignment and, as if that were not enough, to incorporate some form of technology (135). In her study of online environments, Paulette Robinson encountered one student who labeled the online portion of her course a "necessary evil" (120). The comment led Robinson to question whether we as educators are "condemning" our students to a "necessary evil" by using Web-based formats for our classes. She contends that unless instructors build a "place" for their students and create a community that extends to the online environments, the students will not *ENTER* (my emphasis) the class, they will merely type in answers and leave. The solution that Robinson then proposes is having students share personal narratives at the start of the course in the physical classroom. "We create and re-create our world within a sociocultural context—a complex series of relationships" (122). This is a key point in the current pedagogy focusing on the integration of technology into the composition classroom. Throughout the literature regarding computers and writing, words and phrases such as "transformation" "promotion of audience awareness" and "democracy" abound (see Tornow, Warschauer, Dowling, Rheingold). The phrase "...more than traditional classroom settings" is also prevalent with technology-laden classes touted as superior to traditional teaching methods. Yet there are also a growing number of warnings about assumptions over what is going on in these classrooms. As Wolfe contends, we must not be too quick to label who will benefit from computer-

mediated- communication since her study—and others that she has examined—raise doubts about which minority groups, if any, do gain.

There were other concerns within the C&W community as well. In the journal of *Computers and Composition*, several special issues demonstrated community concerns regarding its status. For example, in 1998 the focus was on intellectual property, and in 2000 there was an issue devoted to tenure. In the 1998 issue, guest editors Gurak and Johnson-Eilola contend that *Computers and Composition* has expanded to include a wide breadth of issues and that there is a new complexity to research and writing within this community. They state that

> We are entering into a new economy of texts, in financial, political, and cultural
>
> senses. Yet, despite the rise of computers in our discipline and the resulting rise
>
> in intellectual property issues, few of us truly understand copyright, fair use, or
>
> the implications that new technologies and new legislation will have on future
>
> legal decisions in our classrooms, our Universities, and the world at large. (121)

Again there is a concern that forces beyond the discipline would take control if members of the discipline did not stay current and active with technology.

In the special issue two years later dealing with tenure, the C&W community showed its willingness to address the need for revision within the discipline of Composition Studies, a need to legitimize the community of C&W scholars (that lived within it walls) via changes in tenure. Guest editors Jessica Lang, Janice Walker and Keith Dorwick articulated the need as one that exacerbated complexities in the value and content of C&W scholarship. They stated that

Although some individuals who have built their careers working with computers in writing programs or English Departments have been awarded tenure, others have not; as more tenure-track faculty claim technorhetoric as their primary area of research and teaching, the drive to determine what counts and why intensifies. (2)

Composition Studies as a whole began to see the new millennium as a chance to grow and make its presence felt. In the final years of the 20th century members of the discipline began to embrace ideas of growth and in 1998 it's annual conference centered on the idea of "breaking with precedent." The following year, participants were called on to become more visible as a profession. In the conference program Keith Gilyard's greeting as program chair stated "...my driving concern is to get us to clarify and affirm our positions on important issues in the field. Stressing 'visibility' has been one way to address my concern"(5). In 2000 Wendy Bishop exhorted participants to "connect past to present at the opening of our new century. Please use the next few days to explore provocative, radical, and exciting options as we do our re-imagining together." The discipline was again moving towards greater connectivity. In 2002 and 2003 as members gathered to consider "Connecting the text and the Street" (the theme for 2002) and to consider transforming the discipline by "Re-writing Theme for English B: Transforming Possibilities" (in 2003). Shirley Wilson Logan in 2002 would stress that in choosing the theme "wanted to emphasize the urgency of paying attention to the needs and desires of the various publics that we serve" (5). In her 2003 address, Logan would exhort her colleagues to "explore how we might adjust our practice to match our declared goals,

change our goals to match present-day realities, and break our silence about the disparities" (95).

Computers and Writing Conferences also reflected a growing awareness of the significance of its own presence. As the 20th century concluded the conferences demonstrated an interest in change and presenters challenged participants to look towards global visions and transformation. In 1999 Fred Kemp reflected on the "tradition and technology" in his keynote address "Battle Beyond the Millennium: the Internet Versus the Teacher Culture: Are You Ready to Rumble?" In his speech, Kemp described the experience of getting his first e-mail account through Texas Tech:

> I applied for an Internet email address (we called them Bitnet addresses), and had
> to work my way all the way up to the head of academic computing. He stared at
> me as if I was requesting his wife for a weekend in the Bahamas. ("Battle"
> website)

Kemp also notes when he finally received the account the head of academic computing warned him that it was for research purposes and that it was "a trivial use of the resource" for an English professor to have such access. But that was in 1990 and as Kemp stood looking towards the new millennium with the computers and writing community gathered at that conference he offered this warning:

> As teachers standing on the limb that we always stand on, we tend to have a death
> grip on the tree trunk. Whoever climbs out on some distance on the limb tends to
> make the rest of us loosen our grip on the trunk and follow, if only a few inches.
> I'm suggesting that a death grip on the tree trunk while the rest of society -- and
> indeed the global society -- is provocatively engaged in exploration and risk

largely through the overwhelming influence of communication technology, may

represent a death grip in the literal sense. ("Battle" website)

The conferences that would ensue supported Kemp's strong words that change was under

way and those in education needed to move forward onto the limb. In fact, in 1999 C&W

conferences would begin to meet online. Technology had now become *a place* for C&W

scholars to meet online beyond the boundaries of the traditional physical environment.

In the year 2000, the conference was titled "Revolution, Evolution, and

Implementation: Computers and Writing for Global Change" and was challenged to

reflect on a range of questions: "What technologies have we adopted out of necessity?

What are our current choices? Which directions should we follow? And what pitfalls

should we avoid?" In 2002 the conference considered "teaching and learning in virtual

spaces," and in 2003 the emphasis was on "discovering the digital divide" which

highlighted the need for the community to continue on as pioneers adventuring into the

many new areas of learning and teaching opened by technology. In an effort to

dramatically demonstrate this, a group of scholars and publishing professionals gathered

for a pre-conference workshop in which they authored, assembled and published an e-

book in 3-hours.

The C&W community had faced the era of potential and unrest with a growing

determination to create improved composition classrooms via technology. Yet even with

successes such as the creation of an e-book or confronting issues of tenure, the

community would need to step further off the limb. The question would be how to do

this and still pursue their agenda.

Conclusion

Throughout its history scholars within the Computers and Writing community have demonstrated a pioneering spirit, even if at times they struggle with when to let go of the branch on which they stand, as Kemp stated. However, as the community has organized and matured, literature demonstrates that its members have come to appreciate the idea expressed by the theme for the 2004 Computers and Writing Conference: "never turn your back on the ocean" (online conference pamphlet). The call for proposals explains it this way:

> The waters of the Pacific can be a source of pleasure and excitement, but they can
>
> also pose serious dangers…how can we negotiate the currents and ride the waves
>
> in ways that are productive for our students, our communities, and us?

Understanding interaction within the evolving computers and writing classroom presents a rising tide with some very challenging currents and waves. Because technology has shifted from being a tool to becoming a place, and because writers are experiencing connectivity in greater amounts and in ways never before seen in history, it is time to negotiate this ocean before us with new tools and resources. In the next chapter I will present a continuation of this story, focusing on the development of the hybrid classroom, and the development of social presence theory.

Chapter 3: Being "Present"

In this chapter I analyze the development of presence as a field of scientific

scholarly research in order to introduce my audience to the broader context of this body

of work and what it has to offer C&W scholars. I do this in order to examine the

connection between a growing interdisciplinary body of research on the subject of human

perceptions of presence and the increasing need for broadening discussions about how

technology affects activities within the computers and writing classroom. Therefore,

within this chapter I explore the six major conceptualizations of presence research and

analyze how scholars have used theories of presence to benefit their particular

disciplines. I include an examination of Virtual Reality (VR) and Artificial Intelligence

(AI) because they are both so vital to work being done on presence. Contemporary

scientific theories of presence have often developed via the work of researchers exploring

VR and AI, areas in which technology and a user's sense of presence can be easily

manipulated (Steuer 37). (VR research is especially significant for researchers who are

developing the meaning of presence for media studies, interpersonal communication

theory and educational technology.) Therefore, within this chapter I will present an

analysis of scholarship within the social and computer sciences mapping the development

of work focused on issues of human perceptions of presence within technologically

mediated domains.

Origins of Presence Research

Although the term "presence" was not in use during the 1940's, scholars who

study presence commonly point to that decade as the starting point for this field due to

the invention of a "gadget" that proposed to allow "vision at a distance" for the common

person. "Tele-vision" revolutionized both the entertainment industry and the world and began humanity's first small steps towards altering human perceptions of "reality," which would become a major catalyst for presence research. Society would never be the same as televisions invaded homes, communities and minds, sweeping through humanity like a tidal wave and introducing a new way for the average person to be "present." This new gadget was "not just a novelty in a research lab or an amusement at the World's Fair" but was instead something that would define culture and affect the psychological makeup of an entire world (Biocca, Kim and Levy 3). The television would be the first step in creating the "cyber-worlds" which would push reality and definitions of what it means for a human to be "present" to a new level. In fact, in their discussion of VR, communications scholars Frank Biocca (who also serves on the board of the ISPR), Taeyong Kim and Mark Levy link television as the direct ancestor of VR:

> More than 50 years after the introduction of television, VR technology presents us with devices such as the head-mounted display, a television set that wraps itself around our heads both literally and metaphorically...VR dangles in front of our eyes a vision of the media's future, changes the ways we communicate, and the way we think about communication. (4)

Television may have been the foundation upon which VR was able to grow, but it was fear of nuclear attack in the 1950's that initiated its first major growth spurt. During that decade, the U.S. military commissioned a radar system "that would process large amounts of information and immediately display it in a form that humans could readily understand. The resulting radar defense system was the first 'real time,' or instantaneous, simulation of data" (Science website). Following that, designers began researching ways

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for computers to graphically display or model air flow data, which then required computer experts to restructure computers in order to not only compute these models but also to graphically display them. According to the University of Illinois "Science for the New Millennium Expo" website the designers' work "paved the way for scientific visualization, an advanced form of computer modeling that expresses multiple sets of data as images and simulations."

With the new technology the United States as a country was armed with a defense system superior to all that had preceded it. The United States as a culture, on the other hand, was producing technology that would move computers into the graphical era. This would be a time period where screens would finally be capable of displaying more than words and numbers, a time where VR simulations could truly simulate the physical experiences of being human. These advances would require a new look at what it means for a human to be present in ways that humans had scarcely dreamed of up to that point in time. During the 1940's and early 1950's (until his death in 1954) philosopher and computer scientist Alan Turing, whose work is a cornerstone for much of what is done in both AI and VR, researched and wrote profusely on the subject of humanity's relationship to technology. He questioned just what it would mean for humans to be in an environment that did not exist outside of a machine and what it would mean to interact within machines. Although technology was at a far cruder stage than today's standards, he felt it was vital to ask how technology might affect humankind's relationship both with one another and with the technological tools being created. Turing was a true visionary for his day. Not only did he create the foundations for many modern day conceptualizations of presence, most notably "medium as social actor" (explained

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below), but he theorized that technology had the potential to develop beyond "tool" to become "place" (Turing 433). Although VR and AI were both still extremely young and Turing who had no way of knowing for sure that one day a computer would indeed beat a chess champion or that avatars would roam the Internet "chatting" with humans (who often are not even aware that they are addressing a non-human), he would be instrumental in challenging subsequent VR and AI scholars to give careful thought to what they developed and how it might affect humanity. In fact, the "Turing Test", (introduced in his well-known and widely cited article "Computing Machinery and Intelligence" as a way to measure the extent to which a computer mimicked human intelligence) was considered the standard for more than three decades as a way of thinking about the line between humans and machines (Turkle, *Life* 85).

Then in 1968, satisfying what Frank Biocca and Ben Delaney called the fulfillment of a "centuries old dream of creating an image that is perceptually convincing," Ivan Sutherland built the first head-mounted device. Sutherland, a computer scientist often credited with being the "father of computer graphic design" and with coining the term "virtual world," created this helmet-type device which allowed users to experience movement in a computer-generated environment in an effort to push the envelope of human perception (Biocca and Delaney 66). Sutherland saw computer technology as offering new worlds to explore, much as one might view space exploration. He summed up his work by stating that "[t]he screen is a window through which one sees a virtual world. The challenge is to make that world look real, act real, sound real, feel real" (507).

Following WWII, the government pumped millions of dollars into technology that would create safe but yet effective training alternatives for fighter pilots. Initially pilots were trained in mock cockpits on the ground that physically pitched and rolled, but the military concluded that this was ineffective and work was done to create a more realistic experience that also provided feedback for the pilots. By the 1970s, pilots were training on simulators enhanced by more advanced computer-generated graphics (though still relatively primitive by today's standards) operating in real time. As that decade ended, the military had progressed to head-mounted displays and by the early 1980s, "better software, hardware, and motion-control platforms enabled pilots to navigate through highly detailed virtual worlds" (Science website).

In order to develop these programs effectively, computer scientists found themselves asking more and more questions about the relationship between technology and the human beings that used it. In effect, they began to ask what it meant for a human (in the case of the military programs this would mean the pilot) to feel present *within* the technology. Computer scientists creating these programs soon realized the only way to continue advancing was to define and understand this intangible aspect of their work. That is, they came to understand that "the key to defining virtual reality in terms of human experience rather than technological hardware is the concept of presence" (Steuer 35). In other words, human experience was being broadened and if computer scientists were going to continue developing technology, they would have to understand the human component.

VR was not the only vein in which the human experience was being broadened. During the 1960s, humanity found new ways of connecting with one another and with

machines, via networking. In a series of memos in August 1962, J.C.R. Licklider, a computer scientist at MIT, wrote the first recorded description of the potential social interactions that could be created through networking computers, a concept he called "Galactic Network." Licklider envisioned "a globally interconnected set of computers through which everyone could quickly access data and programs from any site. In spirit, the concept was very much like the Internet of today" (Leiner website). His ideas had a great impact on MIT computer scientists—including Ivan Sutherland—who would go on to develop Licklider's ideas.

In 1970 the first computer-mediated system for communication which allowed multiple users to work together online was created by physics scholar Murray Turoff (Hiltz and Turoff 46). During this same time, research in intimacy communication between individuals, which would play an integral part in presence studies, was occurring. Social scientists such as Michael Argyle and Janet Dean in the mid-1960s, examined physical proximity, eye-contact, intimacy of conversation topic, and amount of smiling that occurred during a face-to-face discussion in order to better understand how to optimize an overall level of intimacy. A few years later Morton Weiner and Albert Mehrabian would analyze how choices of language assist in creating a sense of psychological closeness or immediacy, and as early as the 1970s M. Heilbronn and W. Libby studied how the choice of a medium for interaction creates the sense of immediacy and intimacy.

But perhaps the most significant development for the general public during this time would be in 1968 with the government's Advanced Research Project Agency (ARPA) which would create ARPANET, one network with the capabilities of connecting

thousands of smaller ones. (This would be followed by other WANS such as USENET and FIDONET, but it would be BITNET that would become the most successful growing into a large worldwide network.) It would be these efforts of connecting smaller computers—initially within the scientific community but rapidly expanding to a point where humanist scholarship would comprise the majority of activities—that would eventually create a landscape for presence studies and hybrid writing classes (Wright 261).

VR would also benefit from its sibling, Artificial Intelligence (AI), which ultimately contributed to the development of presence research. Psychologist Sherry Turkle, a well-known and influential scholar who has done extensive research on identity and interaction within cyberspace, cites AI's conception as the logical result of researchers working within a climate of curiosity about the new worlds technology could create. While simultaneously contributing to and drawing from VR research, AI offered intellectual offspring for humanity, which would reside solely within technology.

The term "presence" itself originates from work on AI projects and is traced to the word "telepresence" which was coined by MIT professor Marvin Minsky, who is considered to be one of the world's leading authorities on AI. Minsky began using the term "telepresence" in the early 1980s originally referring to teleoperation systems used in scientific work for manipulating physical objects at a distance (Steuer 37). Minsky's term "telepresence" was shortened to "presence" as a way for researchers working on VR to distinguish between an emphasis on the technology (telepresence) versus an emphasis on the human perception of what is occurring within the technology (presence) (Steuer 36). "Presence" as an umbrella term for the various efforts within VR and AI projects

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arose as a result of work by computing technology computer scientists Thomas Sheridan and Thomas Furness, who together founded the journal *Presence: Teleoperators and Virtual Environments*, which is considered to be one of the main journals for scholars interested in presence research. Sheridan's article "Musings on Telepresence and Virtual Presence" is considered to be a pivotal article because it offered a basic definition of presence upon which scholars would build modern-day conceptions of the term. Sheridan wrote that presence is "a generic perception of being in an artificial or remote environment." He then challenges his readers by asking if a "sense of 'presence' [is] simply a concomitant benign phenomenon, or even a distraction? Or is the quality of 'presence' the critical psychological indicator of physical stimulus sufficiency?" (Sheridan 120). Ultimately, Sheridan, Furness and their new journal would raise many more questions, opening the dialogue on issues of presence.

By the mid-1980s VR technology exploded in the public sector. For-profit companies hoping to commercialize the technology began to research virtual reality and in 1984 Jaron Lanier, who is credited with coining the term "Virtual Reality" founded VPL Research (a company known as one of the first pioneers in the VR industry). One of Lanier's goals with developing VR was to create worlds in which the human spirit could be freed, worlds where loneliness and isolation could be overcome (Roos website). Lanier marketed popular VR interface products such as EyePhones (a head mounted color display system), DataGloves (a glove-based input unit), and DataSuits (body suits used as input devices). Known for his vivid imagination and out-of-the-box thinking, Lanier has sought to expand VR into realms of the human experience that he believes Western civilization has rejected or stifled. On a pop-up for the VPL website he states:

Idealistically, I might hope that VR will provide an experience of comfort with multiple realities for a lot of people in western civilization, an experience which is otherwise rejected. Most societies on earth have some method by which people experience life through radically different realities at different times, through ritual, through different things. Western civilizations have tended to reject them, but because VR is a gadget, I do not think it will be rejected. It's the ultimate gadget. (Website)

Thanks to Lanier and others who have joined him, VR research has grown considerably during the past two decades and now many research companies as well as universities are delving into this field (Ashline and Lai 83). As modern VR technologies expand and become more prevalent, humans are being pushed through the screen into previously unheard of places. Technology has evolved rapidly from the initial screen that once offered limited virtual presence to one that now wraps around the user's head both literally and figuratively making the human mind the newest mode of transportation (Biocca, Kim and Levy 6). This "transportation" is allowing humanity to break free of boundaries that were once serious constraints. Consider, for example, skiing Aspen without leaving the local mall—a feat currently available in many arcades. Whether the desire is to ski, go deep sea diving, or take a class across the country from your residence, designers who are delving into the human experience are striving to make these experiences (as mediated by technology) more feasible and more enjoyable.

In order to understand and more fully exploit this "new mode of transportation" concepts such as VR and the "presence" resulting from it needed to be viewed in a radically different way than early technology pioneers defined them. The relationship

needed to be framed in terms of the humans using the technology and not the other way around. As Steuer contends

> a device-driven definition of virtual reality is unacceptable: It fails to provide a
> conceptual framework from which to make regulatory decisions, fails to provide
> an aesthetic from which to create media products, fails to provide a method for
> consumers to rely on their experience with other media in understanding the
> nature of virtual reality (33).

This means that terms such as memory chips, motherboards, and software upgrades must now be accompanied by discussions of identity, interaction, and politics. Humanity has long ago surpassed a time—if one ever existed—when its inventions could be seen as separate from its creators. There is no such thing as *simply* creating a VR simulation without exploring the psychological facets of the event because in order to be successful it must rely on the human interplay. And there should be no mistaking the use of CBCTs in a classroom as anything less than a psychological event with no guarantee of success for those who use it carelessly. Classroom instructors must be aware that technology may potentially disrupt an online task (such as a peer editing session) due to different ways students view and individually interact with the technology.

Conceptualizing Presence

While the International Society of Presence Researchers would not officially form until January 2002, researchers from a variety of fields were attempting to define presence in both technical and non-technical terms long before this new organization would provide them with a forum for their work. On the technical side, there have been several attempts to understand virtual environments and presence via the creation of

taxonomies. Among the most well-known are those of Nicholas Lavroff, M.J. Wells, William Robinett and David Zeltzer who created descriptions of virtual experiences that combine a mixture of hardware, software and human factors. These taxonomies have been helpful to computer scientists not only in the design stage of these systems but also in the planning stage for the continuing development of virtual environments (Barfield 482), which according to Lombard and Ditton, will be extremely valuable in every arena of the human experience as virtual reality and its impact is felt (website). Although these taxonomies vary slightly, they share many similarities all aimed at clarifying accurate ways to measure and thus study presence. Zeltzer's taxonomy, known as the AIP cube, includes the following components (Zeltzer 128):

- Autonomy: "simulated objects and actors in a virtual environment ought to be capable of a range or more or less autonomous behavior."

- Interaction: the software framework for the human-machine environment.

- Presence: immersion in a very high bandwidth stream of sensory input, organized by the human's individual perceiving systems, and out of this 'bath' of sensation emerges a sense of being in and of the world. This feeling is also engendered by the ability to affect the world through touch, gesture, voice, etc.

The intersection of the three components creates a system that is used as a qualitative measure of virtual environment systems. They have been found to be of incredible assistance to members of the scientific community attempting to define new avenues of research to pursue such as analysis of input devices (such as a keyboard, mouse or data

gloves) or measures of the degree to which input/output devices match the human user (Barfield et al. 486).

Robinett's taxonomy, according to Barfield et al., is considered to be complimentary to the AIP cube since it reflects "a principled attempt to begin to describe and quantify multi-modal interfaces to virtual environment and teleoperator systems, which are represented along a single axis only—the 'presence' axis—in Zelter's work" (483). This taxonomy attempts to categorize the different classifications of virtual environment and teleoperator systems. Robinett bases his analysis on the spatial and temporal relationships among the human participants, the human-computer interface, and the simulation software of teleoperator system (Robinett 231).

The taxonomies done by Wells and Lavroff show a slightly different approach to virtual experiences. Wells uses the following classifications (Wells 1):

- Immersive: "means that the participant is completely surrounded by the computer simulation"

- Interactive: "which means that the participant's actions affect the simulation,

- Intuitive: "means that the participant communicates with the simulation using actions that are familiar and natural".

Lavroff, on the other hand, while agreeing with Wells on the idea of immersiveness, also chooses the following terms (27):

- Manipulation: "in that the participant can affect objects in the simulation, and will, in turn receive sensory cues from the objects.

- Navigation: which refers to the participant's comfort and ability to navigate through an environment.

In attempting to find the appropriate terms with which to view presence, these researchers demonstrate an ongoing struggle by scholars in all disciplines to name and thus to understand a concept that involves humanity's new relationship with technology.

As the ISPR has grown, Matthew Lombard, current president of the ISPR, and Theresa Ditton, an ISPR board member, saw a need for creating a summary of major research that could serve as a glossary for the types of presence being explored. Therefore, in their effort to unify and identify scholarly work on presence they proposed six classifications: social richness, presence as realism, presence as transportation, presence as immersion, presence as social actor within a medium, presence as medium as social actor. Because of the significance of both the act of creating common terminology (which I contend is one benefit of Composition Studies entering into this body of research) and of the classifications themselves for understanding presence I will detail these conceptualizations below highlighting the most cited and well-known studies comprising each.

Presence as "social richness" is a major focus for scholars interested in communication—both written and spoken. For these researchers presence is defined as "the extent to which a medium is perceived as sociable, warm, sensitive, personal or intimate when it is used to interact with other people" (Lombard and Ditton website). Social presence theory (described in more detail within Chapter 5) and media richness theory (primarily pioneered by Ronald Rice in the early 90's) were developed to better match communication media and organizational tasks to maximize efficiency and satisfaction because of differences among various facets of communication media (Rice, "Media," 452).

A medium defined as high in presence as social richness allows individuals to adjust variables and thus increase levels of intimacy and immediacy, two concepts originally applied to non-mediated interpersonal communication. Research in intimacy during communication between individuals suggests that when individuals interact they vary behaviors such as physical proximity, eye-contact, intimacy of conversation topic, and amount of smiling to optimize an overall level of intimacy (Argyle and Dean 300). Choices of language also assist in creating a sense of psychological closeness or immediacy (Weiner and Mehrabian 25). Other scholars, such as M.Z. Hackman and K.B. Cynthia Walker propose that intimacy behaviors and even the choice of a medium for interaction (as concluded by Heilbronn and Libby) also affect this sense of immediacy and intimacy (website).

Presence as "realism" refers to the degree to which a medium, television for example, can produce seemingly accurate representations of objects, events, and people that is, representations that have the characteristics of the "real thing" such as look, sound, and/or feel. This conceptualization is typically used in assessing consumers' responses to variations in the characteristics of a medium (Lombard and Ditton website). For example, in a study of television, T. Hatada, H. Sakata and H. Kusaka asked subjects to report their subjective evaluation of the level of "reality" they experienced when researchers manipulated variables such as viewing angle, display area and viewing distance. In another study examining the "sensation of realism" William Neuman varied the resolution and screen size of high definition television systems and measured viewers' reported feelings of realism. However, not all researchers agree on this type of measurement. For example, Lombard and Ditton take issue with Carrie Heeter's study of

entertainment systems. Heeter, who has published a multitude of frequently cited studies on presence, asked users of consumer virtual reality entertainment systems, "How real did the overall experience feel?" (Communication Research 199). They contend that this view of presence is often used in a vague manner that fails to distinguish between two key types of realism: "social realism" and "perceptual realism." Here "social realism" is defined as "the extent to which a media portrayal is plausible or true to life in that it reflects events that do or could occur in the nonmediated world" (Lombard and Ditton website). Perceptual realism is different, for while presence may include an element of social realism there is a perceptual element that is separate. According to Lombard and Ditton:

> a scene from a science fiction program may be low in social realism but high in perceptual realism because although the events portrayed are unlikely, the objects and people in the program look and sound as one would expect if they did in fact exist. On the other hand, the people and events in an animated presentation may be high in social realism but because they are not "photorealistic," they are low in perceptual realism. (website)

Presence as "transportation," another conceptualization reported by Lombard and Ditton, refers to the idea that a particular medium creates a sense of either taking the individual to the place or the place to the individual. Lombard and Ditton identify three distinct types of transportation: "You are there," in which the user is transported to another place; "It is here," in which another place and the objects within it are transported to the user; and "We are together," in which two (or more) communicators are transported together to a place that they share (website). According to Biocca and Levy

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"you are there" is the oldest form of presence going back to oral tradition when stories were told around campfires to transport the listeners to another time and place, and involves a "constructed sociopsychological place" which the authors define as "a liminal world where the user crosses a threshold and suspends disbelief" (Communications Applications 132). There are two essential ingredients for this to occur: Imagination, which Biocca and Levy define as "the replacement of everyday sensory reality for user-generated illusions driven by cues from a medium," and illusory space, which consists of "a mutually accepted make-believe space" (also called "the consensual hallucination refereed") (Biocca and Levy, *Communications* 132). Along with being the oldest form of presence, the "you are there" concept is the most common one used in discussions of virtual reality. For example, Sheridan follows Minsky's lead in discussions of teleoperation and defines telepresence as "feeling like you are actually 'there' at the remote site of operation," while virtual presence is "feeling like you are present in the environment generated by the computer" (120). Rheingold also calls telepresence a "form of out-of-the-body experience" (Virtual Reality 256). Similar definitions for presence are also used in the writings of Heeter, Held and Durlach, and Steuer.

According to Heeter, "you are there" (i.e. "being there") has several complications for both researchers and the individuals using technology because of the individualized nature of presence. What one person defines as reality (and what s/he accepts as proof of it) another person may not. Heeter's research supports the conclusion that different personality types may be more or less receptive to virtual simulations and even a person's age or gender may affect how willing s/he is to accept an altered state of presence. For example, children may approach virtual simulations with more openness

than an adult, or women who may be less acclimated to technology may respond with more hesitancy. Another significant part of understanding how a person may interpret an online environment is their preferred learning style, which Heeter argues is one of the most powerful components for creating an individual's sense of presence ("Being There" Conclusions). This complicates some of the prevailing views of hybrids (see Chapter 5) as a class format that accommodates all learning styles.

In her online manuscript, *Being There: The Subjective Experience of Presence*, Heeter—in reference to the "being there sense of presence"—breaks the concept into three dimensions: personal, social and environmental. In her study, she analyzes the types of evidence provided by a virtual experience to users in order to measure the extent to which the user feels like they are "there." Her approach is different than the ones commonly used in presence studies in which presence is measured by how closely a virtual world mimics real world sensations. She begins by offering a basic premise for her discussion—similar to Lombard and Ditton's key concept—contending that experiencing virtual reality presence is like the process of discerning and validating the existence of self in the natural world (which humans have engaged in since birth). A sense of presence in a virtual world, according to Heeter, derives from feeling like you exist within, but as a separate entity from, a virtual world that also exists. The differentiation and experience of self may be enhanced if other beings exist in the virtual world and if they appear to recognize that you exist. It may be enhanced if the virtual environment itself seems to acknowledge your existence. As a framework to focus her discussion, Heeter presents three dimensions of the subjective experience of presence: personal, social or environmental. She recommends that VR designers ask themselves

"how do I convince participants that they and the world exist?" They can then focus their work addressing issues of which elements are the most significant to their work: personal, social, and environmental ("Being There" Conclusion). For Heeter, "subjective personal presence" then is a measure of the extent and reasons why someone may feel as if they are a part of a virtual world. She cites several examples such as a person being able to see their own hand in the new environment or the virtual world gives the user a sense of déjà vu, (i.e. they feel as if they have been there before). Heeter then defines social presence as "the extent to which other beings (living or synthetic) also exist in the world and appear to react to you." Calling social presence a subset of personal presence in some respects, Heeter discusses them separately in order to draw attention to its potential power for enhancing presence. She contends that social presence may derive from conversing with other humans or from interacting with animated characters. Heeter adds that part of what convinces a user to buy into the experience may be someone or something else that seems to believe that s/he is there. And finally, environmental presence refers to the extent to which the environment itself appears to know that a user is present and thus reacts to that user. For example, perhaps lights turn on or portals to other places flash. This is the same argument as the one for social presence, i.e. if the environment acknowledges that the user is present, that acknowledgment may result in a sense of presence ("Being There" Introduction).

"It is here" offers a different type of presence where instead of an individual being transported by the technology ("you are there"), the technology brings the new place to the individual. One of the most well-known examples of this is the television which may or may not make a person feel like they are somewhere else, but if the person

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is willing to believe in the transportation, the technology brings a new place to the individual (Lombard and Ditton website). Reeves proposes that while adults do not generally believe (as young children do) that something on-screen is physically present and can be touched (see Flavell, Flavell, Green, and Korfmacher), adults lacking sophistication with a specific technology may fail to distinguish fully between images and referents. For example, some theater-goers at the beginning of the film era reportedly panicked and attempted to flee the room when a black and white film of an oncoming locomotive was shown (Schoen 97). Lombard argues that individuals respond to what they see and hear in a mediated experience when they fail to distinguish between image and referent. These individuals will react as if what they see and hear is physically present rather than responding indirectly as they would something they believe is only a symbolic or representational message (website).

"We are together" is a form of presence typically applied to telecommuting and refers to the same concept as the term "co-presence" which is used on the ISPR website. As the number of people telecommuting has increased in recent years the significance of understanding this form of presence has also risen. A recent study by social scientists Crystal Hoyt, Jim Blascovich, and Kimberly Swinth explored how performance of a task, which can be disrupted by the physical presence of others, is affected by the presence of others in online environments. In this study subjects were given a task to master and were told that they were performing either alone, in the presence of other humans or in the presence of human controlled avatars. The researchers concluded that those performing in the presence of avatars demonstrated classic social inhibition performance impairment effects (192). L. Muhlbach, M. Bocker, and A. Prussog who studied

telepresence in video communications—defining it as "the degree to which participants of a telemeeting get the impression of sharing space with interlocutors who are at a remote physical site" (301)—measured presence by asking participants the degree to which they agreed or disagreed with statements such as "[It felt] as if we were all in the same room" and "[It felt] like a real face-to-face meeting" (301). They concluded that enhanced feelings of presence made online meetings more enjoyable and perhaps even more productive as a result (302). Early researchers in VR theorized that its greatest potential could be in its role as a virtual gathering place with no boundaries or other spatial limitations allowing people from around the globe to gather in one environment (Biocca, "Insider's View" 151). And this is indeed beginning to happen. Heeter, for example, lives a professional life dependent upon technology making the "we are together" conceptualization a lifestyle choice as she telecommutes from San Francisco to her full-time position at Michigan State University actively working with people thousands of miles away from her physically. In her own words she "spends a larger portion of every day as a virtual person than as a physical person" (Reflections 1). She estimates that 95% of her human interaction occurs via technology and that since beginning this lifestyle in the early 1990's many things have changed, including priorities in presence research. In recalling a study she completed in 1992 of virtual entertainment experiences, she states that "personal, social, and environmental presence were important as ways of making experience seem real—you know you are there because you see yourself, because others see and respond to you, because the environment responds to you. But for telerelating, it doesn't matter whether you feel like you are 'there' or not— what matters is whether you can express yourself, perceive the other (who of course

exists), communicate and feel connected" (Aspects 1). It is this later concept that is most

relevant to the C&W classroom since current educational technology does not necessarily

require a feeling of "being there." It does, however, require the participant to feel that

s/he may communicate and feel connected.

Lombard and Ditton's fourth conceptualization of presence emphasizes the idea

of perceptual and psychological immersion. To define this conceptualization they

highlighted the work of communications scholars Mark Palmer, Gene Quarrick along

with Biocca and Delaney. According to the latter pair, this conceptualization of presence

becomes the most compelling virtual reality experiences as the senses are immersed in

the virtual world. Biocca and Delaney define perceptual immersion as "the degree to

which a virtual environment submerges the perceptual system of the user" (57), and the

psychological part of the equation is defined by Palmer as the user feeling "involved"

(284), by Quarrick as the user feeling absorbed (4) and Lombard and Ditton also add the

words engaged and engrossed (website). In "presence as immersion" the body is

entrusted to a reality engine as the eyes are covered by a head-mounted display and "the

real world" becomes invisible. Biocca and Levy compare this conceptualization to

becoming engrossed while reading a book. The major difference is that within VR "this

book has stretched in all directions and wrapped itself around the senses of the reader --

the reader is swallowed by the story" (Biocca and Levy, "Communication," 135).

Immersion is a major focus of VR research and is at the forefront of popular culture. As

William Bricken and Geoffrey Coco concluded from their examination of virtual

environment operating shells (known as VEOS) creating an "immersive environment"

redefines "the relationship between experience and representation, in effect eliminating

the syntax-semantics barrier" (102). They contend that computer technology, which was once seen in purely representational modes (i.e. symbols such as computer coding), is now advanced enough to solve the problems that it created in the first place. By allowing users to "create" an aspect of reality from information that is more than letters and numbers. Thus for Bricken and Coco, who have done extensive work on Virtual Environment Operating Shells (VEOS), VR can be defined as systems which "afford non-symbolic experience within a symbolic environment," totally immersion of the user is VR presence to the maximum (104). Advances in technology now make total immersion an experience in which all of the senses may be addressed via head mounting devices, headsets and even full-body suits (Lombard and Ditton website)

"Social action within a medium" refers to an individual ignoring the mediated nature of interaction. This occurs when the media personality presented in, for example, a television program, is incorrectly perceived as a social actor. Donald Horton and R. Richard Wohl, in their frequently cited article "Mass Communication and Para-Social Interaction: Observations on Intimacy at a Distance" suggest that although the relationship between a television personality and a television viewer is one-sided, offering no possibility of real time interaction, personalities may use direct address camera views (in which the personality seems to be looking at the viewer), and other cues such informal speech patterns, and sincere tones to create what appears to be a conversational give and take (215). This is called "parasocial interaction" and involves media users responding "to social cues presented by persons they encounter within a medium even though it is illogical and even inappropriate to do so" (Lombard and Ditton website). Studies by both Lombard and communications researcher, Dafna Lemish, have

demonstrated this phenomenon showing that people will respond to interpersonal distance cues and even talk to the pictures of people on the television screen.

"Medium as social actor" refers to responses by a media user to cues provided by the medium (for example, chess playing computer programs). This is the arena in which most AI work is done. It raises very complex issues such as the question of the "intellectual" potential of computers, a subject which has been debated ever since Turing opened his article "Computing Machinery and Intelligence" with the question: "Can machines think?" In the article, Turing challenges his readers to consider the "hope that machines will compete with men in all purely intellectual fields" (1). From his vantage point more than five decades ago, Turing was a true visionary in exploring "medium as social actor." He had no way of knowing for sure that one day a computer would indeed beat a chess champion or that avatars would roam the Internet "chatting" with humans who often are not even aware that they are addressing a non-human (Turkle, "Life", 97). In fact, medium as social actor is actually quite familiar to the general public in America where the entertainment industry has made legends of computers, robots and androids (e.g., Data in Star Trek, C3P0 and R2D2 in Star Wars, Hal in 2001: A Space Odyssey, the Terminator in the Terminator films, the Replicants in Blade Runner, etc.), eliciting social responses from other characters and audience members due to their seeming "humanity" (Lombard and Ditton website). However, while flamboyant special effects may present images that are still in the future, current research demonstrates that even a simple home computer can elicit a similar phenomenon. For example, Clifford Nass and his colleagues at the Center for the Study of Language and Information at Stanford University, have demonstrated that even sophisticated technology users may respond to

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computers as social entities because they use natural language, interact in real time and have begun to fill social roles (for example, bank teller or tutor) historically held by humans. In a study by Nass, Steuer, Henriksen, and Dryer computer users followed social rules concerning politeness and even gender stereotypes when interacting with the technology responses (550), that Nass and Moon demonstrated were directed to the entity of the computer and not the human computer programmer (website).

Lombard and Ditton contend that a better understanding of presence will open new opportunities for scholars to study psychological processes and the role of technology within the human experience. Though researchers often use mediated stimuli as a substitute for the nonmediated stimuli of interest (for convenience as well as control) they have had to assume that their findings will apply in both contexts. A few examples that could be cited are studies of the way individuals perceive what is occurring around them, the way people estimated time to collision in auto accidents, the causes and effects of motion sickness, and the treatment of phobias. Therefore, presence becomes vital to these areas, as Lombard and Ditton contend, because "current understanding of these processes is based on studies in which it has been assumed that mediated (i.e., presence-inducing) stimuli are exactly the same as nonmediated stimuli; if that assumption is wrong, we need to know" (website). Work relating directly to educational environments has been done by psychologists Gale, Golledge, Pellegrino, and Doherty whose research suggests that non-mediated and mediated stimuli do indeed differ within varying learning situations which supports the conclusion that an online classroom discussion may vary greatly from what may have occurred off-line. In other words, it cannot be assumed that an active in-class discussion will automatically be reproduced online.

Conclusion

After examining the various conceptualizations addressed within this chapter, social presence theory seems to hold the greatest potential for exploring interaction within the C&W classroom, most specifically the hybrid course format. In fact, it is from social presence theory that I have derived a portion of the definition I propose for C&W scholars to use as a starting place for exploring this facet of technology. That definition states that technology-enhanced presence is the psychological impact felt by an individual while interacting within CMC or other portions of the online writing classroom which affects his/her willingness and/or ability to pursue actively discussions and other required online events. For the C&W classroom the issue is whether participants within a classroom community feel that they are connected and being heard. It is an old issue for Composition Studies, but with the addition of technology it may again be a new topic in need of new tools.

Tools for examining concepts of presence have been developing for decades and considering the fact that the European Union just slated $20 million towards continued development of tools and research related to conceptualizations of presence, there is every indication that they will not only continue to do so, but will expand in ways that were previously unimaginable (Biocca e-mail). New worlds are literally being created and many of those who enter the composition classrooms in the coming years will have resided within them...at least temporarily. Those new worlds have already begun to enter the classroom under the guise of "hybrid" courses where participation occurs in both the face-to-face brick and mortar world and online. Concern for how students write and what writing theory is embraced by the community of scholars focused on

Computers and Writing, must begin with as thorough of an understanding of these new worlds and how they have evolved as possible. For if this community does not become active, informed participants in the uses and developments of technology, there are those who will come forward with motives less concerned with literacy than with economics and less informed about research regarding writing practices than with principles of balancing the books. There is nothing wrong with understanding the economics of education nor with keeping books balanced; however, we as a community have staked our careers on the belief that there is theory behind writing, that there is more to the pedagogy of composing than simply assigning a five-paragraph theme. This community has so far led the way to integrating technology into the writing classroom; we have already invited our students and colleagues to new worlds. Now it is time to consider the way another important field defines what it has meant for them to be "present" in these new worlds that we have offered via technology and failure to do so could severely handicap a community devoted to improving the writing classroom via technology.

Chapter 4: The ISPR

Within Chapter 4, I analyze the history of the ISPR. Since the focus of my project is an examination of the connection between a growing interdisciplinary body of research on the subject of human perceptions of presence, and the increasing need for broadening discussions about how technology affects activities within the computers and writing classroom. I use this chapter to introduce my readers to this group of scholars and the evolution of this organization. I conclude this chapter by addressing issues of debate and disagreement among scholars who study human perceptions of presence. This chapter (along with the previous one in which I examine the history of theories of presence) are significant for laying the groundwork for demonstrating how the creation of the ISPR and the maturation of the C&W have coincided with larger social forces and technological developments, both of which have produced the need and means for understanding technologically enhanced human perceptions of presence. These chapters support my contention that the ISPR can offer the C&W community a new avenue for understanding presence within the technologically-enhanced classroom and provide not only an umbrella for research regarding online interaction but also the potential for improving it.

During the years of technological advances described in the previous chapter, scholars from a variety of fields found research opportunities in design centers at universities, private corporations, and military sites. Interest in the "sensation of being present" rose as these centers launched research programs focusing on the phenomenological aspects of experience in anticipation of continuing work in interactive media (Biocca and Levy 27). As Biocca and Delaney explain "it became necessary to understand 'being there,' moments when our awareness of the medium disappears and *we*

are pushed through the medium (the authors' emphasis) to sensations that approach direct experience" (102). The necessity to understand "being there" arose from the need for new information in order to expand technology that was reaching individuals in unique ways that machines had not yet been capable of doing.

Efforts to define presence were also occurring in Corporate America. For example, in the year 2000 articles such as the one by Jonathan Rosenberg, Chief Scientist at Dynamicsoft, declared an expanded idea of presence relating not so much to the idea of "you are there" as much as "we know where you are." Rosenberg announced in his article published on November 5, 2000 that communication technologies enable session initiation protocols (SIP) to direct communications (for example, traditional phone calls) to "locate" the intended message recipient's "presence." Once the individual is located she can then be contacted. According to Rosenberg this technology is more advanced than the previous attempts by phone companies to forward calls. Rosenberg's use of the term "presence" falls under the category of "medium as social actor;" however, the interesting facet to note is his motivation for defining and using the term is neither scholarly nor developmental. Instead he has created a definition of presence that serves a purely marketing purpose: "the ability to access real-time information about a person's status, communications capabilities, and preferences." Rosenberg considers a cell phone's physical location when an individual is attempting to reach that phone as an attribute of presence. He lauds "presence" as relevant to every form of technology-enhanced communication and argues that soon "presence" will be a well-known term in popular culture (website).

Origins of the ISPR

In 1998 a diverse group of scholars met for the very first conference devoted entirely to dialogue about the great potential that presence research offered for improving life and opening new areas of human understanding, a potential that would touch every academic discipline. The three-day workshop (as it is referred to by the event website) was held in Suffolk, England and would be an extremely significant event for researchers because it allowed them to debate, discuss and unite around the common goal of understanding presence. This was pointed out in several presentations at the conference; for example, researchers Stefan Thie and Jacoliene van Wij would begin their abstract by stating that "many points of departure have been chosen in research on presence" but as a group these scholars had much to learn from one another. "Presence" had become an umbrella term for cross-disciplinary efforts to understand human relationships with and within machines (conference website). There would be three major components of the event: conceptual issues (everyone converging to consider the definition of presence from they have been working), methods of measurement (an offering of the different research methods), and experience (in which speakers addressed differing ways humans experienced of presence). Many of the participants would address issues related to education focusing especially upon peer collaboration in online environments [see appendix B for a complete listing of topics addressed] (Presence website 1998).

The website for the 1999 event demonstrates a much more organized event, and an equally greater sense of community among the conference attendees. This could be seen by the pictures that were posted of participants following the event, which demonstrated visually the camaraderie that occurred, as well as an expanded agenda which included debates and discussions as well as ongoing discussion from what had

been published in the preceding year. Rather than three vague categories, there were

five: the concept of presence; state-of-the-art of current research; shared presence in

virtual environments; measurement methodologies; and applications - Virtual Reality,

Immersive TV, Broadcast. Again there were more attempts at defining presence and

Americans, Lombard and Ditton, presented their definition of presence and several other

scholars addressed what present meant within shared environments (Presence conference

website 1999). The third conference again shows growing sophistication and a greatly

expanded list of topics [see appendix B] including: the concept of presence: causes and

effects, co-presence in shared VEs and online communities, social/affective interfaces,

virtual agents, parasocial interactions and educational applications of presence

technology.

The fourth annual workshop was significant in that it was the first time that

presence researchers met in the United States. The list of topics was again greatly

expanded covering one significantly new area: the future of presence research. Many of

the participants were eager to consider where they might go both with their individual

work and as an organized group. In fact, within a year, they would formalize their

association creating the ISPR. There were also many presentations with great potential

for application within the classroom. For example, in her abstract on operationalizing

mediated presence, Tracy Russo addresses the "the extent to which interactants in a

virtual environment perceive other interactants in that environment as real, immediate or

salient" (conference website). Her presentation raised issues about how users online

interacted and to what extent they may display behaviors (such as being rude) because

they fail to perceive others in the online forum as "real" (conference website). This line

of research offers many possibilities for optimizing online discussions and debates within the classroom.

In 2002 another milestone was reached as presence researchers created their own professional organization: the International Society for Presence Researchers. The ISPR was created 'to coordinate the annual International Presence Workshops as well as a variety of research efforts related to the concept of presence" (website). Among the newly formed organization's activities was the creation of a website offering resources— such as a directory of researchers and their projects, as well as providing a home for presence definitions created by researchers around the globe. The website states that the ISPR's mission is to:

> support academic research related to the concept of (tele)presence, commonly
>
> referred to as a sense of 'being there' in a virtual environment and more broadly
>
> defined as an illusion of nonmediation in which users of any technology overlook
>
> or misconstrue the technology's role in their experience. (website)

The official formation of the ISPR has formalized and strengthened the work of those scholars researching technology's impact on human users. It has supplied them with connections to colleagues from around the world and access to research beyond the traditional disciplinary boundaries of the university. Much like the organization of the computers and writing community within Composition Studies, which was formed as a sub-group focused on the particular interest in technology, the creation of the ISPR drew a wide range of scholars focused on the particular interest in "presence." It has given a common forum for a wide array of interests ranging from the strictly technical to the

more humanistic take on technology. As it continues to expand and evolve it promises to offer fertile ground for decades of research yet to come.

The ISPR's Statement of Explication

One of the most vital documents within the ISPR, and the one that most clearly demonstrates who this group is and what they are attempting to accomplish with their work, is the "Statement of Explication" posted at the organization's website. The statement comes from participants in the ISPR's listserv who have posted at their website a 12-point analysis of presence as a result of conversations and research efforts by its members. This page also includes an invitation for scholars to add more. The statement notes that "technology is defined as a machine, device, or other application of human industrial arts" which includes "traditional and emerging electronic media such as television, radio, film, the telephone..." The first point of the ISPR's statement is one that appears (or is implied) in the majority of discussions about presence on the organization's website. It is the declaration of the idea of "consensual hallucination" (which Biocca writes about) and the defining of terms frequently used by ISPR members:

> Presence (a shortened version of the term "telepresence") is a psychological state or subjective perception in which even though part or all of an individual's current experience is generated by and/or filtered through human-made technology, part or all of the individual's perception fails to accurately acknowledge the role of the technology in the experience. Except in the most extreme cases, the individual can indicate correctly that s/he is using the technology, but at "some level" and to "some degree", her/his perceptions overlook that knowledge and objects, events, entities, and environments are perceived as if the technology was not involved in

the experience. Experience is defined as a person's observation of and/or

interaction with objects, entities, and/or events in her/his environment; perception,

the result of perceiving, is defined as a meaningful interpretation of experience.

(ISPR website)

Defining terms is significant so that all scholars understand the basic ground language of

a particular body of study and the ISPR's website, which demonstrates a keen

understanding of the complexities and ambiguities of presence, stresses the need for

scholars to define their terms. This first explication point was my motivation, my starting

point, and my guide for the creation of a definition that would be particularly applicable

to the C&W community.

This particular point draws upon research from various ISPR members and, in

fact, the idea of "immersiveness" (cited in both Lavroff's and Wells' taxonomies) can be

seen here. For regardless of the path of inquiry, presence begins with an individual's

"current experience" being filtered through technology. Whether the technology

addressed is as elaborate as the head mounting systems used to experience virtual reality

or the online discussions of a hybrid course, with this point, ISPR members are

highlighting the role of technology and the participation of human users willingly

entering into an activity that is only possible via technology and only possible via

individual acceptance of this situation.

The second point of the explication statement broadens the idea of presence

"removing it from the shadow of telepresence" (ISPR website). It states that *all*

perception is mediated via "human perception and complex processes" (this is called

"first-order" mediated experience) and that this is the basic level of being present, the

way humans mentally acclimate themselves to the environment in which they are physically located. For while presence may have originated with telepresence research, it has become increasingly clear that there is more to understanding the concept than looking at the hardware/software involved. In presence studies first-order mediation refers to the idea that every experience is interpreted through receptors with first-order experiences being understood via the body's sensory receptors. Early communication theorists such as Marshall and Eric McLuhan called the body "the primordial communication interface and the physical world its content" (45). For example, Mark Palmer asserts that face-to-face communication is the first and most primal of humankind's contacts with one another (282). The theory of first-order perception in presence studies in many ways relates to theories that are more commonly found within the domain of English departments. In Composition Studies the concept translates to the idea that there is no such thing as "objective" language usage or context free rhetoric. In the introduction to his book, *An Introduction to Discourse Analysis*, for example, linguistic scholar James Paul Gee begins by stating that language does not simply convey information, but rather reveals "a particular perspective on what the 'world' is like" for the speaker (2). He contends that there are really two primary functions of language: "to scaffold the performance of social activities and to scaffold human affiliation within cultures and social groups and institutions" (1). The importance of first-order mediation implies many complex levels. For developers of virtual reality researchers, first-order mediation is the standard by which their work is judged (Biocca and Delaney 59). This is also true for proponents of technologically-mediated class formats. These scholars are

frequently subjected to criticism that online components are impersonal and lack the vigor of face-to-face classroom environments.

In explication statement number three, the ISPR contends that "presence is the property of an individual and varies across people and time"… and is "a psychological state or subjective perception"(ISPR website). This highlights the idea that interaction with technology occurs within the individual, an aspect presented by Steuer in his study of interactivity within virtual environments in which he concludes that "virtual realities reside in an individual's consciousness; therefore, the relative contribution of each of these dimensions to creating a sense of environmental presence will vary across individuals" (41). If feelings of presence when interacting with technology are the property of the individual, then it follows that a person's sense of presence can vary in degree. One of the goals of virtual reality researchers is to heighten this sense to the fullest possible, with the ultimate aim being the "elimination of the perception of mediation" according to Biocca who also contends that "embedded in the evolution of media is the goal of ubiquity and sociability" (124). This is also a significant factor for courses in which classroom community is dependent at least in part on community formation within an online component.

Perhaps one of the most significant points of the explication statement to the current study states that presence is multidimensional which means that there are different types of presence. Although Lombard and Ditton have attempted to classify types of presence described in current literature, at the ISPR website scholars argue for a classification of the types into those that involve perceptions of physical environments, those that involve perceptions of social interaction, and those that involve both of these

(ISPR website). (Classifications that fall under the "perceptions of social interaction" are the most relevant at this time to the Composition classroom.) This point of the ISPR statement reveals an ambiguity, a complexity of presence with which scholars struggle. However, ISPR members do have a sense of what constitutes the different dimensions of presence. They emphasizes that it is vital to distinguish between antecedents/causes of presence, presence itself and consequences/effects of presence, and therefore, propose the following:

- "Spatial presence" also known as "physical presence" or "a sense of physical space" it is considered to be the embodiment of the phrase "being there". In this situation, the "consensual hallucination" results in technology appearing to transport the user to a physical location different than the one in which she is actually located.

- "Sensory presence" or "perceptual realism" occurs when the user fails to acknowledge the role of technology and has sensory experiences that correspond to the physical world. This is the interaction with technology from which a user walks away saying "it seemed so real!"

- "Social realism" is similar to perceptual realism in that the user becomes totally caught up with the technology forgetting the physical world in which they are actually located, but differs in that it is not the sensory details (i.e. smell, sounds, touch) but rather the social ones that are the focus. What this means is that people, objects and events that the user encounters in the outside physical realm are being duplicated within the virtual one.

- "Psychological immersion" occurs when the user's perception is directed away from objects, events and/or people in the physical realm and toward, not the technology, but rather the corresponding objects, events and/or people created by the technology.

- "Social actor within the medium" also known as "parasocial interaction" occurs when a person mistakenly believes that she is involved in two-way communication when in fact the communication is one-way, "from the technology to the person without feedback from the person to other entities".

- "Co-presence" involves users perceiving others with whom they are interacting via technology to be in a similar physical environment when in fact they are not. An example of this would be a meeting in which some attendees are physically present and others are using technology in order to "attend".

- "Medium as social actor" involves a user perceiving that she is actively communicating with another person when in fact she is actually interacting with technology. The technology simulates human-to-human interaction by using human language and filling a social role (for example, that of a bank teller or teacher). (ISPR website)

Understanding the different dimensions of presence and being able to categorize these characteristics will not eschew all ambiguity. However, this listing does represent a major step for researchers wishing to join in a conversation to debate and build knowledge. Much like efforts to categorize presence, the ISPR's explication statement is a major step in the development of "presence" as a vibrant body of research from which

scholars may draw. The explication statement is a part of the ongoing conversation of scholars exploring presence and is a vital lifeline for the community of scholars who have joined ISPR. These members now have a forum for both contributing and debating the issues relevant to their studies of technology.

Disagreement and Debate

Disagreement and debate are part of the lifeblood of academic communities and the scholars gathering under the umbrella of "presence" research are no different. There are several issues that are prominent within current literature such as definitions of presence, which are frequently debated. This can be seen by the ambiguity addressed within the ISPR explication statement that addresses the multi-dimentional facet of presence and the complexity of defining the concept. For example, Heeter takes issue with Lombard and Ditton contending that their much-quoted definition of presence implies that in the absence of technology everyone experiences continuous presence at a constant intensity. Heeter, however, contends that "presence is not a constant of everyday non-mediated experience" (Reflections 1). Instead she proposes that researchers consider unmediated—what she parenthetically labels "real"—presence as a guide for research and for focusing conceptualizations of presence. She begins by arguing that research on presence currently focuses on the senses more strongly than the mind and that even the most carefully mediated sensory stimuli do not necessarily induce continuous presence. Next she contends that expectations, cognitive schema and familiarity impact presence and here she refers to an experience she had at space camp where she both "knew too much and too little" in order for her to feel present within the simulated space experience. She proposes that

physical presence may be disrupted by demanding or frustrating tasks, strong

presence may often results from sensory stimuli that engage psychic energy,

presence varies from person to person and moment to moment, and finally, that

people are individuals experiencing different amounts of presence in daily life

(Reflections 1-8).

Heeter concludes by contending that researchers and designers need to be very focused

and have a clear understanding of their goals so that they may effectively study and/or

create their intended type of presence (Reflections 20). These are vital points. C&W

scholars must gain a clear understanding of their goals in order to "effectively study

and/or create their intended type of presence." In fact, this is my motivation for my

project: initiating a discussion that will allow interested C&W scholars to build upon

work that is relevant to the C&W classroom.

Another area of disagreement is noted in the ISPR's final explication statements.

ISPR listserv members disagree about whether presence occurring within the context of

non-interactive technologies (such as television and film) is comparable to what occurs in

the context of interactive technologies (such as with the computer and virtual reality

technologies). This has occurred in part due to an expansion of both VR technologies

and scholarly examinations of presence. Presence research was once the sole domain of

VR designers. Now that VR technology is coming of age it offers experiences that

include not only sight and sound, but also smell, touch and even taste. It has advanced

with an emphasis on creating a complete experience of off-line "reality" via technology

and as these advances have occurred an intense and clearly defined sense of what was

being labeled presence began to develop (Lombard and Ditton website). However, since

VR systems are not the only presence being created in the current age of technology—as media scholars such as Shapiro and Lang contend—the question is not be as significant to the current project as the question of what is happening in online space not enhanced with VR technologies (700).

Another prominent discussion among ISPR members seems to be "the exact nature and location of the processing that results in presence" (website). Several ISPR members offer possibilities in the website discussion. For one thing, it could be possible that in some cases a person's response to external stimuli is the same regardless of whether or not that stimuli is mediated by technology and thus the mind processes automatically not taking into account the role of technology initially. In other cases, however, a "higher order" or "conscious" evaluation is made regarding the role of the technology in the processing of the stimuli. Another theory proposed by ISPR members is that there are two "parallel streams" of consciousness, which allows an individual to simultaneously be aware of the role of technology in one "stream" and yet fail to do so in the other. This allows the individual to both be aware that she is using technology while simultaneously perceiving objects, events and entities encountered as if no technology were involved. A third theory is that the individual may herself encourage or discourage her own sense of presence by directing her attention away from aspects of the situation that remind her of the role of technology (ISPR website).

The nature and location of processing that results in presence has been of great interest to media scholars considering the role of non-interactive technologies such as television. Shapiro and Lang, in their study of television in the early 1990's, questioned

whether or not a non-interactive technology does indeed elicit startle and defense

responses. They concluded from their study that once attention has been engaged,

> processing will be affected by the viewer's perception of the reality of the
>
> stimulus. In other words, once attention is focused on the event the conscious
>
> mind tries to make sense of the stream of information. Part of this process is to
>
> determine the 'reality' of the situation, which then serves to mediate further
>
> psycho-physiological and cognitive responses. (693)

This study then supports the idea—at least in non-interactive technology—that the

viewer/user has an initial response that occurs without conscious thought and that this

automatic reaction calls for higher-order processing that chooses the appropriate response

based upon the intensity and suddenness of the eliciting stimuli (693). However, there

has been little across the board consensus regarding the nature and location of processing

that results in presence (ISPR explication statement). Within the context of the C&W

classroom, the issue may be particularly relevant in cases where students come to an

online portion of a class with little or no experience navigating within cyberspace.

Understanding where that student may take pause as they begin a course may offer an

insight into how to best initiate the individual into the course. However, with so much

division on the subject there would need to be further study for this to be helpful in this

arena.

These are just a few of the areas most prevalent in current literature; however,

there are undoubtedly just as many unpublished debates that—as with any other field of

study—occurs over the lunch table at conferences and within the flurry of e-mails that

connect scholars. Debate and disagreement are a healthy part of the growth of academic

communities and with issues of presence becoming more and more relevant to every area of academia they will no doubt continue to occur among scholars examining presence.

Conclusion

Work by Lombard, Ditton, and other scholars who have attempted to categorize and conceptualize "presence" as a body of research, has been the major impetus towards the creation of the International Society of Presence Researchers. Without efforts to organize, the research occurring around the world in various academic and corporate settings to examine the effects of technological mediation would not have gained the momentum that it now demonstrates. Through the sharing of resources, "presence" has become a viable field of study in which scholars can seek better ways to exploit the potential of technology.

The ISPR's statement of explication ends noting that "[a] large number of possible consequences of some or all of the different types of presence have been proposed and serve as motivation for further study of presence" leaving visitors to the sight with the challenge to do more than merely read the definition offered. Considering the inroads that computer/Internet technology has made in areas such as Composition Studies, and the potential changes for the future, this should not be taken lightly.

Chapter 5: Hybrids—the Latest Challenge

Within Chapter 5, I examine Short et al.'s social presence theory (which was summarized briefly within my introduction) and the development of the hybrid course, a type of course in which time is split between face-to-face and online activities. The hybrid provides one of the clearest examples of the connection between the interdisciplinary body of research on the subject of human perceptions of presence and the increasing need for broadening discussions about how technology affects activities within the computers and writing classroom. Current literature indicates that the hybrid format is a growing trend within the educational community and because of the unique problems and benefits it offers in the area of classroom interaction. Within this chapter I contend that presence (as it is currently being researched within the social sciences) offers Computers and Writing scholars methods for researching and extending our knowledge of how people use and understand technologies in relation to writing instruction. In addition, I contend that social presence theory is especially significant for C&W scholars who employ hybrid learning environments because it offers a springboard for researching pedagogical and technological choices that will encourage deep, active learning within this new structure.

Hybrid courses began appearing in educational settings in roughly the 1990s, but became prevalent within the C&W community in about 2000. Described as offering the best of both worlds, hybrids present a unique class structure in that they are not considered a traditional brick and mortar course, but yet they are not solely online. Students have online access to course material, class forums, even meetings with their instructor 24 hours a day, seven days a week. Yet even beyond that, students are

required to accomplish certain tasks within the online environment. These tasks may range from course discussions to peer editing to small group collaboration. However, these courses include a face-to-face component that encourages interaction for things such as opportunities for clarification of online components and the traditional camaraderie found in the brick and mortar courses to which they are already accustomed. While initially it may appear that hybrids are less susceptible to problems with interaction because of the scaffolding that can occur in the face-to-face environment, in actuality they could potentially produce more problems including (but not limited to) students failing to find a space for themselves in the online environment and mentally withdrawing from the entire course, instructors appearing impersonal or out of reach for students, and online bullying creating tensions in the off-line segments. Research has begun to show that what occurs online may dramatically affect what occurs off-line. For example, in their study of computer-mediated-communication, Yagelski and Grabill concluded that "ultimately, online discourse … seems to have been a function of the ways in which individual participants negotiated the various constraints on their participation and understood their respective roles within that discourse" (35). They contend that student participation is, therefore, a complex issue that requires more inquiry into how online spaces "enable and limit discourse, and more importantly how they relate to the more conventional discursive spaces that teachers and students occupy" (36). Therefore, scholarship attempting to understand presence is particularly relevant to hybrid courses, a format that many see as the next stage of evolution in educational technology. According to the website for the University of Wisconsin Milwaukee Hybrid Project—a leader in the study and creation of hybrid courses—hybrids courses are the

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next logical step of development in technology-integrated education. Defining hybrids as courses in which computer-mediated interaction is mandated for at least 25 % of the course (a figure proposed by the UWM project members but is not necessarily adopted by all universities) the website hails hybrids as being able to accommodate most learning styles and personal learning preferences (Garnham and Kaleta website). Even beyond its intellectual potential, hybrids also appeal to University administrators who were at one time hesitant to embrace a plan to cut down the amount of time students actually sat in the traditional classroom setting. Now they encourage hybrids because of potential economic and logistic benefits (Bleed 18).

Hybrid Courses

Hybrids have evolved slowly and have appeared only recently under that name, a label that currently represents only minor agreement as to the percentage of total class time that should be spent online during the total course experience. The definition proposed by the University of Wisconsin Milwaukee's "Hybrid Project," one of the earliest programs in which scholars researched the hybrid course format, offers little by way of clarifying these percentages but does offer at least a foundation for what should be called a hybrid. The website for the project states that hybrids are

> courses in which a significant portion of the learning activities have been moved online, and time traditionally spent in the classroom is reduced but not eliminated. The goal of Hybrid courses is to join the best features of in-class teaching with the best features of online learning to promote active independent learning and reduce class seat time. (Website)

Hybrids have developed as more of a natural progression of the relationship between Internet technology and writing pedagogy than a new invention and some argue that it is actually just a different version of hybrids created decades ago under the name of correspondence courses (some of these courses required face-to-face minimal interaction during the semester). Today's hybrids are the result of the incorporation of technology and the growing understanding of the vast potential of that technology to expand the boundaries of the writing classroom into a global community of teachers and learners. Modern-day hybrids were formally addressed for the first time at a C&W conference in 2001 where a roundtable consisting of faculty and students addressed "so-called hybrids" (as it was listed in the conference guide). According to the summary of the roundtable, hybrids seem to fit very well with the C&W community's agenda:

> Hybrid courses merge elements of distance education with face-to-face teaching in an attempt to create a more cohesive learning environment, aid teachers and students in connecting online discourse with the real persons behind the words, and improve communication about successes and problems during courses. They also create a more cohesive learning environment, permit teachers to integrate resources, individuals, and activities that aren't available in a physical classroom, and help students assume a more active, self-directed, and independent role in a course. We are trying to preserve the more flexible opportunities for reflection, dialogue and small group work that are characteristic of online learning. (Online conference guide)

The term "hybrid" itself begins to appear in C&W literature near the end of the 1990s. In the journal of *Computers and Composition*, the word first appears in 1997 in an article by

Michael Johanyak. However, his application of the term is not the same as the one used by the Hybrid Project. Johanyak is addressing communication in CMC environments, or what he terms "hybrid texts," not the course in which computer-based communication tools (CBCTs) are used. While the phrase "hybrid course" begins to grow in use in the general educational community during the late 1990s, one of the early references to a C&W course as a hybrid comes in the year 2000 when Jeffrey Ross at Arizona College introduces "HEC" (Hybrid Electronic Course). Ross was obviously conflicted about its potential. On the one hand, he concluded that student learning was accelerated, on the other hand, Ross states that teaching writing using a distance learning model is difficult at best and that doing so both "impedes and enhances student learning" (ERIC). The scarcity of literature during this time demonstrates that at least as far as published discussion, Ross was a pioneer with very little company as he dealt with HEC. However, in 2002 there began to be more discussion as scholars attempted to put a name to this course format. For example, in his article about a mixed mode course, Thomas Oblender opted to combine the words "virtual" and "traditional" to create "virditional." Other names that appear in literature include "transitional," "Internet intensive," and "mixed mode." Members of the Hybrid Course Project (at the University of Milwaukee) aren't sure themselves when "hybrid" began being applied to any course format in which both technology and traditional physical classrooms served as settings for students. Peter Sands, from the University of Milwaukee's English Department, suggests that perhaps the term hybrid may have begun to be applied to academic courses around the time that cyborg and other terminology referring to the joining of technology with non-technology

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components began in the 1990s (e-mail). In an article in 2002 published in *Teaching with Technology Today*, Sands states that

> Hybridity in postcolonial studies refers to cultural and racial mixing resulting
> from forced commingling of peoples. In genetics, hybridity refers to offspring of
> two genetically dissimilar parents. A hybrid is also a mechanism in which two
> dissimilar parts produce the same function or result. Hybrid teaching and learning
> partakes of each of these concepts to some degree. (Website)

This is also the same time that Carla Graham, another member of the hybrid project, places the beginnings of the term. She states that members of the project recall hearing the term first used by Chris Dede, Chair of the Learning and Teaching with Technologies program at Harvard University, in the mid-90's (e-mail). Dede himself does not recall the origins of the term as applied to educational environments, and states that he himself does not particularly care for the term, preferring instead to use "distributed learning" (e-mail).

Variations of "hybrids" can be traced back to the beginning of distance learning. Early correspondence courses completed by mail in the 1800s (in cases where proximity allowed) students met f2f after having interacted during the semester via postal mail (Simmonds 3). One of the earliest references to the modern day form of the hybrid (using f2f and Internet technology) appeared in the mid-1990s in work by Claudia Keenen. In her "Educator's Guide to the Internet" in August of 1996, Keenen, in continuing work from her dissertation, wrote about three potential models for teachers using technology: the traditional, the transitional, and the distance. She defines the traditional as maintaining all of the elements of pre-Internet courses such as the fixed

meeting time and place within the brick and mortar classroom. For those using the traditional model, technology is an "add-on," something that the teacher introduces the students to while directing them "to explore it further as an alternate source of information for a specific assignment or a set of assignments.... Ideally, the Traditional model incorporates several units of instruction on these technologies as appropriate complements to course materials" (Website). The traditional model requires little more than an awareness of technology and its potential for supporting research assignments. Therefore, presence is not altered and still falls under traditional composition views of presence.

The transitional model would be most closely associated with the types of classes C&W members began promoting in the 1980s. Here the course maintains fixed meeting times within a brick and mortar setting, but may take place within networked classrooms or (in the early days) include trips to the computer lab. Keenen states that

> The Transitional model introduces and continues to explore Internet concepts
>
> during class time, and incorporates the Internet not only as a supplemental
>
> resource, but as an alternate delivery mode for instruction and collaboration.
>
> Instructors in the transitional model may post course materials to a syllaweb or to
>
> a class listserv, and may also allow students to submit assignments over electronic
>
> mail or to collaborate with each other through synchronous conferencing
>
> software. (Website)

This model is the most similar to what are today labeled "hybrids." Within the transitional model presence is potentially altered by the introduction of technology especially in such activities as synchronous collaboration.

The distance model goes one step further and, as Keenen explains, "transcends traditional class boundaries." In this model everything can go on the Internet and class time typically spent within the brick and mortar environment is replaced interacting online with only a few scattered f2f meetings. Keenen, who is writing from a mid-90's perspective, describes the distance model as a course that

> introduces, explores, and relies upon Internet concepts for its success throughout the semester. This model allows the student's self-paced instruction and individualized attention through electronic mail, listservs, newsgroups, and synchronous conferencing, either on a local area network or in a Multi-User Domain. Distance Instructors may also use Real-time video transfer over the Internet, which is quickly becoming more accessible to teachers and students for distance education.... In conjunction with satellite capabilities, instructors in the Distance model may exploit the Internet's 'learn anytime, anywhere' to its fullest potential. Students may participate from virtually any geographic location, at any time, using these technologies. (Website)

While using different terminology from Keenen, Charles Dziuban and Barbara Truman-Davis, from the University of Central Florida's Research Initiative for Teaching Effectiveness, offer a similar model of the three modes of teaching currently available to educators, however, they have chosen to address their categories slightly different noting that there are courses that offered the Internet as a resource, courses that exited solely online, and courses that try "to combine the best of both worlds" (website). I mention this not because the categories are significantly different, but to highlight the language they have chosen to use for describing the hybrid. The phrase "best of both worlds" is

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very common among those who promote hybrid format classes. The problem for Composition Studies is that there has been disagreement as to what is the best and whether it can be achieved via technology. These are complex issues with equally complex answers. Expanding the discipline's interest in "presence" to consider such theories and research methodologies as the ones presented later in this chapter by social scientists such as Short et al., will not make these issues any less complex, but it may offer an avenue for maneuvering through them.

Overlapping C&W scholarship with those of the ISPR community offers methods for researching and extending knowledge of how people use and understand technologies in relation to writing instruction most specifically within the hybrid. The reason it is critical is precisely because of the warnings offered in recent histories of the C&W community; scholars will lose control of the ways technology is implemented if they do not become informed leaders. Currently there appears to be conflicting evidence regarding the effectiveness of online interaction. Integrating interdisciplinary theories regarding presence—such as Short et al.'s that is explained later in this chapter—offers one way to become these informed leaders. Especially within the hybrid, expanding the discipline's understandings of presence may offer new insight into the creation of tools for more effectively choosing which technology would most encourage active learning within this format.

As the 20th century ended and the 21st began, articles addressing questions of presence mediated by technology were framed mostly in terms of how students interacted with one another online and how instructors struggled with changes in traditional roles. Within educational theory, social presence within online classrooms became a serious

issue. Charalambos Vrasidas and M.S. McIsaac, scholars from educational technology backgrounds, proposed in their article "Factors Influencing Interaction in an Online Course" that social presence offered a promising framework for considering online interaction and thus making the most of the Internet. They stated that a sense of presence is absolutely vital for the creation of an online learning community and that social presence theory offers a potential avenue for educators to consider this component of the hybrid course. Finally, the authors concluded that knowing how to be present is also a vital component for faculty members who must not only create the spaces for students to exist but also must find a way for themselves to participate (Vrasidas and McIsaac 16). This is particularly vital within a writing classroom in which students are asked to form an active writing community.

One year after Vrasidas and McIsaac published their theory, *Converge*, the online magazine for the Center for Digital Education, published an interview with researchers Charles Dziuban and Barbara Truman-Davis who described their ongoing study of the hybrid model of education. They stated that the biggest obstacles initially faced with the hybrids they observed was interaction among classroom community members and the problem of students struggling to simply use the course technology (this situation became less prominent as students became more accustomed to technology). The first problem, however, presented a conscious effort to understand what was occurring. Dziuban and Truman-Davis said this was addressed largely by creating more opportunities for feedback from both students and faculty. Students needed to feel they were being heard and needed both online and off line space where they felt someone was directly listening to them. Being heard is a vital part of the writing classroom, and in fact, who is heard

and why is at the very heart of some of the discipline's most significant debates. Much of the research being published about issues of online presence is focused on that very act of being heard. How will technology interfere with students and faculty being heard? How will instructors create the space referred to by C&W scholar Paulette Robinson as being so vital to the successful fulfillment of pedagogical objectives? Questions of online presence will need to addressed in some manner if the hybrid is to succeed.

Among the many conclusions from their study, Dziuban reports one significant finding was a changing attitude among students. He states that four years ago students asked *why* when instructed to look at a class website. By the time of this interview in 2000 (two years after the study began) students were only asking why when they were *not* instructed to look at a class website (Lago *Converge* website). Many students are becoming more technologically sophisticated and do indeed have expectations that technology will be used in some manner now when they enter a course. However, there are two major complications. First, this means that many students are entering a hybrid class with understandings and expectations from personal online experiences that instructors do not have and have not taken into account. The second is that requiring interaction within an academic, online environment may still be a new experience. David Bartholomae's contention that students must "invent the university" is still very applicable within the hybrid course. The only difference now is that this invention must come both within the face-to-face segment and the moments alone at the keyboard. Being technologically savvy does not mean being academically acclimated, and it can be very easy for instructors to confuse one with the other and potentially shut down a student attempting to interact within this foreign space. In fact, according to Ann Duin and Craig Hansen, a

student's discomfort and inexperience with even traditional academic interactions (i.e. discussions in the physical classroom) may be intensified in an online setting. Therefore, while students who are more experienced interact with instructors online in a very similar way to a traditional classroom, students who are struggling to become a part of academia are more apt to avoid online interactions with outspoken students and instructors because they feel uncomfortable and unsure of how to proceed (104).

In the spring 2002 issue of *Educational Forum*, hybrids courses were framed in terms of both interaction and faculty concerns. I.D. Winsboro stated that

> Both the pedagogical and political realities of the new millennium are bringing
> dramatic changes to the traditional mode of instruction. Perhaps chief among
> these is the exponentially increasing demand by legislators and administrators for
> educators to implement distance-learning technology as a mainstay of the new
> millennium curricula. There is little doubt that distance learning will displace the
> traditional classroom for most teachers, if that has not, in fact, already happened.
> Thus, the traditional teaching mode that provided for teacher-student intimate
> interaction for the last century has succumbed to the more impersonal and distant
> electronic contacts of the 21st century (247).

Among the concerns he presented as representative of the group with which he helped create a new hybrid program, was "intellectual integrity." He argued that there was a very real potential that intellectual integrity may be compromised by political and social agendas that press on modern day education. Again this rings of the warnings from the C&W historical narratives examined in Chapter 2, and again there is a mandate that traditional teachers must "retool" or be pedagogically lost (247). Part of this retooling

requires reaching beyond disciplinary boundaries with C&W scholars both giving and taking from the growing work of the ISPR.

Sands also believes that "retooling" is in order for educators who are considering hybrid courses. In article "Inside, Outside, Upside, Downside" published in 2002, he declared that "hybridity is the order of the day, as teachers combine the distributed teaching and learning of distance education with the comfortable interaction of the classroom in an effort to achieve a synthesis of the two" (*Connecting* website). Highlighting interaction as a major component of the hybrid class, Sands offers guidance in implementation of hybrid courses which also includes an emphasis on *retooling* of the educator's thinking in regards to how a class should operate. He warns that educators must brace themselves for extreme change in how the classroom community operates. Citing an educator's loss of traditional power within the hybrid course, Sands writes that "once seat time is reduced and everyone is online but not in the same room, opportunities to monitor and manage interactions move from the geographic space of the classroom to the temporal space of the week" (Website). This temporal space is a significant shift that requires a pedagogical adjustment that educators may be unprepared to address if for no other reason than the unrealistic expectations that may arise from teaching a format that offers "the best of both worlds." That is not to say that hybrids cannot offer this, however, shifts in traditional power structures within a seemingly impersonal online environment may be disconcerting for both teacher and student.

Ultimately, the hybrid format holds incredible unforeseen potential that is still not fully understood. In a discipline such as Composition Studies whose very pedagogy depends on how the classroom is defined, this potential is murky at best. Gaining a

clearer view will mean not only finding avenues such as one pursued by ISPR members, but also by reconsidering older discussions within Composition Studies. For example, Joseph Harris states that the question of community within the classroom is very significant for the field. He observes that scholars within the discipline have long debated how to define the classroom wondering with some of the most well-known studies questioning whether to call the writing classroom a contact zone, a discourse community or somewhere in between (117). Choosing a theoretical stance in this debate is only the first step in the hybrid classroom whose complexities are going to require more than another look at Stanley Fish or Mary Louise Pratt. The hybrid also is going to require a look at theories that consider what technology does to the contact zone or the discourse community, just as social presence theory does.

Complications

Current C&W literature demonstrates that discussions and debates surrounding hybrids are increasing indicating a wider usage of the format, and so the writing classroom again finds itself in transition. This time, however, when the dust settles the questions asked by scholars will not be *what* can computers do for Composition Studies, but rather *where* can computers take its students and teachers. It is this "place" that makes theories such as Short et al.'s theory of social presence relevant to the C&W community. For within the new structure of the hybrid course, students and faculty no longer simply share the traditional space of the brick and mortar classroom. They are now *meeting* in places created by technology that exist only within the computer screen.

In recent years hybrids have not only become technologically more feasible, but they have also become more integral to the evolving concept of the *improved* and *more*

equitable classroom that Hawisher et al. propose as the C&W community's agenda. C&W scholars such as Peter Sands have begun to espouse hybrids as the answer to accommodating different learning styles, communication differences resulting from gender and cultural stereotypes, and increased writing and interaction among students (Hybrid Project website). However, even while the hybrid seems to support the C&W community's ideals, questions that have arisen in recent years regarding the effectiveness of online interaction and its impact on the off-line classroom complicate this next generation composition classroom.

C&W literature has long demonstrated a conflict among scholars whose studies seem to conclude that computer-mediated interaction is liberating for students *and* non-liberating. There are studies that hail online interaction as silencing no one, and studies that conclude that it may silence the same groups that were silenced off-line or perhaps even silence those who were vocal off-line. These conflicts may lead to a defining moment for the C&W community when, just as it has in the past, the community must answer tough questions about who it is and how technology supports a liberating pedagogy when its scholars are asking questions similar to Joanna Wolfe who wonders why women feel ignored online or Christian Weisser who asks if we are creating a pedagogy of isolation for student writers online. Paulette Robinson's discussion of student attitudes, which should presumably be positively affected by movements towards an improved classroom, raises issues of whether integrating technology has become a "necessary evil" and C&W scholars must still face the issue of whether or not online interaction is missing something that only physical interaction can provide. However, educational theorists Liam Rourke, Terry Anderson, Randy Garrison and Walter Archer

disagree with this assessment. In fact, in their study of social presence as it relates to distance learning, Rourke et al. contend that computer-mediated communication has the ability "to support high levels of responsive, intelligent interaction between and among faculty and students while simultaneously providing high levels of freedom of time and place to engage in this interactivity" and therefore, they find social presence theory, which they define as "the ability of learners to project themselves socially and effectively into a community of inquiry," a vital component of technology-enhanced learning environments (Website). This is where the "coffee and biscuits" theory of social presence offers to expand the conversation.

Coffee and Biscuits: A Theory of Social Presence

In the 1970s, Short, Williams and Christie observed a business meeting in which some participants phoned in via a video conferencing system. As they watched the group who was physically present enjoying coffee and biscuits while they interacted both before and after the other group had phoned-in, Short et al. wondered what was gained and what was lost for those who attended via technology. They also wondered how phoning in affected the goals of the meeting and what was accomplished. Drawing upon sociology and media studies, the trio began to create "social presence theory," which states that the match between communication media and organizational tasks affects efficiency and user satisfaction. Most commonly used by scholars in the communications department, this theory is valuable for the study of how individuals perceive interaction mediated by computers and the effect it has on the task at hand whether it involves simple chatting about life or collaborating on a school project. In effect, this theory can be summarized as the extent to which a medium is perceived as sociable, warm, sensitive, personal or

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intimate and what impact this has on the individuals using it (Lombard and Ditton website). The theory originally focused on telephone conferencing. Later, however, computer social scientists began to draw on it for studies of computer technology. Social presence theory was built upon the work of four researchers whose work has become the cornerstone of many studies in presence theory: communications theorists Weiner and Mehrabian, who are most well-known for their study of the concept of *immediacy*, and sociologists Argyle and Dean, who stand out for their work on the concept of intimacy.

Argyle and Dean's theory of *intimacy* states that participants in a conversation seek to reach equilibrium and the participants, therefore, negotiate their interaction via eye contact, smiling and personal topics of conversation. Their research focused on better understanding the various components of interaction needed to reach this equilibrium (300). Short et al. used this to research as a building block for understanding how equilibrium might be expected to occur in technology mediated conversations.

Yet to do this, Short et al. also needed to understand how communication in non-mediated circumstances inspired a feeling of involvement between participants. Defining it as "those communication behaviors that enhance closeness to and nonverbal interaction with another" (203), Weiner and Mehrabian's theory of immediacy was concerned with what makes humans feel psychological closeness to one another. Weiner and Mehrabian initially used their theory in researching speech patterns; however, Short et al. extended it to include non-verbal aspects of communication. The trio applied the terms "social immediacy" to speech and non-verbal cues that can be seen during f2f communication, and "technological immediacy" to apply to the extent to which a technology (which they defined as telephones and what they believed would be interactive televisions) could

communicate immediacy. In other words, what they were trying to understand was how a feeling of psychological closeness would translate within a technologically mediated experience. Weiner and Mehrabian's theory provided them with the groundwork for doing this.

Short et al. felt that both concepts (immediacy and intimacy) needed to be expanded and applied to emerging communication technologies. They proposed that communication medium (something not addressed by Argyle and Dean and only to a minor extent by Weiner and Mehrabian), should be considered to be a factor contributing to intimacy during communication. Arguing that communication technology does not fit all people in all situations, Short et al. saw a gap in existing research that would need to be done in order to make better use of the technology available (72). After careful analysis of the research that had been done on immediacy and intimacy, Short et al. proposed a more in-depth consideration of what occurs in human interaction when technology is added. In1976, they published their explorations of the implications of switching from f2f communication to technology-mediated interaction. The technology with which they were most concerned was the telephone and the new video conferencing that businesses were beginning to employ, but they were well aware that this was just the beginning of the ways in which human interaction would be altered. In their introduction, the authors acknowledge computer-mediated-communication and see it as something that fits with their discussion, but concluded that it was too new and beyond their scope of knowledge to address directly. The authors observed that communication has historically emphasized face-to-face physical contact simply because that was the only means available to humans. However, with advances in technology that were being

developed and the potential to which they led even as early as the 1970's, the authors saw

great potential for expanding interaction among people which would lead to new research

questions to be examined. No longer would humans be restrained by physical locations,

and in fact, the future offered an incredible new world:

> It is within the scope of foreseeable technology to reconstitute by electronic
>
> means a virtual three-dimensional representation of an individual who is hundreds
>
> of miles distant. Dazzled by such technological marvels, enthusiastic futurists
>
> have speculated about possibilities ranging from education at home, to working
>
> by audio-video links from homes no longer located in overcrowded cities. The
>
> potential significance of such developments for a range of disciplines from
>
> sociology and psychology to urban and transportation planning needs little
>
> elaboration. (v)

Short et al. created a 3-tiered theoretical approach to understanding the effects of

varying medium of communications. The first two theories—"efficiency" and "non-

verbal"—have appeared in various social psychology literature previous to Short, et al.'s

book, but the third, their theory of "Social Presence" (which builds on the first two), "is

relatively novel" (61). Efficiency theory plays upon a "common assumption": that

technology-mediated interaction will be less efficient without the assistance of non-verbal

cues (61). Although Short, et al. were writing in the mid-1970's the *common assumption*

to which they were referring continues to raise questions to this day. In fact, within

Composition Studies there are many studies and articles citing failures of online

discussions and wondering if the lack of physical contact might be to blame. The

efficiency theory of communication, therefore, implies that a face-to-face conversation

will accomplish more than one that is mediated by technology. Short et al. argued that there are several problems with the efficiency theory beginning with the logic of the theory. They contend that "there is no compelling reason why removal of cues at the level of the mechanics of the interaction should always lead to a reduction in the overall efficiency" (Short et al. 62). This would mean that discussions within Composition Studies when scholars are analyzing a failure within the technologically enhanced writing classroom, it would be faulty to focus the debate to a question of whether or not a lack of non-verbal cues interfered with task completion. The issue is more complicated and involves both human and technological components of the interaction.

The second theory that Short et al. considered as they built their social presence theory emphasizes non-verbal communication as a significant element in communication. While the authors consider this to be a "more sophisticated approach" to communication research they still consider it incomplete. They argue that first of all, non-verbal cues never occur in isolation which means that such things as word choice, tone of voice and pauses also play a significant role and in terms of technology, individuals adapt as necessary to convey their message. Because individuals adapt their message as necessary, non-verbal cues do not hold the same social significance once a population has encountered a technology that does not support it. (Short et al. uses the example of smiling indicating friendliness in person but over the telephone individuals seek other means for measuring this.) In the end the authors conclude that "simplistic extrapolations based on the normal functions of the visual non-verbal cues share too many of the faults of…efficiency theories" (64). This means that those who criticize online interaction as

failing to convey the same intricacies as face-to-face interaction may be oversimplifying the issue.

The inadequacy of the above theories in understanding communication ultimately led the authors to consider a theory based on feelings of social presence. This theory of communication relies on the work of A. Douglas in the late 1950's and I.E. Morley and G.M. Stephenson in the late 1960s. Douglas proposed that within any interaction there are two activities occurring simultaneously. First of all, participants are concerned with fulfilling certain roles. Second, they are interested in developing or maintaining the relationship that is the foundation for the interaction in the first place (Douglas 79). Morley and Stephenson built on this work by analyzing the distinction between interactions using various media. They proposed that these two activities occurred at varying levels depending upon the medium of communication, for example, on the telephone there might be a greater emphasis on the inter-party aspect rather than on the interpersonal (543). In other words, for the technology at the time, researchers were beginning to focus on task to be accomplished as well as on the medium being used. From this body of work, Short et al. were able to pursue the specific question of just how technology affects person-to-person communication and any task completion in which they are engaged. They proposed that Morley and Stephenson's research, which occurred in the context of business negotiations, could be expanded and thus they used the term "social presence" to describe the hypothetical construct of "the degree of salience of the other person in the interaction and the consequent salience of the interpersonal" relationship. However, they further clarify their definition by adding that

We regard Social Presence as being a quality of the communications medium. Although we would expect it to affect the way individuals perceive their discussions and their relationships to the persons with whom they are communicating, it is important to emphasize that we are defining Social Presence as a quality of the medium itself. We hypothesize that communications media vary in their degree of Social Presence, and that these variations are important in determining the way individuals interact. We also hypothesize that the users of any given communications medium are in some sense aware of the degree of Social Presence of the medium and tend to avoid using the medium for certain types of interactions; specifically, interactions requiring a higher degree of Social Presence than they perceive the medium to have. (65)

Short et al.'s research was among the first to highlight the need to consider how technology affects relationships and group interaction. It was this latter component that brought them to consider the "coffee and biscuits problem." While studying groups using teleconferencing they noted how participants were distraught over how to engage in social functions such as chitchat and refreshments when some participants were not physically present (141). Ultimately they conclude that for every person there is a "*communications diet* comprising various proportions of written, face-to-face, and tele-communications" (143). In other words, there are many factors involved with human interaction and integrating technology into the process is no easy task. Groups using a given technology for communication will bring to the process their own biases and beliefs and the "coffee and biscuits problem" may be different in different collaborative contexts.

In the late 1980's social presence theory entered the corporate world as the "first generation of technokids" moved on from MIT. The MIT Media Lab, founded by Nicholas Negroponte, occupied a central role in the development of interactive technologies during the 1980's and offered an incredible environment for students who John Caldwell labels "the first generation of 'reality hackers'" (Stone 171). Due to Negroponte's connections with the head of the Atari development labs, his protégés moved into the newest Atari labs and for a brief time period "financial support, theoretical encouragement, free imagination, and peer camaraderie" surrounded the researchers. During this time, they focused on presence not in terms of human-machine interfaces, but rather in the vein of Short et al. and examined "situated technologies that addressed such issues as gender and ethnicity" in an effort to consider different variables at play that affected interaction (Stone 172). This expands the discussion of presence into areas that Composition scholars have considered for a very long time. There is already quite a bit of scholarship addressing male/female differences within online writing classrooms as well as how minorities adjust to technology which means that this is a place where C&W scholarship could contribute to ISPR work. The major difference between the work of C&W scholars and the ISPR in these areas is the extent to which they rely upon sociological and technological research.

In 1993 Ronald Rice also began work theoretically based on Short et al.'s coffee and biscuits problem. He created a study that "assesses the reliability and dimensionality of a media appropriateness scale" out of a need to "overcome some limitations of prior research" and to pursue some fundamental research questions about just how businesses should be choosing the media with which they communicate ("Media," 452). Rice

asserted that one of the most effective ways in which to rate social presence was via satisfaction of the participants in any given interaction with the ways in which technology facilitated or disrupted communication. He also concluded that the benefits of a media appropriateness scale was that it allowed individuals to "explicitly consider the match between a specific medium and a specific task/activity context" ("Media," 453). Rice also expanded Short et al.'s work to include electronic mail noting that new concerns surfaced due to new communication technologies and social presence as a theory needed to be expanded. Therefore, in this particular study, Rice included the exchange of confidential information and exchange of information within a timely manner as primary among the new concerns for individuals dealing with CMC ("Media," 454). This is also among the expectations of students entering writing classrooms who are accustomed to the new, more immediate timetable technology has given them within their non-academic personal interactions online.

In the late 1990's early 2000, the coffee and biscuits problem was re-framed within the context of an educational setting—as opposed to Short et al.'s and Rice's business framework. Rourke et al. in their study of programs at the University of Alberta, where roughly 400 courses included at least some form of computer conferencing, asked the question about the significance of social presence theory for understanding CMC within education. They relied upon the "community of inquiry model" created by Garrison et al. in 2000. In this model there are three key elements for creating a "worthwhile" educational experience (i.e. one that involves true learning): cognitive presence, teaching presence, and social presence (2). Garrison et al. define cognitive presence as "the extent to which the participants in any particular configuration

of a community of inquiry are able to construct meaning through sustained communication." They define social presence as "the ability of participants in the Community of Inquiry to project their personal characteristics into the community, thereby presenting themselves to the other participants as 'real people'." The purpose of social presence, therefore, is to support the cognitive and affective objectives of learning. In a community of learners social presence instigates and sustains critical thinking (4). The third element, teacher presence, is a role in which one person shoulders responsibility for design of the educational experience and for facilitation of the experience; however, Garrison et al. contend that anyone within the learning community may fulfill these roles (although in the formal educational system this typically falls to the assigned instructor) (5).

Using this model, Rourke et al. proceed to examine CMC highlighting both the conflicts and the difficulties of attempting to ascertain whether or not technology is an appropriate "place" for students and teachers to interact (appropriate is defined by the authors as a situation conducive to critical thinking). One conflict can be seen in researchers' disagreement as to what should even be included in a definition of social presence when examining educational situations. In 1986 Richard Daft and Robert Lengel argued that based on their research in social presence theory, CMC was wholly inadequate as a site for deep, reflective discussions between students and teachers (57). However, in 1994 Walther contended that social presence theory in the form presented by Short, et al. was not meant for the current types of technology being used and that more research would be required using modified definitions of what constitutes social presence (18). Studies by Hara, Bonk, Angeli in 1998 supported the idea that CMC could be

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highly effective (2). Arguing for the need to further examine CMC in terms of social

presence theory Rourke et al. contend that

> fairly high levels of social presence are necessary to support the development of
>
> deep and meaningful learning, we expect that there is an optimal level above
>
> which too much social presence may be detrimental to learning. Discourse in a
>
> community of inquiry is not equivalent to social interaction over the garden fence
>
> or the bar at a neighborhood pub.... We believe that the social presence density
>
> calculation provides an important quantitative description of computer
>
> conferencing environments. Social presence density calculation allows for the
>
> formulation and testing of hypotheses in which social presence is used as a
>
> dependent or independent variable. (Website)

And while not decrying or lauding CMC within educational contexts, the authors

conclude their study by noting that there is much more work to be done especially within

discipline specific contexts and with a clear-cut definition of what instructors expect to

accomplish by using CMC. The authors note that student satisfaction, achievement, and

retention are among factors that need to be addressed when social presence is examined

(Website).

While there is still much work to be done—as noted above—social presence

theory offers a way for C&W scholars to begin answering the questions of how to create

active learning communities and how to measure them in more than just simply the

amount of times a student logs in. Not only that, but as Rourke et al. observed, work

within discipline specific contexts, such as Composition Studies, will contribute to the

evolution of social presence theory in ways that will benefit the learning community at

large. Scholars within Composition Studies have something to contribute as well as to gain in the merging of their scholarship with the ISPR community.

Conclusion

Social presence theory encompasses both sociological research, which addresses human interaction, and technological studies, which provide insight into how communication may be disrupted or facilitated via machines. This is particularly relevant to the C&W community with the introduction of hybrid writing courses. This mediation may or may not support the discussion and debate that composition pedagogy often requires of students and it may also dramatically affect the off-line component of the course, thus potentially interfering instructor objectives. However, as a starting place for expanding the C&W community's understanding of "presence," social presence theory offers great potential. This in turn could lead to a better understanding of how to create a hybrid course effectively because it offers new avenues for future research on interaction and the types of mediation that will facilitate these efforts.

Chapter 6: Conclusion

In many ways Composition Studies has been a discipline devoted to understanding presence. Its scholars have considered rhetorical issues of whether a student is present within a text and pedagogical issues of how to create space for students to be present within a classroom. Now the subgroup of Composition Studies, Computers and Writing, must confront technological issues of what it means to be present within the very thing that was once hailed as a tool for previous studies of presence: the computer. Throughout this project I have attempted to establish whether research with an emphasis on presence from the social, cognitive and computer sciences as is currently being generated by the ISPR is needed and ways in which it may be relevant to the C&W community. The goal of this study has been to examine the connection between a growing interdisciplinary body of research on the subject of human perceptions of presence and the increasing need for broadening discussions about how technology affects activities within the computers and writing classroom. To this end, I have first considered ways in which presence and the role of technology have evolved within the C&W community via an examination of historical narratives. From this I have concluded that the role of technology has shifted from tool to place and that there is a gap in research as to how to address this effectively. In addition, I have analyzed work from the social, cognitive and computer sciences to determine what research from these areas might say about presence in online environments. My analysis has demonstrated that there is much work addressing presence that may be helpful to the C&W community, work that could also benefit from C&W scholars who are active in this field's discussions of presence. On the most specific level I have examined the hybrid course and the

complexities of this format, which social presence theory may help writing teachers address more effectively as they design and conduct these classes.

With the continued evolution of technology and the C&W community's commitment to seeking the best possible practices for the writing classroom, there is a need for expanding our understandings of how technology facilitates or disrupts the social pedagogies most frequently enacted within these new spaces. Without entering into the conversation with those who study presence from beyond our boundaries, C&W scholars may be missing a tremendous opportunity for understanding how to maximize the effectiveness of online interaction. For although currently VR rarely comes into play in the C&W classroom, there are many questions regarding how to match pedagogy with technology, how to enhance sensory experiences in the online portion of their course, and how to truly engaged students in active online learning are a part of the everyday landscape (Lea 2). The C&W community needs not face these issues in isolation, struggling to address what so many scholars across the campus have made such great strides studying.

Much of the current examinations of presence within online environments appear to demonstrate this isolation and within the C&W community debates regarding the effectiveness of online interaction often appear murky. For example, one scholar cites evidence of online interaction as an electrifying demonstration of true democratic discussion; another disparages it via research results that highlight isolation and lack of deep, meaningful investment by students. Consequently, scholars attempting to address the issue of student interaction within the technology-enhanced classroom have splintered into discussions with often vastly different terminology lacking a sense of a unified

direction of research, thus limiting the potential for community-wide discussion and sharing of knowledge.

This discussion is vital as studies reveal the darker side of technology enhanced classroom. These studies present evidence that online classroom spaces can be isolating (Christian Weisser asks "are we teaching our students to be alone together"), confusing (Joan Turnow notes how students may feel disoriented at the rapid pace of discussion text), and sometimes even limiting (Paulette Robinson proposes that teachers help students find a "space" to speak, contending that it is not a given that students feel free to do so). In *Computers and Composition* during the years 2001 and 2002, several articles examine these concerns and call for more understanding of what occurs when a classroom of writers becomes "present" online. Patricia Peterson, for example, in her article "The Debate About Online Learning: Key Issues for Writing Teachers" begins by noting that students connecting via technology are experiencing a dramatically different learning environment than the days of brick and mortar only classrooms because computer-mediated-communication becomes so significant. She wonders whether or not students will find their new classroom space (online) "necessarily—or even overwhelmingly—negative" (359). These are very similar concerns to what Short et al. raised more than 30 years ago, concerns that are currently being explored by computer scientists attempting to develop software that presents a positive experience and by social scientists trying to understand what in a human makes online interaction engaging.

Another example of concerns about technology's impact is being examined with the C&W community is Donald Hess' analysis of faculty presence online. In exploring how faculty negotiate their "presence" on the Internet, Hess tells the story of faculty web-

page building. Hess observes that Victor Vitanza's "official" page—the one housed on the University of Texas—is full of humor and playful jabs at online property issues. However, Vitanza's page under his own domain name is slightly different lacking the obvious attempt to define identity (186). Hess asserts that Vitanza's web page demonstrates a desire to create and claim one's identity. He reveals his fears that one day universities will require and control faculty online presence via their websites, and, in fact, he observes that Vitanza is already rebelling against existing regulations (186). Hess' discussion demonstrates another side of the online classroom discussion of presence, that of the faculty member. For along with being responsible for creating a space that will allow students to "enter" the online forum, the instructor must also find her way to do this. Understanding some of the cognitive as well as technological facets of being a part of an online community would be beneficial for doing this as well.

In an effort to better understand these cognitive and technological facets I have structured my project to examine a variety of significant artifacts. Within Chapter 2, I analyzed various historical artifacts to create a narrative of the Computers and Writing community which differed from previous ones in that it highlighted the group's struggles to understand social context and the role of interaction within the classroom. I examined C&W scholars' developing views of the social nature of writing and technology's contribution to that those views. From this research I determined that as societal forces and the growth of technology emphasized greater connectivity, C&W theory developed towards a view of "technology as place" thus making the projection of a student's presence a major component in classroom interaction.

In chapters 3 and 4 of this project I analyzed scholarship from technical and social sciences on issues of human presence in order to understand what this body of work may have to offer those who are interested in computers and writing. This narrative included a consideration of Virtual Reality and Artificial Intelligence, as well as current conceptualizations of presence and the creation of the relatively new organization of scholars interested in how technology affects human interaction, the ISPR. The uniting of scholars as an international organization focused on issues of presence has allowed them to use common terminology and share research resources, ultimately enabling them to push further into technology's affect on discipline specific tasks.

Finally, within Chapter 5, I examined one of the results of these evolving views of technology: the hybrid course. Within Chapter 5, I examine the hybrid course, a class format in which the theories of "presence" created within the social and computer sciences can most clearly be applied. The hybrid raises many of the same pedagogical issues Composition Studies scholars have struggled with for decades. Among these issues is the need to understand what space students occupy within the composition classroom and what pedagogical assumptions regarding interaction and collaboration underlie objectives within the course. These issues are complicated by the use of technology as place and highlight the need for understanding how this new environment affects the interaction and consequent task completion required of class members. . From this examination, I propose that "social presence theory" (one of the conceptualizations of presence described by communications scholars Matthew Lombard and Theresa Ditton) offers an avenue for researching and extending our knowledge of how people use and understand technologies in relation to writing instruction.

Therefore, from the preceding chapters, I conclude the following:

1. Presence research offers Computers and Writing scholars a terminology and approach that will help them to improve their use of technology in the classroom because

   a. As societal forces and the growth of technology have emphasized greater connectivity, writing theory has developed a greater emphasis on interaction.

   b. Computers and Writing theory has developed towards a view of "technology as place" thus making the projection of a student's presence a major component in classroom interaction.

2. Presence research offers Computers and Writing scholars methods for researching and extending our knowledge of how people use and understand technologies in relation to writing instruction has important potential benefits for the field.

   a. One significant insight may be why there is so much conflicting evidence regarding the effectiveness of online interaction.

   b. Another benefit may be the creation of tools for more effectively choosing which technology would most encourage active learning within the hybrid format

3. Social presence theory is especially significant for C&W scholars who employ hybrid learning environments because it offers a springboard for researching pedagogical and technological choices that will encourage deep, active learning within this new structure.

a. Social presence theory is specifically focused on how technology disrupts or facilitates interaction.

b. Social presence theory addresses how tasks are completed and to what extent participants are engaged during the task.

The Need for Terminology and Research

In the Fall 2001 issue of *Kairos*, Cynthia Walker contends that composition instructors who are struggling with teaching online must ask themselves "Am I creating a good atmosphere for communication? Am I using technology wisely?" These are questions that all composition instructors who enter the technologically enhanced class must answer. Technology's evolving role both within society and within the educational community has opened a need for framing these changes in productive ways that will encourage new avenues for research. In fact, the history of Computers and Writing theory demonstrates a marked change in the role of technology from being simply a tool, to becoming a place, which makes the projection of a student's presence a major component in classroom interaction and the need for new terminology to address this new role an urgent need.

Technology has offered composition specialists new spaces in which to teach, but these spaces cannot be effective without critical reflection. The new online venue offers not only the promise of greater connectivity, but also the peril of isolation and the potential to strip away the productive interaction touted by volumes of pedagogical research. Vician and Brown concluded from their study of technology-enhanced interaction within the writing classroom "that individual and task characteristics might interact to influence interaction, usage processes, and student outcomes," raising essential

issues for considering what effect technological mediation is going to have on student outcomes since individuals are just that—individuals—and the mediated experience will have different meanings for each. If the psychological state and subjective perception of these students is filtered through technology and thus they are experiencing an altered level of perception from the standard brick and mortar classes, what does that mean? Studies such as Vician and Brown's that "raise questions about the extent to which social interaction and relationship building can occur within a learning process dependent upon computer-based communication tools" are perfect examples of composition instructors for whom social presence theory could be extremely useful (225).

Making use of online spaces also means finding ways to accommodate pedagogy that relies upon interaction and active participation, an overriding pedagogical theme within Composition Studies for decades. Some of the most outspoken proponents of this participation have scholars such as Peter Elbow, Lisa Ede and Andrea Lunsford and Ann Ruggles Gere. In 1973 Elbow penned the words "If you are stuck writing or trying to figure something out, there is nothing better than finding one person, or more, to talk to…" wrote Peter Elbow (49). In 1985 Ede and Lunsford wrote an article titled "Let Them Write—Together" in which they argued that research demonstrated that "the concept of authorship as inherently single or solitary is both theoretically naïve and pedagogically flawed" (120). This was supported by Gere in her book *Writing Groups: History, Theory and Implications* several years later. These authors were joined by many others and by the end of the 20th century composition scholars such as Joseph Harris would express what was commonly accepted among writing theorists: "we write not as isolated individuals but as members of communities…" carrying forward the belief that

writing is a social act, a view that C&W scholars would embrace wholeheartedly (98).

For the C&W community, networked technologies enhanced these beliefs as Hawisher et al. observed: "the view of writing as social process, already beginning to inform teachers' ways of viewing word processing classrooms, found a more-than-comfortable fit with the communal cyberspace of computer networks" (150). Yet the questions being raised in journals and at conferences show another side, one in which there has been a widening gap between the potential of technology and the use of it to support interaction. Walker's question at the beginning of this section is not simply about whether or not technology can be used better, but rather how. How can technology be used wisely to support student interaction? This is the driving question for members of the ISPR who have drawn from studies of human interaction and developed terminology to use these studies to understand what is occurring within cyberspace. Computers and Writing scholars have the opportunity for a very rich vein of study by considering what researchers of presence have to say and how this may be adapted to the writing classroom. Now is the time for C&W scholars to join the ranks of ISPR members. Now is the time for C&W scholars to take confront of the widening gap between the abilities presented by technology that seems to expand on an hourly basis and our students' capabilities as humans to adapt and thrive in cyberspace by considering what presence research may offer.

Extending our Knowledge

Presence research offers C&W scholars methods for researching and extending our knowledge of how people use and understand technologies in relation to writing instruction. One significant insight may be why there is so much conflicting evidence regarding the effectiveness of online interaction. Another benefit may be the creation of

tools for more effectively choosing which technology would most encourage active learning within the hybrid format. By not joining in the already rich and complex research occurring on the topic of presence, C&W scholars are not benefiting from the potential insight offered by presence which may offer insight into why there is so much conflicting evidence regarding the effectiveness of online interaction. In addition, with the introduction of the hybrid classroom, the C&W community will face continued questions about how to create and implement effective composition pedagogy.

One example of a vein in which ISPR scholarship may be helpful is work by C&W scholars such as Chelley Vician and Susan Brown who stress the need to study the context for communications within the hybrid composition classroom. They conclude from their study of technology-enhanced interaction within the writing classroom "that individual and task characteristics might interact to influence interaction, usage processes, and student outcomes" (225). This raises essential issues for considering what effect technological mediation is going to have on student outcomes. Studies such as those by Rourke et al. offer tools for measuring and analyzing social interaction and the ways in which technology was designed to sustain or limit it. If the psychological state and subjective perception of students has become an issue for researchers such as Vician and Brown, then cognitive and technical tools are needed to continue this work. Vician and Brown observe that there are many questions "about the extent to which social interaction and relationship building can occur within a learning process dependent upon computer-based communication tools" (225). Without considering the implications of the scholarship focused on cognitive presence online C&W scholarship may use vital time exploring it and still not expand the community's understandings in meaningful

ways. If that occurs, then the fear expressed by Hawisher et al. and the other authors of the historical narratives I considered (within Chapter 3) may leave our nightmares and enter our classrooms. That is, C&W scholars may be pushed aside while others determine the direction and ultimate fate of composition courses.

The Potential of Social Presence Theory

Social presence theory offers one possibility for effectively addressing the hybrid classroom because it is specifically focused on how technology disrupts or facilitates interaction and it addresses how tasks are completed and to what extent participants are engaged during the task. As hybrids become the next logical step in the maturation of C&W classrooms, social presence theory offers a lens through which to view what is occurring within these courses and how well pedagogical choices are matching the technology. According to Lombard and Ditton, studying "the extent to which a medium is perceived as sociable, warm, sensitive, personal or intimate when it is used to interact with other people" may be useful in understanding how to enhance collaboration or making online chat forums the *safe space* touted in composition literature as a necessity for productive class sessions (website). Social presence theory addresses how the match between communication media and organizational tasks affects efficiency and user satisfaction, and is specifically focused on the role of choice of media in online interaction, the completion of tasks that involve online collaboration and the extent to which participants are engaged during the task. Most commonly used by scholars in the communications department, this theory is valuable for the study of how individuals perceive interaction mediated by computers and the effect it has on the task at hand whether it involves simple chatting about life or collaborating on a school project.

Many studies in educational settings have already demonstrated the value of social presence theory. For example, educational psychologists, Rourke et al., found that social presence theory offered a lens through which they could deep and meaningful learning within a technology-enhanced course. Using Short et al.'s work as a foundation, the researchers modified the theory, altering it to fit an educational situation—as opposed to the business setting originally used. They defined social presence as "the ability of learners to project themselves socially and effectively into a community of inquiry," (Website). In order to use social presence theory more effectively within C&W, I also altered Short et al.'s definition to create the term offered in the initial pages of this project: TEP (Technologically-Enhanced Presence"). This term could potentially be used as an umbrella for research aimed to understand and improve online interaction. Based upon the research completed within this project, I have defined TEP as the psychological impact felt by an individual while interacting within CMC or other portions of the online writing classroom, which affects his/her willingness and/or ability to pursue actively discussions and other required online events. It presumes technology to be a place in which members of the classroom community may conduct interactions vital to the writing process and the functioning of the writing course in which they are participants. Ultimately, within the hybrid Composition classroom, TEP theory proposes that the ability of individuals to participate actively within all aspects of a particular community of learners is affected by his/her feelings of presence within a particular "place" created within technology for the purpose of working within a learning/writing community. My focus with this term is on the psychological impact felt by an individual while interacting within CMC or other portions of the technology-enhanced writing classroom, which

research demonstrates impacts a student's willingness and/or ability to participate actively in discussions and other required online events. Furthermore, TEP implies a view of technology as *a place* in which members of the classroom community may conduct interactions vital to the writing process and the functioning of the writing course in which they are participants.

Questions and Complications

Although creating a theory of presence for the C&W classroom does begin to provide direction for exploring issues, I do not wish to imply that TEP can in and of itself solve the problems of inequity to make the technology-enhanced composition classroom a better place. Many current studies have begun to reveal what Rheingold warned his readers about in the 1980s. Technology is not a panacea for social ills and, in fact, it is not even an escape from them. As Hilligoss contends, using Internet technologies "...does not simply replicate the larger cultural norms, but may in some respects magnify the problem of identity" (33). The significance of proposing TEP is that it highlights again how technology is not a cure- all and that even something as seemingly straightforward as a chatroom has implications for how liberating or equitable the classroom experience can be for participants. This is not meant to be a negative stance but rather yet another acknowledgment that "there's more to computers and writing than meets the eye..." (Blakesley 1). But while it is not a cure-all, TEP offers scaffolding for future research that will meet several needs: support ideals of an active writing classroom, address concerns raised by recent research stating that online interaction affects off-line (which therefore raises the stakes for the writing teacher), and assist in supporting the "democratic" classroom ideal.

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There also is more to "presence" than meets the eye and TEP theory as proposed here raises many questions itself. Among those questions is how the C&W community can effectively study TEP. Scholars in the social sciences and in technology-oriented disciplines have spent almost as much time researching how to effectively study conceptualizations of presence as they have actually studying the phenomenon (see Lombard and Ditton, Short, Williams and Christie and Heeter). In Rourke et al.'s research of how to assess social presence in asynchronous classroom communication, the authors state that further study must be done to ensure that methodologies and measurements of presence are appropriate to the goals of a scholarly study. They add that terminology must be verified so that what one researcher labels as social presence is understood and comparable to another. That is precisely why I have defined TEP and believe that it may offer at least initial terminology for the C&W community.

Making decisions about how to study presence will not be easy, however. In fact, the ISPR website urges researchers to present clearly a definition for their terminology within the early stages of a study. It also states that certain standards should be set for what assumptions are appropriate (such as in the definition of terminology) and which are not so that scholars can better draw upon one another's work. Drawing upon the ISPR's body of work will greatly benefit the C&W community and it has at least one very clear motivation for that: the C&W classroom agenda to develop a view of how to create a just, equitable classroom (Hawisher et al. 2).

Defining and creating tools for understanding presence will open the door for understanding many of the complexities of the subject that C&W scholars will need to address. One of these is creating an appropriate level of presence because merely

attempting to create a sense of presence may not be enough. Rourke et al. proposed that there can be such a thing as too much presence making a classroom discussion appear more like a bar room chat and thus potentially counterproductive to pedagogical goals:

> Although we postulate that fairly high levels of social presence are necessary to support the development of deep and meaningful learning, we expect that there is an optimal level above which too much social presence may be detrimental to learning. Discourse in a community of inquiry is not equivalent to social interaction over the garden fence or the bar at a neighborhood pub. (Rourke et al. website)

Appropriate levels have already been a concern for the C&W community because of it's focus on classroom experience in which all students find a space in which they feel comfortable speaking and expressing themselves. There is a general theme within C&W literature of an online classroom in which there is a true democratic atmosphere that encourages all races and genders to become appropriately present within the class. This means active enough to speak and challenge ideas but not the overbearing bully. The optimal class, therefore, appears to be the community of writers within the classroom to interact as presumably "working writers" who brainstorm together, comment on drafts, and become audience for the work produced. The C&W community obviously values active learning (another benefit supported by hybrid courses) which produces "authentic" writing situations in which students are expanding their thinking and writing and not merely pumping out a meaningless 5-paragraph theme. This reliance on interaction to achieve pedagogical goals and the increased use of technology is what makes

conceptualizations of presence (such as TEP) significant factors in the future of the C&W community's attempt to create better classrooms.

Another issue that will certainly need to be addressed is how TEP may relate to the actual classroom. How exactly does an instructor create a sense of presence that is enough to support pedagogical goals but yet does not go the extremes cited by Rourke et al.? There is no simple answer to this question and, in fact, this query requires future research. The purpose of this current project was to present TEP, begin the conversation and with that conversation create awareness. The first step is to be aware of the social and psychological implications of moving writing theory online and to monitor how a course is progressing. The metaphor offered by Doug Eyman in his article "Rethinking the Academy" seems appropriate here. Eyman proposes that just as the technology of the pencil was once strange and formidable so today's technologies may appear at first. But just because educators do not yet know what to do with "an unsharpened pencil" does not mean that it cannot become useful and less formidable if the user is committed to the task (Website). Understanding TEP may assist educators in making this decision, but that does not make it appear any less daunting at the outset. And one glaring problem with helping writing teachers learn to use "the unsharpened pencil" of CMC technologies is that of making theory accessible and useful for a community still unable to come to terms with its own underclass of part-time instructors.

There are also concerns on a larger scale beyond the writing classroom because in some respects the same traits that make hybrids and TEP theory appealing also make them troublesome. For while the hybrid does offer many advantages Eyman makes some very strong points about some of the serious implications that need to be considered when

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using educational technology. Although he is not addressing hybrids specifically, his concerns are applicable to the hybrid. Eyman contends that since technology offers to lower university costs (in the hybrid, for example, class space is needed for less time) the financial bottom line can easily become more appealing than the educational bottom line. Among the concerns that should be considered are the larger class sizes made possible by integrating technology, access issues both for students and for faculty, and the potential increase in the Composition Studies underclass. Larger class size brings into question problems with the quality of education. Students may be gaining greater access to course materials but lesser to actual teaching or direct attention from the instructor, who herself may be overwhelmed with the workload. Access issues for students have been brought up by a number of C&W scholars, however, attention also needs to be given to faculty who may be expected to supply their own support technology (software, computers, printers) in order to teach a class effectively. And the issue of the underclass becomes glaringly apparent as companies such as eCollege hire faculty for one or two courses here or there without offering full-time benefits. The underclass may also be affected by the previously mentioned concern of access to technology, where those without the financial resources may be overlooked for teaching positions because they cannot provide either the technology itself or simply lack experience and knowledge of technology.

These complexities bring to light three additional concerns: technological determinism, the need for greater faculty training, and the active role writing instructors must have in shaping technology. Technology cannot be seen as an agent acting upon us for the good of society. Researchers on issues of presence (both by the C&W community and the ISPR) are now concluding the need for looking at how individuals fit with

technology and how there is no "one size fits all" or single simple solution to the

problems faced by minorities, women and ESL students. Ultimately, whether or not the

C&W community can even begin to fulfill its agenda, it must be done with an awareness

of technological determinism and an equal determination on the part of writing teachers

not to succumb to it. Technological determinism can be hard to overcome without the

proper training of faculty, and certainly ways to address technological developments in

general require adequate education of teachers as well. For technology to be effective

there must be training at all levels (with special consideration of the Composition

underclass who may or may not have the resources for further professional development)

or else there will be no point to TEP research (after all, if TEP complicates the idea of the

democratic classroom being a straightforward result of integrating technology, instructors

will need to consider how to address this within their classroom practices). And finally,

presence research further points to the need for the C&W community to be active in the

construction of the technological horizon that lies ahead. From Selfe to Kemp to

Dowling to Rheingold warning has been issued many times in many ways. The C&W

community cannot afford to let others lead the way because lead the way they will.

Policies and standards are being set, things that will change the educational scene forever

altering what it means to learn, teach and thrive within the intellectual borders of the

university. The C&W community cannot continue its pattern of ill-defining the students'

relation to technologies and that is yet another reason why research to between

understand conceptualizations of presence such as TEP is so vital. Presence is being

studied in many places and educational uses of VR are not far behind. As technology

continues to evolve, educational technology may soon find an even more urgent call for

presence research. The C&W community has a unique opportunity to do so now while the body of presence research for educational purposes is still relatively young.

Future Research

One of the most obvious areas for future research was mentioned briefly above, and that is translating presence research into something that can truly improve the C&W classroom. Simply knowing that what occurs online affects what goes on off-line or that TEP (or some other formation of presence theory) may assist in creating a more consistently effective online environment for writing pedagogy will not be enough if there is no action to implement theory. This will require further study, which will be assisted greatly by consensus as to a general framework for TEP (i.e. shared meanings and methodologies within the C&W community) and an interdisciplinary approach that will make use of what is occurring within other fields. Some answers for the C&W community may be available in the more immediate future through live-subject research, while others may development in conjunction with growth in educational technology. Just as Carino concluded that advances in technology impacted writing theory and that writing theory at times impacted technological developments, so the development of TEP within the C&W community may one day be seen as both.

In addition, TEP soon may be very relevant to exploiting technology that has not yet been integrated into the composition classroom but holds great potential for it. In the concluding section of their historical narrative, Hawisher, et al. project that future developments may include new processors which could "supply the power required to run programs that include sound and video files and should make possible desktop implementation of 3-D interfaces and virtual reality" (228). VR technology may soon

enter the classroom on a large scale because even though the C&W community has not

made much use of them, VR environments have been employed for education for many

years. Researchers (for example Heeter) are creating large bodies of research on how VR

technology may apply to educational environments, and the fact that today's students are

involved with VR games both on their computers and within arcades, means that there

are many opportunities for students to become deeply immersed within simulated worlds

long before entering a single C&W course. Online games available on the Internet

already include a vast selection of simulation learning games in use at all levels. They

offer students the opportunity to do everything from "shopping" at a mall while

developing math skills, to building a house while developing design and geometry skills,

to "interviewing" at a virtual placement office while developing job hunting skills. Each

of these activities already occur with students interacting with both real humans and

computer-generated humans alike. Composition Studies may not have reached this point

yet, but judging by the growing interest in C&W can it be very far into the future?

The fact that students are already involved with VR environments also

demonstrates that corporate America, as well as popular society, is already seeing uses

that will soon be offered to the educational community. In the C&W community's

efforts to create better classrooms, understanding these new interfaces will be a

worthwhile venture. For as Turkle argues, today's students exist in a world far different

than the ones from which their teachers came and, therefore, there is an even greater need

to understand presence as a way to adapt pedagogy for new generation, one whose

definitions of what knowledge is and how it is made differs greatly from previous

generations. Students who have grown up with technology are its true citizens while we,

the educators who typed our theses on electric typewriters, are "at best the naturalized citizens" (Turkle, *Life*, 77).

Other areas for future research will of course include studies such as Rourke et al.'s that will test the reliability of tools C&W community members may employ to further assess appropriate levels of presence. And of course, there will be a need to continue examining in what ways online and off-line interactions affect one another and what effect this has on composition pedagogy. Having studied off-line interactions for my master's thesis and within this project created a preliminary theory for technology-enhanced presence, my next project will be to conduct a live subject study of interactions within the hybrid against the backdrop of TEP theory.

The Contribution of Computers and Writing

Throughout this project I have mentioned several times that the C&W community also has something to contribute to the ISPR and I cannot conclude this project without commenting one more time. Composition Studies is a discipline devoted to questions of presence, although not necessarily from a social science point of view. There is much that can be contributed by scholars interested in the writing classroom who have researched and debated the implications of Pratt's contact zones or Fish's discourse communities. C&W scholars who have been a part of these debates have a substantial amount of knowledge to offer. This contribution combined with the discipline specific context in which to explore presence (as currently studied by the ISPR from a social science perspective) makes the intersection of these bodies of scholarship a major benefit for technology-enhanced learning.

Concluding Thoughts

Throughout the course of this project I have worked from the major journals (*Kairos* and *Computers and Composition*), the main C&W conference programs and presentations, and *Computers and the Teaching of Writing in American Higher Education, 1979-1994: A History*, the most comprehensive history at this time to focus a dialogue on the connection between presence theory and the C&W community. In order to examine this connection, part of my study has focused on shifts in views noted within these sources that demonstrated a changing view of technology from one of educational tool to venue. However, just as North contends in his discussion of changes with Composition Studies that the concept of a paradigmatic structure within a discipline is a flawed concept and whether or not paradigm shifts even actually exist outside of the narratives of the discipline is a significant question. North contends that discussions of paradigm shifts assume that Composition Studies has had a paradigmatic structure, which would imply that there have been unified responses by members of the discipline to the complex issues that have arisen during its development. He contends, however, that internal changes in Composition are not a unified response to a shared paradigmatic problem, but represents the struggles and conflicts of a growing discipline (321). I have offered a possible narrative that reflects a similar situation. By considering the stories told within the sources upon which I have relied, I have chosen artifacts which I believe reflect major streams of thought within the community, but by no means does this represent a *unified* response. The C&W community represents many voices and many stories. As scholars attempt to tell these stories one must always be conscious of the fragmented nature of what has occurred and what continues to occur at the many levels of

the computers and writing community all the way from the classrooms—which in and of themselves are multi-leveled due to the wide range of teachers that includes graduate students, adjuncts many of whom are not composition specialists, and tenured faculty for whom composition is a major focus.

Cyberspace has become the classroom of the new millennium, first informally as classmates conversed via e-mail, and then formally as instructors made online interaction part of the syllabus. However, research demonstrates that simply combining social theories of writing with a socially constructed technology is not a straightforward proposition. While networked technology may accommodate social writing theories they may not always facilitate them and instructors cannot necessarily assume that their pedagogical goals will be fulfilled to the extent to which they had hoped. The goal of this project has been to propose that the body of research focused on cognitive and technological presence would be effective for addressing this complexity and perhaps create new avenues for future research. Therefore, within the very first chapter of this project I proposed a definition for technology-enhanced presence, which would be appropriate for beginning the discussion of this possibility. My definition, much like the 12-point explication statement offered by members of the ISPR, is intended to be a starting place. While I would argue that TEP, as presented within this project, holds great potential for helping the C&W community fulfill an agenda of developing "a view of how computers could help writing teachers move toward better, more just, more equitable classrooms" (Hawisher et al. 2), there is much more work to be done as studies clarify and expand what this means for the C&W community.

In the program for the 2003 Computers and Writing conference, event chair

David Blakesley explained that the theme, "Discovering Digital Dimensions," arose from

the "sense that there's more to computers and writing than meets the eye, that we've only

now learned to appreciate the depth, range and scope of the significant developments in

the field over the past twenty years…"(1). My project has arisen from a similar

realization, a sense that there are many layers to the relationship between computers and

writing, the majority of which have yet to be discovered. Discussions among

composition theorists wondering whether computers *could* play a role in the writing

classroom have evolved into conferences, journals, and dissertations leading to even

more discussions of whether or not technology *would* lead to large scale reform in the

discipline (Dowling 234). Visions of improved classrooms have become clouded by

questions and complexities as the shape of the technology-enhanced classroom has

evolved from word processors as fancy typewriters to Internet chat rooms as course

venues. Technology, as Bolter and Grusin observe, is "proliferating faster

than…cultural, legal, or educational institutions can keep up" (5), which leaves little time

to appreciate fully "the depth, range and scope" of significant developments. And these

developments have been many. But while Blakesley may declare that the members of the

field have "only now learned" his statement may be more accurate if the word "begun" is

included. With such a complex history behind computers and writing, members of this

community *have only begun* to learn to appreciate what has transpired and what is

continuing to rapidly unfold as the walls in the brick and mortar classroom crumble.

When C&W educators revel in this incredible feat they must not forget that when this

happens "[i]*n a very real sense, there is no college; there is only the student, the*

computer, and the information and communication that comes" **from them** (Randall and

Pedersen Website).

APPENDICES

APPENDIX A

FNC Resolution:

Definition of "Internet"

10/24/95

On October 24, 1995, the FNC unanimously passed a resolution defining the term *Internet*. This definition was developed in consultation with the leadership of the Internet and Intellectual Property Rights (IPR) Communities.

RESOLUTION:

"The Federal Networking Council (FNC) agrees that the following language reflects our definition of the term "Internet".
"Internet" refers to the global information system that --

(i) is logically linked together by a globally unique address space based on the Internet Protocol (IP) or its subsequent extensions/follow-ons;

(ii) is able to support communications using the Transmission Control Protocol/Internet Protocol (TCP/IP) suite or its subsequent extensions/follow-ons, and/or other IP-compatible protocols; and

(iii) provides, uses or makes accessible, either publicly or privately, high level services layered on the communications and related infrastructure described herein."

Last modified on October 30, 1995

http://www.itrd.gov/fnc/Internet_res.html

APPENDIX B

ISPR Conference Topics

Presence 1998

Topics of PRESENCE 1998 include, but are not limited to:
- presence in shared virtual environments and virtual togetherness
- coupling real and virtual environments
- presence in CVEs as extelligence: vituality and collectivity
- presence in virtual theatre
- a general theory on presence
- peer collaboration and virtual environments
- collaborative decision making
- the influence of haptic communication on the sense of being together
- combining qualitative and quantitative methods in the study of presence
- the experience of presence in shared environments
- gestures for social communication in virtual environments

Presence 1999

Topics of PRESENCE 1999 include, but are not limited to:
- the concept of presence
- state-of-the-art of current research
- shared presence in virtual environments
- measurement methodologies
- applications - Virtual Reality, Immersive TV, Broadcast

Presence 2000

Topics of PRESENCE 2000 include, but are not limited to:
- the concept of presence: causes and effects
- copresence in shared VEs and online communities
- presence evaluation/measurement methodologies
- presence-associated technologies:
- social/affective interfaces, virtual agents, parasocial interactions
- applications such as:
- presence & design
- state-of-the-art of current research
- philosophical issues - nature of reality

Presence 2001

Topics of PRESENCE 2001 include, but are not limited to:
- the concept of presence
- state-of-the-art of current research
- shared presence in virtual environments
- measurement methodologies
- applications - Virtual Reality, Immersive TV, Broadcast

Presence 2002

Topics of PRESENCE 2002 include, but are not limited to:
- presence as performance
- cultural engagement in virtual environments
- togetherness through virtual worlds
- co-presence and interaction
- a cultural approach to presence
- presence in hybrid environments

Presence 2003

Topics of PRESENCE 2003 include, but are not limited to:
- immersion and presence
- trade-offs between presence and co-presence
- facilitating the presence of users and 3-D models
- when real seems mediated: anti-presence
- a psychological approach to presence

Presence 2004 (not occurring as of the completion of this project)

"The goal of the PRESENCE 2004 conference is to bring together academic researchers

in the area of media and presence, content and technology developers, and interested

commercial parties so they can meet, share experiences, present research, and exchange

ideas." (http://www.ispr.info/)

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