

Chapter 1 - Introduction

Identification of problem and central question

DigitalEve is an international organization dedicated to women's networking and advocacy in the field of information technology (IT) work.¹ Its members are female workers who work professionally or semiprofessionally in the field of IT, such as web designers, "new media" artists, programmers, network engineers, and software developers.² While the organization is an international, primarily virtual, organization with global online forums, it has local chapters which serve the needs of members in particular regions.³ This text is, in part, a case study of the Toronto chapter of DigitalEve in its present context, as an organization for women's advocacy, activism, and networking within the information technology field. I explore DigitalEve both as a concrete organization with a very specific member base, and as a model for women's organizing in an arena which is doubly "nontraditional" for women: the focus is professional or semiprofessional IT work, and the group operates primarily as a virtual, or online, organization. I do this through observation of their literature, online discussions, and in-person meetings, and through interviews with a more limited group of over fifty DigitalEve members. In the course of this examination, I draw together three themes: women and technology, women and work, and women organizing. DigitalEve serves as a

¹ The main website for DigitalEve can be found at <http://www.digitaleve.com/>. The Toronto chapter's website can be found at <http://www.digitalevetoronto.com/>.

² A small percentage of members are women who have an interest in IT, but may not necessarily be working directly in the field. Some are students in IT-related fields, while others are in non-IT fields, but are frequent users of IT.

³ At time of writing, DE had chapters all over North America, as well as in the UK, Israel, and Japan. The Toronto chapter was the largest, with around 4000 members on the mailing list.

lens which focuses this thematic discussion on a particular population of women, namely, professional or semiprofessional IT workers in Toronto who are members of the organization. I explore the experiences of female information technology professionals, both as they understand them personally and as their experiences intersect with common themes in the literature, and how these experiences shape their participation in an organization dedicated to their IT work. My central thesis, put simply, is that these experiences shape the organization.

Given that an organization is built on the values, practices, and strategic interests of its members, DigitalEve, as an organization, reflects the unique experiences and concerns of female IT workers. In this study, I examine what these experiences and central concerns are, and how they are incorporated into DigitalEve's values, structure and strategy. The women of DigitalEve are part of this organization primarily to improve the quality of their professional lives (and to a lesser degree their personal lives), and this "quality" is defined in terms of their role as female IT workers. What kind of quality of workplace life do these women seek, and how do they feel is the best way to achieve it? What organizational structure and strategy is optimal for these women, and why? How do they understand their work and their relationship to the organization of which they are part? How do the organization's structure, ideologies, and strategic practices reflect the concerns of its members, and what advantages/limitations occur because of these configurations? How are these concerns derived from members' material conditions, gender, race, and work/class experiences (both in an individual and structural sense), and from their personal ideologies?

My contention is that women's experiences in the context of semiprofessional or professional IT work will have particular elements which inform DigitalEve's ideologies and practices. In other words, what these women IT workers are doing, and how they understand what they are doing, will to some degree influence the way they organize around these work practices in the form of DigitalEve. This type of specificity and awareness of the interplay between structural and individual factors is not always reflected in theoretical material about women's relationship with technology, work, and organizations. The elements which shape women's experiences are not straightforward nor ubiquitous; the relationship between experience, structural factors, and worldview is often muddy. Indeed, it is precisely this *lack* of clear causal relationships which encourages me to interrogate some of the issues raised in the literature. The current literature, which I explore in subsequent chapters, does not adequately reflect both the positive experiences of women IT workers, particularly those for whom IT work is a lucrative, creative, and fulfilling field, nor their lived tensions and contradictions. The positive factors which attract women to this field of work, and from which they derive personal and professional satisfaction and empowerment, have been undertheorized. However, the structural relations of power and privilege which shape women's experiences in the workplace in general are, indeed, quite well represented in the literature. Thus, this study provides a fortuitous conjunction of what is already known about women workers, and what remains to be understood.

For women, the positive features of IT work are juxtaposed with the ongoing challenges of a labour market which continues to be organized by gender, race, sexuality,

age, et al. As a result, women workers in the IT field will indeed experience a series of tensions and contradictions, which will affect both their experiences as workers, and as members of a women's activist and networking organization. These tensions and contradictions will be derived from their situation within a certain work/gender/industry configuration (in that the women will both experience distinct differences from as well as share concerns with other women workers), and they will also be reflected in the structure, ideology(ies) and practices of DigitalEve. The experiences—positive, equivocal, and negative—of these women will form the primary data of this study, and they will be framed in the larger context of the literature on women and technology, women's work practices, and women organizing.

DigitalEve challenges and contradicts the relevant literature in some ways, but in other ways reflects the enduring prevalence of structural factors influencing women's work and organization. As an international organization which operates primarily virtually, DigitalEve is freed from many of the day-to-day problems which plague other women's organizations. However, its situation within corporate IT practices, its struggle to define a mandate, and its rapid growth highlight many of the same concerns experienced by women's organizations in general. The virtual structure raises questions about the viability of policing gender boundaries, and the availability (or not) of the technology can create concerns about access for women without economic or educational means. These and other questions about the potential advantages and limitations of DigitalEve's values, structure, and strategy inform are raised in the dissertation.

I propose some connections between these women and their organization. However, the diversity of the women themselves, as well as the apparent contradictions in the organization, indicate clearly that the process by which women identify their central concerns, then organize around them, is multifactorial. Thus, while I suggest a strong relationship between the experiences of the women of DigitalEve and their choices in how they organize around their position as women IT workers, I also suggest a caveat. Simplistic interpretations of female behaviour in all three areas—technology, work, and organization—are theoretically inadequate for understanding the complex and dynamic relationships between these multiple elements. Many analyses which I take up in the literature review section have made this error. An analysis such as this must be based in both theory and practice (if indeed the two can be said to be distinct), and an investigation of concrete material conditions. I must begin from an observation of what work these women are doing, how they are doing it, and why, before I am able to move to suggesting some links between their experiences in the IT workforce and their needs and concerns in DigitalEve. Like the World Wide Web which is connected at infinite points by nodes of intersection, women's experiences are reflective of a web of multiple factors which shape their lives.

Outline of study

This study is intended to be a “snapshot” of the current concerns occupying a particular population of women workers who belong to this organization. The term “case study” best describes my approach to this material, as it involves an examination of the central issues which are germane to a very specific group of women in a Canadian urban

centre at a given point in time. Although I do not intend to study development over time, I will contextualize this study in a brief history of this organization. Ideally, this research will result in both a general contribution to gender and technology studies as well as a more particular account of women's activism and work within a specific context.

This research has several components. First, and simplest, to provide the reader with some foundational knowledge about the three central bodies of literature upon which I draw: women and technology, women and work, and women in organizations. Because of the expansiveness and scope of this study (at least of the literature base), it will be necessary to acquaint the reader with a diverse body of material. I have divided the literature review into three chapters, which build on one another. For each of the three areas, I outline some of the central debates found in the related literature and identify the relevant concepts. This literature is not meant to be partitioned neatly into three separate areas; rather I intend to "layer" the themes raised in each canon and indicate their intersections as well as the way in which one supports the others. The fundamental layer of women and technology use provides the conceptual basis for understanding women's work in a so-called "nontraditional field", which in turn helps us to understand women's concomitant organization around issues of the IT workplace. Chapter Two begins with a discussion of women and technology, problematizing the often simplified category of technology, distinguishing three gender-and-technology models in the literature, with an eventual discussion of feminist responses to technology, and presenting the theoretical framework used. Chapter Three identifies some general themes in the literature on women and work, such as the double day, salary disparity, and gendered definitions of

skill, and combines these with specific concerns intrinsic to women's IT work. Chapter Four presents an overview of the literature on women in organizations, particularly in feminist and non-profit organizations, and then explores the process of organizational formation as it pertains to women IT workers, especially the issues raised by organizing virtually.

Second, I apply the themes in the literature to the primary interview data, "testing" some of the assertions in the literature against the experiences of the respondents studied. I identify some points of disjuncture, as well as some recurrent commonalities. Chapter Five outlines my methodology and data collection process, and gives some background information about the population studied. Chapter Six examines the experiences of the membership with technology, from first realizing a love for the field, to developing a "technology of their own". In this chapter, I challenge some of the notions about a singular "genderandtechnology" experience. Chapter Seven takes up the themes in the literature on women and work raised in Chapter Three, as well as the experiences of the women in Chapter Six, to investigate the experiences of the membership as women workers in information technology. Chapter Eight engages with the material in Chapter Four through Six, and explores the specific case of Webgrrls/DigitalEve as an organization which both challenges and reinforces the arguments made in the literature on women's organizing. It is here that I begin to make the case for the organization representing the unique concerns and needs of its constituents.

Third, I synthesize the material from Chapters Two and Eight to show how many of the themes raised in both literature and primary data re-emerge at a particular point in the organization's history. During this research, a series of events precipitated a shift in the organization, and Webgrrls became DigitalEve. I use this change as evidence for my assertion that the organization reflects the concerns and needs of the members, as an example of some of the tensions and contradictions which are inherent to IT work and organization, and as an opportunity to discuss in greater detail the structure and practice of the organization. I discuss this transformation and its implications for current and future organizational practice in Chapter Nine.

Finally, I conclude in Chapter Ten with some evaluation of how well this study succeeded in representing the complex relationship between the organization and its members. I reiterate the themes and central questions raised in the dissertation, suggest some new directions for research on virtual organizations, and speculate about the future challenges for the organization.

Notes on style

This work uses two main sources of information: literature and interviews. Where texts are quoted, they are indicated by either bracketing in quotation marks with a footnote (if they are short), or by indented, single-spaced text, also with a footnote. Where interview transcripts are used, they are also bracketed in quotation marks (again, if they are short enough); if they are longer quotes, and most of them are, they are single

spaced *without* indentation, to distinguish them from text quotes.⁴ Unlike text quotes, transcript quotes are not footnoted, but are rather assigned only a number to indicate the speaker. A complete list of the interview subjects (by number, not name) is found in Appendix A. Because of the sensitivity of some of the interview material, and because of the promised confidentiality of the interview protocol, I do not name subjects unless they have given their explicit consent. Most subjects have been assigned a number only, notated as, for example, "S14". I have also incorporated occasional quotations from the e-mail lists of DigitalEve; in this case, I also do not specify the poster's name, but provide the date of the posting.

The reader may be surprised at the length of some of the interview transcript sections. I have deliberately provided lengthy excerpts from my interviews because I feel that the words of the subjects should, to some degree, be allowed to speak for themselves. Many of the speakers were more eloquent, evocative, and incisive than I could have been, and I feel that representing their speech thus provides the reader with both a sense of "being there" to participate in the interview, and a glimpse of the various personalities which emerged in personal interaction. The former point of interview participation is also significant because, as I indicate in my discussion of methodology, reader, interviewer and speaker work together to mutually create knowledge. I, as the researcher, am not "discovering" or "mining" the information that my subjects hold; rather the two of us together (three, if the reader is included) develop knowledge in the course of our relational interaction. Thus, the reader is encouraged to likewise participate in this

⁴ I realize that this is a break from stylistic convention, but I deliberately chose to do this in order to make a

construction of knowledge through reading the "primary text" of the interview transcripts. Of course, I will not pretend that transcripts represent the unadulterated truth; everything from the questions I asked in the original interview to the words I chose to include reflects my own agenda; however I hope that in some small part, the reader will feel that s/he also has engaged with the subjects of my interviews.

The reader may notice, with some confusion, that the terms "Webgrrls" and "DigitalEve" often appear to be used interchangeably. The title of this text, From Webgrrls to DigitalEve, refers to the transition of this women's technology organization from one to the other, and the resulting effects on values, structure, and strategy. Toronto Webgrrls (TWG) was originally part of Webgrrls International (WGI), and in the fall of 2001, became DigitalEve Toronto (DET), part of DigitalEve International (DEI). I describe this process fully in Chapter Nine; I chose to leave a discussion of this transition until the end of the dissertation, so that the reader could identify several of the relevant themes that I have raised throughout the text. The process of switching from TWG/WGI to DET/DEI serves as a symbolic and real crisis in the development of the organization, and the resulting discourse and practice around this event illustrates some of the central tropes found both in the literature and member experiences. However, for the purposes of most of the text, it is appropriate to use the terms Webgrrls and DigitalEve together, as much of the research was conducted when the organization was referred to as TWG; thus it appears as such in many interview transcripts.

clear distinction between interview data and written text.

