Designing Technologies for Empathic Communication

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Designing Technologies for Empathic Communication

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Abstract

If you have ever used your phone while on a date to send a text message, or snapped a picture with a friend to upload to Facebook, or cut a sentence down to 140 characters to broadcast on Twitter, you may agree with some leading Social Scientists that technology is changing the way we relate with one another. Our interactions through technology seem to be getting increasingly short with less sophisticated language. More and more, our thoughts are broadcast to everyone instead of intended for someone special. Yet, there is something profoundly human and central to our development that is neglected in these interchanges. Close human relationships—with families, significant others, friends—need complex, intimate, ongoing conversations in order to create and maintain empathic connectivity. In these types of conversations, individuals become part of one another, defined by each other. Together, they change, they grow, they find meaning in life. This is, in essence, what I call Empathic Communication.

Until now, this concern has been largely neglected in the field of Human-Computer Interaction, a community of researchers and technology designers who are arguably best positioned to address it. To suggest one path forward, in this dissertation I raise the question of whether computer technologies can become brokers of Empathic Communication between people who care about each other, with a specific focus on intimate partners. How can we conceptualize Empathic Communication, how can we build tools that support it, and how do we know if we have succeeded?
I address these questions by creating a simplified model of the therapeutic process of intimate reconnection, or the 4Rs framework—Repattern, Reflect, Restory, Reconnect. Using the 4Rs framework as an ideation tool, I designed and field-tested a technology concept for a dyadic journaling application, Diary Built for Two, that might help romantic partners reconnect through deep communication. Using the 4Rs framework as an evaluation tool, I found that Diary Built for Two enabled more intimate, more thoughtful, more Empathic Communication that changed the way partners saw themselves, one another, and their relationship.

Unexpectedly, I found that research interviews I conducted with intimate partners had the same type of therapeutic effect. Simply asking partners questions about their relationship caused them to reflect on and change their understandings of their relationship and each other.

To guide other researchers and designers of Empathic Communication Technologies (ECTs), I present a set of specific outcomes of my study. First, I present Symmetric and Asymmetric interface profiles, which identify new human-technology configurations that may better support deep communication—for example, having one shared device between two people, as opposed to one separate device for each. I also share some of the ways in which research interviews may positively and negatively affect study participants towards reconsidering current informed consent practices. Both of these findings showcase the utility of selectively conceptualizing our technology designs as well as our research methods as therapeutic interventions; when we apply the “therapy” metaphor, new design and research opportunities become apparent.
Acknowledgements

When I first embarked on my graduate studies, I thought that earning a PhD was a matter of writing this document, of generating a corpus of research. In recent years, however, I have come to believe that earning a PhD is a process of developing a more thoughtful, moral researcher and social actor. This has been a human process more than an instrumental one. For all of my progress, I am indebted to mentors, friends, and family; for all the learning to come, I look to them still:

My parents, Lynn and Bruce. I am here because of them, in so many ways. My mother taught me anything I know about kindness and generosity and personal sacrifice. When I was a little girl, if I got sick in the night, she would wake and care for me until dawn. In later years, she drove me to swim practice at 4:00 every morning, waiting alone in the car until it was time to take me to school. It was hard to discern then that these were not things that mothers do; these were things that compassionate people do.

My father taught me to struggle, to strive for ideals, to leave a place improved. As a little girl, I liked to help him in his workshop, sweeping up sawdust. He taught me that even in this job there should be pride and skill. At a high school swim meet, after slashing two seconds off my personal best 100-yard backstroke record, he congratulated me, and then quickly turned to coaching me on strategies for improvement. His voice and his drive are in me always.

My older sister, Kelly. She is my truest complement. As a girl, she was resolute, tenacious, downright stubborn. I was timid and malleable and tractable. As we grew older, we learned from each other and moved closer to the center. We have disagreed deeply about everything from religion to politics to moral philosophy. But, we have always been in meaningful conversation, and for that I am truly grateful. Because of Kelly, I am closer to those with whom I disagree; I am more understanding, respectful, and humble than I could be on my own.
Laurian Vega, the women of the Association for Women in Computing at Virginia Tech, and the Grace Hopper Conference. Without these inspirational women, I never would have found my way into or out of graduate school.

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Jason Chong Lee, my life partner. In our early days as lab mates, Jason was the highlight of coming into the office, a reason to laugh and smile at work. Over the years, he has become my intellectual and emotional other, an extension of myself. Our deep discussions about positivist versus interpretivist approaches to research have added complexity to my understanding of science and epistemology. His willingness to read drafts of my writing and be a sounding board as I worked through argument structures has greatly improved my work. And, his support through the ups and downs of the graduate journey is the reason for my success. I cannot imagine coming to this place without his unwavering encouragement, humor, and love.

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Promita Chakraborty. My first, fondest, most vivid memory of Promita recounts a graduate student social gathering. With her characteristic smile and energy, she demanded the floor by standing atop a chair and giving an impromptu speech. At the end, she challenged us to “dig deep, ask yourself why you are here in graduate school and how you plan to change the
world.” She had us each publicly declare our passions and goals in turn. Genuine, hopeful, kind, knowing, creative, driven—she is all these things. She has been and remains an outstanding source of inspiration and a model for how to live.

Steve Harrison, my advisor. When I first joined Steve’s research lab, he observed that I was “one of those rare students who exhibits ‘intellectual curiosity.’” And, he fostered that curiosity. In a department in which philosophy was often regarded as beside the matter of research, Steve and I spent meeting after meeting taking different philosophical lenses to our work. I rarely left his office without a stack of books and his blessing to take the time to read them. He told me that I had “the soul of a designer,” and so helped me develop a new sense of identity and critical distance from my roots as an engineer and computer scientist. He gave me permission and a long leash to do whatever I imagined, to craft a research project all my own. I am a stronger, more thoughtful, more independent researcher for our collaboration.

Deborah Tatar. I have taken many classes with and participated in countless research dialogues with Deborah that have left profound impressions on my thinking. Perhaps the earliest and most valuable lesson she taught me was to invite myself and my personal experiences to the knowledge-making table. It is rare to have a conversation with Deborah that does not include a perceptive story about her sons or her day-to-day observations in the service of scholarly arguments. I thank her for her thoughtful and persuasive modes and for empowering me to see myself and my worldview as having something to contribute to research.

My research committee. After my Research Defense, an attendee remarked that it was rare to see such a supportive committee, one that had notably set personal agendas aside. This is absolutely the case. Each member put my education first, selflessly allowing my interests to guide the course and providing helpful suggestions to streamline and strengthen the work. For the countless hours they spent directing their attentions toward my agenda, I am thankful.

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literature. Before having read about Dialogic Space, I experienced it in his office; he always made room for me and my thoughts, offering a compassionate ear and resources to help me get to where I wanted to be. Without any explicit coaching, I think Fred has taught me how to be a better listener, a more supportive conversational partner, a more Empathic Communicator.

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My study participants. There is no data, no dissertation, no learning without participants. The 5 therapists and 20 members of intimate couples that met with me were extremely generous with their time and personal disclosure. It was a true joy, even if a challenge, to come to know them in the process of analysis.

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As I had, no doubt, hundreds of times before, I walked through the door to the characteristic ringing bell of Bollo’s—a quirky, little independent coffee shop in downtown Blacksburg. “Little” is actually a defining quality. The shop is so small, the tables so close, that it is a true cooperative effort just to navigate to one’s seat without spilling coffee. That is part of what I loved about this place; it always seemed to encourage serendipitous conversations with the stranger sitting next to you.

This particular day was no different. Every single table was full. But, I had work to be done, and I decided to take a chance that the gentleman at the table for two wouldn’t mind some company. “Absolutely, it’s so nice to meet you again.” That was a surprise, as I couldn’t remember him at all. “Actually, I had been hoping I would see you here at some point because I’ve wanted to thank you. You really changed my life.” I was flabbergasted. “You’re the graduate student in HCI, right?” A vague recollection set in. It so happened that about a year prior, we had similarly fallen into conversation. He was a graduate student in philosophy, and I loved philosophy. I was a graduate student in Human-Computer Interaction, and he was intrigued. We talked and shared our passions for our respective fields. After all, our conversation had persuaded him to pursue a second masters degree in HCI, and he could not be happier with his decision.

We had another lovely conversation that day, and the fact that I had left such an impression on him, left an impression on me. Funny, I thought, how an unexpected, even unmemorable (to me) exchange could leave someone changed. I had not sought to change him, he had not sought to be changed. And, yet, in the end, we both were.

This dissertation concerns technology, but I begin with a story of people because, between the two, I believe people should always come first. These exchanges were not made possible through a computer, but through space and place and warm talk. In fact, a computer might
only have gotten in the way. My purpose is to explore whether computers can only get in the way, or if they can become meaningful, yet understated participants in our lives. Can computers function more like the tight spaces and implicit communion of Bollo’s, such that they bring us into deeper empathic connection with those in our presence? And, if technology can be therapeutic in this way, will that change how we see ourselves as technology designers and researchers? For my full answer, you will have to read this dissertation. But, for the short, I offer some thoughtful words from Paul C. Rosenblatt:

*I do not think there is a distinct boundary between therapy and most human activities. Almost anything can draw a person out of depression; help a person to reframe experiences; reflect the self back to a person; give a person words for things that could not be conceptualized clearly before; provide healing, soothing, or distraction; give a person a reason to go on; or suggest new meanings for events. Therapeutic benefits may come from cooking, shopping, scraping one’s knee, playing with a puppy, hearing a piece of music, swimming, an overheard conversation, a brief chat, being misunderstood, or almost anything else. That said, a researcher can still have great concern that with people who are hurting, needy, or stuck, he or she might attempt a therapeutic intervention.* (Rosenblatt, 1995)
1 Introduction

Chapter abstract
In this dissertation, I propose a class of technologies for Empathic Communication—slow, built, intimate dialogues that nurture mutual identities and strong-tie relationships. This work offers an alternative amidst the trend toward evermore staccato, disembodied technological messaging. Yet, it is unclear whether technology is inherently distancing in collocated communication; can technology foster interactions that enable us to more deeply connect with each other? In this introductory chapter, I present motivating research questions, my basic approach to addressing them, and the outcomes that contribute to research, design, and the field of Human-Computer Interaction.

Motivation

The connection crisis

Today's adolescents have no less need than those of previous generations to learn empathic skills, to think about their values and identity, and to manage and express feelings. They need time to discover themselves, time to think. But, technology, put in service of always-on communication and telegraphic speed and brevity, has changed the rules of engagement with all of this. When is downtime, when is stillness? (Turkle, 2011)

Empathy is the imaginative process of stepping outside the self to identify with another (Krznaric, 2007). Literally meaning “in-feeling,” it entails unselfish projection into their embodied positions and emotional perspectives. Empathy is how you come to deeply understand others, and in so doing, come to deeply understand yourself. On a mass scale, empathy can push radical, moral social change, like the abolition of slavery or women’s suffrage (Krznaric, 2007). My fascination with empathy in this work, however, is much more local. How can empathy (re)build strong-tie relationships with those who matter most in our everyday lives: our families, our friends, and our romantic partners? How can technology help?
My last question is a controversial one. As important as empathic connection is, empathy is in decline, and by many accounts, technology is culpable. A meta-analysis of 72 studies across the last 30 years reveals a small but significant decline in both Empathic Concern and Perspective Taking among college students, particularly in recent years (Konrath et al., 2011). The number of Americans who reported that there is no one with whom they discuss important matters nearly tripled from 1985 to 2005 (McPherson and Smith-Lovin, 2006). Gardner and Davis (2013) draw from these and other studies to argue that technology is the cause for growing social isolation and empathic disconnect. We are in the midst of a “connection crisis.”

This take on information and communications technology is gaining widespread traction. “Generation Me” (Twenge, 2006), “The Lonely American” (Olds, 2009), and “Alone Together” (Turkle, 2011) are just a few of many works that implicate technology as the seed of increasing individualism, self-importance, loneliness, depression, and the proliferation of “weak-tie” relationships. As with all social dynamics, the phenomena are complex and causal lines are hard to draw with confidence (Matsuba, 2006; Mazalin and Moore, 2004). Even if we understand the role of technology in social behaviors, the ways in which we interpret and respond are deeply entwined in subjective values. There are other perspectives. For example, Klinenberg, author of “Going Solo” (2012), agrees that the American “religion of self-reliance” is made more accessible through technology, but perceives a neutral or positive social shift.

Nevertheless, most researchers agree that our increasingly independent lifestyles are made possible by the uptake of mobile communication technologies. The tradeoff of being always connected is in the quality of connection; mobile talk encourages diminished attention and thinning language. In the words of Sherry Turkle, her emphasis in bold type:

> On our mobile devices, we often talk to each other on the move and with little disposable time—so little, in fact, that we communicate in a new language of abbreviation in which letters stand for words and emoticons for feelings. We don’t ask the open ended “How are you?” Instead, we ask the more limited “Where are you?” and “What’s up?” These are good questions for getting someone’s location and making a simple plan. They are not so good for opening
Email, text messages, Facebook, Twitter, Instagram, WhatsApp, Vine, Snapchat, and more are now the preferred platforms for today’s youth (Bilton, 2013). The trend toward shorter, less textual, more disposable communications is apparent (Sloane, 2013; Palls, 2013; Bilton, 2014). Language is becoming scarce in technological communications.

A core assumption in this research is that language matters; it is consequential. Communicating with words goes far beyond transmission of information. Substantial, personal communication can build empathy (Krznaric, 2007). Put differently, language can change people, molding mutual identities (Penn, 1994; Strong and Paré, 2004). Hence, the connection crisis is not simply a reduced capacity for people to hear and be heard through technology. It is a reshaping of human values, human identity, human intimacy, and human empathy (Turkle, 2011). On a panel about the future of long-form journalism, New Yorker editor David Remnick described the power of language as compared to new media in this way:

> Language is still the greatest invention we have, still the most complex, richest invention we can possibly imagine... and if the story is good enough, if it’s imaginative enough, if it’s moving enough, it is going to reach deeper than just this sheer information and change somebody’s life, to degrees. That is an enormous achievement. (Zilar, 2011)

Long-form journalism has recently enjoyed a resurgence among digital natives (Pew Research Center, 2012). I argue that we need a resurgence of a sort of long-form intimate communication, if you will. We need more Empathic Communication—the slow, deep, built, (inter)personal discourse that can nurture identity and grow strong-tie relationships. Technology currently pulls toward more atomized, abstracted, broadcast, ephemeral transactions. But, can technology encourage more substantial, face-to-face, ongoing dialogue? Is technology part of the solution to technology?

**Seeking technologies for connection in HCI**

Human-Computer Interaction (HCI) has turned energies towards matters of communicating
empathy and intimacy, but not in ways that address the connection crisis head-on. In fact, to an extent, HCI can be considered as part of the problem. HCI has had a long-standing interest in developing more realistic, more socially-integrated agents and robots (Turkle, 2011). We design robots to treat and be treated as humans—as caregivers and companions for our children, our aging population, and ourselves (Turkle, 2011). For Turkle (2011), the acceptance of such relationships is a misguided reaction to the connection crisis and also a contributor to it: “Our willingness to consider their company says a lot about the dissatisfactions we feel in our networked lives today… In the company of the robotic, people are alone, yet feel connected: in solitude, new intimacies.”

There are, however, more promising signs. I see three bodies of research within HCI that are very close to the topics of empathy and intimacy. The first is acceptance of empathy as a means of creating a more fruitful researcher-participant relationship. The second is the focus on technologies for mediating intimacy in strong-tie relationships. And, the third is a growing community of researchers of the quantified self (Quantified Self, 2912), personal informatics (Li et al., 2010), and various other technologies for reflection. Together, these form the foundation of and make space for the research agenda I present in this dissertation.

The first body of research has been articulately captured by Wright and McCarthy (2008) as the adoption of methods that build empathy between design researcher and participant. Wright and McCarthy (2008) locate empathy-building in various methods, including ethnography, cultural probes, scenario-based design, personas, role-play, autobiographical design, and others. In these methods, participating with users, talking around artifacts with users, telling stories of users, and acting out the roles of users are all ways in which the designer can become empathically aware of the feelings and experiences and needs of users. Their model of empathy is a Bakhtinian “pragmatic-dialogical” conceptualization. That is, empathy is achieved through deep conversation: “Central to the dialogical approach to empathy is the importance of each person engaging from their own perspectives and appreciating the other’s perspective as other… The aim is not to become the other but to make sense of the other through oneself” (Wright and McCarthy, 2008). However, Wright and McCarthy describe
empathy as a pragmatic one-way street, such that the researcher empathizes with participant in search of knowledge that can lead to more user-centered designs.

The second body of research is that of mediated intimacy. Foundational work in this area was laid by Strong and Gaver (1997; Gaver, 2002), who presented technologies for symbolic, emotional sharing in intimate long-distance relationships. The interest in technologies for intimacy has not waned (for example, CHI 2012 hosted a paper session titled “Intimacy and Connection”), yet the types of technologies developed have remained surprisingly unchanged (Branham and Harrison, 2012). Technologies for mediating intimacy typically support awareness or making sentimental gestures, usually across a distance (Branham and Harrison, 2012; Branham et al., 2012). In a 2012 review of 143 such devices, all technologies surveyed were intended for non-verbal communication between distant partners (Hassenzahl et al., 2012). Notably missing from this corpus are technologies that support Empathic Communication for collocated partners.

The third and final body of research is clustered around a growing interest in designing technologies that foster personal reflection. Consider the burgeoning communities of the quantified self (Quantified Self, 2012) and personal informatics (Li et al., 2010). Both emphasize gathering personal sense data (e.g., via pedometers and heart rate monitors) and presenting it to the user for self-monitoring, self-reflection, self-knowledge, and self-help. The slow technology (Hallnäs and Redström, 2001) and reflective design (Sengers et al., 2005) movements are largely focused on how technology might help users or designers reflect on the technology itself. All of these bear in common the thread of reflection and—against the tradition of efficiency-based technologies—the value of slowing down and re-connecting to ourselves and our technology. These movements lack a focus on interpersonal reflection and connection.

To summarize, HCI has focused on creating empathy between researchers and participants during the research process, but says little about how to promote empathy between users during technology use Wright and McCarthy (2008). HCI has focused on mediating intimacy
in close personal relationships, however these technologies are intended for geographically-separated parties and do not encourage intimacy through collocated dialogue (Branham and Harrison, 2012; Branham et al., 2012). And, HCI has focused on creating technologies for slowing down and reflecting, but these are put to the task of personal rather than interpersonal growth (e.g., (Li et al., 2010)). My research agenda draws from and builds upon each of these: I seek to design technologies that can promote empathy between users, such that intimate, local relationships are fostered through reflective, generative, interpersonal conversation.

Research questions

The core research question of this dissertation is “can computer technologies support Empathic Communication?” This question is subdivided into a series of smaller questions that are addressed chapter-by-chapter (Table 1). This dissertation will explain how I came to a definition of Empathic Communication by gathering insights from human development experts and interpersonal therapy literature (answering question 1). It will present my analysis of HCI technologies designed for intimate partners to motivate the need for exploring Empathic Communication technologies for that user group (answering question 2). It will retrace the process of developing a design sketch and deploying a prototype of an Empathic Communication technology, a dyadic journaling system for intimate partners (answering question 3). Finally, it will reflect on how design researchers can learn from the experiences of participants in my study (answering question 4).

My research methods, discussed in depth in Chapters 2 and 4, are centrally based upon qualitative, semi-structured interviews, carried out first with relationship experts and then with couples. I used Constructivist Grounded Theory to code and coalesce themes segment-by-segment, generating memos, reflexive notes, and finally arriving at a set of meaningful research findings. As is typical of that type of work, my study and analysis were guided by open-ended research questions from the outset. Those questions evolved and solidified with my analytic codes and themes. Therefore, the questions presented in Table 1. represent the questions I ultimately answered, rather than the questions I initially asked.
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<td>2 Are the technologies designed for mediating intimate relationships in HCI</td>
<td>We overwhelmingly design for abstracted presence for distant partners instead of Empathic Communication for local partners.</td>
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Table 1. Research Questions
The core research questions addressed in this dissertation, along with short answers. See chapters for details.
**Approach**

In my opening paragraph, I proposed that Empathic Communication Technologies (ECTs) may benefit local friends, family, and intimate partners. I have decided to narrow the project in this dissertation by looking at just one of these groups: intimate partners. My approach to understanding partners accepts the trade-off between generalized and particular insights to meet present needs in the field. As described in Chapter 3, few studies have sought to generate detailed descriptions of couples or test the real-world efficacy of design sketches. One goal of this dissertation is therefore to provide rich examples of the mundane, yet extraordinary circumstances of particular intimate partner relationships. Another is to construct a set of tools substantiated through practice that can be useful guides to designers and researchers who seek to promote Empathic Communication. To meet these needs, I conducted small-scale but in-depth studies in naturalistic settings as opposed to highly controlled laboratory studies or broader quantitative surveys.

I began my inquiry into Empathic Communication and intimate relationships by interviewing Marriage and Family Therapists (MFTs), three of whom were leading researchers at academic institutions. Academics in MFT are a special type of expert in that they are required to continue practicing the craft of therapy alongside conducting research. They brought both abstract and practical knowledge about couples to our conversations, often sharing specific stories of couples with whom they had worked. Our interviews helped me construct the 4Rs framework—Repattern, Reflect, Restory, Reconnect—a simple yet powerful characterization of how intimate partners stay empathically connected to one another. To verify correspondence of the 4Rs to accepted therapeutic models, I examined them against MFT “common factors”—features common across empirically-proven models of therapy. The 4Rs define a class of meaningful conversation that unfolds in “dialogic space” and supports empathic connection between self and other. As such, the 4Rs framework is one possible formulation of Empathic Communication.

To test and refine the 4Rs framework as a potential tool for designers, I used it myself. I designed a system called Diary Built for Two, or DB2. Put simply, DB2 is a digital journaling...
system through which portions of personal entries can be shared with one's partner. An analysis of 40 technologies designed for couples revealed that Diary Built for Two is a rarity in a design space dominated by systems for “abstracted presence” (as opposed to Empathic Communication) and distant (as opposed to local) partners. In a two-week field study of 10 couples, I asked partners to use a low-fidelity prototype of DB2. Through three detailed interviews with each couple, I was able to discern subtle and significant turns in partners’ conceptions of and behavior toward themselves and one another. Some partners did not take to the exercise, but those who did were touched; one participant even reported that “it was an opening door in the relationship.” DB2 supported Repatterning, Reflecting, Restorying, and Reconnecting between partners. In short, it supported Empathic Communication.

Unexpectedly, the 4Rs were observed in the course of research interviews with participants. The same type of deep conversation that journaling encouraged between partners was also found in the process of answering prompts like “Tell me about your relationship” and “What drew you to one another?” and “Are there points of tension?” Partners came to see each other anew, simply by virtue of being assessed in the course of a research study.

Rather than a model for use by therapists, the 4Rs are a shorthand for therapeutic processes that can be usefully employed by HCI designers and researchers in search of more fitting designs and more meaningful research practices. For designers, the 4Rs can guide the conceptual stages of sketching to the analysis of prototype deployment. To push forward the design of DB2 and other Empathic Communication Technologies, I present a set of design alternatives in the form of Asymmetric and Symmetric Design profiles for couples; I show how these, too, can be usefully refined with the help of the 4Rs. For researchers, the 4Rs can be used to “read” researcher-participant engagements—conversations that take place during the research process—as a forms of therapy. This metaphor opens up a world of new opportunities and problems and suggests new bodies of literature that can help navigate them.

In keeping with the theme of this dissertation—the importance of meaningful, inclusive conversation—I have made some reporting and stylistic choices that break with tradition in
HCI. I often use first person pronouns (for example, “I”) when describing my research activities. Additionally, the description of my research methods includes a reflexive statement of my personal standpoint and how that may have influenced the “seeing” in my analysis. Together, these acknowledge the role I play as designer and researcher in constructing findings, and they invite other perspectives—both as I write and as you read (Patton, 1990). I endeavor to include the voices of many others in this written “conversation;” I quote liberally from my interviews with participants and readings from other academic writing. This is part of an effort to more accurately and respectfully portray the specific beliefs and circumstances of the participants who donated so many hours to helping me learn and share learning. And, it is my invitation to you to join me in the search for meaning.

Contributions
This research has produced a number of findings and tools that benefit various communities. HCI as a field is in need of a unified effort to respond to criticisms of authors like Turkle (2011) by addressing the connection crisis. Empathic Communication is one possible and, my research suggests, promising approach. Designers, specifically those working on technologies for couples, have been overwhelmingly preoccupied with designing for remote scenarios and one-bit communication. This dissertation points to new areas for exploration by identifying local partners and Empathic Communication as new design concerns; presenting the 4Rs framework, the Diary Built for Two design sketch, and Symmetrical and Asymmetrical design profiles as a guide; and showcasing detailed portraits of interactions between intimate partners as inspiration. Finally, researchers who seek to expand methodological discussions about issues such as ethical practice will appreciate my comparison of research interviews to Empathic Communication spaces. I summarize these contributions below:

To the field of HCI

- **Empathic Communication Technologies.** I coin the term Empathic Communication Technologies (ECTs) to identify an area of research that is underexplored, yet extraordinarily important.

- **Introduction of Marriage and Family Therapy.** I introduce the field of Marriage
and Family Therapy as an untapped source for research and design guidance in HCI.

• This work has been published in a Springer book chapter (Branham and Harrison, 2012), as a best paper at DIS (Branham et al., 2012), and has resulted in an upcoming workshop (Branham et al., 2014).

To technology designers

• 4Rs framework. I conceptualize the 4Rs framework—a tool for designing Empathic Communication devices—and ground it in Marriage and Family Therapy common factors.

• The design space for intimate partners. I present a literature review of 40 couple technologies, categorizing them according to design attributes. The design space identifies new design opportunities, including Empathic Communication for local partners.

• Diary Built for Two design concept. Diary Built for Two provides a concrete example of an Empathic Communication device. It also demonstrates how the 4Rs can be used as scaffolding in the design process.

• Rich descriptions of intimate partners. I present several in-depth examples of partners’ feelings and behaviors around the dyadic journaling exercise that may be used as inspiration for new designs.

• Symmetric and Asymmetric interface profiles. I identify four classes of interface configurations for intimate partner technologies that can guide future design efforts.

To design researchers

• Therapy as a lens for research methods. I present an analysis of my study of couples that suggests research practices like interviewing and deploying technology probes may have therapeutic effects.

• Ethical considerations in design research. I identify broader methodological and ethical ramifications of the potential for harm and the potential for therapeutic outcomes of design research practice.
Overview

I begin this investigation in the next chapter by considering how intimate partner connection can be achieved from the perspective of Marriage and Family Therapy (Study 1); drawing on study findings and literature, I define Empathic Communication as a therapeutic process that unfolds in “dialogic space” and encourages Repatterning, Reflecting, Restorying, and Reconnecting (the 4Rs). In Chapter 3, I return to the field of Human-Computer Interaction to observe how intimate partners are conceptualized and what technologies have been made for them; I thematically organize 40 intimate partner technologies into a design space that shows local (as opposed to distant) partners and Empathic Communication (as opposed to abstracted presence) are neglected areas of research and design. Motivated by the lack of foundational research on technologies for Empathic Communication, I designed Diary Built for Two (DB2)—a shared journaling system for couples; Chapter 4 presents how DB2 was conceived using the 4Rs, my intuitions about how DB2 can support Empathic Communication, and a description of how I set out to study DB2 use by couples in naturalistic settings (Study 2). Findings from Study 2 are presented in the form of thick descriptions built around interview transcripts with couples; notably, both DB2 (discussed in Chapter 5) as well as the research interviews I conducted to assess it (discussed in Chapter 6) supported the 4Rs and Empathic Communication. In Chapter 7, I take a step back to consider the value of these constructs for designers as well as researchers. After proposing four classes of Symmetric and Asymmetric interfaces for supporting empathy, I describe how the 4Rs can be used by designers to critique and substantiate their utility. Finally, taking stock of informed consent practices in HCI, I demonstrate how applying the metaphor of therapy to research tools can help guide researchers’ methodological practices. A summary of key findings and future work are located in Chapter 8.
2 Defining Empathic Communication

Chapter abstract
Empathic Communication is a therapeutic process that takes place in “dialogic space” and can be characterized simply by the 4Rs: Repatterning, Reflecting, Restorying, and Reconnecting. This notion was first conceived from conversations with Marriage and Family Therapists; their stories helped me develop the 4Rs framework, which I then refined by mapping to “common factors” of successful therapy. This chapter presents Study 1 methods and findings, the analytic work of my “common factors” comparison, and considers the rationale for the term and definition of Empathic Communication.

The 4Rs: insights from interviews with relationship experts
This research project began in mid summer 2010 when I was working at Intel Labs with Tad Hirsch. Tad was interested in arguments between intimate partners and the potential for technology to augment interactions. We decided to interview experts in the field of Marriage and Family Therapy to become introduced to the nature of arguments. But, as is typical of exploratory research, the insights we gained from therapists took the project in a very unexpected direction. Starting from “arguments,” I eventually arrived at “Empathic Communication.” This chapter documents the evolution of the concept of Empathic Communication. I begin in the next section by describing the basic research methods I used for interviewing Marriage and Family Therapy experts (Study 1).

Research methods for Study 1
Semi-structured interviews
Semi-structured interviewing is a popular method in qualitative research for coming to know participants and their cultural perspectives. As opposed to other forms of interviewing, which may be deeply concerned with asking a consistent, pre-determined set of questions to all
participants in a study, semi-structured interviewing provides the flexibility to adjust questions in situ. In the words of Glesne (2006), “the spontaneity and unpredictability of the interview exchange precludes planning most probes ahead of time; you must, accordingly think and talk on your feet.” The value of modifying questions to the situation is that it allows the interviewer to follow the interviewee down conversational paths that are more salient and hence definitive of the latter’s worldview.

While semi-structured interviews are flexible, there is still need for some preparation on the part of the interviewer. The interviewer often prepares a set of questions or themes to be explored during the interview and allows the conversation to stray from and reconnect with the protocol according to the interviewee’s interest, comfort, and depth of insight gained. The protocol is navigated and negotiated in a situated manner. The semi-structured interview protocol may change in another way, as well. As the interviewer completes more interviews, she may begin to notice that certain questions are worded awkwardly, that reordering the interview questions can improve conversational flow, or that some interviewees have brought up topics of unforeseen interest that should be broached in future interviews. As the study progresses, the protocol can become iteratively refined and adjusted. I have included scanned copies of interview protocol printouts in the Appendix to document the hand-written traces of this type of evolutionary adjustment.

Semi-structured qualitative interviews have several strengths and weaknesses. The primary strength is that they allow participants to provide nuanced descriptions of the meanings in their lives, largely untethered by pre-existing labels imposed by researchers. However, interviews can suffer from, for example, focusing primarily on words as opposed to actions (Kvale and Brinkmann, 2009). There are several ways to manage the potential weaknesses introduced due to the nature of interviews. As one example, I often question participants for successively richer accounts of past events. This makes it easier to render past events and to trust the accuracy of the telling. However, it can sometimes be a challenge for participants to speak very clearly and in great detail about minute happenings or personal issues. We see some evidence of overcoming these when I report findings from Study 2 in Chapters 5 and 6. In
Study 2, I interviewed intimate partners about their relationship; Jack and Jill from Couple 10 pointed out that our interviews went into much more depth than normal conversations (Chapter 6, Example 2). Relatedly, Dawn from Couple 4 told me that she was initially unsure how personal she could get in the interview, and that my interviewing style helped her share more personal topics. More details about my interviewing technique are included in Chapter 4 (section “Research Methods for Study 2”) and Chapter 5 (section “Differentiating effects of journaling and interviewing”).

**Constructivist grounded theory**

After gathering audio recordings produced from semi-structured interviewing, there must be some way for the researcher to simplify and characterize the data into meaningful findings. I chose to use a popular methodology, Constructivist Grounded Theory (GT), as described by Charmaz (2010). Constructivist Grounded Theory is a set of loosely-defined practices that support generating inductive theory that is grounded in a set of data. Instead of approaching a data set with presupposed hypotheses, the researcher approaches with an open mind, seeking to construct new theoretical understandings. The generalizability of the theory can vary greatly depending upon the circumstances of the study and goals of reporting.

The methods I draw from Charmaz’s (2010) rendering of GT include initial segment-by-segment coding, focused coding, memo-writing, and theoretical sampling. Segment-by-segment coding is the process of applying succinct labels to meaningful segments of interviews; in my experience, these can be as small as a few words in a phrase, or as large as a couple paragraphs of conversation. Several codes may overlap one another. Focused coding takes a second pass at the codes generated for the interview with the intention of narrowing them to more “directed, selective, and conceptual” categories (Charmaz, 2010). Throughout the process of coding, the researcher keeps memos, or personal notes, that document the meanings of and connections between categories. Finally, theoretical sampling “involves starting with data, constructing tentative ideas about the data, and then examining these ideas through further empirical inquiry” (Charmaz, 2010). Codes developed from Study 1 were used to guide data collection and analysis in Study 2.
Participants

I conducted one-hour, semi-structured phone interviews with five Marriage and Family Therapists (MFTs). Tad and I jointly interviewed one therapist, and I individually interviewed the other four. Marriage and Family Therapy is umbrellaed under the larger field of Family Studies, which researches and develops theories around the nature of families and couples. Three interviewees were leading MFT researchers at research universities, one was a senior graduate student at a research university, and one was a practicing Licensed Clinical Social Worker. The four researchers in this study represent a particularly rare kind of expert in academia because they have experience both as researchers of and practicing therapists with couples and families.

In interviews, I asked experts about the predominant understandings of intimate partners in the broader Family Studies field. I also asked experts about their experience with couples, including how intimate partners communicate and argue, what needs and concerns intimate partners have, when intimate partners seek therapy, how therapy is conducted, and what role technology has or could have in intimate relationships. While interviewing intimate partners directly is an alternative to this approach, experts had the advantage of being able to provide a research-based as well as a more practical experience-based understanding of intimate partners.

Analysis

The analysis was conducted independently, with intermittent conversations between myself and Tad Hirsch. I first transcribed all five interviews. I qualitatively coded the interviews. Tad and I held meetings to discuss codes and agreement was achieved verbally. This resulted in 9 main categories and 16 sub-categories that characterize the experts’ descriptions of how intimate partners interact and mechanisms of change within relationships. The main categories were: therapy as last resort, patterns of interaction, superficial versus underlying issues, spiraling out of control, reclaiming agency, breaking out of patterns, reflection, restorying, connection (Figure 1).
Figure 1. Study 1 Interview Analysis Codes

Themes and sub-themes that were coded for in interviews with Marriage and Family Therapists. Study 1 and 2 analyses focus on highlighted codes: breaking out of patterns, reflection, restorying, and reconnection.

THERAPY AS LAST RESORT
stigma, denial

PATTERNS OF INTERACTION
positive interaction patterns, negative interaction patterns

SUPERFICIAL VS. UNDERLYING ISSUES
conflict vs. argument, other

SPIRALING OUT OF CONTROL
spiraling out of control, being stuck in patterns, not understanding their own behavior

RECLAIMING AGENCY
partners being without agency, giving agency to partners

BREAKING OUT OF PATTERNS

REFLECTION
mindfulness, seeing, reflection, distancing from the self

RESTORING
new thoughts, new narratives

CONNECTION
intimate sharing, love gifts, acceptance, ongoing connection
In retrospect, Constructivist Grounded Theory may not have been the best analysis method for the purposes of Study 1. Rather than try to develop a grounded theory about how professional therapists and researchers conceptualize couples and therapy, it might have made more sense to simply use therapists’ testimonies to guide me through the existing literature in MFT. However, the application of GT to the interview data helped reframe my conceptualization of the problem and solution spaces for technology in intimate relationships; instead of focusing on mediating arguments, the thematic analysis led to a focus on mediating connection. Furthermore, the analysis reframed the research agenda, marking a shift away from simply designing a technology to additionally generating tools for other designers who might want to create therapeutic applications.

**A simple view of Marriage and Family Therapy**

*A simple view of discursive therapy involves changing how talk occurs ... so that other understandings and actions are made possible. (Strong and Paré, 2004)*

One of the most significant outcomes of the interviews was a shift in my thinking about the role of arguments within intimate relationships. I initially assumed arguments were a central concern and potential site for technological intervention. However, the interviews revealed that the MFT discipline, as described by our experts, has a different emphasis.

First, as one therapist noted, “arguments themselves are not necessarily the problem” (Figure 1 code: “superficial versus underlying issues”). Instead, conflicts are at the heart of arguments, and are often hidden from superficial view. For example, an argument about the dishes and another about the trash can both actually be the same conflict about a very different thing—say, one partner feeling under-appreciated by the other. The work of therapists is to help partners reflect on their interactions towards surfacing and understanding the conflicts beneath them.

Second, another therapist noted that “the absence of positive in a relationship is more important than the absence of negative” (Figure 1 codes: “connection” and “superficial versus underlying issues”). The presence of arguments is not so devastating as the lack of positive
affect; on the contrary, arguments can be healthy for couples. Argument prevention or direct resolution may in fact be less important than supporting regular connection: “the major reasons for divorce, cited by nearly 80% of all men and women, [is] gradually growing apart and losing a sense of closeness and not feeling loved and appreciated” (Gottman and Levenson, 2000).

Finally, experts suggested that there is an opportunity for positive intervention within virtually all couples, not just those seeking therapy. On one hand, most couples go to therapy as a last-ditch effort an average of seven years after initial symptoms of relationship deterioration arise (Figure 1 code: “therapy as last resort”). In the United States where nearly half of all marriages end in divorce, this means that many couples who do not go to therapy might benefit from it. On the other hand, notes one therapist, even healthy relationships can use a regular “tune-up” or benefit from “check-ins to remind [them] what [they] already know” (Figure 1 code: “connection”).

Figure 2. The 4Rs Framework

The 4Rs—Repatter, Reflect, Restory, Reconnect—are phases of a cyclical therapeutic process that emerged as four thematic categories in MFT interviews. Conceptually, the 4Rs progress in order, but in practice they can occur in parallel.
The above insights led me to consider the potential for technology to mediate connection instead of arguments. Below, I summarize the experts’ perspectives regarding how to support couple connection in a stage-based model: Repattern, Reflect, Restory, Reconnect (Figure 2). I have also included additional literature review to buttress these findings.

Repatteren

... novel ways of talking, new possibilities of going forward. That’s what good therapy does. (Strong and Paré, 2004)

A key component of reestablishing connection between partners is to help break them out of the “patterned and stuck” forms of interacting they have unconsciously adopted over time (Figure 1 codes: “patterns of interaction,” “breaking out of patterns”). Therapists likened partners’ interactions to “sleepwalking through life” and getting caught in “patterns of behavior that neither of them understood.” One therapist explained it this way: “you get in the middle of [an argument] and you become very predictable and you live the same life day after day after day.” The goal of therapy is “trying to get the couples to do something differently.” Doing differently means saying differently means being differently. This is the essence of Repatterning.

To help partners Repattern their interactions, therapists might asks intimate partners to “schedule their arguments or to change the location of their arguments.” They might alternatively assign “homework” that, for example, encourages partners to set aside time when they can ask each other prescribed questions about their relationship (Piercy, 2002). But, Repatterning is also a much more basic principle built into the therapeutic situation itself: "the psychoanalytic interview takes place in the structured setting of the therapeutic hour," where time constraints, foreign spaces, presumption of a problem that needs fixing, mediation of conversation through a therapist, reconfigured power relationships, and so on, all work to produce new forms of interaction (Larner et al., 2004; Kvale and Brinkmann, 2009). Repatterning is about introducing new, semi-structured activities into the intimate partners’ lives as a way to give partners permission to try new forms of interaction.
Reflect, Restory

By seeing psychotherapy’s back-and-forth as a performance, clients and therapists are afforded opportunities to reflect and try on other compelling forms of talk and common sense. (Strong and Paré, 2004)

Repatterning is the prelude to narrative realignments to self and other that are enabled via cyclic Reflecting and Restorying (Figure 1 code: “reflection” and “restorying”). Therapists describe these as “helping couples look at what they’re doing” and “helping [them] see themselves differently.” They are accomplished through remembering the past (Kvale and Brinkmann, 2009), deep probing and self-knowledge generation (Kvale and Brinkmann, 2009), and consideration of the self in relation to other (Penn and Frankfurt, 1994); “interaction moves back and forth from inner conversation to conversation with others, from monologue to dialogue, becoming the ‘stuff’ of new narratives” (Penn and Frankfurt, 1994). Reflecting and Restorying are often closely entwined, so I present them here together.

MFTs often engage intimate partners in reflective activities. For example, they may ask partners to participate in “meta-communication;” that is, “instead of talking about the contents of the argument,” they try to get partners to be aware of “how [they are] actually having the argument” and the impact of that on one another. Another strategy, the “intergenerational approach,” helps partners make sense of themselves and their interactions by tracing personal beliefs and behaviors back to those of their parents. Through these and other forms of reflection, therapists help participants develop new understandings of themselves. Reflecting and Restorying take place not only at the individual level, but also at the level of the couple. As partners reflect on the past, they simultaneously explore alternate configurations of mutual understanding.

Reconnect

[In conversation], we “danced” together ... We’ve “pinged and ponged” (as you once put it) back and forth, and I’ve witnessed a gradual movement towards what has felt like adequately mutual understanding. But I mean something more than “you (mostly) get me and I (mostly) get you.” There’s more: Our exchanges over these months have increasingly contained echoes of the other’s utterances. The contours of what may have started as “my view” and “your
When intimate partners are given permission to improvise their interactions, when they can engage creatively with personal narratives, they are in a position to co-create stories of their relationship and reach renew connection (Figure 1 code: “connection”). In the dialogic space of therapy, “each strives to maintain herself and the other as the subject. This means recognizing the other as separate and different as well as existing in herself” (Penn and Frankfurt, 1994). Hence, Reconnecting is an activity by two and of two. Furthermore, the connection process is ongoing; in the words of a therapist in the study, “a relationship needs to be rebuilt everyday; it doesn't matter how often you've told somebody you love them, they need to hear it now, or see it now in some form.” Another therapist noted that “small deception begets major deception,” referring to how chasms between partners may begin with seemingly innocent withholdings about even the most mundane experiences—feelings, daily activities, etc. This is why, said therapists, Reconnecting on a regular basis is critical.

Therapists encourage Reconnecting in at least two ways. Some ask partners to give each other “love gifts”—things like “back rubs, a kind note, a smile, or help in some way.” But, love gifts might not sufficiently support renewed connection on their own. In many relationships there is a history of “negative attribution,” such that “even the most loving behaviors can be filtered and seen as dastardly, as [having] a negative ulterior motive.” The therapist presented an example: “I did a homework assignment once, kind of a love day, where the person is supposed to say or do things very positively to their partner… This one guy came back and he said ‘I told my wife I loved her and she said ‘what do you mean by that?!’” Reconnection may require deeper Reflective activities that rework negative attributions. It may also require more intimate sharing of feelings and experiences towards developing mutual empathy (e.g., Piercy, 2002). Reconnecting is about encouraging sharing of personal experiences and emotions on a regular basis towards rebuilding common ground and empathy between partners.
Do the 4Rs represent a therapeutic process?

In the previous sections, I presented the qualitative results of my interviews with therapists in the form of stages of partner reconnection: Repattern, Reflect, Restory, Reconnect (the 4Rs). But, is the 4Rs framework really representative of a therapeutic process? In this section, I seek to strengthen the case for the 4Rs by demonstrating the model’s coherence with current theoretical constructs in Marriage and Family Therapy. Specifically, I map the 4Rs to a subset of therapeutic “common factors,” or principles that underly effective therapeutic treatments.

The Common Factors movement in Marriage and Family Therapy (Sprenkle et al., 2009) is one approach to explaining why, among empirically-proven therapy treatments, there can be relatively small differences in outcome (e.g., Lebow et al., 2012; Sprenkle, 2012). The proposition made by common factors proponents is that positive outcomes in effective therapy can be largely explained by generalizable qualities of the therapist, the client, the problem conceptualization, the intervention, etc. (Sprenkle et al., 2009).

Davis (2005) advanced the understanding of common factors by conducting a rigorous grounded theory examination of three different approaches to MFT: Emotionally Focused Therapy (EFS), Cognitive Behavioral Therapy (CBT), and Internal Family Systems Therapy (IFS). From each of these therapeutic models, he interviewed a senior researcher who had contributed to the development of that model, one of his or her graduate students, and each of their former clients who had successfully completed therapy. Through analyzing transcripts with two other researchers, Davis arrived at a set of common factors amongst these methods that are believed to support the therapeutic process. The conclusion of this work, which has been published in various venues (Davis and Piercy, 2007a; Davis and Piercy, 2007b; Sprenkle et al., 2009)), can be summarized in the following way:

*Though the interventions that flow from the theory-specific conceptualizations sound different, ... these interventions frequently overlap in their efforts to alter the interactional cycle [between partners] by changing behavior, altering cognitions, and getting clients to experience emotions differently. (Sprenkle et al., 2009)*
<table>
<thead>
<tr>
<th>Common Interventions</th>
<th>MFT Model-dependent Common Factors</th>
<th>The 4Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raising awareness of the interaction cycle and each individual’s role in it</td>
<td></td>
<td>Slowing down the process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standing meta</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Encourage personal responsibility</td>
</tr>
<tr>
<td>Use of metaphor</td>
<td></td>
<td>Repattern / Reflect</td>
</tr>
<tr>
<td>Family of origin as a context for the cycle</td>
<td></td>
<td>Reflect / Restory</td>
</tr>
<tr>
<td>Altering the cycle</td>
<td>Emotional regulation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cognitive reframing</td>
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<tr>
<td></td>
<td>Behavioral shifts</td>
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</tr>
</tbody>
</table>

Table 2. Mapping the 4Rs to MFT Common Factors, Interventions
The common factors of MFT as identified by Davis (2005). Common Interventions and Common Outcomes are broken into finer subcategories. The mapping of the 4Rs is indicated (right).
In Davis’s (2005) dissertation, he identifies four categories of common factors: Model-dependent Themes (e.g., “Therapist’s Common Conceptualizations”), Common Interventions (e.g., “Cognitive Reframing”), Common Outcomes (e.g., “Making Space for the Other”), and

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Table 3. Mapping the 4Rs to MFT Common Factors, Outcomes

The common factors in MFT as identified by Davis (2005). Common Interventions and Common Outcomes are broken into finer subcategories. The mapping of the 4Rs is indicated (right).
Model-independent Themes (e.g., “Patience” on the part of the therapist). The 4Rs model describes characteristics of therapeutic interventions (Repattern, Reflect, Restory) and therapeutic outcomes (Reconnect). Therefore, I have made an effort to locate the 4Rs with respect to Davis’s (2005) Common Interventions and Common Outcomes. The mapping is surprisingly congruent (Table 2 and Table 3). In the following sections, I define the categories and subcategories of Davis’s (2005) Common Interventions and Common Outcomes and draw connections to the 4Rs model. My analysis confirms that the 4Rs can be interpreted as a model of therapeutic process. I close by explaining my rationale for developing the 4Rs as opposed to simply adopting Davis’s (2005) model or any specific empirically-proven therapeutic model.

**Comparison of MFT Common Interventions and the 4Rs**

*Raising awareness of the interaction cycle and each individual’s role in it*

Therapists, like Computer Scientists, see the world through a Systems Theory lens (Piercy, 1996). One consequence of this perspective is that therapy is taken to be a collective rather than an individual affair; both partners and maybe even family members need to be involved. Another is that interactions between partners are characterized as cybernetic processes; partners get into cyclical negative or positive feedback loops. Hence, *raising awareness of the interaction cycle* is a matter of the therapist helping clients to become aware of their patterns of interacting and how each of them contribute.

Davis (2005) sub-divides this category into three different strategies that therapists use to help their clients gain awareness. They can *slow down the process* by introducing disruptions in the midst of clients’ interaction cycles. According to Davis (2005), therapists’ strategies included “structuring the amount of time each client talked, helping each partner listen to their partner rather than jumping to conclusions and helping clients see their partners differently.” The result is that “couples slow down and begin to explore other possibilities for their current difficulties” (Davis, 2005). Therapists also help clients to *stand meta*, or take a step outside of themselves and their interactional cycle. Strategies included “encourag[ing] the clients to explore alternative explanations for their partner’s actions.” Finally, therapists try to *encourage personal responsibility* of each partner’s role in the interaction cycle. Detailed
definitions and client/therapist examples of *slowing down, standing meta,* and *encouraging personal responsibility* can be found in Tables 4 and 5.

Repatterning and Reflecting are *slow* processes that encourage taking a step back from habitual behaviors and more consciously choosing alternative ways of thinking and doing. Reflecting is the act of *standing meta*—thinking about yourself from a position in which you feel outside of and less identified with yourself. *Encouraging personal responsibility* is not explicitly captured by the 4Rs model, however in Chapter 5, I show how the act of Reflecting (*standing meta*) can actually have the effect of encouraging participants to be more thoughtful about their behavior and take more responsibility for interactions with their partners. Hence, *raising awareness of the interaction cycle and each individual's role in it* is closely related to Repatterning and Reflecting.

**Use of metaphor**

Some therapists in Davis’s study (2005) used metaphors to help partners understand or “picture” their interactional cycles towards changing behavior inside and outside of therapy. Davis (2005) gives the following example: “[One therapist’s] clients spoke of ‘being in a tank, shooting at each other,’ or ‘warriors hiding behind armor and shooting at each other.’” The definition and client/therapist examples of *use of metaphor* can be found in Tables 4 and 5.

There is not an explicit indication of *use of metaphor* built into the 4Rs, however the use of mutual Reflection may encourage new ways of understanding the couple relationship. In Chapters 5 and 6, I observe that none of my participants reported the use of metaphor as a means to understand their relationship.

**Family of origin as a context for the cycle**

Therapists from all three therapy models in Davis’s study (2005) tried to create links between negative interaction cycles and behaviors, affect, or cognitions learned in clients’ past relationships. Rather than blaming the past, “the family of origin was simply used as a context for the origin of their current difficulties.” The definition and client/therapist examples of
family of origin as a context for the cycle can be found in Tables 4 and 5.

Like the use of metaphor, the use of family of origin rationale is not explicitly built into the 4Rs framework. However, as we will see in Chapters 5 and 6, Reflection can encourage personal exploration of the past and new understandings of the self in those terms.

**Altering the cycle**

Altering the cycle means teaching clients how to change so that they can initiate more positive interaction cycles. Altering the cycle includes shifting affect, cognitions, and behaviors; changes in one of these often results in changes in the other. The definition and client/therapist examples of emotional regulation, cognitive reframing, and behavioral shifts can be found in Tables 4 and 5.

Altering the cycle, in the terms of the 4Rs, is a function of Reflecting and Restorying. Through Reflecting, cognitions change and Stories of self are remade. Changing thoughts can instigate changes in affect that encourage new intentional behavior.
<table>
<thead>
<tr>
<th>Common Factors</th>
<th>Low-level Definitions (Davis, 2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slowing down the process</td>
<td>“The first step in altering the interactional cycle was to slow down the process. This was done in several ways, including structuring the amount of time each client talked, helping each partner listen to their partner rather than jumping to conclusions and helping clients see their partners differently. This... seemed to help couples slow down and begin to explore other possibilities for their current difficulties.”</td>
</tr>
<tr>
<td>Standing meta</td>
<td>“Therapists helped them stand meta, or outside of, themselves. Therapists used several different techniques to facilitate this process, such as reframing their partner’s behavior or intent. One of the most common methods was to encourage the clients to explore alternative explanations for their partner’s actions.”</td>
</tr>
<tr>
<td>Encourage personal responsibility</td>
<td>“Therapists helped clients take personal responsibility for their role in the cycle. There was no one technique used to do this; instead, it was more directly or indirectly encouraged in the language that the therapists used with their clients.”</td>
</tr>
<tr>
<td>(Use of metaphor)</td>
<td>“Metaphors were often used to help clients keep a ‘picture’ of the cycle in their minds as they worked on altering the cycle inside and outside of therapy.”</td>
</tr>
<tr>
<td>(Family of origin as a context for the cycle)</td>
<td>“[Some therapists] frequently referenced dysfunctional affect, behaviors, or cognitions learned in the client’s family of origin or previous relationships as the source of their role in the cycle. ... However, time was not spent blaming the past. Rather, clients were encouraged to explore new ways of interacting in the here and now; the family of origin was simply used as a context for the origin of their current difficulties.”</td>
</tr>
<tr>
<td>Emotional regulation</td>
<td>“Clients need to shift from being emotionally reactive to being emotionally responsive to their partner.”</td>
</tr>
<tr>
<td>Cognitive reframing</td>
<td>“Each of the therapists focused on reframing attributions that each partner made about the other that perpetuated the cycle. The intent that one partner attributed to the other’s actions was often seen as contributing to the dysfunctional interactional cycle and thus became the focus of intervention. Interventions aimed at altering these cognitions include exploring other alternatives to their spouse’s behavior.”</td>
</tr>
<tr>
<td>Behavioral shifts</td>
<td>“Therapists from each model tried, in some fashion, to get their clients to behave differently.”</td>
</tr>
</tbody>
</table>

**Table 4. MFT Common Factors, Interventions: Definitions**

This table captures the common factors in MFT using definitions presented by Davis (2005). All quotations come from Davis (2005).
<table>
<thead>
<tr>
<th>Common Factors</th>
<th>Examples from Clients and Therapists (Davis, 2005)</th>
</tr>
</thead>
</table>
| Slowing down the process       | **Therapist:** “First of all was to get him to kind of slow down and to actually hear her.”  
**Client:** “…[over time, the therapist] wouldn’t let him go on that long and [she would] say, ‘Look at Louise, what’s going on here? Why do you think she is being quiet?’ and that sort of thing... Pointing out something he might not have been aware of himself and [try] to help him not interrupt.” |
| Standing meta                  | **Client:** “We were communicating better and seemed to step outside ourselves and listen to what the other was saying... It’s easy when you are in any kind of conflict... to take strictly your side and think in terms of were you’re coming from and draw conclusions. It’s not easy to find out what the other person’s perspective is and where they are coming from.”  
**Therapist:** “So I said to him... ‘We could tape the sessions and then what you can do is you can take the tape home and listen to it. You might find that useful.’”  
**Client:** “[I learned to] listen more... I realized [when] listening to a tape recorder... that I talk too much.” |
| Encourage personal responsibility | **Client:** “One of the things that [the therapist] would work with me on was asserting myself initially right when I feel the need to do it rather than store, store, store, and then explode, or let it magnify and then distort.” |
| | **(Use of metaphor)** | **Client:** “[One therapist’s] clients spoke of ‘being in a tank, shooting at each other,’ or ‘warriors hiding behind armor and shooting at each other.’” |
| | **(Family of origin as a context for the cycle)** | **Client:** “Look, I need to know why I feel this way and why don’t I feel more special... She comes from one background and one way of being brought up with different parents and different set of siblings and I’m coming from a different scenario and its like night and day.” |
| Emotional regulation           | **Client:** “I tried to talk deeper about how I feel in certain situations... [whereas] before we were able to talk about feelings in a way that we accused each other.” |
| Cognitive reframing            | **Therapist:** “So it’s a lot of monitoring of self talk and identifying where there [are] distortions [in] what they tell themselves [that] gets themselves emotionally wound up and [leads them to] engage their spouse in a lot of negative interactions.” |
| Behavioral shifts              | **Therapist:** “Taking risks was an element of changing behavior that most of the therapists urged their clients to do.”  
**Therapist:** “[This therapist] had her clients structure their at-home interaction by setting a time limit on how long they could talk about an issue. The husband tended to keep talking about an issue until the wife could no longer stand it and she would withdraw. Setting a time limit helped the wife be able to re-engage in the discussion and it helped the husband regulate his emotions.” |

**Table 5. MFT Common Factors, Interventions: Examples from Clients and Therapists**

This table captures the common factors in MFT based on testimony from therapists and their clients. All quotations come from Davis (2005).
Comparison of MFT Common Outcomes and the 4Rs

Softening

Softening is the first of two categories of Common Outcomes observed by Davis (2005). Softening means adoption of gentler approach toward the self and the other. Davis describes this as a release of the “previously harsh, critical view of [one’s] partner… in favor of a more patient, loving approach.” Through softening, partners can avoid negative interaction cycles. Softening can take the form of cognitive (Softening of thoughts), behavioral (Softened behavior), and emotional changes (Softened affect / emotional regulation), and can also be encouraged by increased awareness of negative patterns of interaction (Client’s awareness of the cycle and their own role in it). The definition and client/therapist examples of each of these types of softening can be found in Tables 6 and 7.

Softening is achieved through the Restorying and Reconnecting phases of the 4Rs. Restorying can help partners come to see themselves and their partners as more complex, fuller people; the result is the ability to empathize and consequently think, feel, and behave more kindly toward one another. That is, they Reconnect.

Making space for the other

The second Common Outcome of successful therapy is that clients make space for the other. Allowing one’s partner to be their own person and acknowledging that they do not need to change are aspects of making space. It is important to support [each] partner’s autonomy. Through making space, the more submissive partner gains confidence, and the more dominant partner learns how to relax efforts to change their partner (slow down) and take more personal responsibility for change. The definition and client/therapist examples of support of the partner’s autonomy, confidence, slowing down, and personal responsibility can be found in Tables 6 and 7.

Reconnecting is centrally about making space for the other. Through intimate sharing in “dialogic space” (Penn, 1994), partners come to understand themselves in relation to the other. They become more aware of similarities and accepting of differences. They create empathy.
### Table 6. MFT Common Factors, Outcomes: Definitions

This table captures the common factors in MFT using definitions presented by Davis (2005). All quotations come from Davis (2005).

<table>
<thead>
<tr>
<th>Common Factors</th>
<th>Low-level Definitions (Davis, 2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client’s awareness of the cycle and their own role in it</td>
<td>“A softening in behavior, affect and cognition seemed to be both preceded and accompanied by an awareness of the cycle and their own role in it and a willingness to take responsibility for changing [it].”</td>
</tr>
<tr>
<td>Softening of thoughts</td>
<td>“At least one client from each model mentioned that their thoughts had changed as a result of therapy. When a client’s thinking shifted, shifts in behavior and affect either co-occurred or soon followed.”</td>
</tr>
<tr>
<td>Softened behavior</td>
<td>“For each client, harsh, defensive behavior was replaced with softer, more loving behavior.”</td>
</tr>
<tr>
<td>Softened affect / emotional regulation</td>
<td>“Couples were better able to regulate their emotions; they were less emotionally reactive, which made it easier for their spouse to be the same, replacing defensiveness with emotional accessibility.”</td>
</tr>
<tr>
<td>Support of partner’s autonomy</td>
<td>“As therapy progressed and each client began to see their partner and themselves differently, they replaced their controlling stance with a more accommodating stance. They made space for their partner to grow according to their own desires.”</td>
</tr>
<tr>
<td>Confidence</td>
<td>“As the controlling spouse eased up and the submissive spouse re-engaged, both partners seemed to enjoy an increased sense of self-confidence. The submissive spouse was able to freely say what was on his or her mind without fear of retribution from his or her partner.”</td>
</tr>
<tr>
<td>Slowing down</td>
<td>“At the end of therapy, each therapist mentioned that their clients had slowed down and relaxed in their efforts to change things outside of them.”</td>
</tr>
<tr>
<td>Personal responsibility</td>
<td>“As they stopped worrying about their partner’s behavior and focused on their own, they began to open up space for their partner’s autonomy. They stopped demanding that their partner change and instead focused on how they could change, regardless of what their partner did.”</td>
</tr>
<tr>
<td>Common Factors</td>
<td>Examples from Clients and Therapists (Davis, 2005)</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Client’s awareness of the cycle and their own role in it</td>
<td><strong>Client:</strong> “The awareness level is so much greater that we can almost see it coming now. And when you can see it coming and you’re aware that you’re headed in a direction that you don’t want to go it’s much easier to intercept.”</td>
</tr>
<tr>
<td>Softening of thoughts</td>
<td><strong>Client:</strong> “Shifts in thought included attributing different intent to their partner’s actions, as evidenced by [this client’s] mention that, “the way [my] partner behaves is not necessarily how she wants to behave...so give her the benefit of the doubt.”</td>
</tr>
<tr>
<td>Softened behavior</td>
<td><strong>Client:</strong> “Do not [accuse] each other. Talk about your own feelings without accusing the other person.”</td>
</tr>
<tr>
<td>Softened affect / emotional regulation</td>
<td><strong>Client:</strong> “I think what was crucial was that [my therapist] was able to make us share our inner emotions. That shows [our] vulnerability, [so] then the other person takes a look back and maybe shares her vulnerability. That would work for us.”</td>
</tr>
<tr>
<td>Support of partner’s autonomy</td>
<td><strong>Client:</strong> “We both stopped trying so hard to change the other person. Also...we both developed [a] greater acceptance [of each other].”</td>
</tr>
<tr>
<td>Confidence</td>
<td><strong>Therapist:</strong> “[My clients] recognize[d] that each of them had desires and they had legitimate concerns about what they wanted in the relationship and they learned to give each other what they needed...I guess in essence they learned more healthy ways to fulfill each others’ needs.” <strong>Client:</strong> “And then the biggie, the most important one, is [that I learned] compassion for self, which also increases compassion for others.”</td>
</tr>
<tr>
<td>Slowing down</td>
<td><strong>Therapist:</strong> “[The therapist] mentioned that her clients went from attacking their partner to, ‘...a more secure attachment than they had ever had in...their lives. They were able to look at their vulnerabilities [and] move into a place where they could tell each other their deepest needs and feelings and be responsive to each other.’ [Another therapist] said that her client was, ‘Just more free to enjoy her life and not have so many worries that really weren’t very grounded.’”</td>
</tr>
<tr>
<td>Personal responsibility</td>
<td><strong>Client:</strong> “[The client] said that now when he is involved in an argument, he, ‘...[tries] to look back and think, ‘It obviously starts with you’. [I try] to look at [myself] before [I] worry about her.”</td>
</tr>
</tbody>
</table>

Table 7. MFT Common Factors, Outcomes: Examples from Clients and Therapists

This table captures the common factors in MFT based on testimony from therapists and their clients. All quotations come from Davis (2005).

**How does the 4Rs framework contribute?**

In this chapter, I have developed the concept of the 4Rs, drawing comparisons to common factors across MFT models. My answer to the question “Do the 4Rs represent a therapeutic process?” is “yes.” But, what value do the 4Rs bring, if there are already so many established
therapeutic models in the MFT field? The 4Rs framework is not intended to be a therapeutic model for use by therapists. Rather, the purpose of the 4Rs is to create a more accessible representation of key aspects of therapy for use by HCI technologists performing design and evaluation. The 4Rs simplify a rather complex and involved set of phenomena into a form that still bears key resemblance to clinical therapy, while also being more readily comprehensible to non-MFT technology designers. To quote my committee member Fred Piercy, “the 4Rs are a sort of shorthand for therapeutic processes that are at work in therapy and everyday life.” Hence, I consider the 4Rs to be a contribution to designers in HCI as opposed to a contribution to the field of Marriage and Family Therapy.

**Empathic Communication**

*Therapeutic conversation is not unlike many conversations between strangers in everyday life. They work out a shared discourse, to bridge differences and similarities in their ways of understanding and talking.* (Strong and Paré, 2004)

**Evolution of the term “Empathic Communication”**

The term “Empathic Communication” has evolved over the course of this research, along with my understanding the concept and my goals for wider adoption. It seems important to explain how the term came into being and why I have not chosen other, perhaps clearer, descriptors. Other labels that I have used in the past, in the order that I used them, are: “mutual reflection,” “deep interpersonal sharing,” “reflective sharing,” and “therapeutic communication.” Each of these capture important aspects of the 4Rs—they involve mutuality, reflection, deep sharing, and describe a therapeutic process. I thought each new term was an incremental improvement over the last, and that perhaps the most accurate characterization of the 4Rs was (is) “therapeutic communication.” However, as I have been discovering through recent peer reviews of conference papers, I now believe that this term presents obstacles to adoption and application for other researchers.

“Therapy” may be a limiting term because, for many, it has a very specific and inflexible meaning. For example, several reviewers of my conference submissions defined therapy as taking place only between a professional therapist and client. Therapy is not generally seen as
an activity that may take place casually and to small but meaningful effect, perhaps even between peers in the course of everyday conversation. However, as the excerpt from Strong and Paré at the opening of this section suggests, this is not a perspective held by all therapists. There is a growing body of postmodern therapeutic methods that seek to neutralize power and authority imbalances between client and therapist (e.g., Penn, 1994; Strong and Paré, 2004; Levinas et al., 2004; McNamee, 2003). These renderings add plausibility to the notion that therapy may take place in situations like those described in Chapters 5 and 6 of this dissertation. Another reviewer was deeply concerned that therapy was not efficacious; however, it is scientifically widely accepted to be effective (see these meta-analyses in peer-reviewed, high-impact journals for details: (Lebow et al., 2012; Sprenkle, 2012)). The fact that there are so many different types of therapies, that Marriage and Family Therapy is unfamiliar within HCI, and even possibly because therapy is not often openly discussed may all contribute to these communication difficulties. Hence, it may be best to use a more neutral term to invite conversation about the various meanings of “therapy.”

**Linking therapy and empathy: Dialogic space**

I have settled on the term “Empathic Communication,” because I believe empathy is the core process at stake in mutual reflection, deep interpersonal sharing, reflective sharing, and therapy. I have been influenced by readings about therapy, journaling, and conversation that draw from postmodern philosophers—such as Bakhtin and Levinas—to demonstrate the power of discourse to support empathy and human development (Strong and Paré, 2004; Larner et al., 2004; Penn and Frankfurt, 1994; Halberg, 1987; Wright and McCarthy, 2008; Krznaric, 2007). The type of empathy that these authors refer to is not the autonomic response to facial expressions of others, as the term has meant in the past. Rather, it is a more active engagement in which—through finding the other in discourse—you find yourself. This type of empathy often arises in dialogic rather than monologic settings (Figure 3).
Monologic Space
speaking at rather than with each other. Interlocutors remain isolated and unmoved.

Dialogic Space
speaking in which each participant’s position is mutually considered, and meaning is collaboratively built. Interlocutors are moved in the process.

Figure 3. Monologic versus Dialogic Space

Empathic Communication takes place in Dialogic Space, which supports empathy and mutual development between conversational participants. This characteristic has been called “empathic impersonation” by Penn and Frankfurt (1994), “being in-the other” by Larner (2004), “making space for the other” by Davis (2004). In this dissertation, I call it “Reconnection.” These diagrams were inspired by those presented by Wegerif (2012).

Larner (2004), for example, describes therapy as a Levinasian dialectic process that supports connection beyond traditional notions of empathy; he calls it “being in-the other.” In fact, departing slightly from Davis (2005), Larner (2004) believes the power of thoughtful, respectful, ethical dialogue to be so significant that it comes prior to any other factor in accounting for successful therapy:

*Therapy is not a mere technology imposing a language of expertise and knowledge but first enacts a relational ethics. This is a gesture of hospitality, a welcoming of the other to a place where dialogue as a speaking between persons can occur. Whatever happens after that, in the form of therapeutic techniques, strategies or approaches is secondary to face to face Saying and dialogue. This accords with outcome research showing what contributes most to change is not therapeutic technique or model but “common factors” across all approaches, like the therapeutic relationship and whether the therapist is perceived as empathic, caring and compassionate.*

For Larner (2004), therapy is built on the empathy of the therapist which, through dialogue, is imparted to the client. I think Penn and Frankfurt (1994), who present a very similar view, best articulate the ties between therapeutic discourse and empathy by proposing the integral role of Bakhtinian “dialogic space:”
Ideally, in order for conversationalists to produce and maintain a dialogic space, each conversationalist asserts the otherness (the difference) of the other (Hitchcock, 1993). Each strives to maintain herself and the other as a subject. This means recognizing the other as separate and different as well as existing in herself. We would like to call this acknowledgement "empathic impersonation," which we see as pretending to be like another in order to understand him. This process begins when the therapist, through participant listening, empathically witnesses the clients' dilemmas, understanding their intentions, strivings, disappointments, rage toward others both present and absent. This inside/outside position transfers to the clients through their increasing understanding of their own personae and those of family members. The clients begin to adopt the therapist's willingness to step into the shoes of the other, which increases the clients' empathic capacity toward others. This struggle to maintain the dialogic space can be viewed as an ethical stance. "One [addresses] others with a presumption that they are capable of responding meaningfully, responsively, and above all, unexpectedly" (Morson, 1986, p. ix). It is important that the other is seen as unfinalized and capable of surprise.

The letters our clients write, after all their revisions, are knowingly double-voiced. In the process of revision, the writer of the letter fine-tunes her understanding of the other so that the letter may be "heard" by its receiver. This process includes the writer's empathic impersonation of the other. In this way, clients transfer the idea of the dialogic space from the therapy to their relationship with others. Meaning, then, is co-created from the empathic exchange when we treat each other as subjects (Weingarten, 1991). For example, in our case of Mary, to be presented later, Mary writes a letter to her ex-husband. Her former narrative was characterized by her sense of victimization, followed by a wish for revenge and confrontation. In the act of reading the letter aloud to the therapist, Mary develops a new idea, which results in a surprisingly empathic stance toward an aspect of herself in relation to her ex-husband. This new way of describing him provides a new description of herself. She had expected that writing to her ex-husband might change him—only to discover that it had changed her, her perception of herself as well as her perception of him. This experience moved Mary from a monologic to a dialogic stance.

4 The struggle to treat all parties as subjects and not address others as objects is at the heart of postmodern feminist writing (Benjamin, 1988).
This description of therapy as an empathic dialectic shows hints of Davis’s list of common factors (including standing meta, encouraging personal responsibility, cognitive reframing, softening and making space for the other) as well as the 4Rs (Repatter, Reflect, Restory, Reconnect). Hence, we can read the 4Rs framework as describing client-therapist dialogue in which empathy is built for all parties (therapist, client, romantic partner, and others). The connection to empathy arises out of the fact that the therapeutic situation—both in conversation and in writing—“asserts the otherness of the other” such that “each strives to maintain herself and the other as a subject” (Penn and Frankfurt, 1994). In more basic terms, the act of talking or writing to or about another person encourages imagining that person and their perspective. Penn and Frankfurt call this “empathic impersonation,” or the act of pretending to be like another in order to understand him.” You must also imagine yourself and your perspective. Each statement is representative of both the self and the other. Both people are changed by the engagement. In future chapters, as I apply the 4Rs framework to non-clinical settings (that is, settings without therapists), I will extend this reading to encompass dialogue between other parties and mediums: talking with the self through journaling, talking with the partner through journaling, and talking with the researcher through interviewing.

“Therapeutic” or “Empathic” Communication?

Perhaps the biggest drawback of using the term “empathy” is how difficult it can be to know what it refers to at first sight. It has many different academic meanings in different fields. Psychotherapy specifically has a long tradition of using the term in different capacities. Notably, it is used to describe the therapist’s relationship to the client (e.g., Rogers, 1975), not unlike Wright and McCarthy (2008) use the term to describe the researcher’s relationship to the participant. In addition, empathy can be achieved variously; conversation is just one mode (Krznaric, 2008; Penn and Frankfurt, 1994; Lavinas et al., 2004). All of these may cause some confusion as to how the term is intended in this new context. As described above, I use the term “empathy” to characterize the way partners relate to themselves, to one another, and even to the researcher. I use the dialogic definition of “empathic impersonation” given by Penn and Frankfurt (1994): “the act of pretending to be like another in order to understand him” through conversation.
The chief benefit of using the term “empathy” is that it has become familiar and even popular in recent years. It seems that “empathy” is much less fraught than the term “therapy;” empathy is not a taboo topic, and achieving empathy does not imply the need for special knowledge. According to empathy philosopher Roman Krznaric, “Empathy is more popular today as a concept than in any point in its history. Barak Obama has been talking for several years now about America’s ‘empathy deficit.’ You’ve got business people talking about ‘empathy marketing.’ The neuroscientists are measuring the empathy parts of our brains” (RSA Animate - The Power of Outrospection, 2012). Even proponents of the connection crisis (Chapter 1) link the lack of face-to-face communication to declining rates of empathy (Turkle, 2011; Gardner and Davis, 2013). Hence, the term “empathy” may be particularly descriptive and accessible in the term “Empathic Communication Technologies.”

Summary
This chapter proposes the 4Rs framework as one way to understand how mutual intimate reflection and empathy can be achieved between partners in conversation. The 4Rs represent a process in which partners can 1) Repattern cognitions and activities, 2) Reflect on memories and meanings, 3) Restory (inter)personal narratives, and 4) Reconnect empathically with the self and other. Drawing on “common factors” of successful marital therapies, I argue that the 4Rs can represent therapeutic processes of communication. The 4Rs, like therapy, constitute a dialogic space, or a space in which collaborative and welcoming talk can contribute to built meaning. In dialogic space, conversationalists empathically imagine themselves in terms of the other. Hence, I refer to the 4Rs and dialogic space as “Empathic Communication.”
3 Technologies for Intimate Partners

Chapter abstract
From discussions with therapists, I learned that intimate partners need to engage in Empathic Communication regularly in order to stay connected. However, technology design for intimate partners in HCI has been largely concerned with providing abstracted presence—monologic, sensory, emotional, and ephemeral communications. Technology design for intimate reflection and growth—dialogic, linguistic, narrative, and ongoing communications—is rare but important.

Intimate partners
The HCI tradition leans heavily on the notion that technologies are primarily instruments of work—for the individual, and for social groups (CSCW). But, it is increasingly the case that the technologies we build, when unleashed into “the wild,” become appropriated as instruments of intimacy—instruments that mediate intimate relationships and hence redefine what it means to be intimate (Turkle, 2011). Consider, for example, a story told to me about two partners in a long-distance relationship. When they go to sleep, they turn on iPad’s FaceTime and leave it running in their beds throughout the night. In another example, told to me by a fellow researcher, the cellphone has changed the way she and her husband interact even when they are right next to each other. Sometimes when they are in bed together, instead of simply turning over to speak with one another, they exchange text messages. In these and no doubt many other ways, technology has become a party in intimate couple relationships (Figure 4).
Two real-world scenarios that illustrate technology mediating intimate relationships. Thanks to Joon Suk Lee for allowing me to reproduce his Scenario 2 drawing.

Figure 4. Scenarios of Intimate Partners Using Technology

Scenario 1: distant partners using FaceTime in bed

Scenario 2: collocated partners texting messaging in bed
The adoption of technologies in domestic spaces has not gone unnoticed by HCI researchers, who have been hosting workshops (Neusteadter et al., 2010), writing books (Neustaedter et al., 2012), and designing dozens of couple-centered technologies (Table 8). As discussed in detail below, there has been special interest in distance scenarios like the first described above (Figure 4, scenario 1). Overwhelmingly, design and research has revolved around how technologies can renew connection between geographically-distant partners (e.g., (Strong and Gaver, 1996; King and Forlizzi, 2007; Judge et al., 2011). However, distance relationships constitute only an estimated 3% of couples (United Nations, 2004). Overwhelmingly, intimate partners are local—but they are still using technology (Figure 4, scenario 2).

**The design space for intimate partners**

The design of technologies for intimate partners has been thriving for almost two decades in HCI. However, from the lens I take, the products designed and the presumed user needs addressed have been surprisingly narrow. As I will lay out in detail below, we overwhelmingly design for partners at a distance and lightweight interactions that can best be described as “abstracted presence” (this term is adopted from Dodge (1997)). Towards moving technologies for intimate partners into broader waters and helping us explore the many other facets of couplehood, I propose an expanded design space that includes technologies for local partners and Empathic Communication—hitherto underexplored design concerns.

**Survey of technologies designed for intimate partners**

Technologies designed for intimate partners began to emerge within HCI as early as 1996 (Strong & Gaver, 1996). Since then, dozens of system concepts or implementations directed specifically toward couples have been proposed. In the early days of this research, I gathered as many of these as I could find and compiled them into the list represented in Table 8. These systems can transmit digital kisses, touches, hugs, hand-holds, and kicks. They can send signals that smell, float, light up, warm up, vibrate, spin, play music, and more. Yet, even amidst this diversity, a broad perspective reveals that these technologies fall within a relatively narrow band of a much larger potential design space for partners. Let us take a look at how some representative technologies (Figure 5) might be used by couples.
Feather and Scent (Strong & Gaver, 1996) were two of the first couple technologies to be published in HCI. Both are targeted at relationships in which one partner is traveling while the other remains at home. Feather is composed of two physical artifacts, one that resides as a stable piece of furniture in the home—a glass vase containing a feather—and the other that stays with the traveling partner—a picture frame. When the remote partner handles the frame, the feather in the vase is briefly floated in the air by a small fan at the base of the fixture. Similarly, Scent is comprised of two objects, one being a picture frame. In place of the vase, Scent introduces an aluminum bowl with a heating element. When the remote partner handles the picture frame, the heating element vaporizes essential oils contained in the bowl, filling the air with a lingering fragrance. These two systems foreground the subtlety of intimate communication and the value of implicit, non-verbal, symbolic interaction.

inTouch (Brave & Dahley, 1997) is one of the first couple-targeted systems to seek simulation of touch towards more intimate communication, though its designers were expressly against simple mimicry of existing physical forms of human-to-human touch. Instead, they designed a pair of devices outfitted with three rollers each. Two distant partners might communicate using these devices by rolling their hands over their respective device. When one of the rollers is rotated, the corresponding roller on the remote device also rotates. Like Feather and Scent, inTouch is characterized by “subtle and abstract…interaction” and a “lack of ability to pass concrete information” to one’s partner.

LumiTouch (Chang et al., 2001) is another system designed for geographically-separated partners. LumiTouch consists of two picture frames. When one partner handles their picture frame, the remote partner’s frame illuminates with colors that correspond to where, how hard, and how long the frame is squeezed. The authors suggest that the abstract communication supported by the system may be able to take on more nuanced meanings via creation of an “interpersonal language;” “the combination of colors and force allow[s] a grammar, while the duration of squeeze provide[s] syntax for creative interpersonal dialect between two people.”
Figure 5. Representative Technologies for Intimate Partners

This set of technologies designed in HCI for use in intimate relationships represents the general trend of supporting abstracted presence for distant partners. Images are borrowed from (Strong and Gaver, 1996; Brave and Dahley, 1997; Chang et al., 2001; Mueller et al., 2005; Kaye, 2006)
Hug Over a Distance (Mueller et al., 2005) is a system that supports tactile interactions that simulate hugs between partners that cannot be physically copresent. Its designers were inspired to create haptic experiences for couples that act as “emotional pings”—interactions akin to “small ‘I love you’ text messages.” The intention is for each partner to wear a vest that can fill with air to mimic the sensation of a hug. The “hug” can be initiated by either partner by making a hug gesture; the other’s vest will then fill with air until the hug is released by the initiator.

I Just Clicked to Say I Love You (Kaye, 2006)—like Feather, Scent, and Hug Over a Distance—offers one-bit communication for couples in long-distance relationships. The system runs on each partner’s personal computer. When one partner clicks on the circle displayed on their screen, the corresponding circle on the other’s screen turns red, fading in color over time. Each partner is able to view the color of their significant other’s circle. As proposed by Chang et al. (2001) regarding LumiTouch, field trials with I Just Clicked to Say I Love You suggest that even one-bit communication can generate rich interpretations; “a single bit of communication can leverage an enormous amount of social, cultural and emotional capital, giving it a significance far greater than its bandwidth would seem to suggest.”

Table 8 lists the above technologies and 34 others that have been identified through a review of HCI and related literature, as well as through a web search of design sites. The inclusion criterion for this list was simple: did the designers explicitly identify couples as a target user group? There are many systems developed for families, close friends, and other types of users that couples might readily co-opt and find useful (e.g., Judge et al., 2011). I have intentionally limited the scope of this list to aid the task of considering what design motivations and design outcomes become apparent when designers take couples as their target users. The coming paragraphs explore just that: what can current technology designs reveal about the prevailing design assumptions regarding who couples are and how technology can serve them?
Table 8. Survey of Technologies for Intimate Partners

This list, compiled in early 2011, sampled the state of technology design for couples. Technologies are categorized by design goal: for distant or local partners, and for abstracted presence or Empathic Communication.
Central design concerns for intimate partner technologies

Looking at the current design space for intimate partners can provide insight into the prevailing assumptions about who couples are and what they need (or perhaps more interestingly, do not need) from their technologies. To this end, I have characterized the designs described above and those included in Table 8 according to two overarching design motivations as reported by the designers: connecting partners at a distance and supporting intimacy and connectedness via “abstracted presence” (Figure 6). While there are undoubtedly other ways to characterize these technologies, this particular characterization was particularly salient, pervasive, and—as we will come to see—useful. I will describe these two recurring design motivations in more depth below.

**Figure 6. Current Design Space for Intimate Partner Technologies**

This diagram visualizes the organization of existing technologies for couples. Each dot represents a technology from Table 8. Overwhelmingly, designs aim to support long-distance relationships and/or abstracted presence.
**Distant partners**

The first core tenant of the collective design thinking for couple technologies is the notion that intimate partners separated by distance are most likely to benefit from technological mediation. Papers tend to describe these partners as “separated by distance,” “geographically separated,” or “in long-distance relationships.” For Chang et al. (2001), being distant means “living or working separately,” and for Strong and Gaver (1996) distant partners may be temporarily separated for travel. In the study of CoupleVIBE (Bales et al., 2011), distant partners had “been apart for six months or more and were separated by at least 400 miles.” Table 8 and Figure 6 show that 33 of the 40 technologies can be categorized as being motivated by the distant partner problem. Three technology designers did not specify their target user group in reference to distance. The problem of partners and family members separated by distance is a highly compelling and frequently addressed one.

**Abstracted presence**

The second core tenant of the collective design thinking for couple technologies is the notion that partners (often those separated by distance) prefer to use technology to communicate via “abstracted presence.” Abstracted presence, as defined by Dodge (1997), is about providing “intimate, non-verbal inter-personal communication.” A technology that supports abstracted presence is characterized by “its ability to become a shared virtual space... through aural, visual, and tactile manifestations of subtle emotional qualities” (Dodge, 1997). Though abstracted presence is a term thus far used only to describe The Bed (Dodge, 1997), most other couple-centered technologies fit this definition and are described by their creators in similar terms. For example, when Strong and Gaver (1996) describe the subtlety of everyday sociality as the inspiration behind Feather and Scent, they explain that there is “no explicit communication, but instead a myriad of more basic visual, auditory, and tactile links are shared.” Furthermore, they note that “the concern is not to exchange information, but rather to express mood and emotion.”
Others have also picked up on this trend. Considering some of the technologies listed in Table 8, Davis et al. (2007) said the following: “what these technologies have in common is that they aim to evoke intimate reactions by relying on materials and abstract representation.” Similarly, Lindley et al. (2009) note that “…technologies designed to mediate personal relationships are often lightweight. They afford a type of contact that is sufficiently vague to be interpreted as a show of tenderness, while precluding the communication of specifics.” Table 8 and Figure 6 show that 31 of the 40 technologies can be categorized as being motivated by the desire to support abstracted presence. Four technology designs did not restrict communication to abstracted presence.

Although the technologies listed in Table 8 were exclusive to couples, Hassenzahl et al. (2012) published a broader review of 143 artifacts for intimacy that includes technologies for couples as well as families. Their survey yielded similar findings. Hassenzahl et al. (2012) list a set of six design strategies for creating a sense of “relatedness” between partners, none of which include verbal communication, as is essential in my formulation of Empathic Communication. These six goals are: Awareness, (emotional) expressivity, physicalness, gift giving, joint action, and memories. Furthermore, their survey confirms that technologies for distant partners are predominant by the simple fact that all 143 technologies they surveyed were also intended for use in long-distance relationships.

**Marginal design concerns for intimate partner technologies**

Phil Agre (1997) posits that fields of research tend to tacitly organize phenomena into a particular metaphor, such that those phenomena of best fit come to the center of attention and those of poor fit gravitate to the margins. I consider that distant partners and abstracted presence are the symptoms of a predominant metaphor that emphasizes the need for geographically-separated partners to sense physical togetherness. In this section, I offer a picture to expand our center to include qualities that are currently at the margins—qualities that can account for the five uncategorized technologies in the lower-right of Figure 6.
An expanded design space that includes local partners and Empathic Communication as opposite poles of distant partners and abstracted presence, respectively. Three new conceptual spaces open: Empathic Communication for distant partners, Empathic Communication for local partners, and abstracted presence for local partners. Each dot represents a technology from Table 8. Notably, few designs occupy the three new conceptual spaces.

Characterizing the design space for intimate partners as largely centered about two foci, distant partners and abstracted presence, begs the question “is that really all there is to couples?” Are there other intimate partner needs and perhaps other technologies to meet them? This characterization can also lead us to some answers if we use it as a sort of scaffolding to envision new design opportunities. We can imagine, for example, that distant partners and abstracted presence are two ends of intersecting continua that transition into local partners and Empathic Communication, respectively. By extending the distant partners design locale along...
a spectrum that leads to local partners and likewise extending the abstracted presence locale along a spectrum that leads to Empathic Communication, we can visualize three underexplored design opportunities: abstracted presence for local partners, Empathic Communication for local partners, and Empathic Communication for distant partners (Figure 7). Notably, most technologies for intimate partners currently occupy the extremes of distant partners and abstracted presence, and few sit within the new spaces.

Local partners

Local partners are those who live close enough to be physically present with one another on a regular basis. Local partners need not be in the same room at all times or even when they are engaging in mediated communication, though these are certainly valid configurations. The difference is that partners at a distance do not have the ready option of being physically collocated, while those who are local do. This is not a strictly operationalized definition, but judging from the lack of definition for “partners at a distance,” it does not need to be. The value of the term local partners lies in its basic ability to suggest that even partners who can regularly carry face-to-face conversations and engage in physical contact may have the need or desire to participate in mediated interaction. At the extremes of the proposed continuum, we can imagine a couple that lives in different time zones for months on end as opposed to a couple that lives in the same house and spends little more than a few hours apart at a time.

There are at least two issues raised when thinking about designing mediated interactions for local partners. First, do these partners want to have technologically-mediated interactions? No doubt, local partners regularly call one another on the cell phone, use text messages or emails, and so on to communicate. Even collocated partners use technologies, like the researcher and her husband in the second scenario portrayed in Figure 4. Indeed, some past studies have stumbled upon the fact that partners enjoy mediated communication even though they are local (Ito, 2005; Bales et al., 2011). The second question raised is: even though local partners desire technological mediation, and often seek it out, is it actually a good thing? As described in the introduction, technological mediation, specifically in situations where interlocutors are copresent, is often considered a distancing mechanism (Turkle, 2011; Piercy, 2011). Is there a
way that communication technology for local partners can support more instead of less connection? Technologies for Empathic Communication may be one promising answer.

**Empathic Communication**

Dialogic space (Penn and Frankfurt, 1994)—a conversational space in which empathy emerges from deep, considerate sharing—together with the 4Rs—Repatterning, Reflecting, Restorying, and Reconnecting—describe conditions that support Empathic Communication. In the context of the design space for intimate partner technologies, I envision this type of communication to be antithetical to abstracted presence. Unlike the highly abstract, often one-bit, largely visceral exchanges supported by abstracted presence systems, Empathic Communication involves verbal, written, or similarly complex and nuanced communicative acts. Whereas the former is ephemeral, encouraging more decontextualized emotional or sentimental response, the latter is ongoing and built, encouraging a communicative grounding process that can contribute to “mutual knowledge, mutual beliefs, and mutual assumptions” (Clark & Brennan, 1991). And, whereas the former supports lightweight contact—a click or a push or a squeeze—the latter requires time, thought, work to build something meaningful. In short, abstracted presence is monologic, and Empathic Communication is dialogic (Figure 3). Hence, the latter can support conversations that move partners’ interpretations of one another and the relationship forward.

Empathic Communication, then, is about dialogic interactions that can carry highly nuanced meanings as constructed by the partners themselves. Abstracted presence systems, in contrast, tend to constrain the meaning of the communicative acts they enable to a much greater degree. The meaning is largely determined by the designer at the time of making as opposed to the users at the time of communicating. Even though some studies of abstracted presence systems have identified the ability for users to layer their own meanings on top of minimal communications (Kaye, 2006; Chang et al., 2001), the richness is of a categorically different sort. Bill Gaver (2002) has taken similar notice:

*Given these limitations, the devices may be too constrained or sentimental to be emotionally satisfying in the long run—for instance, there is no way to argue or express displeasure using the devices, except implicitly by refusing to send a*
message. Finally, because the display is created by a designer, it may become relatively impersonal for the people using it, as clichéd and inauthentic as a greeting card.

Empathic Communication technologies can overcome these limitations because the communications are more substantial and authentic (see Chapters 5 and 6). Empathic Communication systems do not invalidate abstracted presence systems, just as technologies for local partners do not invalidate technologies for distant ones. Empathic Communication simply presents a set of alternative design possibilities that are currently underemphasized and underexplored in HCI.

Looking to the design space, on one extreme end of the proposed spectrum, we might place single-bit communication devices like Feather and Scent (Strong & Gaver, 1996) or devices that send messages without any human initiation like CoupleVIBE (Bales et al., 2011). On the other end, we might place technologies that foster reflection and allow for flexible, built dialogue. No doubt, the degree of dialogic richness of systems at either end of the spectrum depends on how the system is designed and used. Perhaps some rare users of LumiTouch-like abstracted presence systems (Chang et al., 2001) really would create an “interpersonal language,” and users of Empathic Communication systems like Traveling Book (King and Forlizzi, 2007) would choose to share more poetic, asynchronous messages. Designing toward Empathic Communication does not, therefore, mean that Empathic Communication will emerge in use; but, to greater degree, these systems can make space for and invite the types of deep conversations through which empathy can be built.

**Summary**

A survey of 40 technologies designed for couples in the past 20 years shows that HCI designers tend to focus on certain types and needs of couples when designing. They take as central the design concerns of distant partners and abstracted presence; almost 90% of all technologies for this user population are designed toward one or both of these goals. However, influenced by my conversations with marital therapists, I imagine a design space that includes qualities antithetical to these: local partners and Empathic Communication.
4 Designing a Diary Built for Two

Chapter abstract
Towards charting new terrain on the design space defined in the previous chapter, I used the 4Rs framework to generate the concept for Diary Built for Two, a dyadic journaling technology for intimate partners. This system was conceived to explore the efficacy of the 4Rs as a design research tool and to confront the question of whether technology can encourage rather than hinder Empathic Communication. After presenting the design of the system, I document design intuitions and draw from literature to show how the journaling system might support empathic connection between partners. I then turn to the methods and procedures used in Study 2, in which couples were asked to use a low-fidelity prototype of Diary Built for Two.

Diary Built for Two: an Empathic Communication Technology
What does a technology for Empathic Communication between local partners look like? How does it behave? How do partners fold it into their day-to-day lives? As presented in the previous chapter, only one technology occupies this location on the design space (Fix a Fight (2010), an application developed for commercial sale by therapist Mark McGonigle), and none of the five technologies for Empathic Communication have been studied with users (Figure 7). This is very new territory for HCI. In search of a technology that might encourage the 4Rs and Empathic Communication, I generated dozens of one-line design descriptions and a half dozen or so sketches of alternative concepts. I used the 4Rs to help me ideate and then evaluate and pursue some concepts over others (Figure 8). I eventually settled on the notion of a dyadic digital journal called Diary Built for Two (DB2). In the following sections, I describe DB2 and make the case for how a shared journal might support Repatterning, Reflecting, Restorying and Reconnecting.
These are jottings from the process of designing Diary Built for Two. In several, I use the 4Rs as a construct for considering the qualities of journals and how a shared journal might be used by couples. I used thematic diagrams to explore sub-categories of the 4Rs (bottom left) and lists to map qualities of diaries, journals, and blogs to the 4Rs, or the practices of therapists. In some sketches, “Repattern” is identified as its precursor, “Ritual.” “Restory” is listed as “Connect,” and “Reconnect” is listed as “Renewal.”
Design of Diary Built for Two

As depicted in early interaction sketches (Figure 9) and a simple storyboard (Figure 10), I envision DB2 as an application for a tablet device that allows for free-form input from a stylus or finger, with the option to type entries on a soft or external keyboard. In its most essential form, DB2 enables entries to be written and preserved, and it allows sections to be shared. Journals are personal in the sense that they can be authored individually and kept private. Journals are interpersonal in the sense that portions of entries can be explicitly shared between partners within the system. Each journal can only be reciprocally linked with exactly one other journal. Diary Built for Two is a social network for two.

My initial vision of DB2 allowed for manual and automatic inclusion of digital artifacts like pictures, text messages, social media posts, and other metadata generated throughout the day by both partners in cyberspace. Control over which digital artifacts might be viewed by the other could be managed individually, and artifacts might be directly sent to a shared workspace via email or text message or through the app itself. When authoring an entry, partners would be able to access this shared artifact space, choosing between a randomized card-like view or a timeline view. The timeline view would show partners’ artifacts arranged along parallel timelines such that the daily activities of the partner in relation to the self could be considered. My intuition was that these artifacts might, first of all, give partners a starting point for written entries and, second, encourage reflection on the self and the other (Figure 9).
Figure 9. Early Sketches of Diary Built for Two

These rough sketches show initial plans for the Diary Built for Two to include multimedia from both partners.
DB2 is not intended to simply replicate paper journals. Using a digital platform brings certain qualities to the activity that may help further the 4Rs. For example, adding multimedia aspects as described above may foster Repatterning and mutual Reflection. Digital journals might automatically manage or adjust the length of time that entries are kept, rearrange entries temporally, or show a random past entry at the start of each session. These features become readily feasible in the digital medium and they might encourage Reflection and Restorying. The ability for the journal to be digitally coupled can constrain the exercise, perhaps encouraging more intimate content, more relationship-oriented writings, and more sharing, which can feed Reconnection. Digital media can make old genres more accessible to new users in app marketplaces, and may present the activity of sharing journals as more legitimate or normal. And, digital journals have the added convenience of being even more mobile, not to mention allowing different editing functionality (e.g., copy and paste), different exporting functions (e.g., printing a copy), stronger encryption, and more. There are always tradeoffs when changing mediums—for example, the loss of a tangible, distinct artifact that can be hidden or displayed, or the “feel” of pen and paper. But, the potential gains suggest that digital exploration of shared journaling is worth while.

Due to time constraints and uncertainty about the form that the system would have to take in order to be useful and used, I set aside the multimedia design. I decided to explore prospects of a simple, coupled digital journal for writing and drawing (Figure 10). The following scenario demonstrates how this slimmed-down version of the DB2 system might work and be used:

Meg and her partner Joon have been keeping individual journals on and off throughout their lives. When Meg found DB2 on Apple’s App Store, she imagined that a digitally coupled journal might be a good way for her and Joon to encourage each other to be more consistent authors. She downloaded the app for her iPad and convinced Joon to download it for his iPhone. When Meg opens DB2, she sees a list of recent activities: her recent entries, her recent shares with Joon, and Joon’s recent shares with her. She can use the links in this list to (re)visit her entries or shared portions of each others’ journals. If she navigates to her journal, she can author a new entry with a stylus or soft keyboard, or revisit old entries by flipping back through the pages. She can
share snapshots of her journal with Joon by drawing a freeform loop around any portion or highlighting typed text, and she can always un-share portions that were previously shared. She appreciates that DB2 preserves some of the privacy of her traditional journal; when Joon logs in, all he can see are his own entries and the portions of Meg’s entries that she has chosen to share. She also enjoys the ability read parts of Joon’s personal entries and to share parts of her own entries, because this often jumpstarts new conversations and connection.

**Storyboard of Diary Built for Two**

*Meg pulls her Diary Built for Two, a mobile touchscreen device, from her bag as she sits down to her daily coffee.

*She turns to the next page in her diary and begins to recount and reflect upon her day, an activity that begets new interpretations of herself and her partner.

*She highlights as she writes, indicating portions of her journal that she would like to share with her partner.

**Figure 10. Storyboard of Diary Built for Two**

Diary Built for Two is intended for a tablet device. It allows freehand and type input and freeform dyadic sharing.

**Dyadic journaling as a 4Rs activity: design intuitions**

As depicted in Figure 8, the 4Rs played an integral role in the design process; my intuitions of digital journaling were in constant conversation with the 4Rs. During initial design of DB2, my intuitions were mostly based on my personal experience with keeping a diary on and off as a younger woman as well as my experience in intimate relationships. I thought Diary Built for Two could become an Empathic Communication Tool (ECT) for local partners (Figure 11). Below, I present intuitions about how a simple, dyadic digital journal might support the 4Rs.
Diary Built for Two is a technology concept intended to be used by partners who live close to one another. It is intended to support Empathic Communication, hence conforming to the 4Rs. In the expanded design space presented in Figure 7, DB2 occupies the area indicated above. Only one other technology fits these characteristics, making DB2 a novel concept in HCI.

I believed that the journal and diary genre had important qualities that might be preserved when moving from paper to digital renderings—qualities that might mirror the 4Rs. Diaries provide a private space where one can engage in an ongoing personal dialogue, often on a regular basis (Repatterning). Additionally, diaries support particularly intimate content; most diaries become grounds for expression of personal thoughts, feelings, and mundane experiences that may never be otherwise shared with others. As a result of these characteristics, keeping a diary is a highly Reflective exercise. And, by enabling the externalization of inner thoughts, the diary invites its author to develop new relationships to those thoughts—whether it be before writing, in the moment of writing, or even minutes, days, or years thereafter (Restorying).
The more interesting and novel intuition was that, by digitally coupling diaries and enabling selective sharing between partners, DB2 might be able to extend the benefits of personal journaling to the level of the couple. DB2 might support communication between partners at new times of the day or in new forms or even about new topics. Therefore, I hypothesized that introducing DB2 would create a space for new patterns of couple interaction (Repattern). The framing of the system as being “built for two” and its selective sharing feature might also encourage Reflection to move beyond the self to include the partner in what I call “mutual reflection”—reflection on the self, the other, and the relationship. Finally, I hypothesized that the digital diary could reinforce couple Reconnection through ritualistic communication and empathy-building.

To summarize, I believed that DB2 could support the 4Rs of Empathic Communication. The second dimension of DB2, as indicated in Figure 11, is that local rather than distant partners were the target users. However, I was initially unsure whether this difference should have any impact on the design. My assumption was that partners would mostly share journal excerpts through the application; presumably, being local or being distant would not have much impact on use. In Chapter 5, however, my report on Study 2 shows that this assumption was incorrect; most of the conversation that happened as a result of the journal took place outside of it—in face-to-face conversations. These were conversations about insights reached in the journal, but they were not explicitly read or referred to as such. Several couples who wanted to share entries explicitly preferred to do so in person, meaning that the digital sharing capability might be insufficient for geographically-distant partners.

**Dyadic journaling as a 4Rs activity: literature review**

[Journaling] is a way of self-healing, which encourages us to develop personally, understand our needs and explore our creativity. It is, fundamentally, a means to self-exploration and discovery in an attempt to become a whole person. (Vaandrager and Pieterse, 2008)

As described above, the DB2 design sketch was initially based on the intuition that a journaling metaphor might encourage ritualized entry-making, invite emotional or mundane content, and enable one to share what was previously un-shareable; I believed these to be
activities that would initiate the 4Rs. According to literature on journals and diaries, the connections between personal writings and therapy are much more profound than I initially suspected.

Diaries and psychotherapy have developed independently but along parallel paths, with some diary keepers incorporating psychological theories in their writing practices, and some psychologists incorporating journal writing into their therapy practices (Rainer, 1978). Various writing formats, including diary entries, sent and unsent letters, structured writing, guided autobiography, and poetry have been used in tandem with guided counseling (Penn and Frankfurt, 1994; Riordan, 1996; Vaandrager and Pieterse, 2008). Below, I illustrate how various forms of writing, with a focus on journaling in particular, can assist the 4Rs. Most of these studies look at writing as a solitary activity in an informal context or as a collaborative activity in a formal therapeutic context. Diary Built for Two is intended as a collaborative activity in an informal context.

Re patterning through journals

A shift from talking to writing creates a new context and the opportunity for reframing, which potentially generates different perceptions, expectations, and, ultimately, behavior. (Riordan, 1996)

Diaries and similar forms of writing are an “active, purposeful communication with self” (Rainer, 1978). The writer is his own audience and is provided a distance from himself and his attitudes that invites new perspectives: "the effect of recording the events of one's life, of endowing them with meaning by observing them, is to locate another voice to comment on them" (Penn and Frankfurt, 1994). Particularly in the realm of therapy-focused diaries, the diarist “take[s] on the roles of both patient and therapist” (Rainer, 1978).

Diary writing is notably absent of formal rules—“everything and anything goes” (Rainer, 1978). “[Diarists] write, sketch, doodle, and play with their imaginations” (Rainer, 1978). The process opens up a world of new ways to speak to and respond to the self; it becomes a medium for new self-relating. And, relating to the self in new ways means relating to others in
new ways. Rainer (Rainer, 1978) lists dozens of forms of diary-keeping and as many benefits: the diary is “…a place to advise yourself… a nonthreatening place to work out relationships with others and to develop your capacity for intimacy… a path to self-awareness and self-knowledge… a means of achieving self-identity… a means of accelerating or concluding psychotherapy.” Therapeutically speaking, diaries are places where one’s stories can become increasingly “rich,” “complex” and “relational” (Penn and Frankfurt, 1994).

**Reflecting and Restorying through journals**

[Each diarist’s work is] a unique, unrepeatable story of self. From reflecting upon what has come from within they discover unrecognized parts of their personalities and interests of which they were unaware. They see patterns of meaning in their lives and secrets of self…. Through this journal process of expression and reflection they discover new solutions to problems [and] enter into and appreciate the process of their lives …. (Rainer, 1978)

As we have seen, diaries are self dialogues in which one can unearth marginalized or otherwise forgotten experiences or understandings. The process of writing “inevitably highlights certain aspects of ourselves we weren’t aware of, such as patterns of behavior that compel us, inner imagery that haunts us, fears and uncertainties that hold us back from being able to hear our own voice” (Vaandrager and Pieterse, 2008). Hence, diaries are platforms for Reflecting. Furthermore, “the act of creative writing is also the act of telling a story, a fundamental in narrative therapy” (Vaandrager and Pieterse, 2008). Writing is a process of exploring how one’s stories are and how they might be. Through articulating and replying to personal stories, diarists make them anew. Diaries are platforms for Restorying.

Again, keeping a diary is not just a means to self-understanding; the journal can be practiced as a way of "deepening understanding of others; as a way to touch and reach the depths of human beings…” (Rainer, 1978). Especially in the more focused context of self-help and therapy, journaling “highlights problems of the current relationship, be it with the self or with others” (Vaandrager and Pieterse, 2008).
Reconnecting through journals

Sharing a diary can bring deep intimacy... But even if you never share a sentence of your diary with anyone else, you will share it through your life. Its existence will touch other people by the way it changes you and permits you to develop in self-awareness, directness, and honesty. (Rainer, 1978)

It may at first seem surprising that journals, which are often solitary expressions, can bring an individual into closer connection with others. It is true that on rare occasions journals are authored collaboratively by spouses, siblings, and so on (Mallon, 1984). And, journals often become places to discuss other people or relationships (Mallon, 1984). But, even when there is no overt connection between the diary and the diarist’s significant others, relationships are still at stake. For one, journals can be precursors to interpersonal dialogue: “we talk to ourselves primarily to talk more effectively to others... [journaling is] a displaced serial conversation; the drafting of a possible meeting of minds; the premeditation or blueprint of a social act” (Summerfield, 1987). Furthermore, simply writing can constitute connection with the other: "the relationship between self and other is important in writing... self and other are authored in conversation... every word is in that sense ‘double-voiced,’ for it is said or listened to, written or read, with a ‘glance’ to the other” (Penn and Frankfurt, 1994). Hence, writing to oneself can spur empathy and Reconnection with the other.

Finally, Reflection and Restorying are processes that are ongoing: “events that have occurred in one time are narrated in another, and written in a third. In each of these time schemes the writer reconstructs and re-experiences these events” (Penn and Frankfurt, 1994). In the moment of writing, and in years that follow, diaries continue to provide deep insight into (inter)personal narratives. This longitudinal construction of narrative is one way journaling puts the “Re” in Reconnecting.

Digital journaling in HCI

There have been a handful of studies in HCI that seek to learn more about issues at the heart of Diary Built for Two—for example, about how people tell stories, reflect on the past, change narratives, change behavior, build strong-tie relationships, and so on. However, rarely are
these qualities found together with respect to intimate partner communications. For example, Peesapati et al. (2010) present “Pensieve,” a system that sends regular email prompts to encourage reminiscence and journaling. This system, however, is intended for individual reminiscing, and storytelling and change are not considered important follow-ons to the task of reminiscing. Research initiatives about the quantified self (Quantified Self, 2912), personal informatics (Li et al., 2010) and life-logging (Harper et al., 2008) are similar. Personal informatics, for example, takes “know thyself” as its motto, and seeks to foster inward reflection on personal data, often towards achievement of health and fitness goals (Li et al., 2010; Li et al., 2012). These systems tend to emphasize the personal rather than the interpersonal and tend to rely on automated data capture for reflection.

There have been several relevant studies of natural blogging behavior on the Internet that suggest that weblogs can contain very personal information, similar to private diaries and journals, and that they can also be used for maintaining strong-tie interpersonal relationships (see Stefanone and Jang (2008) for a useful summary). However, in their study of blogging behaviors, Nardi et al. (2004) found that even when bloggers write to an audience, there is limited interactivity with that audience. Blogging, then, represents a move toward creating more distance between ourselves and our others: “Maybe we are ready to hold each other at arm’s length. But not to disengage” (Nardi et al., 2004). Blogs are, of course, syndicated, whereas the Diary Built for Two is intended to be dyadic; content can only be shared with one other person. It seems plausible that these characteristics might give rise to differences in the amount of intimate disclosure and the degree to which content is partner-oriented. Furthermore, most of these studies do not consider the reflective or growth-promoting aspects of blogs.

Perhaps the two studies that have the most relevant findings are Harper et al. and Stahl et al. (2008), whose work on reflective technologies turns up some categories of interaction that bear resemblance to the 4Rs. The Affective Diary (Ståhl et al., 2008) is not a typical diary; it uses body sensors to generate abstract visualizations for diary owners to ponder and atop which they may write freehand notes. In this rare study of digital journal-keeping, Ståhl et al.
(2008) discovered that the diary “caused [participants] to learn about themselves and even attempt to alter their own behaviors.” They described this as a four-stage process (in my own rewording): 1) identify experiences, 2) reflect, 3) come to new self-understanding, 4) attempt behavior change. These are thematically very close to the therapeutic process captured by Repattern, Reflect, Restory, and Reconnect.

Similarly, Harper et al. (2008) did a study of life-logging with the SenseCam, a device worn around an individual’s neck that automatically snaps photographs at regular intervals. These pictures were then accessible to participants, who could then consider the images captured throughout the day. Like the Affective Diary, this system is fairly different than a written journal, not only because of its pictorial nature, but also because content is not explicitly authored by the user. Still, Harper et al. (2008) report results that present interesting parallels to the 4Rs. Among the several themes listed, “Strangeness,” “Reflection,” and “Reassessing Oneself in the Past” are of primary interest. Essentially, participants experienced “surprise at how their own lives were.” The “images provoked discoveries” and “the ability to juggle up the narrative of life.” Again, these themes echo the 4Rs.

While the 4Rs framework was derived in conversation with couples therapists, I am struck by how, independently, very similar descriptions emerged in both the work of Stahl et al. (2008) and Harper et al. (2008). These accounts further suggest that the 4Rs are “onto something;” that is, they can describe the process of personal growth in non-clinical settings. What will be most interesting to discover is whether or not the Diary Built for Two, with its dyadic coupling, will be able to expand these transformative experiences to the level of the couple.

**Deployment of Diary Built for Two**

In the previous sections, I introduced the motivation and design of Dairy Built for Two. I articulated some of the core design intuitions and checked them against literature that showed how personal journals can affect the type of therapeutic change implied by Empathic Communication. But, it is still unclear whether these effects will carry over to a collaborative journaling activity, and whether this activity is one that actual couples may feel compelled to
do. Furthermore, if Empathic Communication is made possible via dyadic journaling, is the 4Rs construct useful in the process of accounting for how couples experience meaningful change? Study 2 is my effort to address these questions in a way that can lead to a better understanding of dyadic journaling, Empathic Communication, the 4Rs framework, and the lives of couples.

**Research methods for Study 2**

*Diary study*

Study 2 may best be described as a diary study with elements of cultural probe and technological probe influence. Diary studies have been used in HCI since at least the mid-1980’s as a means of gathering more accurate, meaningful information from participants in their naturalistic settings (Palen and Salzman, 2002). Participants are asked to document particular events throughout their normal routines. Traditionally, these diaries take the form of a paper log book that participants can bring home. More modern uses have included computer technologies (e.g., voice mail messages (Palen and Salzman, 2002)) and other media (e.g., photos, audio clips, and physical objects (Carter and Mankoff, 2005)). The primary benefit of these studies is that *in situ* documentation may help participants capture and later recall information that is important to researchers (Carter and Mankoff, 2005).

Diary studies bear resemblance to the use of cultural probes (Gaver et al., 1999) and technology probes (Hutchinson et al., 2003), however there are key differences that separate the three. Cultural probes can also take numerous forms (e.g., photos, annotated maps, etc.), but surrounding activities tend to be less rigidly structured to evoke bits of meaningful insight into the lived worlds of participants. Furthermore, cultural probes are not primarily intended to collect “information” or “data” for “analysis;” rather, they provide provocation and inspiration for use in design. Technology probes (Hutchinson et al., 2003) are extremely simple, digital prototypes—as opposed to, say, diaries or postcards—that are deployed into the field. The key goals of technology probes are more pragmatic than scientific or designerly: they seek to gain information about contexts of use, test technical prototypes in the wild, and inspire users and researchers to think of new technologies.
Study 2 is a “diary study” in two senses of the term. First, it is a study through diaries. Second, it is a study of diaries. In the first sense, I used paper diaries, kept daily by participants at home, in elicitation interviews (Carter and Mankoff, 2005). That is, the diaries—which participants filled with the happenings of the day, to-do lists, rants, and so on—served as prompts in interviews for stories about day-to-day activities and the significance they hold for participants. In the second sense, I used these same paper diaries as low-fidelity prototypes of Diary Built for Two. I learned, for example, that freeform input is an important feature to support in a digital rendition because several participants chose to draw pictures.

Like cultural probes, my diary study was able to tap into very personal and often unobserved aspects of participants’ worlds. Like a technology probe, my diary study was able to shed light on potential usability issues and suggest new variations on the DB2 design sketch. By using this diary study approach, my time with participants was in a sense expanded. While each couple met with me in person for a mere 4-6 hours over the course of the study, the diary served as my eyes and ears for all the moments missed.

**Semi-structured interviews with individuals and couples**

As described in Chapter 2, I used semi-structured interviews in both Study 1 and Study 2 to learn about the activities and meanings produced within couple relationships—first from relationship experts and then from couples. Qualitative interviews are exceptional data creation tools for in-depth research about culture and experience. However, as with all methods, there are strengths and weaknesses. I discuss some of these in Chapter 2 (section “Semi-structured interviews”). In this section, I expand upon that discussion by considering the specific implications when couples are the unit of analysis.

Interviewing couples in particular has benefits and challenges of its own. In some situations, it was appropriate to ask one partner about the other partner, capitalizing on the fact that the two have a deep history and may have keen insights to share. I would ask participants questions that allowed them to describe the same event individually in one-on-one interviews, collaboratively in group interviews, and across multiple interviews. I sometimes repeat what I
believe the participant has said and ask if I have understood correctly. Toward the end of the study, I tested higher-level interpretations by asking participants about them directly and soliciting open feedback. Each of these strategies can provide a type of redundancy or triangulation between multiple accounts from multiple perspectives (Table 9, page 77). These can help raise confidence that the participants have been heard and their views preserved.

Challenges to data quality when working with couples often revolved around the interview structure I chose, in which I interviewed partners separately for the majority of the second and third interviews. Some participants expressed that they preferred interviewing together, often because one partner was uncomfortable in a one-on-one conversation; Fred from Couple 6 preferred it so much, and the quality of our conversation was so much improved, that I decided to hold our third interview as a group. But, there were also unexpected benefits. As I discuss in Chapter 6, Example 1, it was not until I interviewed Dawn and David together that I uncovered an important interaction the two had over the journal. And, even though Fred really disliked being interviewed alone, the one-on-one interview I had with Fyona during interview 2 led to some very valuable conversations about topics Fyona said she would not have discussed in the presence of Fred (Chapter 5, Example 5). On the whole, these three different interview scenarios (the one-on-one interview with partner 1, the one-on-one interview with partner 2, and the group interview with both partners together) offered three different perspectives on the relationship that usually supported fuller interpretations.

During our interview sessions, I collected materials beyond the interview recordings, including journal metadata worksheets, journal entry summary sheets, and for some participants, pictures of journal entries (see Appendix for samples). Journal metadata worksheets asked participants how many entries they made, on which dates, how many pages each entry filled, how many people were mentioned in each entry, etc. Since the journals themselves were not collected (more on this below), these sheets were intended to help me assess whether participants were actually keeping regular journals. Journal metadata worksheets asked participants to write high-level summaries of journal content, mapping those summaries spatially onto photocopied blank journal pages. These were intended to help me understand what types of content
participants wrote about in journals and how much space they devote to each topic. Some participants chose to share pictures of their entries in the third interview. The collection of these artifacts helped add context and richness to the stories participants related in interviews.

**Constructivist grounded theory**

As described in Chapter 2, I used semi-structured interviews combined with constructivist grounded theory to learn about the activities and meanings produced within couple relationships—first from relationship experts (Study 1) and then from couples (Study 2). In Study 1, I conducted segment-by-segment *initial coding* and then *focused coding* (Charmaz, 2010) to generate the 4Rs. On the surface, this strategy may seem like a departure from traditional HCI practice, which usually seeks design guidance directly from users as opposed to experts. However, I consider the therapists I interviewed to be a special user population, because they have a unique combination of scientific, theoretical knowledge of couples as well as a practical, working knowledge of couples. The latter is due to the fact that all five therapists, four of whom were researchers, held regular therapy sessions with couples—not to mention that most were partners in a couple relationship. Hence, I considered the resulting 4Rs framework to be a potentially viable representation of the experiences of non-experts, as well.

Study 2 was an extension of Study 1 that sought to answer the following question that arose as a result of the latter: can the 4Rs translate to non-expert, non-clinical couples? Study 2, then, is a matter of *theoretical sampling* (Charmaz, 2010), or the selection of a new participant sample for testing and refinement of the 4Rs concept. Theoretical sampling entails taking categories generated from initial data collection and using them to guide data collection and analysis of subsequent phases of data collection. Hence, I used the 4Rs as codes when designing interview protocols (although targeted questions were saved until the end of the final interview), and analysis of interviews in Study 2.

Although I used the codes from Study 1 to analyze Study 2 data, I did not simply apply the 4Rs codes to interview segments without critical consideration. I used the 4Rs to “check, qualify, and evaluate the boundaries of [those] categories” (Charmaz, 2010). In Chapter 5,
Example 1, I use a story from Fred and Fyona to expand my definition of Reconnection to include conversations that take place without the immediate mediation of the journal (i.e., talking about the journal content as opposed to reading it directly). In Chapter 5, Example 2, I use a story from Dawn and David to raise questions about the mutuality of each stage of the 4Rs. And, in Chapter 5, Example 6, I consider how the journal helped Chris Repattern, Reflect, and Restory, but feel more Disconnected. These are just some ways in which the 4Rs were critically reconsidered and adjusted in the process of applying them to a wider data set.

Participants

I ran a two-week field study with 10 couples. I recruited participants to join a “study of how couples communicate” through Craigslist’s “volunteers” forum by offering each partner a $50 AmEx card. Replies came from a surprisingly wide variety of couples in a variety of life situations. One couple had been dating for under one year, another had been dating for 4 and was engaged to be married, another had been married for over 20 and had three children together, while the oldest dating couple had children from previous marriages. The youngest participant was 20 and the oldest was 60. Some couples were in precarious economic situations and participated for the money, while others (including a semi-famous author) were financially well-off. One couple was same-sex. Couples were not screened in any way—the only requirement being that they self-identified as “a couple.” This was an explicit decision because there is a dearth of research in HCI devoted to creating deep descriptions of the range of local partners.

Couples participated in three interviews and an at-home journaling activity. Interviews were spaced roughly one week apart at a coffee shop or restaurant proposed by the participants (except for one couple, for which interviews were held at home to avoid paying for childcare). Both partners were present and were interviewed together in the first session. The second and third meetings included one-on-one interviews with each partner (these lasted between 20-45 minutes each) as well as a joint couple interview at the end (these lasted 10-30 minutes each). Between interviews, participants were asked to keep daily personal journals using a medium of their choice. Paper journals were offered for free, but participants had a choice between using
a paper or digital journal. Most participants chose to keep a paper journal; only three chose to keep digital journals in the form of a text file, an email client, and a blog. During the second week, participants were asked to share parts of their journals with one another using a medium of their choice (verbal communication, email, etc.). This journaling process served as both a low-fidelity prototype of DB2 as well as a probe into the nuances of particular couple relationships.

I told participants in the first interview that their journals would not be collected. This decision was made in order to encourage more authentic journaling. Some participants reported that this changed the way they journaled significantly, and others reported that it did not effect their journaling at all. In any event, many participants wanted to continue keeping their journals or at least save them after the study. In order to balance the data collection regarding journals, participants were asked to share limited information about their entries with the first author (FA) through a metadata worksheet, written summaries, and—optionally, at our last interview—photos (see Chapters 5 and 6 and the Appendix for examples). The written summaries were free-form; participants were asked to put only as much information in these summaries as they felt comfortable sharing. Some participants chose not to share anything, most shared some, and others shared their entire journal. Only two couples refrained from taking pictures in the third interview, with most participants choosing to capture a subset of their entries via camera.

The interview structure in the second and third interviews was the same. Both participants were asked to fill out the metadata worksheet. Then, one participant was asked to sit in a different location out of ear-shot of the one-on-one interview I was conducting with the other partner. During this time, the participant was asked to fill out the journal summary sheet or, in the case of the third interview, optionally take pictures of their journal. After the one-on-one interview concluded, partners switched roles. Finally, both partners came back together and we finished the interview as a group.

The questions asked in the first interview centered around the couple relationship. I asked
participants to tell me about their relationship, what they appreciate about each other, and tensions that arise. I also asked them to walk me through a typical day. I asked about how they communicate and what types of technologies they use. In the second interview the focus was primarily on the participants’ experience of journaling, although I modified the protocol to include questions about what happened the week before in the normal course of life. When participants came back together at the end of interview 2, I asked them to answer some questions they had answered separately together. Interview three was very similar to interview 2, with the exception that at the end of the interview, I was more revealing about the research project’s intentions and I asked participants to talk about their experience of the study as a whole. All three interview protocols can be found in the Appendix.

Analysis

The analysis process unfolded over a period of three years due to other commitments and shifting research goals. The initial stages of analysis began during the interviews. As I conducted interviews, I took detailed notes, identifying notable events, jotting down possible themes, writing reflexive notes between interviews, honing interview questions, and talking with colleagues Tad Hirsch, Dawn Nafus, Scott Mainwaring, and others about the emerging themes. Tad and Dawn each acted as a second interviewer for two of the interviews. I conducted the remaining 28 interviews alone.

I began this research project with the goal of transcribing all interviews before beginning analysis, but this soon proved to be an overwhelming task. I completed transcripts of 10 hours of audio (or 6 interview sessions). I recruited help from a senior undergraduate psychology student, Clarissa Stiles, who transcribed another 10 hours of audio. The result was hundreds of pages of transcription, but only half of the 30 total interviews had been completed, and almost a year had passed since the data had been collected.

I decided to change focus from all 10 couples to just one couple, Couple 1, with the goal of creating a thick case study description. Couple 1 was selected because all transcripts were complete. Drawing from transcripts totaling 157 pages, I generated various thematic diagrams,
performing segment-by-segment coding. I talked about Couple 1 transcript segments and themes with Clarissa and other researchers in addition to taking reflexive notes about the analysis process. The result was a hierarchical diagram of themes. Results are clustered under three high-level categories: the partners and their relationship (“Andi and Alan”); interactions around and thoughts about the journaling activity (“Journaling”); and reflective activities in which partners participate (“Mutual Reflection Spaces”). There are 33 total subcategories at the second tier, and there are multiple additional tiers. There are over 1500 coded transcript segments. I coded for the 4Rs, but I mostly generated new codes to describe the intricacies of the couple and their interactions with the journal.

However, it became clear as I was concluding analysis on Couple 1 that some of the interpretations I wanted to put forward required more contextualization; I needed to look across couples. So, with guidance from my committee, I decided to again consider Couples 2-10. This time, instead of taking a full transcription approach, I re-listened to all interviews, taking detailed notes (see Appendix for samples). Notes described what was said, how it related to other statements from that couple, how it related to other statements from other couples, and how it related to the 4Rs. In between note-taking periods, I wrote reflexive journal entries regarding the analysis process. I spoke with my advisor, Steve Harrison, and other researchers regularly about the emerging findings and evidence. When reporting on Couple 1 as well as Couples 2-10, I only use the codes for the 4Rs.
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
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| Triangulation          | I gathered information in multiple formats and from multiple sources to draw a richer, more coherent and more reliable picture of participants’ experiences and beliefs. | • transcripts of interviews:  
  • from individuals’ self-reports  
  • from one partner regarding the other  
  • from couples  
  • collected materials:  
  • journal summaries  
  • journal pictures (some)  
  • full journals (some) |
| Data immersion         | Prolonged engagement with the data helped me become familiar with each couple and more able to compare and contrast experiences within and across couples. | • conducted all interviews  
  • transcribed several interviews  
  • re-listened to each interview multiple times  
  • took detailed analytical notes while re-listening to all interviews |
| Peer review and debriefing | Interpretations were developed in conversation with peers, blind reviewers, my advisor, and my committee. | • collaborative readings of transcripts  
  • conversations  
  • emails  
  • talks  
  • paper reviews |
| Clarification of researcher bias | Reflecting on and reporting aspects of researcher bias can help the researcher and reader look at interpretations more critically. | • kept a personal journal reflecting on my analysis and bias, interleaved with my research notes  
  • wrote the Researcher Bias section in this dissertation |
| Rich, thick descriptions | The use of “thick descriptions” and lengthy direct quotes allow readers to access the analytic work themselves, raising confidence in the validity of the interpretations. | • seamless integration of participants’ terms and phrases using italics  
  • large block quotes and dialogue |
| Negative case analysis | I conducted a conscious search for negative cases, or evidence that suggested the 4Rs were not taking place or were taking place differently than expected. | • documented negative evidence when coding  
  • raised questions in the report of my analysis (e.g. “does this count as Reconnecting?)  
  • wrote “Challenges to Adoption of Diary Built for Two” section |

Table 9. Methods Used to Strengthen Analysis
Summary of methods used to strengthen the quality and trustability of findings. Methods are drawn primarily from Glesne (2006).
I took measures throughout the research process to strengthen the quality and trustworthiness of the analysis (Table 9). When gathering data primarily through interviews, there can be a risk of misunderstandings, withheld information, and so on. One way to counteract this is to gather information from multiple sources and in multiple formats; for example, I gathered information from MFT experts and couples, I asked partners questions about each other, and I asked participants to fill out worksheets about journaling. This practice is known as triangulation (Glesne, 2006). I also used data immersion, peer review, and reflexivity, which simply mean that I spent a great deal of time listening to, reading, writing, and talking about the data with myself and with other researchers (Borkan, 1999; Glesne, 2006). In the next section, I include some reflexive highlights regarding my personal biases toward this research area. Finally, I present thick descriptions and negative cases (Glesne, 2006) to open up the analysis of the data to the reader and qualify the applicability of the 4Rs framework.

**Reflexive considerations**

In any research project, the researcher plays a role in shaping everything from the questions asked to the instruments used to the interpretations drawn from the study. A piece of the researcher is invariably embedded in the work. This is particularly the case in qualitative fieldwork, in which the researcher is actually the primary instrument of measurement herself. In constructivist qualitative research, reflexivity is a standard practice that can help both the researcher and her audience raise the standard for analysis (Patton, 1990; Glesne, 2006; Kvale and Brinkmann, 2009). Reflexivity is a detailed, unfolding process that spans a research project. I have probably a hundred pages of reflexive notes taken over the years. Here, I will only share some of my thoughts about what I perceive to be the highest-level issues: first, my thoughts on theory and design, second, my thoughts on journaling, interviewing, and empathy.

**Theory, ontology, design**

The 4Rs framework or model, as I sometimes call it, can be interpreted as a theoretical construct. This is primarily because I have mapped the 4Rs to Davis’s (2005) theory, but also because I used Grounded Theory methods in its construction. Davis (2005) suggests there is a “golden thread” that runs through all instances of therapeutic change, such that there are
underlying, universal principles to be discovered. I personally disagree with this representationalist view—that these principles can be objectively uncovered “independently of their observation” and that there might be one common factors model to rule them all (Davis, 2005). Rather, I take instances of therapeutic change to be “differ[ing] in their local material resolutions of the inherent ontological indeterminacy” (Barad, 2003), and I believe the varying descriptions we construct of these phenomena are related by “family resemblances” (Wittgenstein, 1973). In this conceptualization, each enactment/observation of therapeutic change is unique yet resonant, and there is no essential set of labels or concepts or principles that can articulate all therapeutic interventions. I interpret this to mean that many different models can usefully describe therapy.

Following from these beliefs, the purpose of models is to serve as a tool for human reflection, planning, and action. Every model necessarily brings certain phenomena and thoughts to the foreground and marginalizes others (Agre, 1997). Instead of focusing on congruence with a singular “Truth,” I believe a model’s validity should be assessed according to its ability to help people take moral and practical action. The 4Rs framework is intended to be used in HCI to guide fresh thinking about design and research practice and outcomes. But, like other models, it is just one of many valid renderings. To mimic a phrase from my advisor Steve Harrison, “It’s just a model” (Harrison et al., 2006).

I think these beliefs do have an effect on my analysis. As described above, the 4Rs model is both an interpretation of worldly phenomena as well as a designed tool for HCI practitioners. The 4Rs are bounded on the one end by the views of 5 therapists in Study 1, by the common factors presented by Davis (2005), and by the views of couples in Study 2. Their definition evolved to enfold aspects of all three. The 4Rs are bounded on the other end by design concerns; I want to balance keeping the 4Rs simple and memorable, for example. In an early conceptualization of the 4Rs, I used terms like “ritual” and “remembering” and “sharing” to describe the activities of Repatterning, Reflecting, and Restorying. There could easily have been additional or fewer or entirely different terms used to define the phenomena, but I decided upon the 4Rs in part because they were linguistically parallel and concise.
Furthermore, when evidence that was unaccounted for by the 4Rs arose, my tendency was to explain that externally to the model so as to keep the model simple and usable; for example, in Chapter 5 (section “Challenges to adoption of a Diary Built for Two”), I narrow the target population for the 4Rs rather than adding new concepts to the model itself. It is necessary for every model developer to ask “to what ends will this model be used?” My answer to that question has undoubtedly left its mark on the 4Rs.

**Therapy, journaling, interviewing, and human flourishing**

When I began this research project with Study 1, I developed the 4Rs model from my best understanding of what therapists had related to me. But, their terms and metaphors were quite foreign. I uncritically adopted their goals in therapy (my understanding of them, at least) as my goals in design, but I had not internalized them or felt them to be personal goals. Similarly, I designed a technology, Diary Built for Two, that was based on a journaling metaphor, but I personally was not a journaler. I decided to try to keep a journal towards understanding my participants and my design, but it was a struggle; journaling did not come naturally to me. I even asked my husband to keep a shared journal with me, to be interviewed with me by a third party using my interview protocol, and to attend a couples therapy session—all for the sake of the research. I soon realized that Diary Built for Two was not for us. So, in many ways I was a very detached observer to the use of the 4Rs and the use of shared journals.

However, as the project progressed—as I transcribed and re-read and re-listened to interviews, and also as I performed literature review—I began to find merit in these things that initially held no interest for me. In the words and experiences of my participants, I saw the 4Rs as an admittedly simple but resonant description. About a year after the study, I started keeping an infrequent but meaningful journal of my on volition. I also started sending friends long, personal, hand-written notes and postcards as intimate gifts (not unlike Mary, as described in Penn and Frankfurt, 1994), which I really had not done with intention before. Furthermore, I came to see the 4Rs as describing something much more significant: human co-development, flourishing, or *Eudaimonia*, as Aristotle called it. I think this is how some therapists may have considered their work from the start, but it did not touch me in quite this way until I realized
that in these rich, dialogic, empathic engagements, identity was at stake. I felt that the interviews with participants—and all the work I did with those recordings thereafter—as well as my personal writing, had changed me, and had changed my own intimate partner relationship. And, some participants reported that it had changed them, as well.

Even though I was not personally aligned with therapy or journaling, I was drawn to certain types of emotional communication. “Reflection” had a positive valence for me, and so did “intimate sharing.” I appreciated talking and sharing with others, and I always found this type of disclosure necessary in my personal relationships. I was somewhat blind to this bias until it surfaced in interviews. Several participants, typically the men, had a different perspective. When this arose, my response was fascination in the way of a cultural anthropologist. For example, Chris from Couple 3 opened our second interview by telling me he would find his journal useful if he put feelings in it, but he is not the type to write down feelings. I responded with: “Can you tell me more about this whole feelings thing—why you wouldn’t [write them in your journal]? I want to know more about that because I personally don’t understand it; I’m the type that’s like ‘oh feelings, feelings, feelings!’ and the more you can tell me about it the better.” I came to understand early on that I needed to respect the communication styles and preferences of the participants as individuals and in the context of their relationship. At times this was very difficult, and I would make notes in my analysis journal about differences in opinion between myself and some participants, but altogether I think this raised awareness helped me decide to defer judgement to the participants.

After all, I consider myself to have been initially neutral to slightly skeptical of the 4Rs and journaling as processes of meaningful change. Through my research, I became convinced—taking on some of the beliefs of therapists and some of the beliefs of participants. I even see this transitional process as an unfolding example of the 4Rs itself; through the various dialogic spaces opened in this research (Repatterning), I Reflected, I Restoried, I Reconnected.

When I first started this research, I had to defend myself against criticism that I could not really understand my target user group because I was not a member of that user group. My
husband did not want to journal, and even though I was open to the possibility, I could not bring myself to do it consistently and with verve. I thought that there might actually be strengths and weaknesses in both positions; as an “outsider,” I argued, I might be able to see uncommonly. Having shifted to the role of an “insider,” I think the same. Each position provides a particular vantage. Having been in both seats, I believe I have been more able to empathize with a wider range of participants, and I think this opened me up to engage with cases in which the 4Rs were slightly off or simply did not apply.

**Summary**

Diary Built for Two, a digital journal for couples, is a first attempt at designing a technology specifically for Empathic Communication between local partners. Drawing on a journal metaphor, I believe that the system may be able to share some of the benefits of personal journaling across partners. Traditional paper journals are known to create a new context for dialogue with the self, which can support reframing; perhaps DB2 can Repattern partner interactions by supporting dialogues with self and other. Journals are known to encourage transformative stories of self that can also deepen understanding of others; perhaps DB2 can help partners positively Reflect on and Restory their understandings of one another. Finally, journals are known to be places for intimate content; perhaps the dyadic nature of DB2 can support more intimate sharing and Reconnection between partners.

To put these intuitions and the 4Rs framework to the test, I recruited 10 couples to participate in a two week “diary study”—that is, a study that used diaries for the dual purpose of gathering naturalistic data about the daily activities of participants as well as their experiences of keeping the diary itself. To the second purpose, the diaries used by participants served as low-fidelity prototypes of Diary Built for Two, as partners were asked to share portions of journals in the second week. I carried out semi-structured interviews and collected other materials across three sessions that lasted 1-2 hours each. The 4Rs framework was used as the primary coding system for the data. Strategies like triangulation, clarification of researcher bias, and negative case analysis were used to increase confidence in my findings.
5 Dyadic Journaling as Empathic Therapy

Chapter abstract
A field deployment of a low-fidelity prototype of Diary Built for Two suggests that Empathic Communication was supported between intimate partners via dyadic journaling. This chapter draws on rich examples across couples to examine the diverse ways in which the 4Rs presented. Diary Built for Two seemed to provide significant value for some couples, but not for others. Experiences of those who benefited map to the 4Rs as well as common factors of marital therapy. Hindrances to keeping a therapeutic shared journal include disliking intimate sharing, gendering the journal, emotional distress, and lack of time, money and technology.

How to read this chapter
This is a long chapter because it aims to weave large portions of primary data (interview transcripts and pictures) into the analysis. Instead of attaching hundreds of pages of transcripts and scanned worksheets to this document under appendices, I have opted for this approach. This is an attempt to allow participants to, in a way, speak for themselves while also making their voices and my analysis process more accessible to interested readers. So, for those who want to “look under the hood” of analysis, to consider multiple couples and multiple manifestations of the 4Rs, “Journaling as a 4Rs Activity: Couples 2-10” is the section for you. Each Example is stand-alone, so read one or read them all. For those who want a much more succinct yet still complete introduction, it is best to consider the aforementioned section as optional; stick to the “Andi and Alan” and “Literature Review” sections.

This chapter is organized as follows. I begin by describing methodological complications of determining whether the 4Rs have taken place and describe how to address them. The next section locates the 4Rs in the practice of dyadic journaling with respect to Couple 1, Andi and Alan. Analysis is organized by each of the 4Rs. Then, I present a set of examples from other
couples that illustrate the 4Rs process more holistically. Analysis is organized by progression of events. I finish with a review of journaling and writing literature to contextualize my analysis. Synthesis of lessons learned from this chapter are presented in the next, Chapter 6.

This organization (Couple 1 first, Couples 2-10 second) is primarily the result of the changing goals, and hence analysis approach, of this dissertation. Initially, I intended to create an in-depth case study of only Couple 1, but my interest shifted to making a broader, stronger argument for the 4Rs by including other couples in the analysis. There are some coincidental benefits of calling special attention to Couple 1. First, Couple 1 was a sort of middle-of-the-road adopter of the journal as an Empathic Communication Tool. Unlike Couples 4, 6, and 9, they did not have a significant Reconnecting experience through the journal. And, unlike Couples 2, 3, 5, and 7, they did feel a sense of Reconnection. So, Couple 1 may help temper expectations of the impact of dyadic journaling by presenting a more moderate case. Second, Andi from Couple 1 often went beyond simply describing the immediate experience of the journaling activity to articulating the phenomena at a more abstract level. For example, her comparisons of journaling to playing chess to storytelling are particularly insightful. Examples drawn from couples 2-10 complement this approach by foregrounding significant events as described by participants and considering the 4Rs secondarily.

Finally, let me make some notes about formatting in these next sections. All 20 participants have been assigned pseudonyms in alphabetical order by couple. Italicized words are quotations. If no source is cited, it can be assumed that these are the words of the members of the couple being immediately discussed. I have chosen to use italics to seamlessly call special attention to participants’ direct words as I interleave them with my own. I capitalize the terms Repattern, Reflect, Restory, and Reconnect to call attention to the particular as opposed to common use of those ideas. Most block quotes present statements in the order that they were uttered, if not consecutively. I include footnotes to identify any unusual reordering.
Differentiating effects of journaling and interviewing

In this chapter, I will attempt to make a case that the journaling activity I gave participants can have therapeutic qualities. In the following chapter, Chapter 6, I will argue that simply interviewing participants about their relationship can also have therapeutic effects. The process of locating the 4Rs is inherently a difficult one. This is particularly the case because the activities of Repatterning, Reflecting, Restorying, and Reconnecting can be very much internalized. In addition, deciphering change requires understanding the history of participants, which is rich and personal and not fully accessible to any one observer (let alone a stranger). Moreover, even if the 4Rs can be detected, what precisely is causing them to take place?

Semi-structured qualitative interviews are strong choice of data creation tool for addressing some of these challenges. As discussed in Chapter 2, flexibly asking follow-up questions and pursuing detailed descriptions of specific events from participants can go a long way toward understanding the experience, internal or external, of a participant. I have made particular efforts to report transcripts of interviews at length because, in step with Clifford Geertz and the necessity of “thick description” to cultural explication, I believe the best way to strengthen the analysis and conclusions is to open this process up to the reader’s critique.

As part of the interviews, I asked participants to fill out journal metadata and summary sheets and gave them the option of taking pictures of their week two entries. For the purposes of this chapter, I consider this worksheet activity to be part of the “interview” because the use of similar items for elicitation in interviews are common in HCI (Carter and Mankoff, 2005). Where these resources speak to my examples, I include them to enhance the clarity of the story. All participants filled out the metadata summary sheet prior to being interviewed. However, only one participant from each couple filled out the journal summary worksheet prior to being interviewed. This is because I conducted the first one-on-one interview with one participant while the other participant was filling out a journal summary worksheet. This procedure may exacerbate the complication of differentiating whether Repatterning, Reflecting, Restorying, and Reconnecting took place during the week of journaling or as a result of re-encountering the journal in this way.
Adding to this complication is the fact that, in Chapter 6, I will argue that the interview encourages Reflecting and Restorying. If this is true, might participants be Reflecting on and Restorying the impact of the journal? How can we know the relationship between what is worked out in the journal and what is worked out in conversation? Below I list some steps I have taken to address this issue:

• locate incidents in a time or place (e.g., [Stacy]: You wrote about that in the journal?, question asked to Isabelle (Chapter 5, Example 3))

• gather multiple statements from one or both participants about the same incident (e.g., Figure 14, page 95)

• draw multiply from interview transcripts, journal photographs, journal summary worksheets, and journal metadata worksheets (e.g., Figure 17, page 104)

• seek out evidence that contradicts my purpose (e.g., Chapter 5, section “Challenges to adoption of Diary Built for Two”)

• report primary evidence at length so the reader can participate in the analytic process (e.g., Examples in Chapters 5 and 6)

It seems fair to conclude that both the journaling process and the interviewing process contributed to partners’ account of their experiences of either. By using the data gathering and reporting techniques described above, it seems possible to ascribe the 4Rs to the medium that contributed most significantly. The reader must be the ultimate judge. In the least, the difficulty of disentangling the effects from journal and interview support my second proposal: that interviews have effects in and of themselves that can be considered therapeutic.

Journaling as a 4Rs activity: Couple 1

Introducing Andi and Alan

Andi and Alan are struggling musicians in Portland, Oregon, although “struggling” would not be their word selection. Living on the fringe and at the margin is a deliberate choice for them. It is a point of pride and self-couple definition. They are 28 and 26 years old, respectively, and have been dating and cohabiting for 3 years. They are members of a two-person band in which
Andi sings lead vocals and Alan plays the drums, which happens to be an apt metaphor for their relationship dynamics as well. Most of the telling in interviews was done by Andi, who labels herself *spokesperson* for the band as well as the relationship. But, the journals were a different story—or, stories—because they became mediums for Andi and Alan to individually express themselves richly. Andi and Alan decided to keep *comic journals*, wherein they drew and narrated scenes from their daily activities (Figure 12). Andi and Alan feel strongly that being *really open* with each other is important, and they see themselves as *building* as opposed to just *having* a relationship.

![Figure 12. Alan’s and Andi’s Journals, Week Two: Alan and Andi Quit Sugar](image)

An excerpt from Alan’s journal (left) shows one of three storyboard panels, which depicts a self portrait of Andi and Alan, who together have just agreed to quit eating processed sugar. An excerpt from Andi’s journal (right) on the same day shows one of four picture panels, which similarly depicts saying “byebye” to processed sugar and “hello” to natural sugars.

**Repatterning through shared journals**

At the conclusion of the study, I asked Andi if there were other activities she did that were similar to journaling. Her response was a thoughtful comparison of journaling to playing chess that suggested the journal enables a new way of interacting with herself and with the world:
[Andi]: It's good to have a really concrete practice that's separate [from being in the moment], because I know for a fact that if you're just trying to do the same thing over and over, that's one thing. But unless you add in a new thing, a new way, something that has a new—Like when I was trying to learn to be more competent in the world, I went through a process when I was a teenager: I had never taken care of myself and I wasn't good at planning and I wasn't good at getting what I wanted and maneuvering and stuff ... So I learned to play chess. I just played chess all the time. And that teaches you, that teaches your brain to think ahead. It teaches your brain to preserve position. It teaches your brain what is essential and, instead of thinking “oh, I gotta get as many points as I can,” you think about “well, if I do this, I still have these three options, one of which might work.” You postpone, and it's all about delaying and procrastinating. If you get into trouble, you just put off the end as long as you can until maybe somebody makes a mistake. ... [Learning how to play chess as a board game has taught me] how to play chess with the world. My point is: that's an external game, a concrete thing that builds up a certain way of thinking.

Andi saw the journal as a new practice, something separate that builds up a certain way of thinking—in the moment but also in a more enduring way. In a more direct exchange, Andi explained that the journal enabled new types of conversations, though not necessarily new content:

[Andi]: There definitely are different things that we communicate when we are talking [in person] than when we're doing the journal. I mean we talk a lot, we just talk so much—it's not like anything here [in the journal] isn't covered [in our face-to-face talks]. But, the story of the day or whatever, we never sit down and are like “let's tell each other what we did today.” Because we know what we did today.

The journal encouraged Andi and Alan to tell each other the story of the day, which is atypical for them; in terms of the 4Rs, the journal was Repatterning interactions with both the self and other. Despite the fact that Andi and Alan each already knew what they did that day, as we will see in the following section, retelling begets re-knowing.
Reflecting, Restorying, and Reconnecting through shared journals

I asked Andi first if there were any drawbacks, then if there were any benefits to keeping the journal. In response to my second question, she stated:

[Andi]: [Since starting to journal, I appreciate] feeling like I'm reflecting and being aware of what my attitudes are towards certain things. I've definitely had some moments where I had to be like, “I was a jerk.” When I look at it, I kind of look at it in a more objective—you know, especially with the visual element, because I am always putting myself in the picture … I think it's really good to tell the story of yourself from a third person perspective and not be so identified with your own viewpoint.

Andi had Reflective moments and also came to new conclusions (I was a jerk) in the process of tell[ing] the story of [her]self. Journaling gave Andi a somewhat detached, more objective, third person perspective, which she seemed to believe contributed to Reflective self-dialogue. In fact, Andi saw journaling as a social activity: It's more social and more about my social self [than meditation or yoga]. It's closer to where ... my brain actually is ... working with pictures and sequential story lines and thinking, and it has words. Journaling is a form of self-other communication (my social self) of stories—even when the other is simply oneself.
Figure 13. Alan’s and Andi’s Journals, Week One: Alan Got a Job

The excerpt from Alan’s journal (left) shows part of his entry from August 14. This was Alan’s first day as a “sign shaker” on the street corner. It was a day of record summer temperatures. Alan depicts himself inside a Dairy Queen, eating “like 5 tots,” “sweat” dripping down to the floor, and his sign seated opposite him labeled “my new [girlfriend].”

The excerpt from Andi’s journal (right) shows the bottom left panel of four panels from the same day, August 14. Andi depicts a generic apartment complex with the description “Looked at apartments on craigslist.” Many other pages of Andi’s journal have pictures with descriptions starting with “We,” to denote that she and Alan had done something together.

In our first one-on-one interview, Andi said the following about journaling and about this entry in particular: “It's helping me to notice—be more attentive to what's going on in my day. For example, I noticed that the first three or four days, I say ‘We’ in every entry. And, then when Alan got a job, there's a couple days where I just say ‘I,’ like I don't mention him, which is cool. I might not have noticed that. I mean, I would have noticed that he had a job, but I didn't notice that—the verbal separation process.”

Andi’s statement presents an example of Repatterning, Reflecting, and perhaps Restorying. For both Andi and Alan, the journal became a place of expressing and also realizing the absence of the other. Andi and Alan shared these entries with each other, although we did not talk about their experience of sharing this particular entry.

Importantly, the journal is not just a place for personal stories; it holds stories by and about the couple (e.g., Figure 13). Even before the second week, when participants were asked to share portions of their journals with one another, Andi and Alan took to writing their journals and reading each other’s entries together:
[Alan]: Sometimes [before writing in our journals at night] we will say to each other, “Oh what did we do today?” Because we are like “Oh, I don't remember what—”

[Andi]: [when we wrote in our journals], we were in the same room, usually pretty much the whole time. And then we just showed [the journals] to each other.

[Andi]: One of us would give the other one their journal and we would watch the other person read it, ... And then we'd point things out. If I was reading his, I'd be like "Oh, there's your thing" and he'd be like "Look, I put that there because I'm a sign shaker." And then I was like—. You know, so we'd comment on it.

[Andi]: [I would say] "Oh yeah, I forgot about that." I know there's definitely one where [I said] "Oh, look, we put the same thing." There's definitely one where I talk about the stuff we got at the bins—we went to the Goodwill bins—and he talked about it, too. But he's like "We got crap" and "We didn't get hardly anything and it sucked," and I was like "I got good stuff, I like it."

The journal provided opportunities for partners to not only have a shared experience of journaling (we were in the same room) and reviewing entries (one of us would give the other one their journal) together, it allowed them to jointly construct (what did we do today?), compare (we put the same thing), and critically evaluate different (I forgot about that) or contradictory (we got crap versus I got good stuff) stories of the day. Particularly when Andi and Alan had different entries, the journal afforded moments to consider the otherness of their partner. In these acts of recording the past, generating new interpretations, and co-constructing mutual understandings, we see signs of Reflecting, Restorying, and Reconnecting.

**Journaling as a 4Rs activity: Couples 2-10**

In this section, I add depth and breadth to the argument that the 4Rs were supported by the Diary Built for Two prototype by drawing on Couples 2-10. All couples from the study exhibited at least some signs of Repatterning, Reflecting, Restorying, and Reconnecting in relation to the journaling activity. However, there was a wide range of behaviors and reactions, some of which I will draw out here. Not all couples are represented; Couples 2, 7, 8, and 10 do
not appear in this chapter. I have chosen examples based upon the unique and overlapping dimensions they bring to the other examples.

**Example 1: Couple 6: “An opening door in our relationship”**

Fred and Fyona, ages 60 and 42, have been dating for almost two years. Both have been previously married and have children from those marriages. They met through an online dating service and found commonality in the experiences that led up to their divorces. Fyona is very clingy and talkative and analytical in her relationships. Fred is by nature very stoic and reserved, but Fyona has helped him discover that he needed a close, intimate relationship even though he hadn't had one in the past. Throughout the day, Fred and Fyona talk almost constantly using text messages, instant message chats, voice calls, and emails. When asked to describe the basis of a partner relationship, they agree that what really bonds a couple is understanding and appreciating one another; the intimacy, the talking about everything, and the sharing of everything is really a key. That, and lots of good sex, too!

Fred’s and Fyona’s journaling stands apart from other participants’ in that they opted for digital journals (Ian from Couple 9 and Jack from Couple 10 were the only others who did so). Furthermore, the format of their journals changed significantly over the course of the two weeks. In week one, Fred kept his journal in his email client’s drafts folder and Fyona kept a private blog that was inaccessible publicly via the Internet. During week one, however, Fyona decided to send Fred a link to her blog and asked him to read it because she thought it was a good explanation of what she was feeling. Fred also sent Fyona one of his entries. In week two, Fred and Fyona decided to merge their efforts into Fyona’s blog, such that Fred could also add and edit entries and all content was shared between the two. Both Fred and Fyona would write and publish their own daily entries. Additionally, Fred would read Fyona’s entries and edit them to add responses in-line (Figures 14 and 15).

While this is not the example I plan to share in this section, it is worth considering briefly some of the interesting conclusions we can draw from this behavior. First, as we have seen with Couple 1 and will see with other couples, sharing some or all content in journals with
one’s partner was a natural activity. This is somewhat surprising given that journals are traditionally solitary pursuits that are either intended to be shared only after heavy editing, much later in life, after death, or not at all. I think the situation of the study—of couples being interviewed together and being asked to journal together—encouraged the sense that journaling was an activity for two, not just one. Second is the notion that technologies for couples need not require separate interfaces. Most all of the technologies listed in Chapter 3, Table 8 are designed with two, Symmetric interfaces. Especially in the situation where partners are collocated, it seems very possible if not probable that many partners will want something or some activity that they can create and participate in together. Instead of two journals, why not one? For more on this topic, see Chapter 7 (section “Symmetric and Asymmetric interfaces for ECTs”).

These details about the sharing and writing habits of Fred and Fyona are all backstory to the following example. At our final interview, Fyona explained how reading Fred’s journal entry in week one helped her gain new insights that she believes she could not have gained from verbal conversation alone:

[Fyona]: He sent me his journal, and when I read it, it was like, there was a few points in it that I hadn't really got out of what we had talked about… There was just a couple of things that he said in there that we had technically talked about it, but we had talked about it and I perceived different things than what I got out of it when I read what he wrote. And, so I told him that, and I said, “look, I know that you think that you tell me everything, but when you write things sometimes I see it from a more in depth perspective and a better understanding than what I got from what you said.” And then I think I pointed out what I got out of it, what I hadn't understood before. And so then at that point Fred grudgingly admitted that there was actually some benefit.

[Fyona]: His point to me was, “don't you get the same thing out of our conversations?” And I said “no, not necessarily because when you're just writing for yourself you cover things that I don't think of”… It's like a peek into your mind as opposed to a conversation between the two of us. You know, I could hear what’s going on, what you're thinking about.
Fyona thinks that journaling changes the way that Fred expresses himself and gives her new, important insights. The difference between typical face-to-face communications and journal-mediated communications is that the journal promotes more individual self-expression; it is a form of *writing for yourself*. Reading from Fred’s journal is more akin to *peeking into [Fred’s] mind* than having a conversation with him. In other words, the journal enables Repatterning by exposing new material for conversation. As the example unfolds below, we will see how these insights are directly related to their relationship and are in fact quite significant for Fyona if not for the couple as a whole.

The excerpt above also calls attention to the fact that journaling may take some convincing. When Fyona notes that Fred *grudgingly admitted* benefit to journaling, she reveals that Fred is in some capacity resistant (Figure 14). In fact, Fred does not like journaling at all:

> [Fred]: There’s value. I think it sparked some thoughts. I think I understand a couple of things that happened this week because I was writing about it.

> [Fred]: I don’t like journaling... it’s even worse than [his job as a professional writer] because I’m writing down my thoughts and feelings instead of writing about how to do this or fix this... It’s more intimate and I’m more reserved by nature.

Fred’s dislike of journaling, however, was not fundamental. Rather, Fred simply did not like to journal alone. Similarly, Fred did not like being interviewed alone; he and Fyona asked to hold our final interview as a group because one-on-one discussion had *been slightly stressful for Fred*. The shared blog that emerged in week two paralleled this preference. Intimate expression was something Fred preferred to do in collaboration with Fyona.

As will be discussed in more detail to follow, this was a very common occurrence across couples: one partner disliking the task of journaling and their significant other wanting them to continue. Men particularly tended to dislike journaling, often citing their dislike of talking or sharing emotions. In other cases, participants did not like journaling in the context of the study because they felt forced to journal too frequently or felt as though they needed to keep the
journal in a particular way. Several participants who particularly enjoyed the journaling activity would have preferred to journal only two or three times weekly instead of daily. While many men did not like journaling, many women did, and they were happy to see their partners making an effort. They appreciated more intimate and emotional communication, it helped them talk with their partners in ways and about topics that they could not otherwise; and it represented an understated identity that they wanted to see drawn out in their partner. There were certainly variations and exceptions to this rule. For example, Ian and Isabelle both enjoyed keeping written journals; Andi and Alan both enjoyed the format of their comic journals; Brittany and Bethany are both female and both enjoyed writing; and neither Jack nor Jill wanted to continue keeping their journals.

Figure 14. Fred’s and Fyona’s Journals, Week Two: Resisting Journaling

Excerpt from Fred’s journal from week one (top). Red denotes content that he shared with Fyona. Excerpt from Fred’s and Fyona’s journal from week two (bottom). Blue denotes Fred’s in-line response to Fyona’s entry.
Though there is not space to fully explore the meaning of this phenomenon, briefly, I interpret it to mean that the journaling metaphor will not work for all or even most partners. Furthermore, this raises the important question of whether an effective technology for couples requires use by both partners. The excerpt from Fyona’s entry in Figure 14 includes this Reflection: [sometimes I use the journal] to reflect or even help myself understand my own mind better. I think it’s the latter [use] that has done us the most benefit. This is one of several hints from across couples that suggests some relationships may be served by giving just one partner a particular forum for Reflecting on the relationship. Again, looking back at Chapter 3, Table 8, there are no technologies for couples with this type of single-user Asymmetric form.

When I asked Fyona to explain exactly what insights she gained from reading Fred’s entry, she thumbed through print-outs of her blog to jog her memory:

[Fyona]: I'm looking for one of the older blogs to see what it was that caused me to think about doing that exercise. Oh yeah! Actually, it was Fred's post. That's what it was. What he wrote [is]... that it really, makes him upset, or sad, or something that I get so upset when I'm afraid of irritating him. Or was it disapproval or—?

[Fred]: Or your fear about disapproval, I guess, but—

[Fyona]: Yeah. I wrote—he wrote about that. You know, that he really wished I didn't get so upset because it wasn't realistic to think that he would never get annoyed with me. And I agreed with him on that, and I didn't know why I would get so upset, but I really would. It was because we had commented on, in the blog, one of the nights when he picked me up, we had a chat conversation about, um... Oh! I told him one of the things I really liked about him...

[Fred]: That was last week.

[Fyona]: Yeah, it was last week, but that's what started it all.

[Fred]: Yeah.

[Fyona]: One of the things I really liked about him is that he teaches me things, OK? And not just because he teaches me things, but that he, like, lets me look
over and observe and just be around him and that doesn't ever bother him. And then I started telling him how my ex was not like that; that he didn't like to teach anybody anything. He doesn't like to have anybody looking over or staring at anything. And Fred's response to that was, well, “I could see how that would be irritating.” And what upset me about it was I was telling him how much I love that about him, and that it was important to me, and then he said, “Well, yeah, I can see how that would be irritating.” Then I was like, “I’m irritating you? I really like that about you.” I was just really, really upset. I started crying at work. And, I just, like, was... When he picks me up, he's like, “What's wrong? You look off.” I'm like, “I'm really upset.” You know, so we had this whole discussion...

[Fred]: Actually, I figured something was wrong before I picked you up because your chat tone and rhythm changed.

This is a good place to pause and untangle the logistics of the situation being described above. During week one, Fyona and Fred had an instant message chat about how much Fyona enjoys being taught by Fred. But, Fred’s response—that this can sometimes be annoying—really upset Fyona. This prompted Fred to write a blog post about how unrealistic it is for Fyona to expect that they will never annoy one another. Fred shared this post with Fyona, who believed that she was able to gain more out of reading the post than she had gained in their verbal discussion about the issue. And, here is where things get even more interesting. We see in the following dialogue that Fred’s entry prompted Fyona to do some writing of her own:

[Fyona]: Anyway, so I explained to him that that upset me and he blogged about it. And he, you know... He said it's unreasonable to think that I would never annoy him. And I'm like, "Yeah, I know. I don't know why I freak out about it." And so I did a writing exercise to try and figure out why it is I freak out about it.

[Stacy]: No way. In your journal?

[Fyona]: No, I didn't journal it.

[Stacy]: Somewhere else? Email?

[Fyona]: On my laptop. Just on a word document. It's a matter of asking myself, my deepest self, questions and writing whatever comes out. Even though that
may not seem right, or that seems like a weird answer. Just letting it flow. So I
did that, and the answer that I came up with was that—which seems kind of
obvious in retrospect—but just that, it's just because I really, really love him
very intensely and anything that threatens that closeness in that relationship is
incredibly upsetting. But, the thing that's been hard has been, like, from the start
of the relationship it's always been, “Well do I really love him enough? Do I...
Am I in love? Do I...?” And so, a lot of our blogs after that really revolved
around this, like, “Wow, you know my feelings are a lot more intense, even, then
I realized.” ... It was kind of a bit of an opening door in our relationship.

[Stacy]: Yeah, so you did your writing exercise somewhere else, and then you
just explained the outcome of that exercise in your blog?

[Fyona]: Mm hm.

[Stacy]: And then did you read it Fred and comment on it or...?

[Fred]: The blog part, yes. I didn't realize until you were describing it now that
you had done the exercise elsewhere.

[Fyona]: Mm hm.

With respect to the 4Rs, this example shows us how reading Fred’s journal entry prompted
Fyona to Reflect on and Restory her conflict with Fred. Instead of being upset with Fred for
finding her behavior annoying (“I'm irritating you?...” I was just really, really upset.), Fyona
began to focus on the idea that she was actually upset about something very different (I agreed
with him on that, and I didn't know why I would get so upset). This led Fyona to perform a
written exercise—although, interestingly, she did not write in her journal—in which she
arrived at an even more profound insight (Wow, you know my feelings are a lot more intense,
even, then I realized). So, the practice of writing led to two phases of Restorying for Fyona. It
seems that Reconnection is taking place on multiple levels, as well. After reading Fred’s post,
Fyona agreed with Fred’s sentiment; they came to a common understanding. And, after
finishing her writing exercise, she believed that the reason she was upset had less to do with
Fred and more to do with herself; the exercise also reaffirmed and strengthened her sense of
attachment to and love for Fred. Finally, as we see in Figure 15, when Fyona reported her
insights in the shared journal, Fred read her thoughts and replied warmly to her belief that she had opened a door in their relationship (*puts doorstop under door* and *now we can depend on each other with all our hearts and our strengths and help each other through weaknesses*).

But last week, I opened a door. And maybe I should have just tried it sooner. It’s funny - with this exercise… I often think I know what the answer is going to be, and yet often it really surprises me. And when I get the answer, then I wonder how I could have not seen it all along, because in retrospect it seems damn flipping obvious.

*F>* Well, it’s about time :) - I knew that *puts doorstop under door*

And the answer was, because I love you so very much that anything at all that would hurt you or us, just breaks my heart so intensely and at such a deep level, I can't even begin to describe the pain. And if I feel I’ve done something to cause you to dislike me in any way - I’m so afraid of losing you - yeah, the tears just flow. I don’t know... but looking at that emotion and really feeling it and allowing it to tell me what it was and why it was there - allowed me to see it for what it is. And it’s not just a negative thing, it’s not just a fear - wow, that’s the part that loves you. Immensely - intensely - with all my heart - so very deeply. Scarily so.

I’m not sure why I have kept it all boxed up and closed off. I’d probably have to do the exercise again, to really get it. But I have. I haven’t always been able to feel it. But all I have to do now, is open the door and ask it, are you happy to see Fred? And I get a surge of joy at just the thought of being with you - that races through my whole body. My heart leaps and races at the thought of you - and I’m not just mellow and content in your presence but filled with light and pleasure just to know you are there.

And funny enough - but it almost feels like I’m looking at everything with fresh and slightly new eyes that had not seen clearly before - all that was in front of me. Though I’ve no doubt I spoke the truth when I told you I loved you - somehow... some way - it means even more. I think that in my whole life, I have never had anyone I could truly depend on. Never. No one has ever been reliable.

*F>* Well, now we can depend on each other with all our hearts and strengths and help each other through weaknesses.

And with [my ex] that was okay - because I kept charge and I relied on me. As I did with most everyone in my life, including my parents. But you, you are different. I have told you so many different times, how I have observed people like you - see...
This example is outstanding because it showcases how the journal was seamlessly woven into the fabric of Fyona’s and Fred’s ongoing communications. Dialogue flowed through instant message chats to face-to-face discussions to personal journal entries that were then shared to word document exploratory writings and back into a shared journal. The thread of conversation is again picked up in our interview, where blog printouts help to feed the conversation and where Fred and Fyona even ask each other questions directly, building new layers of shared meaning (Or was it disapproval or—?). As we will explore in detail in Chapter 7, the interview, too, can become a place for new story creation between partners.

When I began designing a Diary Built for Two, my intention was to enable more intimate communication by providing a dyadic “share” functionality within a digital journaling application. I naively placed my technology at the center of activity and conversation in my imagined scenarios of use, as I suppose many technology designers sometimes do. The failure, I see now, was the assumption that the most significant outcome of introducing a new piece of technology would be internal to that technology—moments made possible by executed code, by an application that is open and running and actively being used. But, in most instances what I instead found can be summarized by these statements from Fyona:

[Fyona]: [The journal] actually had less impact, the discussions that it generated had more... it just got us talking a lot.

[Fyona]: The most important point that the blog played was in prodding me to do the exercise in the first place.

[Fyona]: It felt pretty significant to me. It felt like it opened us up even more and [the journal] was kind of the tool that instigated and facilitated it.

Journaling as a shared couple activity does build on the moments in which the journal is being written and the moments in which the journal is being read. But, perhaps more importantly, it depends on the moments outside of journal writing and reading in which partners collectively develop the ideas that originated there. This has important implications for not only how we ought to design but also how we ought to study interventions; simply observing participants
while the software is “on” may be showing only the shadow of the substance. Having backed into this finding blindly, I now consider it to be a guiding principle for the technologies I hope to design in the future—that they become a means and not an end, that they foreground more collaborative forms of conversation.

**Example 2: Couple 4: “That was a gift to me”**

Dawn and David are graduate students in their mid- to late- twenties who have been dating for 5 years. Although they spent quite a bit of their early years geographically separated due to school commitments, they now live together and have two cats. Their favorite joint activity is talking to one another—dissecting the inner workings and social contexts of coworkers, family members, themselves, and each other. *They*’re both really interested in people, which includes each other. They are the only partners in the study to identify as doing an equal amount of talking and sharing. They believe their relationship is primarily a process of coming to know one another deeply: *the fundamental part is trying to understand the other person and loving them for that.*

Both Dawn and David kept paper journals (Figures 16 and 18) throughout the study. The couple happened to take a special five-day camping trip during week two. This was an interesting divergence from their normal day-to-day affairs because they were spending almost every minute of every day in the presence of each other and engaging in different sorts of activities. This increased a sense of mutual awareness and closeness but also, as we will see in this example, led to tension. In our one-on-one interview, David explained the situation to me.
From the beginning of the camping trip, David had a deep desire to go on a strenuous hike. Dawn and David had already hiked to a beach on the first day of the trip, but David was looking for something more challenging. The next day, when it came time to decide between a much harder hike that ended at a waterfall and an easier hike that ended at hot springs, there was a bit of a conflict. Dawn is not the most adventuresome, outdoorsy person, and preferred to go on the easier hike. They reached a compromise in which they planned to go on both hikes, the easier hike first. But, time ran short, and they never made it to the second hike.

When I asked David if it was difficult to find content from his journal to share during the week (due to the fact that he and Dawn were constantly together), he responded by saying that there actually was something that he shared with Dawn regarding this conflict that was a bit of a revelation (Figure 17):
[David]: There was one instance where I think we revealed something to each other that we didn't know... it specifically was related to the kind of conflict we had about where we wanted to go... I kind of got a little, for whatever reason I kind of got—I felt myself kind of close up and I didn't know why... I wrote about that in the journal and then I talked with Dawn about that. And she kinda shared what she had been thinking, because at the time we both kind of were um—no one really wanted to ask the other person what they were saying, we both just kind of read a lot of body language and took a lot—I guess more just took hints. So when we went back and kind of analyzed how we felt and talked to each other about it, that was kind of a novel thing, for sure.

David used the journal as a space to explore and Reflect upon his feelings (*I felt myself kind of close up and I didn’t know why... I wrote about that in the journal*). Moreover, he decided to share the thoughts from his journal with Dawn, specifically about the conflict, which they had until then avoided discussing (*no one really wanted to ask the other person...*). It seems that the journal Repatterned their conversation (*that was kind of a novel thing*) and allowed them to expand upon or Restory their mutual understandings (*I talked with Dawn about that. And she kinda shared what she had been thinking*). As I began to question David about the details of this experience, it became clearer how the journal supported the 4Rs for David, renewing his empathy towards Dawn:

[David]: I remember this even when I was in high school and you'd write in the journal and sometimes you'd be really surprised at the kind of insight you would have into your—you're just kind of writing and then you would write something, and it might be about something like this or kind of silly, you know? And then you'd write something, and you'd say “that's kind of a profound insight into my own behavior or the consequences of my behavior.” And it was, it was kind of like that where it was writing, and then I was like, “oh, well Dawn”—“I felt like this, it did these things for me” and I kinda listed things. I mean, I would never have thought about that because I would have forgotten about it or distracted myself.
David’s entry on 8/13 (top) described the first hike to the beach, his pride in Dawn for doing the hike, and his feelings of being up-tight and desiring a more intense hike. David’s entry on 8/14 (bottom) described the second hike to the hot springs, his disappointment of not completing the hike to the waterfall, his longing for Dawn to be more adventuresome, and an analysis and reevaluation of his feelings.
In his journal, David wrote about seemingly silly or insignificant things—intimate things—like the hiking experience. But, he thinks there is something about the act of writing (Repatterning) that can lead to unexpectedly profound insights (Reflecting, Restorying). Furthermore, if he had not been journaling, he would have simply forgotten about this incident (Repatterning).

The first of David’s insights via the journaling exercise was of a more personal nature:

> [David]: One of the things that I realized in my journal was that when I had these kind of uptight feelings, that took me away from all that being present and being in the moment that I really enjoyed while I was there. That was one of the things I wrote about in my journal because I was like “Well the end of the trip wasn’t as good as the beginning of the trip,” you know? And, it was, but I didn't really—I’m not sure that I could, without writing in the journal, articulate why that was.

David’s example shows how seemingly banal declarations (“well, the end of the trip wasn’t as good as the beginning of the trip”) in his journal can lead to an unexpected path of thinking (uptight feelings... took me away from... being present). Instead of believing that the end of the trip was not as good as the beginning, David’s writing and consequent Reflecting revealed to him that the end of the trip was actually just as good as the beginning (it was); he simply failed to be present during those moments. David’s journal helped him Restory his trip and perhaps even renew his intention to be more meditative, which may have secondary or tertiary effects on his relationship with Dawn. But, the journal also had some more immediate and relevant impact in the form of a second insight:

> [David]: Dawn's not the most adventuresome, outdoorsy person. I'm not either, but she's less in that that category than me. So, we went on this hike where we hiked into the beach, and then I saw all these backpackers. They kept going from the beach, and I really wanted to follow them. And, so I talked Dawn into it. But it was a really hard hike... sections were so steep that they'd actually brought in ladders, and they had ropes to go up because it was so muddy. And, Dawn did it. I mean, I was really supportive of her, and I helped her a lot, but she did it. When I thought back about her doing that—which I think she kind of, she enjoyed it—but she definitely did it for me, started out doing it for me. And I realized how that was a really big step for her, because that was a really scary thing for her to do, she didn't enjoy it initially.
David thought that the journal played an integral role in realizing that, rather than being upset with Dawn for holding him back, he should appreciate Dawn for stepping outside of her comfort zone for him (“Dawn’s already stepped outside of her limits for me once”… what more can you ask for?). Thus, he Restoried the hiking incident by including more details (namely, the beach hike from the day before) and by imagining the hiking experience from Dawn’s perspective (that was a big step for her and that was a gift to me). And, journaling is the special activity that made all of this possible by Repatterning his thinking process (when you have conflicts… attention comes to yourself and when you… write… it’s almost like you’re channeling something) to allow him to consider the other person, to Reconnect with her (empathizing with them and understanding them).
When I spoke with Dawn about this incident in our one-on-one, I was surprised to find her perspective very different than David’s:

[Dawn]: [In] our journaling, there was one instance where what David shared—I was kind of like “Oh, I guess we had a conflict.” I mean, there was this time where he wanted to go on this very long hike, and I was not really feeling it, and I didn't really realize that he wanted to so badly. I got kind of it, like I thought he might want to. When he wrote about it he was like “Well, you know, [I] wanted to do this, but [Dawn] didn't want to” and like I, I realized that he actually compromised, and I didn't know that. Like, I didn't know that he was giving up something that he really wanted to do.
Dawn: Me being able to understand that, like “Oh,” you know, “David made this compromise for me”—I mean it was something I was like “OK,” like I understood him better now. So I felt closer to him and grateful about it, and maybe also felt like “OK, well maybe next time I'll compromise for him.”

Interestingly, writing in the journal and sharing (Repatterning) actually made a conflict out of a non-conflict (Restorying), or at least an ambiguous moment (oh, I guess we had a conflict). Furthermore, the message that Dawn got from David completely misses the thrust of David’s sentiment as described in our one-on-one discussion; he was appreciative that Dawn stepped out of her comfort zone for him. As with David, the journaling exercise encouraged Dawn to think about her partner’s feelings and come to new understandings (I realized that he actually compromised and David made this compromise for me). Despite ironically misunderstanding one another, both David and Dawn arrive at a feeling of better understanding the other (I understood him better now), feeling closer to the other (I felt closer to him), and desiring to Reflect appreciation back at the other (maybe next time I’ll compromise for him). Or, perhaps instead of misunderstanding, they have each simply appreciated the other and taken personal responsibility. In either scenario, the journal has facilitated Reconnection.

This example provides a fairly straightforward and yet still complex inspection of the 4Rs. The 4Rs clearly took place for both partners—for David as he wrote in his journal and for Dawn when David shared his journal with her. Yet, it illuminates the ambiguity of the 4Rs framework with respect to the degree of mutuality of any given phase. If David had not shared his insight with Dawn, would this still be an example of the 4Rs? Journaling brought about change in David’s interactions with himself; does this constitute Repatterning? Dawn and David come away from their journal sharing with two different interpretations of the event; even though they both feel closer to each other, does this count as Reconnecting?

Example 3: Couple 9: “I feel like I can share more”

Ian, 24, is a recent college graduate looking for work as an accountant, and Isabelle, 20, is still in college for dentistry. Ian and Isabelle have been dating for just under a year and, although they do not live together, they spend a significant amount of time together exercising or
studying or cooking and so on. Whether they are in different locations or right next to one another, they often find themselves text messaging. Appreciation of a goal-oriented, passionate, and active lifestyle—running, hiking, and other adventures—draws them to one another. Being in a relationship means being able to share everything, talking things out, and being really open. Their goal is to be happy together, to make each other happy.

Ian and Isabelle told me in our first interview that their families are frustrating factors for both of [them]... usually that's something that comes up in arguments. This statement seemed to foreshadow a situation that unfolded in week two of the study, in which Isabelle’s grandmother and mother created a great deal of frustration and tension while at the same time—with the help of the journal-sharing exercise—created a path to empathy and Reconnection. The details of this set of incidents unfolded across the one-on-one and joint interviews. It was the first item of discussion brought up by both Isabelle and Ian, just one indication that it bore significance. Isabelle summarized the situation for me:

[Isabelle]: My grandma found out that we were planning a trip to drive across country, so she emailed me and I called her and I had this long discussion with her and she basically said “I don’t approve.” ... So our plans have been up in the air because we already have a hotel room and everything all planned out. So that's basically it... My mom, I don't know, my mom's kind of weird. She thinks I’m not in school. Because she said that I told my grandparents I was done last week but I didn’t and so... [they think] I’m up to something no good.

Ian and Isabelle had been planning to take a cross-country road trip to New York to see the US Open when Isabelle’s grandmother notified her that she disapproved of them driving together. Isabelle and Ian were particularly distraught because they would have to make quick adjustments to purchase plane tickets and cancel hotel reservations. Adding to the stress, just a few days later, Isabelle’s mom called to accuse her of dropping out of her summer session of college. In fact, Isabelle was in the midst of intensively studying for upcoming exams.

In part because she had been participating in the study and in part because she felt urgent need, Isabelle decided to write in her journal about her conversation with her grandmother. And, then
she did something that even surprised herself: she talked to Ian about what she had written, she shared her journal entry with Ian, and then she talked about the issue with Ian some more:

[Isabelle]: I wrote about it right after it happened... I think I wanted to write about it.

[Isabelle]: [Ian was gone all day, visiting with a friend from out-of-town. He came home in the evening]. Finally, we were together, and I told Ian.

[Stacy]: How did you initiate the conversation?

[Isabelle]: We were laying down, I was like, “I talked to my grandma today.” Kind of like that, in kind of a tone where you know something isn’t good.

[Isabelle]: I showed him a page [of the journal]... he actually looked at a few pages, I think.... I said, “here's the page, read it” and then he read the rest of the pages on his own.

[Isabelle]: We talked about it a lot, we talked it out—what we shared [from the journal]—because it’s a big issue.

The journal became part of the conversation, an exchange between Isabelle and Ian in written form (“here's a page, read it”). And, interestingly, it became something that Ian actually wanted to read in more depth (he read the rest of the pages on his own), and Isabelle allowed him. But, the journal did not stand alone; it had an introduction (“I talked to my grandma today”) and it generated an ongoing conversation (we talked about it a lot... because it’s a big issue). These are hints of Repatterning—a new tool, a new rhythm in personal and interpersonal conversation.

There is evidence that the substance of the conversations was also affected by the journal, beginning with the personal self-talk within Isabelle. Isabelle found that the journal helped to relieve pressure while also allowing her to Reflect on her mother and grandmother:

1 the following quotations are rearranged into the order in which the events they refer to took place, but are not in the same order they were said in the interview.
[Isabelle]: I would write what my grandma said and summarize it. Then, “well, what do I think about what she said and why she said it?” rather than “she said that just because.”

[Isabelle]: Keeping a journal makes me think about things I normally wouldn't think about. Just like the issue with my family. Like normally if I wasn't keeping a journal I'd be like “whatever” and I wouldn't think about it as much. But, it kinda helped relieve the pressure that's on me just to put my thoughts into it and to kinda look back and see if there's a problem with it or how I could fix it when I honestly don't know how. So, it's just looking at the different angles of a situation when I'm writing in the journal.

Isabelle used the journal as a place to explore (looking at different angles of a situation) and thicken her stories about her grandmother (rather than “she said that just because”) as well as her own reactive feelings (“well, what do I think about what she said...?”). Like David, she did not think that she would have really engaged with this issue unless she had written in her journal (if I wasn’t keeping a journal I’d be like “whatever” and I wouldn’t think about it). In the course of this Reflective writing process, a richer story began to emerge:

[Stacy]: I kind of want to know what parts you wrote about in your journal and what parts you shared with [Ian] through your journal.

[Isabelle]: I wrote about—because I talked to my grandma and my grandma was like “I’m old fashioned, I don’t believe in dating” and I just listened to her talk at me for 15 minutes about how she didn’t approve. And, I thought about all the times she’s told me she’s known my grandfather since they were three years old. And, so I was like “ummm... how can you say something like that?” I talked to [Ian] about that. It just bothers me that my mom and my grandma can’t see that I’m happy and my aunts and my uncles and my dad know that I’m happy and they support anything I do. It’s just hard for me to have that in the back of my head that my mom and my grandma don’t like my company when they really don’t know him.

[Stacy]: Is that something you wrote?

[Isabelle]: Mm hm.

[Stacy]: What made you write about that in your journal?
[Isabelle]: I just remember when I was growing up my mom told me that her mom... just raised her like “I’m your mom, not your friend” and so my mom told me “I’m going to be your friend and your mom.” But, she was never really the friend, she was just the mom. So, I thought that was funny how that kind of relationship never happened and how—I don’t remember how old I was when she said that to me—but it’s come back to haunt me now. And, what else?

[Stacy]: So, you wrote about that in the journal?

[Isabelle]: Yeah.

Writing in her journal developed these conversations with her grandmother and mother into a fuller, more relational story. The story relates past events to the current (thought about all the times grandma’s told me... and I just remember when I was growing up my mom told me...). The story relates some people to others (my mom and my grandma can’t see that I’m happy and my aunts and my uncles and my dad know that I’m happy). Ultimately, the story distances Isabelle from her mother and grandmother and asserts her alliance with herself and Ian (it’s come back to haunt me now and they really don’t know him). In a sense, it disconnects her from her mother and grandmother and Reconnects her with Ian. Subtle distinctions though these may be, as highlighted in the example with Dawn and David above, sometimes the most important effects of the journal can take place outside of the journal. That is also the case here:

[Isabelle]: I think Ian’s a person who likes to be liked and he doesn’t understand why my family doesn’t like him... By sharing what I was writing, what I was thinking about—I wasn’t sure if I was going to tell him that my grandma didn’t approve. But I just did it anyway. I knew it would cause tension but I didn’t want to bottle it up and keep it from him. So, by sharing I was able to not keep something from him that he would know was bothering me. He knows when something’s bothering me and I know when something’s bothering him. But, sometimes we’ll just be like “No, nothing’s bothering us” and we’ll let it go.

[Isabelle]: My mom left me crazy [voicemail] messages, which I shared with Ian... I didn’t even listen to it, I was like “I don’t want to know what she has to say”

[Stacy]: so, you gave [the phone] to him instead?
[Isabelle] mm hm... She was just like “I'm going to call the police if you don't call me”... he listened to it a few times, he actually listened to it when we got here. He kept listening to it over and over again because it's so funny.

[Isabelle]: I wouldn't have shown him messages and stuff [had it not been for the journaling exercise]. I honestly don't know what to do and I think he can really help me... I wanted to be open.

[Stacy]: So, without the sharing assignment, do you think you would have talked to him about your grandma?

[Isabelle]: No... by [doing the sharing assignment], I'm sharing stuff more—stuff that I wouldn't share I guess.

[Stacy]: Did it somehow make it easier to talk about that stuff?

[Isabelle]: It did, just to have my thoughts in order... writing it out helps me focus on the main points and what's really important rather than going around in a circle... I liked it, I feel like I can share more, and it doesn't matter what it's about... I think it's just easier when I can write it down and then I know what I want to talk about... like, I would never let him listen to my dad or my mom's messages, and I did, just because of the situation I guess... might as well tell him everything... I think he liked it, he laughed.

[Isabelle]: I think [the journal] didn't force actual talking, but it encouraged more conversation rather than texting each other... you lose meaning in text messaging, so there's more meaning when there's actually talking to the person, because you know they're listening.

In these passages, Isabelle explains how she was hesitant to discuss the incident about her grandmother with Ian (I wasn't sure if I was going to tell him). However, the journal sharing exercise encouraged her to not only talk about her grandmother (which she wrote about in her journal), but also to talk about her mother (which she did not write about in her journal). Had she not been journaling, she believes she would not have shared either of these incidents with Ian (I'm sharing stuff more—stuff that I wouldn't share). She feel[s] like [she] can share more with Ian about any topic simply because writing helps her know what to talk about. So, the tendency of the journal and the sharing activity was to encourage Isabelle to be more open.
with Ian—something she and Ian value as a quality of a good relationship (being able to share anything)—and to have more meaningful face-to-face conversation (rather than texting each other). The comparison of journal sharing to cell phone texting is interesting particularly because the Diary Built for Two aspires to be a technology that can overcome the distance that existing technologies can create between intimate, collocated partners. At the end of our interview, when Ian was also present, he and Isabelle together explained the extent and the reason for this Repatterning:

[Ian]: I think the whole study was really helpful on getting emotions out there that otherwise just wouldn't have gotten out there.

[Isabelle]: Yeah

[Ian]: Well, she's very quiet. There's stuff I know she wouldn't share with me unless she actually thought it through and was concise.

[Isabelle]: Yeah. That's what it's doing, that's the word. If I was able to write it down I bet I could be more concise.

[Ian]: It just makes sense, she's quiet and calculated. She doesn't want to say anything that could—

[Isabelle]: hurt somebody

[Ian]: hurt somebody or potentially damage something... that stuff about her grandma that otherwise would just be really hard to say.... Before this study I would always ask her what her mom does, and she would just tell me “ask my dad.” Now, she'll actually tell me what her mom does and all that other stuff.

The sense that journal-writing gives one a clearer, more articulate understanding of one’s own situation was cited by many participants. Once it had been written, it seemed more concrete, more real, more accessible, and they felt more able and willing to communicate these understandings with partners. For Isabelle, who is quiet and calculated, journaling afforded her the ability to be concise about her feelings, and both she and Ian believe that this contributed to her increased openness.
We have seen signs of Repatterning, Reflecting, and Restorying, but what about Reconnection? The final piece to this story and perhaps the clearest evidence of renewed empathy come from Ian’s reaction to the openness displayed by Isabelle. In preparation for considering Ian’s thoughts, let us turn to Isabelle’s explanation of an argument she had with Ian the day before our interview:

*Isabelle*: Yesterday I was just really frustrated with my parents and we were cooking together and [Ian] opened this package and it spilled all over the floor. He’s done it before. And I was like “next time just let me open it.” But I didn’t say it like that, it was mean. And I knew I was mean and after we were done cooking I was like “I’m sorry,” and I think that bothered him all day.

When Ian and I sat down to our final one-on-one, he began by describing this very incident. In his words:

*Ian*: We got into an argument yesterday... She was nitpicking at every little thing I did. I didn't really understand it until I listened to this voicemail her mom left her. Her mom left her this really awesomely psychotic voice message saying—I don't know what's going on there. Actually it's because we were going to drive across the country and now we're not going to because her grandmother didn't approve—so we're just flying across the country now... Her mom was pissed off about that, didn't know where she was. I guess she just thought that she was already across the country, so she was just threatening her. I was just laughing at the voicemail and that's when we started getting along again, 'cause we were just laughing at the voicemail.

*Ian*: She shared some of those things from her journal: how upset she was at her grandma, how upset she was about it not being accepted, and how her family has kind of estranged her.

*Ian*: I just had a better understanding of it, an understanding of what must be going through her head. It's really hard for her dealing with her family.

*Ian*: I didn't know what to think of it, both of our families kind of suck, I guess, so I just kind of supported her.... It does make us stronger to have someone to talk to, someone who understands. We were talking at the gym the other day and we asked “what if our lives were boring?” she said that to me after we got off
the elliptical, “what if our lives were boring and our parents didn't suck and you didn't sue people all the time?” I'm like “I have no idea. I don't think we'd be interesting.”

[Ian]: When she was yelling at me and nitpicking at everything I did, I didn't want to offend her and tell her too much about that... I kept a little bit of that in... First I gave her the part that I did something wrong.

One effect of Isabelle sharing her journal with Ian was that Ian was able to understand Isabelle’s feelings—upset, estranged. Specifically, Ian thought that the voicemail from Isabelle’s mom could be called to account for Isabelle’s mean (in Isabelle’s words), nitpicking (in Ian’s words) behavior toward him. This effectively deflects blame from Isabelle to the situation that she is in, to her grandmother and mother. Despite the altercation, it seems as though the openness enabled by the journal exercise helped Ian remain aware of Isabelle’s inner state (an understanding of what must be going through her head) and even softened his response to her (I kept a little bit of that in. First I gave her the part that I did something wrong). He seems to have gained a sense of empathy with Isabelle (It’s really hard for her), and he even incorporates her into a narrative in which they are both victims, on the same side (both of our families kind of suck, I guess, so I just kind of supported her). The Reconnection seems even more profound when we consider how the voicemails from Isabelle’s mother became a platform for shared laughter (that’s when we started getting along, ’cause we were just laughing at the voicemail) and shared expression of their situation (“what if our lives were boring?” ... “I don’t think we’d be interesting”). It is hard to imagine such connectedness from a scenario in which Isabelle decided to keep her arguments with her mother and grandmother to herself.

In summary, the acts of writing and sharing helped shape the meaning of the incident with Isabelle’s parents as well as the meaning of the argument with Ian (through Reflecting and Restorying); they helped create distance between Isabelle and her family while drawing Isabelle and Ian closer to one another (Reconnecting); and all of this was made possible by encouraging open discussion both inside and outside the journal activity (through Repatterning).
Example 4: Couple 5: “I can write… and… share my feelings with myself”
Eric and Elizabeth have been married for 20 years and have three children together. Eric works for a property management company and likes to buy, repair, and resell cars as a money-making hobby on the side. Elizabeth is a stay at home mom who takes care of the children, cooks most meals, and enjoys keeping a meticulous daily planner as a sort of family organizer and sentimental journal. Their relationship is kept strong because of the commitment; it’s not about you, it’s about the kids. Communication and compromise are key. You have to be able to communicate and keep communicating to make a relationship work.

Figure 19. Elizabeth’s Daily Planner
This is an example of one of Elizabeth’s daily planners / journals from January of 2002. On the left, she writes down a list of things she needs to accomplish for the day, and on the right she sometimes journals reflections about what happened during the day.
Elizabeth is one of only a few participants that already considers herself a regular journaler: she has a collection of yearly planners spanning back about 20 years that she uses to diligently plan out the family’s activities and also to document their day-to-day experiences (Figure 19). She writes down everything from the children’s activities and appointments to what the family ate for dinner. She sometimes tucks in pictures of the children or letters she wants to keep. And, she even jots in more personal information at the end of the day before turning the page: if [she and Eric] argue about something, that will be in [there] too. She yearns to journal more regularly and in a more private, spacious place (In my planner [the description of my arguments] is just a basis of “this is what the argument is about”... but in [my journal] I would probably put more of my feelings and frustrations and my side of the argument). She is excited that the study has given her permission to take time out of her day to write (I like journaling, I think sometimes it irritates Eric... so this [study] was great—I really just got the chance to go for it). Elizabeth tended to write long, daily entries throughout the study (e.g., Figure 20). This issue of Eric not liking when Elizabeth journals comes up again and again, starting from the first interview with Eric and Elizabeth:

[Elizabeth]: Want to know another source of tension? He can’t stand all the stuff that I keep like this [planner].

[Eric]: To me, writing all this crap down—who cares? ... To me, this is crap that I have to haul around.

In my one-on-one interviews with Eric, he reiterates this point, and also acknowledges that it is her way of managing stress:

[Eric]: I give her a hard time about journaling. She knows I give her a hard time about it. She’s like “you hate my journaling.” .... Everyday, stopping and writing “This is what I did today”—I mean, who cares? Who cares what we had for dinner 3 years ago last Tuesday? It’s her de-stress at the end of the day.

[Eric]: Journaling is her de-stress. For me, it’s the TV.

And, in my one-on-one interviews Elizabeth, she explains in more detail why Eric dislikes her taking time to journal:
[Stacy]: what was the impact of writing your journal this week on your daily life?

[Elizabeth]: I really enjoyed the opportunity to journal. I liked that I could have that time. I felt excited to be able to do it because I like to do it and I don’t often get the chance to. I was able to do something that I wanted to do, basically, and not have to worry about hurrying to get done. I could take my time.

[Stacy]: That’s nice. Usually you have to worry about hurrying? ...

[Elizabeth]: He doesn’t see it as an essential time taker. He looks at all the things I do. He thinks I waste a lot of time... and he doesn’t see the journal as really necessary, so that becomes a time waster, so I’m doing that instead of spending time with him. It’s taking away from the family time, whatever he thinks is more important.

Clearly, Elizabeth enjoys journaling (I really enjoyed the opportunity... I felt excited) and sees this study as enabling her to take time for herself (I was able to do something that I wanted to do, basically). Eric expresses that he does not see any value in the journals that Elizabeth keeps (To me, this is crap...). As a side note, this is an interesting departure from the views of Chris in Couple 3, who does not find value in journaling himself, but values his wife’s journals so much that he thinks they should be put in a safety deposit box. Eric does realize that journaling has benefits for Elizabeth (Journaling is her de-stress). Even so, Elizabeth believes that Eric does not want her spending her time journaling (He doesn’t see the journal as an essential time taker. He looks at all the things I do. He thinks I waste a lot of time). It even seems as though Elizabeth views journaling as taking time to honor her own desires as opposed to Eric’s (Whatever he thinks is more important). Similar thoughts come up again and again in my conversations with Elizabeth:

[Stacy]: If you continue to keep your diary, is that something you would do— keep it at night time?

[Elizabeth]: It would depend on how he views me writing in the journal. Because a lot of times he doesn’t like something that will take time away from us being together. So, that’s part of the reason I don’t do a lot of journaling. I usually do it at bed time, I always enjoy doing it at bed time... that’s kind of a
really good end to the day for me. But it bugs him because he wants the time for
us. Even though a lot of times “us” time is just watching TV—which, I don’t like
to watch TV. Sometimes he’ll let me read in bed, but the journaling is nice…
that would be a nice change for me. I could sit and journal while he watches TV.

[Elizabeth]: He wants me to pay attention to the show that he’s watching so we
can laugh about the same things and be interested—when it interests me not at
all.

Figure 20. Elizabeth’s Journal, Week Two
An example entry from Elizabeth’s journal.
So, journaling reaffirms Elizabeth’s interests as opposed to Eric’s as well as discourages joint activity that is valued by Eric ([the journal] will take time away from us). Could it be that the journaling exercise was actually creating a bit of Disconnection between Eric and Elizabeth? Let us explore this possibility through some additional excerpts from our discussion. In the first interview, Eric and Elizabeth explain how Elizabeth uses her planner on some occasions to write about arguments between the two of them:

[Eric]: She writes it down, she doesn’t worry about it anymore, it’s kind of her de-stressor. I kind of figured that out.

[Stacy]: is it?

[Elizabeth]: mm hm

[Stacy]: Can you tell me more about it—more about why you like the “system?”

[Elizabeth]: I can see it. It’s very concrete. If we have an argument, I can put my opinions and my feelings down without someone interrupting or arguing with me about it and I can—

[Eric]: —even if she’s wrong. [laughs] Just teasing.——

[Elizabeth]: I can, I can just get all my feelings out and it helps me to de-stress and not hold a grudge as much. Just because it’s already done and out there. If I can’t say it directly to him, because sometimes I can’t get the words out the way I want to when we’re having a discussion or argument and my words get all flustered. And then I can come back and I can write it all down and just be flustered here and I can get it out the way I want. I can just leave it there, I don’t have to take it to him still. I can just be done.

[Eric]: “He’s being a jerk! He’s being an ass to me!”

[Elizabeth]: But then sometimes I can see what I was doing wrong, too. And say, “well, I was seeing it this way, and that was wrong,” too.

In this exchange, we see that journaling helps Elizabeth Repattern and carry on meaningful discussions with herself (I can put my opinions and my feelings down without someone
interrupting). Seemingly unwittingly, Eric interrupts Elizabeth to suggest that she might be wrong when they argue; we will see later that this is actually a point of sensitivity for Elizabeth. Elizabeth believes when she and Eric have an argument, the journal becomes a place where she can say the things that she can’t say... directly to him. Writing in the journal is a sort of alternative to talking to her partner. Writing can also help her Reflect on and Restory her account of the argument to see that she may have been wrong (“well, I was seeing it this way, and that was wrong”). This is a somewhat abstract example, but near the end of my final one-one-one interview with Elizabeth, I was able to uncover deeper layers of how the journal served as a unique experience for her and why she cared so much about keeping it:

[Stacy]: Is there anything else [in your journal] that you wouldn’t share [with Eric]?

[Elizabeth]: Yeah there were some feelings about my son. I was really proud of the way he was a babysitter. Some other times when I’ve shared things like that with [Eric] before, and he gives his opinion, it’s not very positive towards it. And, so I tend to keep it more quiet, tend not to share it as often. But, I could write about it here and still share my feelings with myself. ...

[Stacy]: Why do you think that Eric would potentially react negatively to that?

[Elizabeth]: I don’t think he thinks it’s a big deal—“Yeah, so what? He can change a diaper.” ... I guess something like a maternal, a female... it’s a feeling. There’s an emotional connection. And, the feelings that I feel about my son—I’m really excited that he would do that, it’s not like an ordinary thing. Just like when he gets good grades. I’m proud of him for that and I want to praise that, because I think so much we focus on the negative and especially with Eric, he’s always finding fault with everything they do and I want to praise every good thing they do instead. It’s that, the conflict between the two of us. So, when I bring up all the good things he does—“Oh yeah, he changed diapers,” and he’s like “OK, so? What’s the big deal?” And that kind of downplays my feelings... I feel things and he doesn’t; he’ll downplay it or have negative reactions to it. And so, I don’t want to hear that so I just won’t say anything about it.”
Our conversation continued, but I want to stop here to consider what has been said up to this point. Elizabeth wrote about things in her journal expressly because she knew she could not talk about them with Eric (I... tend not to share as often. But, I could write about it here). Not only is she not sharing the content of her journal with Eric (which might foster Reconnecting), but also the story that she is writing inside the journal serves to reify Elizabeth’s connection to herself as opposed to Eric (I guess it’s something... maternal and I feel things he doesn’t and I could... share my feelings with myself).

Since this was the end of my final one-on-one interview with Elizabeth, I decided to ask some more explicit questions to test some of my interpretations:

[Stacy]: We were hoping that some of the things that were kind of harder to talk about would be more accessible [because they are in the journal], but it seems like for you two, it’s best if you don’t talk about those things; is that right?

[Elizabeth]: In the journal I was able to open up and expand upon it, but those were the ones I left unshared.

Journaling helped Elizabeth Reflect and Restory (I was able to open up and expand upon it), but in the end, she was developing stories more in line with her beliefs, stories that she knew she did not want to share with Eric (those were the ones I left unshared). Elizabeth and I talked about other things she did not want to share with Eric for similar reasons. She did not tell him about an upsetting fight she had with her mother or her worries about how tight the finances become when Eric buys cars—in both cases because she predicts that they will draw negative reactions from Eric (in our interview she predicted: “that’s why I don’t want you hanging around with your mom!” and “don’t worry about that!”). While Repatterning, Reflecting, and Restorying seem to be happening for Elizabeth personally, it seems as though these are not happening at the level of the couple. In other words, rather than the journal encouraging a more empathic understanding of Eric (or vice versa), it is encouraging a more empathic understanding of herself:
[Elizabeth]: He is always—he is in the mind frame that he is right, and I am always in the wrong. If I contradict or say anything against him—so when it comes to discipline—that’s why I don’t necessarily think there’s a right or wrong. I think there’s different ways to approach this. If my son doesn’t do the dishes, [Eric] wants to ground him for two weeks, I want to make him do the dishes. Who’s right, who’s wrong? There’s not a right or wrong, there’s just differences. And, he thinks there’s right and there’s wrong.... I have to pick my battles all the time... So he feels I’m always wrong. Am I really always wrong? So, it builds up, and that’s why I think journaling helps, that I can say “hey, maybe I’m not as crazy as I think I am.” Because when you’re wrong 100% of the time, you can just get depressed if you’re not careful, and I’ve been through bouts of that.

[Stacy]: Do you think that the journal can actually help you distance yourself from your husband? Because it would maybe be a place where you can get all that stuff out but you never actually broach the issue with him? I don’t know.

[Elizabeth]: I don’t think so. I think for me I can help sort it out in my journal and decide what needs to be shared, what’s important enough to discuss and fight for and then the things that aren’t important I can still vent and write about and talk about, but I don’t have to share them with him and cause more problems or arguments.

In this segment, we get to the crux of Elizabeth’s reason for keeping her more meaningful journal entries private: she needs a space where her feelings can be acknowledged, where she can be right (he is in the mind frame that he is right, and I am always in the wrong and There’s not a right or wrong). Her journal does not interrupt, does not talk back and in so doing, provides a platform for self-expression, self-assuredness, and self-esteem renewal (“hey, maybe I’m not as crazy as I think” and when you’re wrong 100% of the time, you can just get depressed). Elizabeth sees this as only a good thing; rather than seeing this as closing herself off to Eric, she believes it helps her decide... what’s important enough to discuss and avoid caus[ing] more problems or arguments. This does not really constitute Reconnection, in that empathy toward or between one another is not being established. But, to Elizabeth, it does constitute a valid function in maintaining the relationship.
In this example, we see the journal creating distance in at least two ways. First, it helped Elizabeth Repattern, Reflect, Restory, and Reconnect with herself. She was able to open up and expand upon meaningful stories in her life, but because these entries were left unshared, the journal was somewhat of an echo chamber for own thoughts. Second, the journal was an aggravating factor for Eric because he thinks it is a waste of time (“you hate my journaling”) and specifically thinks it takes time away from them being together (it bugs him because he wants the time for us). Elizabeth, however, does not see the journal as distancing, which raises the question of whether mutual Reconnection is more important than personal Reconnection in relationships.

**Example 5: Couple 6: “It was like I had created my own relationship”**

Fyona from Couple 6 was one of many participants who had journaled regularly in the past. In our second one-on-one interview, she revealed how her past writing had significantly shaped or at least played a role in her relationships with her ex-boyfriend, her ex-husband, and even with Fred. The backstory to this example is that in the last year of Fyona’s floundering marriage, she felt the need for emotional and physical connection that she was not getting from her husband. She turned to an online relationship with another man that was based solely on written correspondence:

[Fyona]: In my previous marriage things really deteriorated. You know, he spent a lot of time on the computer, and he had for years. And, I got into online gaming. And, then I kind of fell in love with somebody online. And, it wasn’t really an appropriate relationship, and that really is kind of what made me realize—the fact that I was open emotionally to that—exactly how dissatisfied I was in my marriage. And, that was really what kind of—I don’t feel like that caused my divorce. But, that caused me to realize that this was unsatisfying in a way that was not ever really going to be fixed. But, that relationship wasn’t viable either. I knew that.

Fyona stayed with her husband despite these feelings, to make sure she wasn’t being hasty and just making an emotional decision in the moment. She gave it a year. Meanwhile, she was no longer seeing that other person online. She was lonely and heartbroken. She and her
husband were sharing a bed, but no longer having intimacy. It was extremely awkward sleeping next to her ex when there was so much distance between them. Toward the end of the year, she moved into her own bedroom. It was really, really lonely and miserable being there. On top of it all, she was missing the other person she still had feelings for.

Figure 21. Fyona’s Journal Summary, Week One: Remembering Past Love

Fyona journaled about how she wanted to play World of Warcraft again, but was wrestling with the fact that she used to play that game with a past romantic partner for whom she still has lingering feelings.

The role of writing in her couple relationships began with Fyona’s ex-boyfriend, whom she met while playing the online game World of Warcraft (Figure 21). In fact, before this relationship, she had never been a big diary-keeper; she was a wannabe diary keeper, with journals that she would start, write one paragraph in, and then never see again. But, something happened in her online relationship that caused her to become a surprisingly regular and almost obsessive journaler turned blogger:
[Fyona]: I got into that intense, emo, chemical relationship with that online person and then he disappeared for like a year. And, I was like, all I can say is, you know when you’re in that chemical thing, you’re not really rational. So, I was convinced that he would come back, and I journaled. You would not believe. You would not believe how much I wrote in that journal. It was huge. And, I would go back and re-read a lot of it. Because I didn’t have the relationship. It was like I had created my own relationship, and I was re-living it.

[Fyona]: When we were in contact I had all these chat logs and letters and things, and so when he left, I continued to write him letters, and I was writing a lot, like 2 to 3 times a day. Then I started converting them into blog posts instead of letters. And I was seriously writing a whole lot for seriously like a year... And then when I gave up on that relationship and finally concluded that it really wasn’t going to go anywhere, I had a hard time letting it go. ...

[Fyona]: And sometimes once in a while if I feel sad or emo about that relationship, I go back and re-read some of those journals, some of the letters that he wrote me, or even write in it still once in a great while... When I created the rela—the journal—I read something that said that when you write things down, you create more of a reality for it. So it occurred to me that in all those letters I had written to the other guy, I had actually created a relationship and more emotional bonding than there even really was by the act of all the writing that I did.... that was unhealthy.

Fyona’s experience with this, her first journal with purpose and lasting attention, was one of Reflecting on the past (I had all these chat logs and letters), and Restorying (I had created my own relationship) and Reconnecting (I continued to write him letters...for...a year) with her ex-boyfriend. But, this was a false Connection (not really rational, it really wasn’t going to go anywhere), an unhealthy obsession (I was writing a lot... 2 to 3 times a day... for seriously like a year and I had a hard time letting go). The journal—in the process of its writing and also in the process of its re-reading—was essentially creating a relationship, creating intimacy that was not actually there (created a relationship and more emotional bonding than there even really was by... writing). In fact, the one-sided relationship carried on in the journal had lasted many times longer than the mutual relationship. And, on occasion, she still revisits that relationship (sometimes... I go back and re-read those journals). Many other participants...
agreed that—in the context of their relationships and otherwise—writing as well as speaking ideas aloud makes them more concrete or real.

As much as a journal can hold a failing relationship together (albeit one-sidedly), it can also pull a failing relationship apart. At the same time as Fyona was writing these letters to her absent ex-boyfriend, she was contemplating the state of her marriage. The fact that she was able to be open emotionally to fall in love with another man made her realize... exactly how dissatisfied she was in her marriage. But, at the time, she was unable to articulate why she was so dissatisfied. Again, she turned to writing:

[Fyona]: I couldn’t articulate why I wanted to leave my husband. And, I felt stupid and guilty because maybe I was just like hot after this guy [the ex-boyfriend]. Maybe it was just that, maybe I was just some cheap, cheating floozy or something, you know? Which, by the way, I never actually met the guy, this was totally online.

...

[Fyona]: [The writing exercise] made it easy for me to tap into this inner part of me and ask myself why I was upset, why I wanted to leave, and how I really felt about my ex-husband. It was really absolutely shocking to me the answers that I came up with. Because I was really thinking that it was all about this other guy and I was in love with him and that is what it was going to tell me. It didn’t.

...

[Fyona]: I didn’t realize this throughout the [20 years of] marriage. I mean, I know it was a problem and I was constantly addressing it, but I did not know how much inside I was upset, hurt, and angry until I journaled this.... The words that came out were just filled with anger and hate... and you know, if you would have asked me I would have been like “I’m not mad at him.” I never thought I was really angry... I sabotaged [the relationship]... I didn’t even know this. ... So, I started writing this and it all came out that I hated him. I didn’t know I hated him! Where did that come from? When I wrote that blog, I really realized I was done.
I have excerpted large portions of this story. The first omitted portion describes how Fyona got the idea to do this journaling exercise from a therapist and how she used her role-playing abilities from online gaming to help her *tap into this inner part of [herself]* through writing. So, although the journal exercise was done by Fyona alone and that exercise yielded the key insights, it was scaffolded in a way by her role-playing experience and her therapist’s prompt: *he told me that I should think of my inner self and I should talk to myself and I should write it out and I should ask that part of me questions.*

The second omitted portion describes how Fyona realized that the sexual problems she was having in her marriage ran much deeper than even she knew; tracing their sexual relationship back to when they first met, she realized she felt violated by him and *it came to a point where [she] didn’t trust him to touch [her].* Writing in this journal helped her Reflect (*ask myself why I was upset...*). It helped her Restory (*from I felt stupid and guilty and maybe I was a cheap cheating floozy and “I’m not mad at him” to I sabotaged [the relationship] and I hated him*). It helped her also, to Reconnect with herself while Disconnecting from her husband (*I started writing this and it all came out that I hated him, I didn’t know I hated him!*). So, while her relationship with her ex-boyfriend is what helped her realize... *how dissatisfied [she] was in her marriage,* writing is what helped her understand *why [she] wanted to leave and realize [she] was done* with her marriage.

While this was not a shared journal, and in fact neither of these journals were, as we saw with Fyona and Fred in Example 1, journaling for (or in this case against) the relationship can be primarily a solitary activity. Furthermore, while Example 1 showed how personal journaling can support the relationship by creating a sense of Reconnection (*[using the journal] to... understand my own mind better... has done [our relationship] the most benefit*), we see here how personal journaling can sometimes undermine the relationship by creating a sense of Disconnection.
Fyona indicated on her journal summary sheet (above) that she wrote a reflection on how her relationship with Fred had progressed and how much more connected to him she felt since writing her a prior blog.

The final piece of this example brings us back to Fyona’s relationship with Fred and the role she thinks journaling can play there. Fyona told me the story of the journal she kept for her ex-boyfriend as a way to explain why she had, prior to this study, created a blog for Fred. Just as writing had concretized the imagined relationship with her ex-boyfriend, she thought that it might help strengthen her initially uncertain relationship with Fred. However, the blog did not work in quite the way she had expected:

[Fyona]: Fred has access to my blog, I gave it to him. He’s the only one who has access. I actually created it because for a while in our relationship I was having trouble communicating with him about difficult topics and would really have a very hard time talking to him. And, I thought this might be a way that I could open up and tell him things. Then, I found that I would write blogs, and if I didn’t feel comfortable talking to him about them I wouldn’t publish them. So,
they would just sit in the edited area. And, then I thought, “well, I don’t know if that’s really working, then.”

[Fyona]: So, when I started that journal for Fred, I was doing two things. One was to be able to express to him things that I had difficulty with. But also the other was to find another way to talk to him to make it [the relationship] more concrete. But, I don’t think that was really as necessary, because Fred and I are communicating and writing all the time in our texting and emails. So, even though I thought it was a good idea, it hasn’t really worked in anything because he’s right there and I just talk to him.

[Fyona]: After I started writing in the blog [for this study], I went back and started using the one that I had created to share with him and that I hadn’t really written very much in. And I looked at some of my old posts including the ones that I hadn’t published. And those were mostly—you know I told you about the time that I almost left [Fred] and I got all upset? And then after that things really just calmed down… I actually made a post the day that I left him and... it was really interesting to read it because it was all this build up and it was very well written and it expressed my feelings at that point in a way that I don’t think I even explain very well when I’m trying to explain why I was trying to leave. So, I went through and I re-read them and I hadn’t really written anything since then and it’s because since then—that turning point—created more acceptance in my heart of the relationship. And the ways that I had been doubting it went away. And it made it a lot easier for me to talk to him. And some of the things I hadn’t posted before I realized that I had talked to him about those topics since, and I actually went ahead and posted those blogs.

Prior to this study, Fyona actually had the idea to create a journal for Fred as a way to Reconnect with him. Back when she was having a very hard time talking to [Fred], she thought that a personal blog might Repattern their interactions, enabling more intimate exchange (a way that I could open up and tell him things). It seems as though writing in the blog may have helped Fyona personally Repattern, Reflect, and Restory with herself, allowing her to articulate her feelings more fully (it expressed my feelings at that point in a way that I don’t think I even explain very well...). But, ultimately, the blog failed to open this process up to Fred through intentional entry sharing (they would just sit in the edited area). There is not enough information to determine whether the blog served to Reconnect or Disconnect,
whether, for example, the insights form Fyona’s blog led up to the argument that she considers the *turning point* in their relationship. But, we do know that Fyona re-read the posts as a result of the study, which both encouraged her to share these entries with Fred (*I actually went ahead and posted those blogs*) and also led to some positive reflections on the current state of the relationship (*Noted I’m a lot happier in my relationship with Fred since I had last blogged (prior to this assignment)*, Figure 22). So, starting this blog and later returning to it ultimately supported Reconnection for Fyona (*Talked about... how lucky I am to have him in my life*, Figure 22). Importantly, the ability of the blog to function as a vehicle of the 4Rs changes with the relationship.

This conversation took place the week before Fyona experienced *an opening door in the relationship*, as described in Example 1. One question that remains unanswered is whether talking me through the role of writing in her relationships and the use of this writing exercise to *tap into this inner part of [her]self*—which she claims to use very rarely—encouraged her carry out that very same exercise during week two. It seems plausible that these could have been contributing factors, and this again raises the question of how consequential research interviews can be to participants. More on this topic will be presented in the following chapter.

In this example, we have seen how Fyona’s journal created and maintained a fictional relationship with her ex-boyfriend, ended a failing relationship with her ex-husband, and served as an experimental communication platform with her current partner, Fred. Journal writing can help concretize thoughts and share more intimately with another. Through concretization, Restorying can evade reality or restore it. External scaffolding like an exercise prompt or role-playing skills, can help the 4Rs along. And, finally, couple journals do exist in the wild, but their function changes with the relationship.
Example 6: Couple 3: “I left myself out”

Chris and Cindy are both 44 years old, have been married for 13 years, and are raising their two daughters together. The two are going through a bit of a rough patch in their relationship—[they’ve] had an off year, [they] are at a drifting apart moment—now that Chris has been out of work for a year and has been diagnosed with bipolar disorder, and Cindy feels the stress of striving to be a supermom by working a full time job by day and picking up the second shift (taking care of the children) when she gets home. The strongest thing that keeps [them] together is probably [their] kids.

Figure 23. Chris’s journal, Week Two

These are Chris’s journal entries from the second week of journaling. Note that the example in this section describes a realization from his journal entries from the previous week, which he chose not to take a picture of. The journal entries in this picture in their entirety have been transcribed and overlaid to the right.
Chris was one of the least participative partners of all couples in the journaling exercise. His entries were extremely short—a sentence or two per day (Figure 23). He thought the journal was a waste of time primarily because he refused to use it properly. That is, he refused to express feelings because of traumatic experiences in his past. This relationship to personal feelings and emotions seemed to cut deep into his identity: I don’t do emotions; I don’t write things down; it’s part of my makeup.

Despite his journal entries being so thin, despite the fact that all the content is already shared (any thing I would write down, I would say), despite the fact that there’s nothing in it, Chris actually had a rather profound Reflective, Restorying experience that was made possible by the journal. In our second interview, I asked Chris whether he had any realizations from his journal, to which he responded:

[Chris]: Some of the times when I wrote how many things [my wife and daughters] did without me, there was impact there. You know, realizing—writing down what I do includes writing down what I didn't do. There was one day they did a lot of things, I only did one thing. So, I left myself out as part of my bipolar stuff... The day that I noticed that, that had an impact on me.

Chris did not go into further detail about this experience, and I did not pursue any deeper explanation due to Chris’s discomfort with sharing emotions and also out of concern for his mental health. What can be seen even from this short description is that the journal did enable Chris to Reflect and Restory his understanding of the day. But, this is a particularly negative reflection (I left myself out as part of my bipolar stuff... that had an impact on me), and it draws distance between Chris and his family (I wrote how many things they did without me). Furthermore, Chris does not really like Reflecting on the past—especially his deep past. For some people, Reflecting is simply not a desired or healthy thing to do, especially without a trained therapist. So, while the 4Rs does have some explanatory power in this example, the fundamental takeaway is that the 4Rs framework has certain assumptions and values that simply will not match the desires and needs of some users.
Discussion

Revisiting therapeutic common factors

The examples presented in this chapter show how Repatterning, Reflecting, Restorying, and Reconnecting are activities that happen through and about a dyadic journaling activity between partners. But, do the 4Rs adequately capture therapeutic processes, and are they an adequate shorthand for designers who want to initiate meaningful conversations and growth for users? In this section, I build onto Tables 6 and 7 presented in Chapter 2, adding a set of quotations from couples in my study that exemplify each MFT model-dependent common factor identified by Davis (2005). Short explanations of these examples and how they map to each common factor are provided below.

Raising awareness of the interaction cycle and each individual’s role in it

The journal interrupted or altered the timing of personal and couple interactions (slowing down the process, or Repatterning), leading to more self-other awareness. Dawn, for example, left her argument with David to write in her journal, which gave [her] time to Reflect. Before writing, she thought he was criticizing [her], and [she] kind of got upset, and then David felt bad. After returning, she wasn’t... mad at David anymore because it wasn’t really about him, it was more about things that [she]’d internalized. The journal interrupted the process and gave Dawn space to reflect before talking to David again. See Example 2 above for more detail.

Journaling also gave many participants a sense that they were outside of themselves (standing meta, or Repatterning). Andi, for example, thought journaling helped her feel like she was reflecting and being aware of [her] attitudes because it helped her look at herself from a more objective, third person perspective. See section “Journaling as a 4Rs activity: Couple 1” for more detail.
<table>
<thead>
<tr>
<th>Common Factors</th>
<th>Examples from Couples 1-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slowing down the process</td>
<td><strong>Dawn:</strong> I thought he was criticizing me, and I kind of got upset, and then David felt bad … [The journal] gave me some time to reflect … I wasn’t… mad at David anymore because it wasn’t really about him, it was more about things that [she]’d internalized.</td>
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<td></td>
<td><strong>Andi:</strong> [Since starting to journal, I appreciate] feeling like I’m reflecting and being aware of what my attitudes… I think it’s really good to tell the story of yourself from a third person perspective and not be so identified with your own viewpoint.</td>
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<tr>
<td>Standing meta</td>
<td><strong>David:</strong> One of the things that I realized in my journal was that when I had these kind of uptight feelings, that took me away from all that being present and being in the moment… I was like “Well the end of the trip wasn’t as good as the beginning of the trip,” you know? And, it was, but I didn’t really—I’m not sure that I could, without writing in the journal, articulate why that was.</td>
</tr>
<tr>
<td>Encourage personal responsibility</td>
<td>(not observed)</td>
</tr>
<tr>
<td>(Use of metaphor)</td>
<td></td>
</tr>
<tr>
<td>(Family of origin as a context for the cycle)</td>
<td><strong>Isabelle:</strong> When I was growing up my mom told me that her mom… just raised her like “I’m your mom, not your friend” and so my mom told me “I’m going to be your friend and your mom.” But, she was never really the friend, she was just the mom. So, I thought that was funny how that kind of relationship never happened and how… it’s come back to haunt me now.</td>
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<tr>
<td>Emotional regulation</td>
<td><strong>Fyona:</strong> When he picks me up, he’s like, “What’s wrong? You look off.” I’m like, “I’m really upset”… so we had this whole discussion… I explained to him that that upset me and he blogged about it… [Then, I wrote about how] from the start of the relationship it’s always been, “Well do I really love him enough? Do I… Am I in love? Do I…?” … a lot of our blogs after that really revolved around this, like, “Wow, you know my feelings are a lot more intense, even, then I realized.” … It was… an opening door in our relationship.</td>
</tr>
<tr>
<td>Cognitive reframing</td>
<td><strong>David:</strong> If I hadn't have written in my journal after our conflict, I wouldn’t have realized how that was a gift to me or a concession to me. I think I just would have been like “Oh that's great that Dawn did this—.” When I wrote in my journal, I was like “Oh, actually she did that for me.”</td>
</tr>
<tr>
<td>Behavioral shifts</td>
<td><strong>Isabelle:</strong> I wasn’t sure if I was going to tell him that my grandma didn’t approve. But I just did it anyway… By sharing I was able to not keep something from him that he would know was bothering me. He knows when something’s bothering me and I know when something’s bothering him. But, sometimes we’ll just be like “No, nothing's bothering us” and we’ll let it go.</td>
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</table>

**Table 10. MFT Common Factors, Interventions: Examples from Couples**

This table captures the common factors in MFT as defined by Davis (2005) using quotations from couples in Study 2.
<table>
<thead>
<tr>
<th>Common Factors</th>
<th>Examples from Couples 1-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client’s awareness of the cycle and their own role in it</td>
<td><strong>Dawn:</strong> I wrote it all down and I read it to David. He said—it was so sweet—he said “Yeah, I could probably write a list like that too…. It was a bonding moment. … [The fight] was a little bit ugly. But, I was upset and I just didn’t want to talk about it. So I wrote [my feelings of inadequacy] down, and then it turned into like a way that we could bond.</td>
</tr>
<tr>
<td>Softening of thoughts</td>
<td><strong>Ian:</strong> I just had a better understanding of... what must be going through her head. It's really hard for her dealing with her family... When she was yelling at me and nitpicking at everything I did, I didn't want to offend her... I kept a little bit of that in... First I gave her the part that I did something wrong.</td>
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<tr>
<td>Softened behavior</td>
<td><strong>Dawn:</strong> Me being able to understand that... “David made this compromise for me”... I understood him better now. So I felt closer to him and grateful... like “OK, well maybe next time I'll compromise for him.”</td>
</tr>
<tr>
<td>Softened affect / emotional regulation</td>
<td></td>
</tr>
<tr>
<td>Support of partner’s autonomy</td>
<td><strong>Fyona:</strong> I was just really, really upset. I started crying at work... so we had this whole discussion... [in his journal] he wrote... that he really wished that I didn't get so upset because it wasn't realistic to think that he would never get annoyed with me. And I agreed with him on that.</td>
</tr>
<tr>
<td>Confidence</td>
<td><strong>David:</strong> If I hadn't have written in my journal after our conflict, I wouldn't have realized how that was a gift to me or a concession to me. I think I just would have been like “Oh that's great that Dawn did this”... when I thought back, I thought, “Wow, Dawn's already stepped outside of her limits for me once”... what more can you ask for?</td>
</tr>
<tr>
<td>Slowing down</td>
<td></td>
</tr>
<tr>
<td>Personal responsibility</td>
<td></td>
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**Table 11. MFT Common Factors, Outcomes: Examples from Couples**

This table captures the common factors in MFT as defined by Davis (2005) using quotations from couples in Study 2.
The assumption of personal responsibility resulted from journaling, as well. For example, David realized that when he had *uptight feelings, that took [him] away from being present and being in the moment*. He realized that it was not Dawn’s fault that he was upset, it was his own: *That was one of the things I wrote about in my journal... “Well the end of the trip wasn't as good as the beginning of the trip,” you know? And, it was, but I didn't really—I'm not sure that I could, without writing in the journal, articulate why that was.* He took ownership for his experience of the trip. Unlike slowing the process down and standing meta, personal responsibility tended to come after or as part of Reflecting and Restorying. See Example 2 above for more detail.

**Use of metaphor**

No participants reported using metaphors to describe their interactions with partners. Though, some insights gained from journaling may have helped partners remember their position with respect to the other. For example, Fyona’s new understanding that *it wasn't realistic to think that he would never get annoyed with me* might prevent her from getting upset next time she annoys Fred. But, this new explanation (or story) is not a metaphor in the sense that Davis (2005) intends it. This lack of metaphors to describe partner interactions may have been due to the short study period or data collection methods which simply missed the such occurrences. It may also be that participants are less likely to create metaphors on their own without the guidance of a therapist. See Example 1 above for more detail.

**Family of origin as a context for the cycle**

For many, the journal became a prompt to reach deep into their personal histories to reflect on the present (family of origin as context for the cycle, or Reflecting and Restorying). Isabelle showed us how journaling can encourage consideration of more relational stories; she drew lines from her current situation back to her mother and even grandmother (*when I was growing up my mom told me that her mom... but it's come back to haunt me now*). However, because there was no therapist guidance, some participants, like Jack, had trouble “exploring new ways of interacting in the here and now” (Davis, 2005). See Example 3 for more detail.
Altering the cycle

Writing in the journal helped bring about affective revelations for Fyona about her relationship with Fred (emotional regulation, or Restorying). Because she was able to hear a new voice through Fred’s journal entry, and because she did her own writing exercise, she shifted from her initial reaction of feeling *really, really upset* and unsure about the relationship to feeling even more emotionally connected: *But, the thing that's been hard has been, like, from the start of the relationship it's always been, “Well do I really love him enough? Do I... Am I in love? Do I...?” And so, a lot of our blogs after that really revolved around this, like, “Wow, you know my feelings are a lot more intense, even, then I realized.” ... It was kind of a bit of an opening door in our relationship.* See Example 1 for more detail.

Journaling also helped to change the way participants thought about themselves and their partners (altering cognitions, or Restorying). For example, David changed his views about Dawn holding him back from the intense hike he desired: *If I hadn't have written in my journal after our conflict, I wouldn't have realized how that was a gift to me or a concession to me. I think I just would have been like “Oh that's great that Dawn did this—.” When I wrote in my journal, I was like “Oh, actually she did that for me.”* See Example 2 for more detail.

Journaling led to risk-taking in the form of more emotional honesty and intimate sharing between Ian and Isabelle (behavioral shifts). Isabelle made the leap to tell Ian about her grandmother, which she normally would not do: *I wasn’t sure if I was going to tell him that my grandma didn’t approve. But I just did it anyway. This helped alter a cycle of concealing emotions: by sharing, I was able to not keep something from him that he would know was bothering me. He knows when something’s bothering me and I know when something’s bothering him. But, sometimes we’ll just be like “no, nothing’s bothering us” and we’ll let it go.* Unlike other means of altering the cycle, behavioral shifts tended to be observed as part of Repatterning or Reconnecting. This was likely due to the fact that the study period was short such that larger cycles of interaction could not be played out or observed. See Example 3 for more detail.
Softening

One aspect of softening is the increased awareness of negative cycles of interaction between partners as well as the role they each play in perpetuating or disrupting it. This was a hard phenomenon to observe in part because the study was so brief. My observations were more local—how Repatterning, Reflecting, Restorying, and Reconnecting happened in a particular instance as opposed to how it affected a larger pattern of behavior. I do not know, for example, if the conflict David and Dawn had in Example 2 was part of a larger recurring pattern; if it was, how did their interaction around the journal affect future occurrences? These are questions for future research.

There were, however, signs of softening at a more local scale, for particular negative interactions. The insights David arrived at in his journal and shared with Dawn led Dawn to also change her thoughts and projected behaviors (softening of thoughts and behavior, Reconnecting). Dawn summarized her change in this way: *Me being able to understand that…

“David made this compromise for me”… I understood him better now. So, I felt closer to him and grateful about it, and maybe also felt like “OK, well maybe next time I'll compromise for him.”* See Example 2 for more detail.

The effect of Isabelle writing in her journal and finding those thoughts more accessible to share with Ian was more acceptance and accommodation by Ian (softening of thoughts and behavior, Reconnecting). First, Ian felt an empathic connection to Isabelle: *I just had a better understanding of it, an understanding of what must be going through her head. It's really hard for her dealing with her family.* Second, Ian decided to act upon this by responding more softly to Isabelle after an argument because he recognized her stressful situation: *When she was yelling at me and nitpicking at everything I did, I didn't want to offend her and tell her too much about that... I kept a little bit of that in... First I gave her the part that I did something wrong.* See Example 3 for more detail.

When Dawn journaled about her feelings of inadequacy and then decided to share those with David, David responded with empathy instead of renewing emotions of their fight just a few
minutes before (softened affect / emotional regulation, or Reconnecting). As Dawn recounted, it was so sweet—he said “yeah, I could probably write a list like that, too.” The journal made Dawn’s deep feelings accessible not only to herself but also to David as she shared; her emotional disclosure invited his. See Example 2 for more detail.

**Making space for the other**

For some participants, interactions with and around the journal encouraged them to acknowledge the “otherness” of their partner, accept them just the way they are, and take more personal responsibility for improving relations (support of partner’s autonomy, slowing down and personal responsibility; Reconnecting). Fred’s blog entry, for example, helped Fyona realize that it was unreasonable to think that [she] would never annoy him. In a sense, this is an acknowledgement that Fred is his own person, that they do not always have to enjoy everything about each other. David similarly found through his journal that Dawn is also her own person and he cannot expect her to want to go on the same types of hikes that he does. He makes space for Dawn by concluding that “Dawn's already stepped outside of her limits for [him] once,”... what more can you ask for? See Examples 1 and 2 for more detail.

**Some differences between MFT common factors and dyadic journaling**

One of the most obvious and important differences between the dyadic journaling activity and the types of therapeutic situations that Davis (2005) observed is the lack of clients and therapists to wield it. Clients are people who feel the need for and invite professional help in their relationships. My participants, excepting a few, were not in this situation. They were paid volunteers for a research project. In fact, it seems that the couples who found the most benefit from the activity were those that already had reportedly open communications and overall very healthy, happy relationships. They did experience the 4Rs, but arguably they already had fairly “healthy interaction cycles.” Several of those who found less mutual benefit from the activity had negative interaction cycles but either did not know how to break out of them (for example, Chris and Cindy) or did not see the need to (for example, Eric and Elizabeth).
Therapists are people who have the permission and perceptive agency to intervene. The journal has qualities that invite and interrupt and so Repattern the thoughts, emotions, and behaviors of partners. But, the journal cannot thoughtfully direct, as a therapist would direct clients, to, for example, develop a metaphor for their interaction cycles. The journal is determined largely by the cultural expectations and personal agendas that participants bring to them.

Another important difference between Davis’s (2005) study and mine is the duration of the intervention. Davis was looking at clients who had successfully exited therapy after months and sometimes years of therapeutic sessions. I was looking at a mere two week intervention. For this reason, Davis was able to observe changes to recurring cycles of interaction that were at first initiated by therapists and then later upheld by clients. My examples, however, cannot speak to the participants’ changing cycles of interaction and their changing agency in those cycles. My examples are very local.

Together, I interpret these differences, along with the comparisons I make in Tables 10 and 11, to indicate that the 4Rs can in fact be used to design for and analyze therapeutic interventions and outcomes. However, I propose that dyadic journaling without external guidance (perhaps form a therapist) may be most likely to help those couples who already have a fairly healthy relationship. It seems that they could be good tools for maintaining positive cycles and preventing disconnection. More research needs to be done to explore this explanation and to observe the effect of journaling longitudinally.

**Challenges to adoption of Diary Built for Two**

Examples 1-6 show a range of 4Rs behaviors—those that had significant impact on the relationship and those that were less pronounced; those that affected both partners and those that only affected one; and even those that may have resulted in more disconnection than connection. While the 4Rs took place within all 10 couples, only 3 of the 10 couples believed that the journal played a significant role in strengthening the relationship: Fred and Fyona (Example 1), Dawn and David (Example 2), and Ian and Isabelle (Example 3). Furthermore, at the conclusion of the study, over half of participants spanning 10 couples were interested in
continuing to keep their journals, but there were only 4 couples in which both partners wanted to continue. These findings—although they are confined to a short study period, small participant pool, and low-fidelity prototype—simply suggest that a Diary Built for Two is not a technology that would work for all or even most couples. In this section I outline some of the factors that would seem to hinder widespread adoption.

Disliking intimate sharing

Journaling is a form of verbal, intimate sharing—that is, of sharing thoughts normally kept to oneself, like the mundane and the emotional. Some people simply do not enjoy or feel comfortable sharing intimate thoughts—be it giving or receiving, journaling or talking. This was the case for Chris, Eric, and Henry. In the course of our interviews, each found occasion to describe a scenario in which the woman would talk for a long time and the man would be only partially attending. For Eric and Elizabeth, this was called getting her words in. For Henry and Hannah, this was called fulfilling her word quota. They specifically disliked communicating feelings—preferring instead to focus on facts or places or things—and expressed disdain for small talk and the mundane (who cares what we had for dinner 3 years ago last Tuesday?, Eric). Let us take a look at Chris and Cindy as a representative example.

In our third interview, Cindy told me that she does 90% of the talking in the relationship. This came as no surprise because, from the very beginning of interview 1, both Cindy and Chris continually returned to the topic of their different talking preferences:

[Cindy]: I’ll ask a question, he’ll give a one little short answer, and I’m like “OK, anything else you want to add to that? I’m always digging for more.”

...

[Cindy]: [After an argument] I just tell him how I feel. Usually he doesn’t know.

[Chris]: Right, she has to tell me. Like I said, I’m not going to figure it out. Just give up trying that. So, when she tells me how she feels, then we’re OK.

[Stacy]: Uh huh. Do you ever tell her how you feel?
[Chris]: No.

[Cindy]: Yeah, that’s a problem with him.

[Stacy]: Yeah?

[Chris]: Yeah, that's not going to happen... I don't do feelings. It's not something I talk about. Anywhere. In any situation, I’m not going to talk about it.... Because I’m closed off, I guess.

...

[Chris]: We communicate enough for me, but I’m sure we don’t communicate enough for her. She’d love for me to spend an hour telling her how the day went and what the kids did instead of pulling teeth to find out how the day went.

[Cindy]: Right.

[Chris]: She comes home and wants to tell me about her day and expects me to care about that.

...

[Cindy]: Today [when she was talking to him] it didn’t seem like he was even listening, he just laid on that chair with his eyes closed. I knew he was awake but I don’t even know if he really paid attention to what I was saying.

[Chris]: Oh, I was listening. Whether I was paying attention, though, is a different story. But, I listened to her. I could have answered her if she wanted me to at the time.

[Cindy]: And sometimes it’s just fine that he lets me “blah blah blah blah blah” because I like to talk.”

...

[Chris]: I don’t mind that she reads [her old journals to me] to me. I don’t get anything out of it.

[Cindy]: He’s used to me yacking away <inaudible> stuff.

[Chris]: She needs to do it, so I need to listen to her.
Cindy really longs for more communication and has to work hard at getting Chris to talk to her
(I’m always digging for more and pulling teeth to find out how the day went). Last time she
talked to him, not only was he not talking, she did not feel like Chris was even listening (it
didn’t even seem like he was even listening). He admits that he was not actually attentive (Oh, I
was listening. Whether I was paying attention, though, is a different story) and does not find
talk valuable (expects me to care about that and I don’t get anything out of it). Listening seems
like a chore (she needs to do it, so I need to listen to her). Cindy describes her talking as not
worth hearing, perhaps because she knows Chris does not value it (“blah blah blah blah blah”
and yacking away). Finally, Chris reveals that he does not appreciate emotional sharing. He
personally does not share emotions (I don’t do feelings. It’s not something I talk about. Anywhere. In any situation...).

These types of attitudes and patterns toward verbal sharing are quite similar to those observed
in Couples 5 and 8. It is hard to imagine that journaling and sharing journal entries could ever
be a desired activity for these partners. Based upon my interviews, it seems fair to say that
Cindy and Elizabeth very much enjoyed journaling and that Chris and Eric hated it. Hannah
and Henry were more moderate: Henry said he probably would not keep his journal at the end
of the study and Hannah said she probably would. Moreover, because these men do not like
talk in general, and intimate talk in particular, the 4Rs model simply does not apply; Reflecting
and Restorying hinge on more intimate sharing. So, it seems that Empathic Communication is
not valued or desired by some, perhaps many, people.

**Gender and journaling**

Disliking intimate sharing and journaling is entwined with gendered expectations. Several men
particularly did not feel comfortable journaling because it was seen as the purview of girls.
For example, Alan noted: *a regular written journal’s kinda for girls.* In an excerpt presented in
the next section, we see that Chris thinks journals are for expressing feelings, and he believed
that most guys do not express feelings. Women also shared these beliefs. Dawn’s reflections on
the matter are particularly interesting because they show how much she wishes that Dan would
identify with more feminine modes of communication like journaling:
[Stacy]: What do you think David thinks about journaling?

[Dawn]: I don't think he likes it. [David] says that he wouldn't spend his time doing it [keeping the journal]. But, I kind of wish he did. Because I, I don't know. I have this hunch—I haven't read it or anything, but I have this hunch that he actually writes stuff in there that I'm like “That's juicy stuff I wanna know or I want him to be thinking about.” Because, one thing I've noticed about him, I think is the science-y kind of environment—and maybe it's because I'm in this psychology kind of environment, so I'm becoming more like emotional or even spiritual, kind of like touchy-feely. And, he's becoming a little bit more like “That's not useful or like practical.”

[Stacy]: No! Jason's like that and I'm trying to pull him over to my side.

[Dawn]: I know, I know, but I can feel him drifting and so, like, because when we first started dating, he kept a journal... And I think that he was like much more into that. And I think now it's like, part of it is like this masculine—like trying to adopt a masculine sort of persona.

[Stacy]: Is he?

[Dawn]: Oh, he definitely is trying to.

[Stacy] Why?

[Dawn]: Well, I think that some of his insecurities come—I tell myself—but his insecurities come from like not feeling like he's manly enough and—like, because he's sensitive. That's what I like about him, you know? And, so I think that there's some pressure... Journaling is definitely considered a feminine kind of pursuit.

Dawn explicitly states the common cultural assumption that journaling is feminine (journaling is definitely considered a feminine kind of pursuit). And, although we do not know for sure what David thinks—other than the fact that he told me he wanted to keep the journal, albeit less regularly—she [doesn't] think he likes it. She thinks journaling would challenge his masculinity (not feeling manly enough). More interesting still is that Dawn really wish[es] he did like journaling. First of all, she believes the journal makes David think in a way that she appreciates and collects information that she wants to know (“That's juicy stuff I wanna know
or I want him to be thinking about.”). Second, she sees journaling as a symbol of not only David’s sensitivity, but also her bond and connection with David in their relationship (I can feel him drifting and when we first started dating, he kept a journal and that’s what I like about him).

The significance of this example is that journaling is a type of talk that women generally appreciate and men generally do not. Furthermore, journaling can be a symbol of the connection between partners. In this light, a Diary Built for Two may be seen as a feminist endeavor to encourage men into more feminine roles and ways of talking and relating. Indeed, therapy itself and the type of talk that it requires is considered a form of emotional expression that is often more comfortable for women. (Piercy, 2002). No doubt, the journal metaphor could be a serious hinderance to adoption of a dyadic journaling system for many couples.

**Emotional distress**

In the course of the study, I was surprised to find that many participants were affected by mental disorders or had traumatic personal histories. Bethany and Chris have bipolar disorder. Both Chris and Jack have had traumatic experiences in their past. During the first week of the study, Bethany actually experienced a manic episode, and during the second week, Chris experienced a depressive episode. Jack appeared to be concerned about his mental health, as well, realizing he needed to see a professional as a result of the study. In most cases, these issues were brought into our conversations during discussions about the journal.

Bethany (Beth) and Brittany both believed that journaling was a positive practice for Beth during the height of her manic episode:

> [Stacy]: Was there any value to writing in the journal, or were there things that weren’t valuable about writing in your journal?

> [Beth]: Well, writing in the journal was actually pretty valuable because it was another outlet for me, especially when I was in my manic. When I’m in a manic, I’m very needy and very much wanting to get out and do things, but 2, 3 o’clock in the morning there’s nothing open, not even a bar. So, it gave me, you know,
something to try and focus my energies on to try and get me to calm down. And it’s not very safe for me to go out anyways when I’m in a manic.

…

[Brittany]: I think she may not need to write in [the journal] every day, but I know that when we first started and she was having that real bad manic, I thought there would be stuff for her to write in it then. It was really helpful for her... It’s really hard for me to focus, to listen to her when she’s that way, and she needs an outlet. Even sometimes just being in the same room with her when she’s manic, it’s very tough on me.

[Stacy]: So, she needs somebody, but it’s hard to be around her. The journal can be that somebody. Is what you’re saying?

[Brittany]: Yeah.

However, Chris and Jack both had quite negative experiences of journaling. For Jack, journaling makes it all too easy for his mind to return to memories of his abusive parents or to stew on his current financial troubles. It is just too painful for him:

[Jack]: I don't really feel comfortable putting a lot of stuff in [the journal] other than really practical things because it's mostly—the stuff that I need to talk about, I need to talk about it with a professional. It's something that's been unresolved for years and gets worse and worse.

[Jack]: Writing it down is kind of just—you know I feel like I'm stewing in it. It doesn't really go anywhere. Because, I'm writing it down, I already know—if I'm looking for a narrative to look at how—you know, give me perspective about it, I can already do that in my head and I've already done it and I just don't want to think about it anymore. Because the more I think about it, the more it pains me.

[Jack]: If I start to focus on it, I'm going to get into that loop. It's too, it feels more real when you write it down. It's already too real and I don't want to think about it.

[Jack]: I don't like those moments of just being by myself and I don't like meditation because—for the longest time I did my best to try and get through the things that I was in. So you kind of learn how to suppress thoughts and try
not to think about certain things and ignore certain things and—that kind of extends into moments of solitude and meditation, and all that stuff starts coming out, and I don't want that. So, most of the time I keep busy.

Instead of the journal Repatterning his thinking and helping him Restory his outlook, the journal seems to be just reiterating his existing beliefs (I feel like I'm stewing and I already know and I've already done it and get into that loop) and concretizing them (it feels more real when you write it down). Not only does the journal bring all of these painful thoughts to the fore (all that stuff starts coming out), but he feels like he needs a professional to help him.

Chris was in a very similar place. When I ask him in interview one why he had such a hard time keeping his journal, he responded:

[Chris]: Because I. Don’t. Write. Things. Down. So, basically what I gave you is just what I did that day. There’s no feelings in it, it’s just facts.

[Chris]: [A journal] is just not something I do or would do.... If I was to use it properly, then I’m sure it would be valuable. But, I’m not going to use it properly. I’m not going to put down why I had a bad day, you know, or like a therapist would like you to use a journal or something. I’m not going to do that.

[Chris]: If there were feelings in it, it would be valuable to me. But, because I’m not gonna do that, then I don’t see a reason to keep it beyond working on this exercise.

[Stacy] Can you tell me more about this feelings thing, why you wouldn’t do it?

[Chris]: Because I don’t like to, I’m not comfortable with it. I’m not the type to express my feelings, and I’m sure as heck not going to write them down... I don’t like to express them. You know, I don’t know a lot of guys that would express their feelings. I mean, apart from that, there’s things in my past that I don’t express and I’ve been closed off because of it for a long time.

Journaling may have had a positive effect on Bethany during her manic, but what if she had experienced a low like Chris? Jack and Chris were very uncomfortable journaling and may have been deeply upset by the activity. Would they have been better off not participating? For
those with mental disorders, for those with traumatic histories, for those who may need professional assistance, the Diary Built for Two is probably not an effective intervention, and it may in fact do harm.

**Time, money, technology**

Limited resources such as time, money, and technology were found to also limit the plausibility of a technology like Diary Built for Two being adopted by several couples. Cindy was particularly strapped for time now that Chris is out of work. Part of this seemed to be connected with Chris’s depression about being out of a job for a year and discomfort with playing the role of *Mr. Mom*. In any case, Cindy works a full time job during the day, then comes home to to take care of her daughters. She also cares for them on weekends:

> Now that I’m working and he has to be with the kids all day, whatever happens at night [with the kids] I try to do—alone. I don’t want to put so much pressure on him with the kids since he’s with them all day. At night, I usually give him a break and I’m with the kids until they go to bed. On the weekends I’m usually with the kids all weekend.

So, Cindy gives Chris a break, but she does not get one herself. Finances are tight, so they cannot afford a babysitter and there is no family nearby to watch the kids and give them a break. Cindy explained how her unrelenting schedule causes stress and arguments in the relationship, and Chris seemed to agree:

> [Cindy]: [Fights happen] just usually if I’m getting stressed, you know, if I give—you know he rarely gives the kids a bath. I’m doing that—

> [Chris]: Rarely? I don’t know if I’ve done that—it’s probably been eight years since I’ve given a kid a bath.

> [Cindy]: So, it’s all the stuff that just, you know tension that builds up in me. And then I take it out on him or yell at him because I don’t feel like he’s helping enough. And part of it is because I’m not communicating, saying—he expects me to say—“go ahead and tell me when you want me to give the kids a bath or take the kids for a walk.” And instead I feel like—
[Chris]: Except for the bath thing because I’m not doing that.

[Cindy]: I think, I feel like he should just see how stressed I am and just do it... I don’t want to ask. Asking to me is like failure.... I’m a perfectionist and I wanna be able to be the supermom, superwoman, superneighbor of the street. You know, do everything. And then I burn out.

[Chris]: She feels like she should be able to do it all.

[Cindy]: Right.

Cindy feels a pull to be be a supermom, superwoman, superneighbor by doing it all, but she cannot. She burn[s] out, she gets stressed. She does not think Chris is helping enough, but she does not want to ask for help because that makes her feel like a failure. She is so strapped for time that she considers our interview and the journaling exercise to be a little date between her and Chris; there is just never any time left over for them. Cindy was often tired when journaling and yawning during our interviews. When I asked her if there was anything she wrote about during the week that she would have written regardless of being required to for the study, she responded:

[Cindy]: Well, I was just looking [at my journal] because I had totally forgotten about what I wrote about. In one of the entries I said “I could use four journals to tell about what I want to tell about.” But I had no time, or I was too tired. So, that day I only did a page and a half.

Her desire to journal is consistent with the past, prior to having to take a full time job. In fact, Cindy told me she had kept about 20 journals throughout the years (Figure 24). She brought a few out to share with me and we talked about why she wrote in them and what she wrote in them. When I asked her why she does not use them anymore, she and Chris explained:

[Cindy]: Just everyday, whenever I had a minute I would write.

[Chris]: Stay at home mom, so she had a little more time.

[Cindy]: I used to [take them out and read them] more often, but now that I’m busy—
Cindy reported having kept about 20 journals over the years. She was kind enough to take some pictures of these journals splayed out on her bed.
Families with demands on their time, demands on their money like this—such that Cindy, who loves to write, cannot find a way—most likely would not be looking for a leisure-time digital journaling application or an expensive technology device that supports it. George and Gabrielle and Eric and Elizabeth likewise had concerns about setting aside time to journal. Beth and Brittany, Jack and Jill, Elizabeth and Eric, and Andi and Alan all had financial worries. Jack not only suffered financial problems that would prohibit him from buying expensive technologies, but he also simply felt too distressed about money and survival that he felt he could not even consider doing more abstract planning as required by the journal.

[Jack]: I'm not at the point of functioning where I have like on my hierarchy of needs, I don't have higher level, abstract planning

[Jack]: Most of the things I think about, it's like constant stress. That's one of the things I wrote about... was thinking about how Jill is going to get a job and what's she going to do for work and school and for student loans and all that. And I'm just concerned about myself and getting a job. Pretty much that's what my thoughts are on: survival.

Jack even went as far as to consider the potential that he and Jill could be rendered homeless if he does not find a job. On his hierarchy of needs, and on that of some other participants, dyadic journaling just was too much toward the self-actualization for them to consider it a viable use of their resources.

Regardless of financial situation, other couples simply were not interested in technology, particularly Alan and Andi. They considered themselves to be luddites. They did not have smart phones or a computer (they would, however, use Internet-enabled computers at the public library), and this was not just because they could not afford them; they actually enjoyed the aesthetic of being low-technology:

[Andi]: We're primitivists.

[Alan]: Yeah, we're kind of more primitive. We don't want to use the computer for any activity, except maybe looking for work on Craigslist, I think.
Other couples, like Dawn and David, had money but did not yet have smart phones. They did not consider themselves anti-technology, specifically because they spend a lot of time on their laptop computers, but neither did they feel it necessary to have the latest and the greatest mobile devices. Time, money, and technology were all factors that made a digital version of Diary Built for Two seem beyond reach or uninteresting to participants.

Diary Built for Who?

Who is left when talk, gender, mental illness, time, money, and technology are accounted for? Out of 10 couples, I believe only three might actually use a technologized version of a shared journal, so long as it was accessible through desktop as well as mobile platforms: Dawn and David, Fred and Fyona, and Ian and Isabelle. These were couples in which both members journaled, both members found utility, and both members felt that the relationship was served during the study period by way of the journal. I think David and especially for Fred, however, would only adopt a dyadic journaling system that allowed Dawn and Fyona to be primary contributors. David would prefer to journal on more of a weekly or monthly basis. Fred would like the system to be similar to the blog, where he could comment on Fyona’s posts in a more conversational way, as opposed to having to write his own entries without any scaffolding. Ultimately, I think there is potential for the Diary Built for Two and for shared journals. But considerations beyond the 4Rs—specifically including those listed above—need to factor into the design process.

Summary

Repatterning, Reflecting, Restorying, and Reconnecting were activities that took place across all couples, although in some cases the 4Rs were only partially borne out, and in others they were more individual rather than shared activities. Even so, some partners had fairly significant Reconnection experiences made possible through journaling—particularly Fyona, who felt that the journal created an opening door in [her] relationship with Fred, and for
Isabelle, who felt like she could share more, particularly sensitive information, with Ian. In both cases, partners were able to reconnect with themselves, with their partners, and with their relationship. Others experienced the 4Rs, too, but more subtly. David and Dawn, for example, found that the journal enabled them to reflect on a conflict, empathize with their partner, and realize that each had actually compromised for the other. The experiences of these participants showed strong resemblance to the experiences of those in Davis’s (2005) study of common factors, suggesting that the journal can indeed promote therapeutic outcomes.

However, journaling was not always a 4Rs activity for couples; sometimes it encouraged more reconnection with the self or even disconnection between partners. Elizabeth, for example, felt that her journal was a place where she could share thoughts with herself that she could not share with her partner. And, Chris realized through his journal how much he was missing out on family activities due to his bipolar disorder. It seemed as though some participants had cycles that were too hard to break out of by virtue of journaling alone; these tended to be couples that had more constrained communication between partners or problems that they felt needed attention of a professional therapist. Furthermore, several participants, typically men, simply disliked journaling or would not be interested in a digital dyadic journal. Some participants disliked sharing intimately in their journals or through talk. Many of the same participants had trouble with the fact that journals tend to be associated with femininity. Some encountered deep emotional stress when left alone with their thoughts. Others may have wanted to keep a journal, but time, money, and disinterest in technology were all factors that might curb their use. After all factors are considered, I believe that only three of ten couples I worked with might actually be interested in and gain mutual benefit from a digital dyadic journal: Fred and Fyona, Dawn and David, and Ian and Isabelle.
Chapter abstract

The Diary Built for Two field deployment turned up an unexpected finding: Empathic Communication was apparently supported between intimate partners via the research interview process, as well. That is, the communication between partners through the research interview conformed to the 4Rs framework. Literature review further supports this interpretation.

Interviewing as a 4Rs activity: Andi and Alan

Let us revisit Andi and Alan from Chapter 5—the musicians at the margins, the comic-journal keepers—and now turn to their experience of the interview process. In Chapter 5, I argued that the process of journalling for Andi and Alan and other couples supported Repatterning, Reflecting, Restorying and Reconnecting in small but potentially significant ways. As I was conducting interviews and also throughout the analysis process, I began to see clues that the interviews themselves were having an effect. Specifically, the types of conversation unfolding via the journals were very similar to those unfolding via the research interviews themselves.

The evidence for the 4Rs in this process is a little more fractious than the evidence presented regarding journaling. The reason for this is that I only started realizing this phenomenon after the first two interviews had been completed. I reserved questions about the effect of the study itself until the very end of the third interview. Consequently, these discussions were much shorter and, although it seems likely that some conversations in the interview were taking the form of the 4Rs, I have fewer self-reports of participants’ experiences to raise confidence. Therefore, in this chapter I can sometimes only identify a subset of the 4Rs for a particular example. I balance these less complete examples by reporting the findings of similar studies that show how the knowledge-seeking practice of interviewing and the interventionist practice of counseling are converging. Together, these show the potential for interviews, like journals,
to have therapy outcomes. In this section, I present an example of therapeutic interviewing with Andi and Alan.

**Repattern**

Not surprisingly, most research studies are an extraordinary experience for participants. As reported earlier, Andi and Alan do not often tell each other the story of their day; telling that story to a complete stranger in a research situation seems also new:

[Stacy]: What did you think about the whole study?

[Andi]: Well, I really liked talking to you, Stacy, it was really nice.

[Alan]: Yeah

[Stacy]: Aw, that's really nice of you to say. I enjoyed talking to you.

[Andi]: ... it's one of the relationships I really would like in my life, someone who just asks me questions about myself and just listens to me.

[Stacy]: Really?

[Andi]: With interest.

[Alan]: And writes it down, too.

[Andi]: And writes it down, takes notes.

Andi and Alan described the interview as structured by questions, intent listen[ing], and interest that Andi felt were desirable and missing from her life. Below, we see that new experiences were shared and new stories were created as a result of new modes of thinking offered by the interview. This constitutes conversational Repatterning.

**Reflect, Restory, Reconnect**

In the first interview, Andi expressed a longing for her past self, prior to her relationship with Alan:
[Andi]: ...before I met [Alan] I lived in New York City and I went to a lot of parties and I had a lot of different friends... I was way more active in the art thing... I wrote more songs,... I was alone a lot. I would jump on any kind of adventure... [I was] much more hard core in my dynamism—

[Stacy]: spontaneity?

[Andi]: —spontaneity and creativity and when I met Alan it took the—that all changed and at first it was like, “I'm not doing this.”

Andi believed that before dating Alan, her life was marked by more friends, more creativity, more dynamism. Because I was interviewing Andi and Alan together, Alan was able to partake in this story-telling and story-making as well:

[Alan]: Well, we've still been involved in some of that, but not—

[Andi]: Sure, no, we have, it's just, no and it—

[Alan]: It's not been as, yeah—

[Andi]: We have been involved in that, yeah

[Alan]: We've done a lot of weird things also—

[Andi]: I know, and I have a really weird stan—

[Alan]: Yeah, yeah—

[Andi]: And that's the thing, is it necessarily isn't less true. Well, I guess maybe that's not the thing, then. It's like more of the like, just the ener—

[Alan]: Yeah—

[Andi]: The energy and being around more people, I think the socialness. Since we’ve been together we’ve be—I’ve been much less social than I normally am.

In this exchange, Andi and Alan negotiated the happenings and the meanings of the way they are as a couple versus when Andi was single. Andi comes to a new understanding. Whether it is a genuine internalized understanding or a more superficial one—accepted, for example, to
avoid conflict—we cannot know. Later in this same interview, however, Andi recalled this exchange as an example of the fruits of reflection, and she even suggests that it is akin to reflection that has happened through a comic journal she and Alan had kept in the past:

[Stacy]: Do you spend time reflecting on your relationship? How you do that and when you do that is really interesting to me.

[Alan]: That's a process that really helps us reflect on even emotional issues.

[Andi]: The comic book?

[Alan]: Yeah, just 'cause we talk about what we went through even if we're not expressing that necessarily in the journal, which sometimes we will be doing at some point.

[Andi]: Yeah, I don't think we need to put all of the fights and snarky comments in there.

[Alan]: Yeah, there are so many petty little things. But there's also very many good, good times and close times.

[Andi]: That's the really cool thing, you know—when we look at our relationship, that's what—like before I was like “Before I met you I was doing all this crazy stuff” and then Alan was like “We've been doing crazy stuff”—

[Alan]: The whole time—

[Andi]: The whole time, and I'm like “Oh, yeah, I just don't feel crazy”—

[Alan]: You attach it to me—

[Andi]: I think is why I'm like “Oh, yeah, wait, I'm doing all the same stuff, I'm just like—”

[Alan]: We haven't really been partying or whatever, we haven't really been doing any of that. I guess here we've kinda been thrown into it a couple of times where it's like—I feel like we're a little more grown up—

[Andi]: Yeah, I'm a little old.
Andi saw the journal and the interview as media for contemplating the past and creating new stories (I just don’t feel crazy or I feel I’m a little old) about herself as a member of a couple—stories that potentially shift cause (or perhaps blame) for Andi’s new lifestyle from Alan to personal misperception or preference. Interestingly, in the second and third interviews, I saw a sort of reifying of the new story by means of the journal:

[Alan]: Doing the journal is a really helpful exercise in I guess, giving you a chance to look back and be like “Oh, we did all of that” or “That all happened.” So, when we think we're being so boring or whatever, we can look back and see “Oh, we were doing some pretty interesting things” or “We had a really good time.”

[Stacy]: Is there anything about Andi’s personality that you think makes [the journal] a good fit for her?

[Alan]: ... it seems like a lot of times she feels like—we both feel this way—like we're not doing what we want to be doing right now and what we're doing is really mundane and stupid and boring at the time. But, then we look back on what we're doing like a year from now or whenever we say “Oh, we were having a great time, that was really fun” ... [by writing in the journal] you'll be forcing reflection every night and when you're feeling a little down and under the weather about what we're doing you can be like “Oh, we're doing this”—I don't know, it just gives you more proof that what you're—more tangible evidence of—what you're doing.

[Andi]: I tend to get lost in the time when I'm doing something, I'm always thinking about the next thing that I could be doing or another thing that could be better and all the things that are wrong and how I'm not satisfied about blah blah blah. But, you know, then when I look back [in the journal] ... I think about all the little moments and things that were so great, and I think keeping the journal helps you to do that more quickly.

[Alan]: You see all the things you did and it's like, “Oh yeah.”

[Andi]: Yeah, looking at the last week, I'm like “Oh, that was a great time we're having here” you know? “Look at the way we're living,” you know?
We see Reflecting (when we look at our relationship), we see Restorying (maybe that’s not the thing, then ... I’ve been much less social), and we see Reconnecting (we both feel this way or that was a great time we’re having here ... look at the way we’re living). Together, Andi and Alan exposed, added thickness to, and positively reformulated alternative stories of self (Vaandragter and Pieterse, 2008). In the process, they encountered each other, in a sense re-making each other. This happened in our interviews and in their journals, and the conversation extended from one into the other and back again in evolving and co-created webs of meaning.

Interviewing as a 4Rs activity: Couples 2-10

In this section, I add depth and breadth to the argument that the 4Rs were supported by the research interview process—including both the verbal conversation as well as the journal worksheet completion—by drawing on Couples 2-10.

Example 1: Couple 6: “David and I hadn’t thought about this”

In week one of the study, the day just before our second interview, Dawn and David had a fight that turned a little bit ugly. Dawn reported having an existential crisis that led to a miscommunication between her and David:

[Dawn]: I thought he was criticizing me, and I got kind of upset about it. And then David felt bad. So, I wrote in my journal, and then we talked about it some more.

In the wake of their argument, Dawn went to the bedroom and scribbled two lists in her journal—a “don’t do enough” and a “do too much” list—that captured her feelings of inadequacy (Figure 25). She returned to David, journal in hand. Reading from the journal through tears, Dawn shared her entry aloud.
In some ways, this story belongs in Chapter 5, because it is a convincing example of how the journal helped Dawn and David Repattern their communication (I was upset and I just didn't want to talk about it. So I wrote... and I was like “you want to hear it?”—I was crying—”do you want to hear my list?”), Reflect on the reason for their argument ([the journal] gave me some time to reflect), Restory (when I wrote down I wasn't... mad at David anymore because it wasn’t really about him, it was more about things that I'd internalized) and Reconnect with each other (it was like a bonding moment and it was so sweet—he said “yeah, I could probably write a list like that, too.” and it was more of an empathic thing). They seem to believe that the journal really helped them in their relationship (it may have saved our asses and I don't think we would have resolved the conflict).
The reason I present this example here is because it also shows hints of Repatterning, Reflecting, and Restorying in the interview. One of the striking things about this episode is that neither David nor Dawn really told me about it during their one-on-ones (which lasted about 25 minutes each). David noted that he and Dawn had a conflict the day before, but that was the extent of it. Similarly, Dawn discussed how she was feeling off the day before. But, neither mentioned the reading from the journal until I brought them together for the joint interview. In fact, when Dawn discussed her experience in the one-on-one, she framed it as a personal crisis, and she hardly mentioned David’s role or the journal’s in bringing resolution:

[Dawn]: Yesterday, before I wrote my journal during the day, I was meditating, and I was so antsy. And, I don't know why, but I literally just kept losing my—I kept on opening my eyes, and I was like “How much longer?” And, I could tell in my journal, many hours later, it was still that kind of total, irritable rant. Like, all over the place. So, they were kind of mirroring each other, I think.

[Stacy]: So it was just sort of that day?

[Dawn]: Yeah.

[Stacy]: And is it something you noticed because you started writing it down in your journal, or how did you connect those two things together?

[Dawn]: When I was meditating, that's when I first realized “Woah, maybe I'm kind of off today.” And then I was just kind of a mess—like in my daily life with [David], like “Waaah” and then at the end of the day, I journaled and was like “Well, here it is again!” So, it showed up and like, maybe it's like different ways to get at the same kind of thing. You know what you're looking for.

[Stacy]: Mm hm, interesting. So, did you, were you like having a fight or something or—?

[Dawn]: Not really, I was just having like an existential crisis, which happens quite frequently.

Above, Dawn explains how she noticed she was antsy and irritable in the course of both her meditation and journaling practice. She notes in passing that she was also kind of a mess in her
daily life with [David], but when I ask her if they had a fight, she explains that the problem was more personal (not really, I was just having like an existential crisis). Later, in our joint interview, I began by asking Dawn and David whether the two had discussed the journal during the week. They seemed surprised themselves when they remember that, in fact, they had:

[Dawn]: We did [talk about the journal] briefly.

[David]: Really?

[Dawn]: Yes, because I knew the first, well you were done really fast and you were like “it was easy”— <laughs>

[David]: <laughs>

[Dawn]: And, I don't know if you told me or I imagined because I could be wrong. I thought that you wrote a list.

[David]: No, not really.

[Dawn]: OK, so we didn't talk about it, I just filled in the blanks. <laughs>

[David]: We did. We did say—we did remind each other that we had to do the journal.

[Dawn]: Yeah.

[Stacy]: Yeah, OK.

[Dawn]: And, I read you my rant last night.

[David]: Yeah, you did.

[Stacy]: Oh you did?

[Dawn]: Yeah.

[Stacy]: Oh, that's so cool. Tell me more about that.
At two different points, both David and Dawn express that they had not talked about the journal (Really? and OK, so we didn’t talk about it). They do eventually resolve that Dawn had read her rant from the night before. It is interesting that this type of sharing was not important enough to be memorable or noteworthy from the start. I interpret the fact that neither Dawn nor David really discussed the journal sharing to this point to mean that they did not consider it to have played a significant role in their interaction. However, we see as the conversation unfolds that this begins to change:

[Dawn]: Well, I had a, a crisis <laughs>

[David]: Yeah.

[Dawn]: <laughs>

[Stacy]: Like we were talking about, you felt inept?

[Dawn]: Yes, feeling inadequate. And, then I wrote, yeah I told you I wrote this whole list of things that like I should be doing more of, but I’m not. But, I was really mostly pissed off about it because at that point I was like, “I shouldn’t have to be doing this.” So, I wrote it all down and I read it to David. He said—it was sweet—he said “Yeah, I could probably write a list like that too.”

[Stacy]: Aw.

[Dawn]: It was a bonding moment.

[Stacy]: Yeah. That is so cool.

[Dawn]: <laughs>

[David]: <laughs>

[Stacy]: Are you sure there isn't like anything more you can tell me about that, because I want to know every detail. But, I mean, I don’t want to, it doesn’t—

[David]: Well, you had two lists.

[Dawn]: It started out with a miscommunication where I thought he was
criticizing me, and I got kind of upset about it. And, then David felt bad. So, I wrote in my journal, and then we talked about it some more.

[David]: Because she had a—

[Dawn]: I was like “you want to hear it?”—I was crying—”Do you want to hear my list?” <laughs>

[David]: You had a “don't do enough” and then a “do too much,” right?

[Dawn]: Yes. And then we briefly, we talked about, where we thought these ideas came from, i.e., parents, society—that's like our favorite one—”society makes us feel this way.”

[Stacy]: Yeah.

[Dawn]: And then I think David said “I could write my own list,” I said “Yeah.” And I like said a bunch of things that I assumed you—<laughing>

[David]: <laughs> And, I was like, “Those—what are you talking about?” <laughs>

[Dawn]: <laughs>

[Stacy]: <laughs>

[Dawn]: No, but it was more like an empathic thing.

[David]: Yeah.

[Dawn]: It wasn't like a criticism, or—it definitely wasn't a criticism, I think. They were like absurd things.

[Stacy]: So, there are two parts of this I want to get at. The first one is what impact do you think this had on your relationship at the time? And, then the second thing is how did the journal function as a part of that interaction?

[Dawn]: Actually, David and I hadn't thought about this, but it may have saved our asses. <laughs>
[David]: Yeah, we—it was a bad, it was—

[Dawn]: It was a little bit ugly.

[David]: Yeah, it was a little ugly.

[Dawn]: But, I was upset and I just didn't want to talk about it. So I wrote it down, and then it turned into like a way that we could bond.

[David]: I think that was really good, yeah.

[Dawn]: Yeah.

[Dawn]: Because it gave me some time to reflect. Because, when I wrote it down, then I wasn't mad at David anymore, because it wasn't really about him, it was more about things that I'd internalized.

[David]: Yeah.

[Stacy]: mm hmm.

[Dawn]: And, so we were able to bond over it.

[David]: I think, too it maybe allowed you to—

[Dawn]: calm down?

[David]: Well, not only just calm down, but to see how to take apart how you were feeling.

[Dawn]: mm hmm.

[David]: So, maybe the conflict wouldn't have been resolved.

[Dawn]: <laughs>

[David]: <laughs> If you hadn't—because instead of just saying “David, you hurt my feelings,” then you started thinking “Yeah, David might have hurt my feelings, but the reason it hurt so bad was because of all of these things.”

[Dawn]: Yeah.
[David]: So, we talked about that, and I think we both got a lot out of it.

[Dawn]: mm hmm. I mean the thing is like, if I hadn't written in the journal, I may have thought about it, but I don't think I could have shared it all with David in quite the way I wanted to, you know?

[Stacy]: Yeah.

[Dawn]: And, I didn't plan on sharing it with him, but it was kind of like “Do you want to hear it?” You know, like I wanted him to know.

In this segment, we see how, as conversation waned, I prompted Dawn and David to explain this situation in more detail (are you sure there isn’t anything more you can tell me... and so there are two parts of this I want to get at... and mm hmm). Each time, they responded with a story that had another layer of texture, a story that was a little “thicker.” This is the way interviews typically go with willing participants, but what is less expected is how surprised Dawn and David are themselves about what they collaboratively uncover (Actually, David and I hadn’t thought about this, but it may have saved our asses and I think that was really good, yeah). Their interactions seem to take on a new Pattern as they tell themselves the story of yesterday; undoubtedly, they are invited to share even more by the way I care about every little detail (I want to know every detail) and show remarkable interest (that is so cool)—as interviewers do. The two are Reflecting together, as I ask them to explain what otherwise might not have been reconsidered or externalized for themselves or each other. And, they are Restorying, not just because they are telling the story together as opposed to separately (note how Dawn’s story changed from a personal to an interpersonal matter), but also because they interpret my questions as assessments of what is important (note how Dawn responds when I ask what impact the interaction had on the relationship and how the journal functioned as part of the interaction). It is hard to imagine, I suppose, how asking partners about an argument or an emotional encounter that happened just the day before would not lead to at least some Repatterning, Reflecting, and Restorying.
Concluding our final interview, I asked Dawn and David about the experience of the study. Their response suggests that the interviews themselves were growth-promoting experiences:

[David]: We've really enjoyed it actually.

[Dawn]: Yeah, we have.

[David]: Yeah.

[Dawn]: I think that it made me think about our relationship. But, I also feel really proud. I'm like “Aw, we're doing, I feel like we're doing really well.”

[David]: Yeah.

[Dawn]: And, I think that, I do think that the opportunity to reflect on it by talking to you as well as journaling has been another really good—it's contributed to us communicating more and thinking more about our relationship, how we work together, which is—do you not?

[David]: Yeah, no, I think so too. It's actually been interesting, too, going back and—when we write down our summaries, our high-level summaries as you say—it's been interesting going back and actually seeing what I wrote.

[Stacy]: Yeah.

[David]: And, seeing “Oh, there's these patterns” that I wouldn't have seen otherwise and that actually lends some kind of insight into how I—these cycles—keep doing the same thing.

[Stacy]: Yeah, do you have an example of that?

[David]: Oh, I was just—I had these few social interactions where I did something embarrassing and they, I just didn't realize how often that happens. And, so I was going back, and I was like, “Wow, I felt embarrassed there and there.”

[Stacy]: And, that was just because I made you go back and—

[David]: Yeah, I would have, I would have totally forgotten.
[Stacy]: So, what you're telling me is that I have to create a system that locks you into place and forces you to re-read your journal entries <laughs>? Sounds like a torture device. Cool. Do you find that sort of thing valuable or just like—

[David]: Yeah, I think it's valuable because I think when you go back and look at that, you think “Well, maybe I didn't actually embarrass myself, maybe I just felt embarrassed because of me,” because that seems to happen too much. I'm not that big of a klutz or something.

David explained how the interviews, including the journal summary, Repatterned his self talk (I would have, I would have totally forgotten), which led him to Reflect and Restory some personal narratives ("Oh, there's these patterns" that I wouldn't have seen otherwise and “Well, maybe I didn't actually embarrass myself, maybe I just felt embarrassed because of me”). We can easily imagine how this type of Reflecting and Restorying could have pertained to his intimate partner relationship. Dawn compares the interviews to the journal, believing both to have contributed to more Reflection and Reconnection in their relationship (the opportunity to reflect on [the relationship] by talking to you as well as journaling... it's contributed to us communicating more and thinking more about our relationship, how we work together and it made me think about our relationship). Perhaps most interesting is that Dawn actually got the feeling that she and David are doing well as a couple simply as a result of being interviewed about their relationship: I also feel really proud. I feel like we're doing really well. In this sense, the interview encouraged Restorying and potentially fostered a sense of Reconnection. (we're doing really well). Our conversation continued when I asked if they had any other thoughts about the study:

[David]: I think we really enjoyed talking to you.

[Dawn]: Mm hm.

[Stacy]: Really?

[Dawn]: Yeah.

[David]: Yeah. We felt like you, like you're very—
[Stacy]: animated? <laughs>

[David]: No, like insightful, that you ask these really—

[Dawn]: Uh huh.

[David]: these questions that really helped us learn more about our relationship.

In hindsight, at this point, I should have asked them what they learned about the relationship and how, but I instead asked what made the questions good:

[Dawn]: Well, like, the last meeting we had. It didn't even occur to me to talk about the process that we had of when I wrote that list and David and I—you know, our conflict. And, seeing you be like “Oh, this is important,” I was like “Oh, I guess it is important.”

[David]: I think you—that's the thing about any good question is that it doesn't have an open and shut answer. And, that's what I feel—that's a good interview: when you ask a question that you can't just clearly answer, and then it gets people to think about something and kind of almost rephrase the question in their head. I'm not sure if that's even what I'm trying to say—but they uh, you get a lot of answers from one question sort of—

[Dawn]: Mm hm, and a lot of new questions.

[David]: And a lot of new questions, yes.

[Dawn]: So much of what I've enjoyed in talking to you is seeing where your energy is. “Oh, oh that is cool, I guess that we did that and that's kind of like special for us.” Like, that feels like good. Like, “Oh, there's some things that are unique about our relationship, or something that's exciting to another person.” Like, that is what I liked.

I think what Dawn and David are expressing here is that the interviews changed some of their ideas about what constituted important happenings in their relationship (“Oh, that's kind of special for us” and “oh, that was important”) based upon where I placed emphasis (where your energy is). Specifically, Dawn cites our conversation in interview two about her conflict
with David and how my sense that it was an important event grew into their sense that it was important. Essentially, by steering the conversation as an interviewer with particular notions of what is “on topic” and what is “off topic,” I was helping them Restory—drawing their attention and interest to particular parts of their lives for reconsideration.

**Example 2: Couple 10: “We’re kind of speaking our narrative”**

Jack and Jill have been living in Portland for just about three months. They met in high school and have been dating for 5 years. Now in their early 20’s and having moved away from their parents, Jill is applying to colleges and Jack is looking for odd jobs on Craigslist that make use of his computer security skills. Money is tight and stress is high. Having come from homes with controlling and abusive parents, they have become each other's strongest support system. They take all relationships—with their families, friends, and each other—very seriously and eschew fake or superficial associations. They care about serious discussion, not being afraid to talk about big issues, and having strong opinions; it's about mutual respect and understanding and accepting the other person for who they are.

Although Jack and Jill did not feature in Chapter 5, both of them had an experience with the 4Rs in which writing helped them think about a particular incident, come to understand it anew, and resulted in sharing findings with one another and acknowledging each other’s feelings. Jill wants to continue keeping her journal, but Jack does not. He believed that the journal made him more aware, but journaling is largely a negative experience for him. Like Chris, Jack had a traumatic past, and he is currently under a lot of stress about money and just plain survival; these are the topics on his mind and topics that he needs to work through, but he does not want to re-encounter and rehash those in his journal without the help of a professional.

When I asked Jack and Jill at the end of our third interview about the effect of the entire study, they immediately latched on to the idea that the interviews shared some qualities with therapy:
Stacy: I’d also like to ask you about the experience of the entire study—coming to another place, talking to a stranger about your relationship, talking to one another. What about that?

Jill: Because I’m nervous with most people, just—specifically because I’ve had experiences with therapists, I’ve kind of built a situation where if I’m talking to a stranger about my life in a professional setting, then it’s OK. And then I’m able to kind of just talk and not think about it as much. It’s just like I’m kind of saying what I’m thinking. So it was a lot easier than I thought it would be. That was nice.

Jill revealed that she views my role as interviewer to be aligned with that of therapists as opposed to most people. The fact that she was talking about [her] life with a stranger in a professional setting made it a lot easier than [she] thought it would be to just say what [she’s] thinking. Although not specific to the 4Rs or even therapeutic outcomes, there is something about the mode and the content that, for her, is associated with therapy. Next, Jack added his thoughts about the study interviews. This is a long stretch of dialogue, but there are three points I would like to highlight with it. As you read, pay attention not only to the basic content but also to how Jill and I respond to Jack as he explains his position:

Jack: I guess since you’re doing a study, you’re staying impartial and that helps. Because if it was anybody else I think it would have been more like—I guess I don’t know how much you concealed in terms of your opinions but there wasn’t anything outwardly horrible like what we’ve seen with our other friends.

Stacy: Oh good, I hope not. Because I actually gave you—I don’t know, I tried to keep this conversational, I told you a little about myself. But, I’m glad that I didn’t—

Jill: Yeah, ‘cause we’ve had friends—I mean, had therapists who outright push away when it’s like “Oh, this really hurt me,” or “My parents do this and it makes me feel like crap.” And they’ll go “Well, I think you should just talk to them about it” and just deny, which is the worst.

Jack: I had a therapist who was—first of all, she talked way more, she talked about herself way more—
[Jill]: Way more—

[Jack]: Than I got to talk about my stuff... You were actually relating it, whereas she didn't relate it. She just like, she was like “Oh, OK, whatever you said, let me talk about my stuff right now.”

[Jill] Yeah, whatever you said, “My son does this.” It’s like “Good for you.”

[Stacy]: Oh my gosh!

[Jack]: Yeah, and the other thing, she gave me terrible advice—

[Jill]: pamphlets.

[Jack]: She gave me stupid pamphlets. But, the worst thing is she tried to convince me to forgive my parents and like make up with them.

[Jill]: Even though that's not what you wanted.

[Jack]: Yeah, that's not what I wanted, and it was physically putting me in danger.

[Stacy]: Yeah, that's crazy.

[Jill]: It all depends on what each therapist thinks their role is in treating the patient.

[Jack]: So mine was kind of like a parental role, which was completely wrong.

[Jill]: That’s the worst.

[Stacy]: I’ve been reading a bit about marriage and family therapists. And there’s a group of them that counsel the marriage instead of the people. So, it’s sort of the same way—where she was telling you to make up with your parents—like, “The best thing for you to do is to make up with your parents.” Well, these other marriage therapists would make sure you stay together.

[Jill]: No matter what.

[Jack]: I think those people tend to be hard core religious. And that’s what I
learned my therapist was like. I pretty much said “My parents did these really horrible things to me” that like, you know, if I ever went to the police about it, they would be in jail. And then she's like “But they're your parents,” as if that's some kind of sacred thing.

[Jill]: As if you didn’t say anything.

[Jack]: Yeah. As if that excuses their behavior.

[Stacy]: So, now you’re not only not getting any support from your parents, you’re being invalidated by your therapist?

[Jack]: Yeah.

[Stacy]: The only real person you can trust is each other, it seems like.

[Jill]: Yeah.

The first observation is that Jack thinks it was helpful that I remained impartial as an interviewer (impartial and that helps). This, he says, is unlike therapy—and, I’ll observe, somewhat like journaling—because I am not dominating conversation (I had a therapist who... talked about herself way more), I am not denying beliefs ([therapists will]... just deny, which is the worst), I am not giving advice ([my therapist] gave me terrible advice), and I am not pushing my opinions ([my therapist] tried to convince me and even though that's not what [Jack] wanted). These are qualities that differentiated interviewing from their previous experiences in therapy and made it more enjoyable.

The second observation is that I was not actually an impartial party. I would emote in my responses (oh my gosh!) and I was usually affirming of the beliefs and feelings of my interviewees (yeah, that’s crazy). I sometimes added in some of my own knowledge that was relevant to the conversation (I’ve been reading about...). It is true that I sometimes asked questions that challenged a participant’s account in search of more detail, but I always ended by acknowledging their interpretation. It seems as though this could serve as a sort of reaffirmation of Jack’s and Jill’s position, a sort of realizing through talking, in the way that the journal can reaffirm and make real one’s own thoughts.
Finally, this exchange shows Jack and Jill collaboratively telling Jack’s story, with Jill empathically expressing Jack’s position (as if you didn’t say anything and even though that’s not what you wanted and that’s the worst). There is no reason to think that they are deeply Reflecting or Restorying. In fact, with all the sentence and thought completion going on, they seem to be on autopilot—telling a story that they have shared over and over again with each other. It is almost as if this is their story, as Jill takes the stance of “being-in-the other” (Larner et al., 2004), and it seems possible that a sort of Reconnection through reaffirmation is taking place. At base, we see that the interview provided a platform for Jill and Jack to acknowledge and promote the feelings of each other. Our conversation continued:

[Stacy]: So, are there any other things about the experience of being here?

[Jill]: Again, like the impartiality—it was nice to kind of vent some things because it’s like, I mean along with writing it down, kind of just being able to talk about it and have a situation where it’s socially allowed to talk about it. Because otherwise—both of us have fears that we talk too much in other social situations. Because there’s a lot of people we know who like being super casual and don’t like going in depth—

[Jack]: into anything—

[Jill]: Yeah, into anything. And both of us really like going into depth with things. I mean even just with people we meet, just talking, like “Well this is what I think about this issue.” And people don’t like having strong opinions on issues very often. So, we’ve had difficulty with a lot of friends. So, this situation was just kind of nice to air out some of those thoughts.

Jill describes how being interviewed as well as journaling (along with writing it down) initiated Repatterning by creating a social context in which venting and going into depth were acceptable (nice to kind of vent and socially allowed to talk about it and a lot of people don’t like going into depth). In our one-on-one interview after week one, Jill spoke similarly about writing in her journal: it’s therapeutic to get it out. So, there may be an association for her between therapy and getting it out or venting or air[ing] out. We can say more certainly that Jill recognizes a parallel between journaling and the interviews themselves. Jack continued:
[Jack]: It made me think about how I need to find a therapist and then it made me concerned about paying for it and all that stuff.

[Stacy]: Yeah, I remember you said that.

[Jack]: But, I realized I have more of a need for it than I thought.

It is not clear whether Jack came to the realization of his need to find a therapist primarily through the interviews or through the journaling activity. In either case, this suggests Restorying (but I realized I have more of a need for it than I thought). In this segment, I acknowledge that Jack and I had previously touched on this topic (I remember you said that); I was referring to an exchange we had during our one-on-one after week one:

[Jack]: I don't really feel comfortable putting a lot of stuff in [the journal] other than really practical things because it's mostly—the stuff that I need to talk about, I need to talk about it with a professional. It's something that's been unresolved for years and gets worse and worse.

[Jack]: Writing it down is kind of just—you know I feel like I'm stewing in it. It doesn't really go anywhere. Because, I'm writing it down, I already know, if I'm looking for a narrative to look at how—you know, give me perspective about it, I can already do that in my head and I've already done it and I just don't want to think about it anymore. Because the more I think about it, the more it pains me.

[Jack]: If I start to focus on it, I'm going to get into that loop. It's too, it feels more real when you write it down. It's already too real and I don't want to think about it.

[Jack]: I don't have health insurance, I don't have a job, I can't see a professional.

Certainly, journaling was contributing to the concretization of Jack’s negative thoughts (it feels more real when you write it down). Positive Restorying was not taking place, and he would just get into that loop of rehashing his concerns (I already know and it's already too real and I don't want to think about it). Perhaps the interview was also contributing. To say to me out loud I don’t have health insurance, I don’t have a job, I can’t see a professional—isn’t that
also a verbal rehashing of concerns? The journal and interview are not able to provide the type of professional scaffolding needed to help Jack break out of his negative cycles. People who need more guided therapy were never the target users for DB2, nor were they target participants for Study 2. I realize now—now that I see the interviews from an external position and now that I have increased appreciation for the power of talk—that continuing the research process with Jack could have actually caused him pain or put him in danger; I should have done more to make sure participants were comfortable and collaboratively discussed with them whether continuing was in their best interest.

As our discussion continued, the place of the 4Rs in the interviews became even more apparent. I asked Jack and Jill directly if the interview is like therapy, and they respond by noting that the content of interviews is similar to therapy, but my role as an interviewer is different:

[Stacy]: So, you’re kind of comparing this to a therapy session, it seems like.

[Jack]: Kind of. It’s just somebody to talk to who’s not an asshole.

[Jill]: Yeah. It’s talking about personal things and writing about personal things, and it forces a certain amount of honesty. So, we’ve just kind of been using that. Kind of another situation in which we’re kind of speaking our narrative to somebody. Because it’s stuff that we know but we never really verbalized before because people don’t usually ask—in a friend situation—“Oh, how often do you talk to your boyfriend?” and all these things, you know?

[Jack]: Even in that situation, it’s nice to be heard and not have other people’s opinion—other people trying to override everything you say constantly.

[Jill]: And just kind of taking it for what we’re saying.

Above, we see hints that Jack and Jill perceive the interview to be a “dialogic space” characterized by “participant listening” and “acknowledgement” (Penn and Frankfurt, 1994); it was a place where they could openly tell their personal stories (It’s just somebody to talk to who’s not an asshole and another situation in which we’re kind of speaking our narrative to
somebody and it’s nice to be heard and not have… other people trying to override everything you say). Like the journal, interviews supported intimate sharing and openness (it's talking about personal things and writing about personal thing, and it forces a certain amount of honesty). And, Jill explains, this was made possible by conversational Repatterning (it's stuff that we know but we never really verbalized before because people don't usually ask—in a friend situation—“Oh, how often do you talk to your boyfriend?”). As Jack, Jill, and I concluded our talk about overlapping and distinct qualities of interviewing and therapy, the role of the interviewer as empathic listener becomes even more apparent (“This is what you should have done” and So, it seems like there was satisfaction in just getting it out to someone...):

[Jack]: Yeah. I’m not nervous about speaking honestly about my situation—not all the gory details, but just like the general situation. I’m OK with saying it, but then what I don’t want to hear is—

[Jill]: is probing and trying to deny—

[Stacy]: “This is what you should have done” or “That didn’t actually happen.”

[Jack]: Or “You should make up with your parents” or “You're too concerned about this,” “You're too hung up on that.” ...even if I explicitly say what happened, even if I do go into the gory details, they’re like “Well, at least they didn’t do this.”

[Jill]: And it’s the same threat that your parents use... “At least you’re not homeless, at least they fed you.”

[Jack]: Yeah, “At least you’re not an Afghani war orphan.” It’s supposed to make you feel better—

[Jill]: “Well, you don’t have it all that bad.”

[Jack]: —with your station and then it like minimizes your experience, it’s like victim blaming. Oh, well, “You shouldn’t feel bad for yourself because you’re just having a pity party.”

[Jill]: Yeah. When it’s like you’re coming to them to talk to them about sharing this and then they just throw it out.
[Stacy]: So, it seems like there was satisfaction in just getting it out to someone else without having to be interrupted or preached to or whatever—

[Jack]: Yeah.

[Jill]: Yeah.

...  

[Jack]: I'm probably not going to keep [journaling]. The one way I can see myself doing it is if I get some sort of professional help and I can use that as a tool—

[Jill]: and have a more structured—

[Jack]: because I write whatever's in my head and I'm going to want to discuss it with someone

[Jill]: So we need the time and space and everything.

[Jack]: Writing it down ultimately doesn't help, you have to do something else in addition to that.

To summarize, this example shows how a research interview can become a “dialogic space” (Penn and Frankfurt, 1994) that supports Repatterning and potentially Reconnecting through intimate sharing. The interviews supported going into depth about personal things that have never really been verbalized before because people don't usually ask. Yet, it seems as though the shortcomings of the journal are also the shortcomings of the research interview: it is a place to be heard and not have... other people trying to override everything you say. In other words, the interview can become an echo chamber of sorts, as the interviewer is not truly impartial (yeah, that's crazy) and participants may become stuck in loops that reiterate and emphasize their preexisting beliefs (I don't have health insurance, I don't have a job, I can't see a professional and I realized I have more of a need for it than I thought). Hence, there was little evidence of deep Repatterning that might enable Jack to Restory. This example helps us comprehend both the potential for as well as the limits of interviews to be therapeutic to participants—as members of a couple or as individuals.
Example 3: Couple 5: “Who cares?”

In Example 4 from Chapter 5, we saw that Eric and Elizabeth were not able to make connection through their journals, in part because Eric disliked journaling and intimate sharing, and also because Elizabeth used her journal to share with herself. That is, Elizabeth used the space of her journal to expand upon events that mattered to her and that she believed would be unappreciated and downplayed by Eric. The journal did not talk back or interrupt or minimize her experience, as she had known Eric to do.

The interviews took on a surprisingly similar quality. As we saw in the previous example and as alluded to by Kvale and Brinkmann (2009), interviewers necessarily empathize with their subjects; I empathized with Elizabeth by showing understanding when she talked about sentiments that mattered to her. This included sentiments that Eric did not appreciate. For example, Elizabeth recounted the story of when someone broke into her car and stole one of her yearly planners. She about died, cried for months, because the memories captured in that planner—including the business card that [Eric] gave [her] the day [they] met—were lost. Eric’s response to my expression of sadness was: See, you’re like “aww.” Who cares? It’s a business card, I’ve got another. Eric was demonstrating a point he had made earlier, that the planners Elizabeth keeps are garbage to him. This type of interaction—specifically where Eric uses those often repeated words Who cares?, and I show neutral or positive support for Elizabeth’s interest—happened numerous times throughout our joint interviews (note: I strove to do the same with Eric, so that neither felt favored over the other).

This comparison of the interviews to the journal is even more pronounced when considering the one-on-one discussions I had with Elizabeth. Take, for example, the following excerpt from our third interview. I had asked Elizabeth if there was anything in her journal that she would not share with Eric. She responded by telling me that she would not share her entry about her pride in her son’s babysitting; she was able to write about that and expand upon it and share her entry with herself. Trying to get to the bottom of why she would not want Eric to know about her feelings, I ask:
[Stacy]: So, you were proud of your son because he was babysitting?

[Elizabeth]: Yeah, two different times he babysat infants—

[Stacy]: Oh, wow.

[Elizabeth]: Like changing diapers, feeding bottles. Not just like watching kids. The first time, three kids—there was the infant, a 5 year old, and an 8 year old. The infant needed diaper changes and bottles.

[Stacy]: That’s a lot of responsibility.

[Elizabeth]: Plus his brother, who’s 13—who actually mostly had the 8 year old and the 5 year old, and he had the baby. But, he was over all of them. And, for the most part, the way our family is, his sister, who’s 15, does all the babysitting for all the people that we know. They love her, she loves babysitting. My son likes kids. He has no problem with them. He didn’t have a problem changing diapers or feeding. But nobody ever asks him to babysit and he’s not the type to go solicit that kind of thing. If someone asks him... he’ll do it. No big deal. He wasn’t getting paid to do this. And, so he just did it.

[Stacy]: That’s perfect.

[Elizabeth]: And, again, when we were in Utah for my sister, for his niece. I was taking his brother and sister over to a friend’s house that they had met—a girl they met here. A friend of ours is her niece. She’d been up here for a couple of weeks, they met her. She lives a mile and a half from my sister. Of all the places in Utah she could live, it’s literally a mile and a half down the road.

[Stacy]: How crazy is that?

[Elizabeth]: Totally crazy. She’s in [location]. She was like “That’s where I’m from” and I’m like “No way.” A city can be pretty big, right?

[Stacy]: Yeah.

[Elizabeth]: Literally less than two miles away.

[Stacy]: You kid me.
[Elizabeth]: So, they went over to go hang out and watch movies. And, so when I dropped them off, he had to watch the baby. It was no big deal, he was like “OK.” And, I was really proud of him. He’s good with kids.

[Stacy]: ... That’s great.

In this segment, Elizabeth is telling me the whole story and has somewhat run away with the interview. She says all of this at a quick clip, almost in a whisper, as I listen intently and give numerous back channels not reported in the transcript above (mm hmm and uh huh and yeah and cool). The details she shares with me are important to her, but not to Eric. In fact, in our first interview, Eric and Elizabeth describe how the type of talk valued by Elizabeth is not valued by Eric:

[Eric]: A lot of the stuff [she talks about] is like, “Uh huh, so? And? So, what’s the point of the conversation?” For you, for the girl, that’s kinda the thing for Elizabeth, the point of the thing is to talk. Get it out there, get it down, whatever. OK. So, I’ve learned that “OK, she’s jabbering,” she’s not saying anything that’s important. You know, you’ll be polite and listen. ...

[Elizabeth]: We’ve come to the point where he knows I just want to talk about my day and just tell him “blah, blah, blah, blah, blah, blah, blah, blah, blah.” And, if it’s important, I’ll try not to save anything important for that time, because I know he’s not really listening.

[Eric]: I’m listening, I’m not hearing it.

Because the study was not intended to question the impact of the interviews on participants, I do not have Elizabeth’s perspective about this situation. However, it seems reasonable to conclude that the interview may have provided a similar type of outlet for Elizabeth as did her journal. Like her journal, I do not provide negative feedback that diminishes her experience; rather, I provide positive support (oh, wow and that’s great). Our one-on-one becomes a private space, apart from Eric’s hearing, in which she can enjoy sharing with me, but perhaps more significantly, with herself. However, also like the journal, the individual interviews may encourage Repatterning, Reflecting, Restorying, and Reconnecting with the self rather than the other.
Interviewing as a 4Rs activity: Literature review

We "basic researchers" had been active agents. By asking couples to scrutinize their relationships and by prompting them to discuss their relationships with one another, our study played a role in shaping these relationships. In some cases, our study served to strengthen a relationship; in other cases, to facilitate its dissolution. ... we unwittingly became couples counselors. (Rubin and Mitchell, 1976)

Following my study, I discovered works by Rubin and Mitchell (Rubin and Mitchell, 1976), Veroff et al. (1992), Bradbury (1994), and Worthington et al. (1995), which show that simply asking couples about their relationships (in interviews, in structured conversations between partners, and even in quantitative questionnaires) can significantly change those relationships. There is consensus across these studies that effects were conceived by couples as largely positive, the important point being that “assessment and feedback is not a sterile procedure” (Worthington et al., 1995). In fact, in their book about qualitative research interviews, Kvale and Brinkmann explain that interviews as tools of research were derivatives of interviews as tools of therapy, and they compare the two forms at length (Kvale and Brinkmann, 2009). While research interviews put knowledge-production first, “both a therapeutic and a research interview may lead to increased understanding and change” (Kvale and Brinkmann, 2009). Below, I draw upon evidence from these studies to illustrate how interviewing couples can support the 4Rs, and thus how basic tools of research may have therapeutic outcomes.

**Repattern**

Interviews are very particular settings that entail certain power relations, a questioner-listener role, an answerer role, etc. that make them extraordinary but increasingly common and acceptable as a conversational format (Kvale and Brinkmann, 2009). Rubin and Mitchell found that “in order to answer the [survey and interview] questions, the participants had to engage in new sorts of thinking, and sometimes in searching examinations of themselves, their partners, and their relationships” (Rubin and Mitchell, 1976). In fact, simply moving direct partner-to-partner conversation into a new setting changed the nature of the conversation, sometimes enabling more productive interactions (Bradbury, 1994). These changes produce Repatterning.
**Reflect, Restory**

Interviews can “instigate a process of reflection that leads... to new ways of self-understanding, as well as uncovering previously taken-for-granted values and customs” (Kvale and Brinkmann, 2009). These evolving evaluations of self are brought about through narrative means: “The interview is a key site for eliciting narratives that inform us of the human world of meanings. In open interviews, people tell stories about their lives” (Kvale and Brinkmann, 2009). Rubin and Mitchell describe the effects of interviews in similar terms as “a cycle from definition to disclosure to redefinition,” in which participants self-disclose current attitudes that subsequently redefine the relationship at the dyadic level (Rubin and Mitchell, 1976). One poignant example of Reflecting and Restorying comes from Bradbury’s study (Bradbury, 1994), in which one participant said the following about the study’s effect: “[it] made me realize how much I love my wife—and how low my self-esteem is.” As in journals, interviews can be spaces for self-other perceptual changes.

**Reconnect**

As mentioned above, interviews and other forms of assessment have largely positive effects on couples (Kvale and Brinkmann, 2009). Worthington et al. show that Reconnection can be marked by attitudinal as well as behavioral changes: “assessment interviews, questionnaires, and feedback may not only help couples understand their relationships better but may also stimulate couples to act to improve their relationship” (Worthington et al., 1995). In the terms of the 4Rs, they prompt a positive cycle of Reconnection. Although this study of 10 couples has many limitations, the close empirical analysis taken together with this external literature suggest that asking partners about their relationships can potentially have therapeutic outcomes.

**Therapy as interviewing: Literature review**

In the previous section, I presented research on how innocuous conversation (presumably inert questionnaires, interviews) came to be seen as therapy. In this section, I present research on how therapy came to be seen as innocuous conversation (less therapist- and model- and
problem-driven, unfolding between equals). I begin with research that shows how pre-treatment “assessment” interviews used in the early sessions of therapy can actually be considered interventive. As described by Tomm (1987):

In a conventional session, most of the therapist's questions ostensibly are designed to help him or her formulate an assessment. The questions themselves are not usually regarded as interventions to help clients. Yet, many questions do have therapeutic effects on family members, (directly) through the implications of the questions and/or (indirectly) through the verbal and nonverbal responses of family members to them. At the same time, however, some of the therapist's questions can be countertherapeutic.

Brosh (2007) tested this assumption and discovered that traditional assessment interviews did, indeed, have a statistically significant therapeutic affect (increased marital satisfaction, intimacy, closeness, and empathy) after just one interview with follow-up measurements taken after one week and then again after four weeks. This result occurred in both clinical and non-clinical couples, meaning that even couples who were satisfied in their relationships experienced therapeutic benefit from the interview (Brosh, 2007). In fact, Brosh (2007) compared traditional assessment interviews to “interventive interviewing” and found that there was no significant difference between these approaches; surprisingly, interviews that are not intended to intervene can be just as therapeutic as those that are.

In addition, some (generally postmodern) therapeutic philosophies discuss the role of the therapist in ways that suggest there is less difference between therapy and research interviewing as one might initially think. Carl Rogers, one of the most influential American clinical psychologists of the 20th century, described his therapeutic mode as “growth-promoting interpersonal communication” (Rogers, 1980). He advocated for empathic listening on the part of the therapist, and minimized the distinction between client and therapist expertise (Rogers, 1975). On his empathic approach to therapy, he explained:

Very early in my work as a therapist, I discovered that simply listening to my client very attentively was an important way of being helpful... Research evidence... points strongly to the conclusion that a high degree of empathy in a
relationship is possibly the most potent and certainly one of the most potent factors in bringing about change and learning. (Rogers, 1975)

Although Rogers (1975) has a very sophisticated notion of empathic listening, the acknowledgement of the effectiveness of simply listening, the lack of a more structured method of therapy and the stepping down of the therapist to meet the client as a mutual conversant suggest a situation much more similar to that between a researcher and participant in an interview setting.

Gergen, McNamee, and Barrett (2001) take a similar approach to therapy. They talk of “transformative dialogue,” which can be characterized by a set of six qualities rather than a traditional model (not unlike my 4Rs framework):

Transformative dialogue may be viewed as any form of interchange that succeeds in transforming a relationship between those committed to otherwise separate and antagonistic realities (and their related practices) to one in which common and solidifying realities are under construction.

Again, in this account the definition of therapeutic intervention and even the language used in its description have been relaxed to imply a more accessible type of conversation between non-professionals: “…our hope is that the vocabulary of transformative dialogue that we propose does not require learning an entirely new repertoire for conversation, nor require a skilled facilitator.”

Summary

Interviewing participants about their personal relationships was experienced by some to be therapeutic. For Andi and Alan, interviews Repatterned interactions by encouraging them to tell each other the story of yesterday. In the telling, they Reflected and Restoried the effect of their relationship on them as individuals, and they came to a point of Reconnection through affirming their shared lifestyle. Dawn and David similarly experienced the interview as a Repatterning medium, a space in which insightful questions were asked and Reflection and Restorying about the relationship could take place. Interviews helped them learn about their
relationship and discover new patterns of personal behavior. Interview sessions were even explicitly compared to therapy by a number of participants. Jack and Jill, for example, described how the interviews made personal disclosure easier because they were professional, as in a therapeutic office. But, in their case, it seems as though the interviews served to reinforce patterns of interaction and shared stories that were already natural to them; ultimately, Jack felt that he needed professional therapy to work through his pain. Finally, just as Elizabeth used her journal for sharing sensitive thoughts with herself, she used our one-on-one interviews to share sensitive thoughts with me. Both journals and interviews can create dialogic space in which the 4Rs emerge, they can also provide an echo chamber or sympathetic ear that reinforces old patterns. Turning to research literature, I found some neglected but convincing studies that conclude that interviews as well as surveys and other conversations between intimate partners can have therapeutic effects. Moreover, I found literature about therapeutic interventions that suggests conversations in therapy are more like those we have in everyday life than presumed. Taken together, these suggest that the same tools we use as researchers to gain knowledge can mirror the tools used by therapists to initiate meaningful interpersonal growth.
Chapter abstract

In the previous two chapters, I presented the case that a shared journaling activity for couples as well as research interviews with couples exhibit characteristics that enable and encourage Empathic Communication. To contextualize these findings with respect to HCI practice, in this section I propose two modes of application. The first, intended for designers, is a map—in the form of Asymmetric and Symmetric interface profiles—to different configurations of the Diary Built for Two and other technologies for intimate sharing. The latter, intended for design researchers, demonstrates how reading researcher-participant engagements as a therapy might enrich our understanding of the roles and opportunities we have as researchers in HCI.

Symmetric and Asymmetric interfaces for ECTs

One of the barriers to adoption of Diary Built for Two that Study 2 brought to the fore was the incongruous communication preferences of partners. Different communication styles, particularly across sex or gender lines, have long been studied. Deborah Tannen (2010), for example, suggests that when men and women talk to one another, it is actually a cross-cultural affair. In my study, the mismatched interest in intimate expression and sharing typically led one partner to dislike or withdraw from the journaling activity. For some partners, like Fred and Fyona, flexible appropriation of the journal enabled them to talk and share with one another in a way that acknowledged each partner’s preference. For others, particularly men who disliked intimate sharing and journaling as a matter of sex/gender identity conflicts, the DB2 prototype was too constraining. My interest in how two very different people might be brought together in a shared technology-mediated conversation led me to the notion of Symmetric and Asymmetric interface profiles (Figure 26). In the sections below, I identify a set of different dyadic communication technology configurations that may help DB2 or related spin-offs become more relevant to more users as well as inspire new explorations into ECTs.
Figure 26. Asymmetric Interface Profiles for Intimate Partners

This diagram identifies four possible orientations of partners to their communication technologies and each other. The most prominent configuration to-date is that of two identical interfaces. Study 2 suggests that the other three configurations may also hold promise. Actors have been named according to the partners from Study 2 that showed interest in using a particular class of design. Although not explicitly shown in this diagram, partners are expected to talk to each other outside of the application about happenings inside the application.

**Symmetric design: Two identical interfaces and single interface**

The first two profiles in Figure 26 represent Symmetric Design configurations. Symmetric Design assumes that both partners should be provided the same interactive possibilities.
through the interface. According to my characterization, there are two flavors of Symmetric Design: two identical interfaces and single interface. In the former, each partner has personal access to an interface that is identical to the other’s—for two people, two devices (e.g., inTouch (Brave and Dahley, 1997)). It is important to note that by “interface” I mean the sum of both software and hardware characteristics of a technology. This type of system is quite popular; of the technologies listed in Table 8, 34 of 40 fit this description. In the second configuration, both partners share the same interface—for two people, one device (e.g., Traveling Book (King and Forlizzi, 2007)). This arrangement is much more rare; of the technologies listed in Table 8, only 3 fit this profile (Traveling Book, Fix a Fight, and Daily Temperature Reading).

Before providing an example of each of these profiles, I would like to point out that technologies classified as “Symmetric” can have vastly different potential to be used and interpreted multitudinously. For example, inTouch provides a relatively narrow set of options for interaction: the three rollers can be moved at varying speeds, back or forth, most likely by one’s hands (Brave and Dahley, 1997). The confined activity and meaning of the interaction are weaknesses of this and other abstracted presence systems (Gaver, 2002). However, the Traveling Book (King and Forlizzi, 2007) allows for various multimedia to be captured and shared between partners. One partner who appreciates handwritten letters may choose to predominantly contribute in that format. The other, perhaps more interested in digital media, can choose to incorporate pictures or text messages or videos. This quality in the interface is what my colleague Joon Suk Lee and myself have termed “processless design” (Lee and Branham, 2012). Essentially, the designers have deferred the construction of process and meaning to the users in the moments of use, rather than trying to embed them or enforce them through the system. So, despite the fact that iTouch and Traveling book are both Symmetric—providing the same interactional opportunities to both partners—the latter allows much more for latitude for appropriation at the time of use, such that each partner can uniquely steer their experience. This may be an important quality for systems designed to suit the distinct communication styles of two (in the case of couples) or more users in mediated conversation.
My initial conceptualization of Diary Built for Two was intended to run on two different iPads, one for each partner. The quality that makes this interface Symmetric is that each partner has access to the same input mechanisms, the same sharing mechanisms, etc. However, like Travel Book, DB2 offers many ways for users to express themselves; for example, some participants wrote lists, others wrote letters, others wrote stream of consciousness, others drew pictures—one participant even allowed her younger sister to color the pages with marker, which she then used as a background for her written entries. I selected Dawn and David as potential users of two identical interfaces because they both enjoyed journaling as an individual activity. Even though they each had their own means of expression—David often drew pictures in his journal (Figure 16, page 102) and Dawn sometimes wrote lists (Chapter 5, Example 2)—writing was flexible enough to allow them both to find value.

However, the two identical interfaces scenario did not fit the needs of many participants. Journaling alone was uncomfortable for Fred (Chapter 5, Example 1); it made him feel pressured and verbally constipated. He did not like expressing feelings without Fyona. In the interview, Fyona tended to share the most, initiating and guiding the conversation. And, Fred would contribute, too, although in a much more supportive role. He would add in missing details and draw connections, weaving strands into Fyona’s larger fabric. This was clearly a more comfortable shared communication format for Fred and Fyona. Not surprisingly, in week two they decided to keep a shared blog in which Fred responded in-line to Fyona’s posts (Figure 15, page 99). They even asked permission to conduct our final interview as a group for Fred’s sake. It seems reasonable to conclude that Fred and Fyona might be more open to a single interface system in which both partners’ voices are constructing the shared conversation together.

**Asymmetric design: Two different interfaces and single user**

Although DB2 is a fairly “processless” system design (Lee and Branham, 2012), all systems have constraints. Chief among DB2’s constraints is that it is framed as a diary or journal exercise. As previously discussed (Chapter 5, section “Challenges to adoption of Diary Built for Two”), many participants, particularly the men, were uncomfortable with this exercise
either because they disliked intimate sharing or they disliked the idea of doing an activity that they perceived to be for women. In order to support both partners in communication, there may have to be more dramatically differentiated interaction opportunities. Asymmetric Design seeks to address this need.

Unlike Symmetric Design, Asymmetric Design does not assume that each partner should have the same interactive possibilities. I have identified two types of Asymmetric design: two different interfaces or single user. In the former, there are at least two if not more interfaces that are distinct and yet compatible with one another. Feather and Scent, presented by Strong and Gaver (1996), are two fairly rare examples of this type of design profile. Each partner experiences a different computer interface: one has an interactive picture frame, the other has a stationary visual or olfactory indicator. Of the technologies listed in Table 8 (page 48), only 3 fit this profile (Feather, Scent, and Aura). In the latter, only one partner uses a device intended to support interpersonal communication. This may at first sound counterintuitive; allowing one partner space to think about the relationship might actually translate to better communication with the other. Of the technologies listed in Table 8, none fit this profile, so I will provide one below.

What would DB2 look like if it were to support two different interfaces? Ian and Isabelle provide a somewhat simplistic case. In Study 2, they chose to use two different journaling formats; Ian preferred to keep entries in the notes section of his smart phone. Isabelle preferred to keep a handwritten journal. DB2 might have two different apps—one that is framed as a note-taking platform, another that is framed as a journal. Sharing through the application may take the form of a separate digital space in which both formats can be represented. We can imagine DB2 offering multiple plug-n-play apps that each offer dramatically different input, sharing, and viewing experiences, inviting users with more diverse communication preferences to join in conversation with their partners. This may be an especially promising approach for some men in the study who did not feel comfortable journaling.
In the single user scenario, DB2 would be an individual, uncoupled, journal used by only one partner. In a sense, this is against the initial goal of DB2: to create a digital, dialogic space in which partners can communicate. However, as I learned in Study 2, much of the meaningful conversation that took place as a result of the journaling exercise happened outside of the journal itself. In paper prototype terms, this means that many of the meaningful conversations were not a direct result of showing a journal entry to a partner or reading an entry verbatim. Perhaps the example of Dawn and David is most appropriate (Chapter 6, Example 1). Dawn used her journal in the wake of a fight with David to express her frustrations. She was surprised to find that she really was not angry at David, she was upset at herself. The journal helped her express these feelings to David face-to-face. She never would have simply showed him the journal entry because it needed to be read with finesse; she wanted the meaning to be negotiated together. The discussion became a point of bonding and Reconnection for the two. But, did David need a journal in order for this interaction to take place? Perhaps not. It seems likely that single user interfaces may produce positive effects at the level of the couple.

**The 4Rs as a tool for technology design and evaluation**

For Study 2, I used the 4Rs framework to help navigate design and make sense of the interactions partners had with each other through and around the journaling activity. The 4Rs have a role to play in the design and evaluation of Symmetric and Asymmetric interfaces, as well. The design profiles in Figure 26 were derived largely from taking a usability lens to the examples presented in Chapters 5 and 6, so they do not account for the 4Rs. It is unclear to what extent these interface profiles can specify applications that promote Empathic Communication, and whether and in which situations one profile may be better than another. Some of these profiles may, in fact, recommend technologies that ultimately do not support a dialogic space. Below, I briefly list some possible drawbacks of the proposed profiles as well as some design research questions that the 4Rs framework may help mitigate at design-time and/or evaluate at use-time.

In the Symmetric scenario, either each partner has their own interface or both partners share an interface. The former configuration may emphasize individual activity, because each
individual has their own space for expression and can use it at their leisure. Although this was not the case for some participants—like Andi and Alan who journaled at the same time in the same space and shared entries with one another—most participants journaled separately and did not know when or what their partner wrote. In the second type of Symmetric system, partners share a single interface. This type of arrangement may emphasize the couple, because it is co-owned and co-managed; it is symbolic of the mutuality of couplehood. Using a 4Rs analysis, we might ask and answer: do single interfaces support more mutual Reflection and Restorying than two identical interfaces?

Symmetric interfaces present each partner with identical interaction possibilities, but there is no specification of the nature of the private and public spaces. Assuming there are private spaces and selective sharing to a dyadic public space, a partner might feel more comfortable disclosing personal things on their own interface rather than a shared interface. Does a shared interface with a private space discourage more intimate sharing with the self, and ultimately lead to sharing less intimate content with the other?

The Asymmetric configuration either allows tailored interfaces for each partner or a single interface for only one partner. These scenarios may accentuate the individuality of each partner even further by encouraging personalized experiences. Do Symmetric interfaces support more mutual Reflection and Restorying than two identical interfaces? Since Asymmetric interfaces do not need to be collaboratively negotiated, do they discourage Repatterning and new ways of expression?

In the first Asymmetric scenario, there is still a means of sharing messages through the system; this is not true of the second, such that Reconnection has to take place through other forms of communication between partners. Since having two different interfaces supports dyadic tethering and within-system messaging, does it necessarily support more Reconnection than having just one interface for a single partner?

The two different interfaces approach may have its own challenges, including finding a coherent way to integrate each partner’s “voice” into a shared space, especially when input
formats are different. Another challenge is constructing an activity that feels collaborative and shared and mutual, since each partner’s experience is distinct. It is unclear if this approach would lead to Empathic Communication, especially for participants who do not like to share intimately. Can the “two different interfaces” approach foster Reconnection?

In the single user scenario, it may be easier for a partner to direct thinking toward oneself or explicitly against the other. It may encourage partners to feel more connected to themselves than their partners, as was the case for Elizabeth (Chapter 5, Example 4). In these single user interfaces, is there need for a more structured activity to encourage Reflecting about the self, the other, and the relationship?

As found in Study 2, some configurations may be more or less supportive of the 4Rs depending on the dynamics of the particular couples who use them. These design intuitions and questions may be useful navigational tools for designers as they study implementations of each profile in naturalistic contexts. The formulations above suggest that the 4Rs framework can help designers prospectively conceptualize potential strengths and weaknesses of technologies that seek to provide Empathic Communication. They can also guide design research evaluations; through questions that use the language of the 4Rs, we can assess the Empathic Communication potential of Symmetric and Asymmetric variations in use.

**Methodological considerations for researchers and designers of ECTs**

_Talk is inescapably consequential. That is, we talk some understandings into being, while contesting or passing over others—and we do this in consequential ways for how our discussion and relationship proceed. So, we hope to promote a richer sensitivity to these constructive and deconstructive aspects of talk in and out of therapy. (Strong and Paré, 2004)_

At the outset of this research, I believed the 4Rs could serve as a framework to support design of technologies that can be used therapeutically, narrowly taking “technologies” to mean “computer technologies.” As the study progressed, I saw the 4Rs surface unexpectedly in the course of interviews—not only with respect to the technology prototype, but also with respect to the interviews themselves. This generated a shift in my thinking about the significance and
potential utility of the 4Rs in HCI; more than just an aid to design of computer technologies, the 4Rs might also be applied as a lens to research methods. In the words of my committee member, Fred Piercy, the 4Rs are a sort of shorthand for therapeutic processes that are at work in therapy and everyday life; in the course of research, [we] were tapping into therapeutic processes that therapists already tap into in conversations with clients. The 4Rs model presents one possible way to think about what can happen in the myriad conversation spaces opened by engaging participants with design probes, interviews, and potentially many other modes of research. In this sense, the 4Rs are not simply guidelines for designers of computer technologies, they may be useful guidelines for designers and practitioners of research methodologies, as well.

In this section, I illustrate how reading researcher-participant engagements as therapy might enrich our understanding of the roles and opportunities we have as researchers in HCI. I begin by proposing some communities in HCI that may find the Empathic Communication construct relevant and useful in their work. I then present an example of one framing of the observations made in my study: that ethical questions raised by the potential for research to benefit or harm participants may require revisiting standards of informed consent process. My purpose is not to put forward a position on how informed consent practices ought to be. Rather, my purpose is to show how considering HCI research as a therapeutic process can usefully invite new voices into the important methodological conversations in our field.

**HCI communities in which ECTs might be useful**

The construction of Empathic Communication that I have put forward in this dissertation—including the 4Rs framework, the notion of dialogic space, and the concepts of therapeutic change and empathic connection—may be fruitfully applied in other research areas of HCI. I have identified three general categories of research that have been growing rapidly in recent years and also share key points of overlap with the research in this dissertation: third paradigm methodologies, tools for deep user engagement, and applications for self-actualization. I describe each of these briefly below.
The first area I would like to call attention to can be broadly defined as those who use *third paradigm methodologies*. As design researchers in HCI, we are becoming increasingly close to our participants—collaborators, co-creators, companions—as we continue to adopt more social scientific, participatory, and action-oriented epistemologies and methodologies (Harrison et al., 2011). These include but are not limited to ethnography, participatory design, critical design, design-based research, action research, and value-sensitive design.

Proponents of the above methodologies tend to take an active stance, such that they acknowledge the active role that researchers play in constructing the worlds they study. Sengers et al. (2005), for example, propose that designs should encourage users to reflect, which “opens opportunities to experience the world and oneself in a fundamentally different way.” Furthermore, these methodologies tend to promote the constructivist position that different frames can be applied to observed phenomena to yield different results (e.g., Dickey-Kurdziolek et al., 2012). Hence, critical reflection on frames, standpoint, bias, and so on, are valued. This community may appreciate the Empathic Communication construct both for its description of science as interventive as well as the potential for it to illuminate interesting parallel and orthogonal qualities between their work and therapy.

The second community that may find this research useful consists of those who use *tools for deep user engagement*. In recent years, emphasis has shifted away from technologies for the office place towards technologies for domestic contexts (Bødker, 2006). Accordingly, a “more human-centered approach” has emerged, such that “primacy [is given] to human actors, their values, and their activities” Bannon (2011). These developments have led to the exploration of increasingly intimate spaces—the realm of families, couples, friendships, and the self—using increasingly conversational and personal means—interviews, focus groups, cultural and technology probes, ethnographic observation, and potentially many more.

The deep conversational nature of the above practices as well as the intimate topics they may broach suggest that these may well fit the characterization of Empathic Communication. Wallace et al. (2013), for example, observe that participants use design probes as “a way to
externalize complex aspects of identity, personality, self worth and relationships with things external to self.” Empathic Communication may be useful to this community as a provocateur of new techniques for guiding sensitive, meaningful dialogue participants.

The third community that may find utility in the Empathic Communication construct includes those who design *applications for self-actualization*. The growth of this community is concomitant with the rise of the field’s fascination with “big data” analytics, technologies for domestic life (Bødker, 2006), and design that accounts for the very particular, contextualized values of users (Harrison et al., 2011). These technologies generally aim to empower users to wield technology to help themselves. Key among these are quantified self or personal informatics systems (Quantified Self, 2912; Li et al., 2010), which foster reflection, self-knowledge, and behavioral change. There are also applications for improving mental or physical health (e.g., (Grimes et al., 2009; Morris et al., 2010). And, we may also include systems like Diary Built for Two or Lover’s Box (Thieme et al., 2011), which seek to enrich relationships, albeit without an emphasis on quantification.

Through the above technologies, we are becoming putative agents of self-help, self-development, and self-actualization. For design researchers of these sorts of technologies, the concept of Empathic Communication may help further these goals. When conducting research on a prototype, for example, the Empathic Communication model can support awareness of how research assessment methods may be enhancing or diminishing the effectiveness of their intended intervention. Perhaps they will use this awareness to minimize or differentiate the effects of their research assessment methods. Or, perhaps it can help them design research assessment methods that actively pursue more positive outcomes for participants.

**Ethical entanglements of using discursive methods in HCI**

*Once we acknowledge that our talking plays a role in constructing understandings... and actions, we face ethical questions. (Strong and Paré, 2004)*
The potential for harm through discourse

Researchers should consider the possibility that their studies, especially if they use in-depth interviews about personal matters, may unintentionally trigger new perspectives in respondents and subsequently change their lives. We are too tempted to see respondents as passive beings dutifully conforming to their role in the ... interview. They may be more reactive than we think. (Veroff et al., 1992)

Regarding journaling and interviewing, I have so far cast a fairly positive light on how meaningful changes can transpire through talk. As we saw in Chapters 5 and 6, journaling helped some partners share more with one another, seek to understand the others’ position, find connection after a conflict, and even strengthen the feeling of love and security in their relationship. Some participants reported enjoying the interviews, as well. The interviews became places where partners could share intimate information that otherwise might not come up (as in the example of Hannah and Henry). David expressed that he and Dawn thought I “ask[ed]... these questions that really helped [them] learn about [their relationship].” Dawn liked “seeing where [my] energy [was]” and said that this made her reconsider what was important in her relationship (“I was like ‘Oh, I guess it is important’”). Jack and Jill similarly enjoyed our interviews, because I seemed to be an “impartial” listener who encouraged them to “go into depth;” “it was nice to kind of vent some things... kind of just being able to talk about it and have a situation where it's socially allowed to talk about it” (Jill). Participants were able to Repattern, Reflect, Restory, and Reconnect with one another. In short, the journaling activity and interviewing were experienced as therapeutic.

Journaling and interviewing can have an impact on participants (and researchers) in positive, meaningful, substantive ways (Kvale and Brinkmann (2009) agree). It think this is actually a very good reason to continue this type of design research. However, we have also seen hints in Chapters 5 and 6 that journaling and interviewing can have negative effects. Some participants in my study had mental disorders or traumatic issues in their past; Chris and Jack were specifically put under emotional stress when writing in their journals or participating in interviews. Just 30 minutes prior to our first interview, Eric and Elizabeth had an argument about financial stressors, and Beth and Becky, Chris and Cindy, and George and Gabrielle all
had seemingly significant ongoing tension in the relationship during our study. Several participants even had worrisome disagreements during the interview, like Chris and Cindy. Although I cannot know for sure, it seems likely that the journaling and interviews might have put stress on at least some of these couples. In situations like these, the 4Rs do not take place as written for various reasons. Perhaps talk is not Repatterened sufficiently, or one gets “stuck” in negative cycles of obsessive Reflecting, or follows the first 3 Rs only to realize that he/she is very Disconnected from self or other. For various reasons, some of which can be understood in terms of the 4Rs model, and some which surely cannot, bad things can happen. It is important to explore the facets of how this type of deep conversation can both help and harm participants. Below, I briefly consider some of the ways in which journaling and interviewing—in the context of an academic study or personal practice—may cause harm.

Journals carry risk particularly because they are not guided and monitored by a third person. For good reason, many therapists recommend journal writing as an activity that complements therapy, not replaces it (Penn and Frankfurt, 1994; Riordan, 1996; Vaandrager and Pieterse, 2008). Negative examples abound. The act of journaling can be isolating, drawing one deeper into the her/himself, neglecting relationships with others (Mallon, 1984). Writing can become a “substitute for action” or represent an “intellectual self-absorption rather than a self-reflective exercise” (Riordan, 1996). Diaries can instigate obsessive thinking (Mallon, 1984; Riordan, 1996). A diary can be accomplice or at least a silent observer to more than just emotional harm. For one young girl, the diary became her closest and only confidant as she spiraled into drug-induced depression and finally succumbed to an overdose (Mallon, 1984). For a man, a terminal entry in his open diary was the only witness as he took his life with a pistol (Mallon, 1984). Especially relevant to my research with couples, “diaries can be uncomfortable third parties to marriages. In fact, they are much more at home in divorce courts than in the drawers of end tables near the marriage bed … Diaries often sneak up with unexpected nastiness on spouse or widow” (Mallon, 1984). In these and no doubt many more ways, diaries present a risk, although minimal and rare.
Interviews and similar research methods have their own hazards. Of the studies I found on the impact of simply assessing relationships, all report that a small number of participants (generally between 3% and 5%) had negative experiences (Bradbury, T.N., 1994; Rubin and Mitchell, 1976; Veroff et al., 1992; Worthington, et al., 1995). Longitudinal assessments of couplehood have been found to lead to strengthening or weakening of relational ties (Rubin and Mitchell, 1976) and may have “negative effects on the natural life course of… marriages” (Veroff et al., 1992). In interviews, interactions may cause “stress,” can be “anxiety provoking,” and can “evoke defense mechanisms” (Kvale and Brinkmann, 2009). In Rubin and Mitchell’s study, some participants “learned things from taking part in the study that they might have preferred not to learn” (Rubin and Mitchell, 1976). Bradbury found similarly, that 12% of couples “were upset or troubled by something learned or discovered in the study” (Bradbury, 1994). Partners may leave studies angry. As one of Bradbury’s participants stated, “I am kind of wondering if maybe [my husband] will be mad after we leave here, and he won't be too thrilled that we were telling all this stuff to other people because [he] does not open up real easy …” (Bradbury, 1994). Another participant stated: “I wish we hadn't come here and had [this conversation with my husband].” Additionally, “my husband is right, he always will be right. It doesn't matter what I say about anything, I am always going to look like the fool.” Not only was the study a negative experience for this participant, but it also seems to have reinforced a personal lack of empowerment and self-worth. Similar to Tomm’s (1987) assessment of non-interventive interviews, my study shows that there can be both therapeutic and countertherapeutic outcomes.

**Considering implications for policy in HCI**

My position is that, by applying the 4Rs to analysis, and more generally by applying Empathic Communication and specifically “therapy” as a metaphor for the activities taking place in research, new worlds of ethical complication and appropriate practice become apparent. In the previous sections, I suggest that other design researchers in HCI may benefit from applying this metaphor and show how a 4Rs analysis can raise awareness of potential harms and benefits that studies pose to participants. In this section, I provide just one possible example of
how we might make use by applying this frame to one particular dilemma regarding informed consent. Informed consent is one practice that mediates the researcher’s ethical responsibility (e.g. ACM Code of Ethics and Professional Conduct, AAMFT Code of Ethics, etc.) to make individuals aware of potential positive and negative effects of study in which they may participate. As I describe below, a question that has recently become important to researchers and policy makers is: Should policy require written informed consent when interventions like interviews and questionnaires are used with human subjects?

In recent years, there have been cross-fields discussions about whether the OHRP (Office for Human Research Protection)—the body responsible for IRB (Institutional Review Board) policy oversight—should change its informed consent policy. Many social scientists argue that IRB was created with the biomedical sciences in mind and does not adequately reflect the lower risk posed by methods such as surveys and interviews (HHS and FDA, 2011). These stakeholders argue that social science researcher should be released from the bureaucratic informed consent processes governing human subject research (HHS and FDA, 2011). Consequently, in 2011 the OHRP requested comments on a proposal to update the policy (HHS and FDA, 2011). OHRP proposed that “research involving educational tests, surveys, focus groups, interviews, and similar procedures” should be “Excused” from IRB approval processes (HHS and FDA, 2011). Additionally, using these types of research interventions would no longer require researchers to obtain written consent from participants; instead “oral consent without written documentation” would be acceptable (HHS and FDA, 2011).

In response, an open letter backed by 167 signatures from HCI researchers and practitioners was submitted with the following core opinion:

_We support the proposed consent rules for Excused research and encourage that ‘user needs assessment, requirements analysis, design, prototyping, and usability studies’ be added to the list of practices subsumed in this statement: ‘... oral consent without written documentation would continue to be acceptable for many research studies involving educational tests, surveys, focus groups, interviews, and similar procedures.’ (Response to HHS-OPHS-2011-0005 by Members of the Field of Human–Computer Interaction, 2011)_
In short, these HCI researchers agree with the OHRP’s proposal and wish to extend the “Excused” category of research to various design-related research in HCI.

Reading research interventions through an Empathic Communication or a therapeutic lens may raise questions about this new initiative and shed light on various alternative approaches that can be taken. First, the therapeutic frame helps us become aware of how creating a dialogic space can positively or negatively affect the participants and their relationships. However, the assumption buried in the proposal and the response is that the risks of methods like interviews and questionnaires “are not greater in and of themselves than those ordinarily encountered in daily life…” (Response to HHS-OPHS-2011-0005 by Members of the Field of Human-Computer Interaction, 2011). These two views seem to be in conflict. Second, the therapeutic frame helps us consider that ethical resources from fields like Marriage and Family Therapy may have relevance to our own research practices. We might, therefore, look at how MFTs formulate ethical therapeutic practice to guide and inspire development of our (official or unofficial) policies in HCI.

Following from this last point, I draw on Pomerantz’s (2012) chapter “Informed Consent to Psychotherapy (Empowered Collaboration)” from the APA Handbook of Ethics in Psychology to exemplify the types of dialogues that become accessible when we consider research as therapy. Pomerantz (2012) provides a way out of a yes-or-no structured debate about whether we ought to have written informed consent: “Discussions of how to obtain informed consent to psychotherapy generally focus on the dichotomy of written forms and oral discussion, typically with both being recognized as important methods to incorporate into the process.” He proceeds to show that written and oral forms have strengths and weaknesses that can complement one another. Written consent can provide standardized information and create a record of consent for both parties, although it can sometimes suffer from being “too exhaustive, too brief, too impersonal, or too inflexible” (Pomerantz, 2012). Oral consent can foster a relationship with the client, does not depend on the client being literate, and can be customized to the client (Pomerantz, 2012). But, oral consent does not produce a record of consent, and it can also be too exhaustive or brief.
As a sort of hybrid strategy, Pomerantz (2012) recommends using a printed list of questions to
give the client as a resource during the consent process (Pomerantz and Handelsman, 2004).
This list includes over 40 questions organized into 7 categories, including “therapy,”
“alternatives,” and “confidentiality” (Pomerantz and Handelsman, 2004). “Ideally, such a
format can enable productive discussion between therapist and client in a manner consistent
with the Ethics Code’s pronouncement that the psychologist should ‘provide sufficient
opportunity for the client/patient to ask questions and receive answers’” (Pomerantz, 2012).
Most of the questions on this list would be inappropriate or awkward if not reworded or elided
to fit the context of HCI studies (e.g., “what is your fee?” or “what is the name of your kind of
therapy?”). Other questions may be ready to adopt (e.g., “what are the possible risks involved?
(like divorce, depression)”). And, some questions offer unexpected help. Consider this
question, for example: “what is your training and experience?” In Study 2, Cindy and another
participant (who dropped out before the study began) both told me that they wanted to
participate because they were having communication troubles with their partners. Similarly,
Rubin and Mitchell (1976) reported that some clients asked to be counseled by the researchers,
and others asked for referrals to psychological counseling facilities. It may be important to
specify very clearly in the consent process that the researcher is not a trained therapist and to
explain the researcher’s actual expertise.

**Empathic Communication as a tool for research method design and
evaluation**

The example above suggests that, by using Empathic Communication as a frame, we can
explore new facets of methodological conversations and invite external voices to inform our
way forward. The particular case that I presented centered about the practice of ensuring
informed consent in HCI. Applying the metaphor of “therapy” to standard researcher-
participant engagements allowed me to 1) consider the weight of potential benefits and harms
to participants, 2) reflect upon the adequacy of current ethics policy, and 3) consider rationale
used in MFT and related fields. Using one particular psychotherapeutic resource, Pomerantz’s
(2012) notion of “Empowered Collaboration,” I found a new perspective on the present debate
about whether to remove or keep the requirement of written consent in HCI studies (that is, the hybrid written-oral approach). I also found new perspective on the types of content that might be included in the consent process (that is, the nature of the researcher’s expertise). And, arguably, I may not have considered the potential benefits and harms to be quite so significant without the descriptor “therapy” to impart it. Through this example, rather than pushing forward a particular problem or solution as the necessary interpretation of Study 2, I am simply considering the value of the Empathic Communication distinction to help enrich our conversations about methodological practice.

The value of the Empathic Communication frame to researchers can be best summarized by McNamee (1988) in her paper titled “Accepting Research as a Social Intervention.” Much in the way that I have compared therapeutic process to research process, McNamee compares the methods of therapy and research along Systems Theoretical lines; research, she argues, is fundamentally a social intervention. I appreciate and want to put forward her concluding thoughts about the purpose and value of her framework:

*The ideas of hypothesizing, circularity, and neutrality can serve as useful guides for researchers as well as clinicians. Employing these principles in the study of social systems does not mean abandoning experimental methods or statistical analyses. Simply, there is a need to continue to be aware of the researcher’s role and how he or she selects the methods and analytical techniques used. This awareness drastically alters the interpretations of research. Research becomes an alternative punctuation which may be more or less useful for society. If it is useful, researchers will probably continue to pursue that line of research—but not because it is "true"—but because it is useful.*

We might adjust McNamee’s wording slightly to match the current context in this way: *The 4Rs can serve as useful guides for researchers as well as designers. Employing the Empathic Communication construct in the study of social systems does not mean abandoning interventive methods like interviews and technology probes. Simply, there is a need to continue to be aware of the design researcher’s role and how he or she selects the methods and analytical techniques used. Awareness and rhetorical flexibility are the primary contributions that the term “Empathic Communication” makes to thoughtful researchers.*
**Summary**

Empathic Communication Technologies are not confined to the therapeutic hour or digital devices; in fact, the paper prototype of Diary Built for Two as well as the interviews with couples both supported empathic reconnection. In this chapter, I suggest that the notion of Empathic Communication can help us make sense of these various “technologies” in ways that benefit HCI designers and researchers. I identified Asymmetric and Symmetric design alternatives for dyadic communication devices like Diary Built for Two; the design and evaluation of such devices can be aided by the 4Rs, because they give designers a language for rationalizing and comparing different design decisions. Additionally, I provide an example of how applying a “therapy” metaphor to research practices like interviewing can aid the identification of ethical problems and illuminate new methodological opportunities. Hence, “Empathic Communication Technology” is a construct that can become a useful tool for both designers (who create computer technologies) and researchers (who create research methods).
8 Conclusions

Chapter abstract
This chapter completes the circle back to my opening argument that technologies for connectivity may, in fact, be making us more disconnected than ever. Over the course, I have shown that Empathic Communication Technologies do hold promise; they help people achieve mutual empathic connection. The experiences that I have shared lay the groundwork for HCI designers to imagine, craft, and evaluate new technologies that support meaningful interpersonal growth. They also provide new lenses to researchers who seek greater awareness of and sensitivity to the effects of their methods as they engage participants in dialogue. As conversations around this research continue, I suggest that we do more to understand needs of local partners and the potential for Symmetric and Asymmetric interfaces, but also that we look beyond Diary Built for Two, look beyond couples, and consider how Empathic Communication may open new horizons.

Addressing the connection crisis in HCI
Relationships with robots are ramping up; relationships with people are ramping down. What road are we traveling? Technology presents itself as a one-way street; we are likely to dismiss discontents about its direction because we read them as growing out of nostalgia or a Luddite impulse or as simply in vain. But when we ask what we “miss,” we may discover what we care about, what we believe to be worth protecting. We prepare ourselves not necessarily to reject technology but to shape it in ways that honor what we hold dear. Winston Churchill said, “We shape our buildings and then they shape us.” We make our technologies and they, in turn, shape us. So, of every technology we must ask, Does it serve our human purposes?—a question that causes us to reconsider what these purposes are. (Turkle, 2011)

As technology becomes evermore central to the way that we get things done in the day-to-day, our relationships with one another have been somewhat displaced. Our technology devices have put a layer of indirection between ourselves and our remote counterparts for the sake of bridging distance. But, at the same time, they have put a layer of indirection between ourselves and our local counterparts, with the effect of making distance. The language of
technology has become increasingly thin and immediate and multitasked, such that we talk at rather than with each other; our capacities to see the world from the position of the other, to let them into ourselves, are diminished. The notion of having intimate others—close friends, family, a partner—is giving way to more dispersed interpersonal connections.

Empathic Communication Technologies provide an invitation to slow down, ponder, imagine unselfishly. Write. Talk. Share intimately. HCI researchers have flirted with these ideas in the context of knowledge-making and technology-making as activities for the individual. I have argued that putting these together in a way that encourages more interpersonal connection and mutual empathy for users is one approach to addressing the connection crisis currently driven by technology. This dissertation has gathered a set of tools and empirical observations that suggest “Empathic Communication Technologies” is not an oxymoron, that there are things we can do as technology designers to help. In the remainder of this chapter, I summarize how this body of work contributes to conversations in HCI and how we might proceed.

**Key findings and contributions**

**Empathic Communication Technologies**

Strong-tie relationships like those of intimate partners need ritualistic reconnection through intimate sharing and meaningful dialogue. Through conversations with therapists and therapy literature, I have come to think of this type of connection as arising from “Empathic Communication.” The 4Rs—Repatter, Reflect, Restory, Reconnect—articulate the construction of empathy in “dialogic space,” or a space in which conversationalists feel welcome to express and reinterpret their identities with others. These are not new ideas, although they do seem new to Human-Computer Interaction. Perhaps it is our information-centric roots that have encouraged us to focus on more efficient communication technologies, and those same roots that inspired radically more poetic and emotional technologies for abstracted presence. Regardless, there is an astounding lack of technologies for intimate couples in particular that strive to initiate conversation towards mutual development and healing; HCI has an Empathic Communication blind spot. A significant part of the contribution
of this dissertation is simply identifying that blind spot, motivating attention, and providing a set of tools that might help us build new, more human-centric futures.

**Diary Built for Two**

Diary Built for Two is most valuable as an example to guide other designers who want to explore technologically-mediated Empathic Communication. Although a software instantiation of DB2 was not developed through this project, this is still one of the most thorough investigations into the behaviors and needs of couples surrounding a particular design sketch in HCI to date. By designing DB2 using the 4Rs, asking couples to use a low-fidelity prototype, and synthesizing analysis into rich examples of behavior, I have created a design trail that others may follow or informedly depart from. The report I give from the other side is that Empathic Communication technologies *can* be built and the 4Rs framework is one way to build them.

**Empathic Communication as an evaluative framework**

In this dissertation, I have ascribed unlikely qualities—“empathic,” “therapeutic”—to seemingly simple conversation spaces—journaling and interviewing. These are qualities that I believe are palpable and resonant in those types of conversations, particularly when intimate thoughts are being expressed. And, yet, these are qualities that are not often discussed with respect to technological mediation or research methods in HCI. One way to read this dissertation is as an instruction manual for how to usefully apply these metaphors to arrive at something extraordinary. When we apply them in the process of technology design for intimacy, we can invent radically new human-machine configurations—perhaps Symmetric or Asymmetric interfaces—and be more mindful of how our deployments are affecting the relationships of those who use them. They are props for defining and meeting design goals. And, when we apply them to the process of practicing research methods, we can be more eclectically informed of our roles and responsibilities and the nuanced practice thereof.

**Future work**

To repeat an often-heard phrase, successful research often raises more questions than it
answers. My work has been particularly exploratory, seeking to find new projects for design and open new dialogues for researchers in Human-Computer Interaction. Below, I identify some of the questions that emerged during the course of my research. Perhaps these threads will be picked up in my future work or yours.

**HCI**

The key contribution in this work is the notion of Empathic Communication Technologies and the agenda it sets forth for the field of HCI. If any idea could reach beyond this dissertation to other practitioners, I hope it would be this. I have endeavored to show what Empathic Communication is, how it can be applied to design and research, and how it matters to intimate partners. But, intimacy does not stop with our boyfriends or girlfriends, husbands or wives. Intimacy matters to all variety of relationships, including our families and friendships. In short, Empathic Communication is a cross-cutting concern.

![Figure 27. Empathic Communication for Other User Groups](image)

This design space visualization suggests that Empathic Communication is a cross-cutting concern. In Figure 7, I present a design space for couples (represented by the yellow plane above). Friends, family (not shown), or even strangers might also benefit from Empathic Communication technology.
Many questions are yet unanswered. What new challenges arise when supporting Empathic Communication between friends or family members or other user populations? The 4Rs are just one possible guiding construct; what other formulations of Empathic Communication are useful? And, ultimately, is Empathic Communication something that technology can give us, or is it something we have to make for ourselves?

**Design**

*Exploring the design space for intimate couples conceptually and practically*

I proposed the design space as a means of bringing the types of technologies placed at the margins of concern to a more central position. In this capacity, I think it succeeded. But, conceptually, it is still unclear whether technologies can occupy more than one location on the space. Can a technology for local partners also be fit for distant partners? Can technologies for abstracted presence also support Empathic Communication? What emergent phenomena are exhibited when a technology designed for one is used for another? More practically, what other sorts of technologies and contexts of use might support Empathic Communication? What are the various ways in which technologies can spur meaningful conversation and then step out of the way? Specifically pertaining to Diary Built for Two, perhaps it could be put to best use in a clinical therapeutic situation, with a therapist to guide clients in an at-home activity. How would such a journal accommodate both therapist and clients as its users? How can use be ethically studied?

*Exploring Symmetric and Asymmetric interfaces conceptually and practically*

Symmetric and Asymmetric interfaces for dyadic communication may be one promising way to open up new dialogic spaces for a wider range of conversationalists. The Asymmetric interfaces, in particular, may help in relationships in which partners have very different communication needs. However, can these technologies still support Empathic Communication, or do they tend to reiterate existing, individualistic thinking and communication patterns? What affect does each interface profile have on Empathic Communication, and which contexts of use are most promising? Furthermore, how do we
implement private and public spaces in these various configurations; what happens to shared spaces when devices are coupled and decoupled? On a more conceptual level, what are the distinctions between each category? Can you implement "two different interfaces" on a shared piece of hardware, like an iPad? Or, a "single interface" on two iPads? How different does an interface need to be in order to be classified as “two different interfaces?” Finally, should Symmetric and Asymmetric interfaces be confined to intimate partners, or might they be useful when designing for other dyads like friends or siblings; how might these profiles translate to groups of three or four?

**Research methodology**

This research has given me much to ponder when it comes to my own choices of research method and particular research practices. Part of this is no doubt a matter of simply having more experience and exposure (I never, for example, imagined interviewing participants with mental disorders or couples who had just finished an argument). However, I think a large part of my growth can be attributed to the application of the Empathic Communication frame to the interviews I carried out with participants. The understanding that these engagements can be read as therapeutic, or at times countertherapeutic, has given me new appreciation for the work of coming to know and also new responsibility. Whereas research might be seen as a stepping stone to securing data and designing technologies and publishing papers, it can also be seen as a process of human growth. I have struggled with questions: “I am not a therapist (in training, in intent), but am I a therapist (in effect)?” and “How can I know if I am doing participants more harm that good?” But, also from the metaphor of therapy, I have been able to find perspective and answers. Literature from Marriage and Family Therapy and similar fields has much to say that can inform our research practices in HCI. We need to continue to inspect and make sense of interviews and similar tools for user engagement as places for meaning creation and relational healing. We need to continue sharing our experiences as a community and raising questions about our roles and responsibilities. And, we need to continue to look to and adapt reasonable accounts of how we might conduct ourselves fairly.
Continuing conversation

Too many pages ago, I asked the question “Is technology part of the solution to technology?” I believe my participants, my collaborators, and I have been able to cast considerable light on one very promising answer: Empathic Communication Technologies. While I agree with Sherry Turkle (2011) that more deliberately-humanistic technology design must play a role in reflecting and shaping our social values, I also hold that technology is overemphasized. I mean this in two senses. The first is that, as technology designers, we should consider those communications that are not mediated by technology—that is, how technologies enter and exit the scene to make room for more human-human connection. The second, more controversial, is that, as technology designers, we should consider when not to make a technology. The environmental, social, and humanitarian costs of technology concern me greatly. Rather, as designers and users alike, we should put down our devices and pick up a conversation.

In the spirit of conversation, I have endeavored to include many “voices” in this writing through directly quoting from and replying to a diversity of texts, a diversity of people. I hope that this provides an inclusivity and a “welcoming stance” (Larner et al., 2004) that will encourage dialogic collaboration to articulate hazards, opportunities, and an array of ways forward.

David: ... At this point, my vocabulary from speaking about dialogue has expanded, courtesy of yours. There’s also a shared vocabulary that’s emerged, so that the two of us can ‘go more places together’ as it were. And as we have, we’ve encountered new nuances, new discussions: I certainly don’t feel any nearer to closure.

Tom: I think that is part of our postmodern predicament: we live with tensions and possibilities that keep us talking, without getting in any final word.

David: Well, here’s to future conversations, furthering talk. (Strong and Paré, 2004)
References


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Appendix

Study 1 Consent Form

Domestic Disturbances Study

Thank you for participating in this study of arguments in the home and the impact of confrontations to family relationships. Towards understanding this space, we are conducting interviews with researchers, practitioners, and clients in Marriage and Family Therapy. Interviews will be audio recorded as a memory aid and will enable us to reflect on what was said. The interview will last about an hour, but you are free to ask us to stop recording or end the interview at any time. Also, please do not discuss with us any plans, inventions, or patents which you feel you may pursue in the future.

All data collected are for research purposes only and will primarily be used for internal analysis. However, we may want to show or use specific portions as examples in research presentations—e.g., at conferences, in classrooms, in journal articles, or with external collaborators. In all presentations and publications, we will take precautions to keep your identity confidential; for example, we will use a pseudonym, not your real name.

To thank you for participating, you will be given an American Express gift card valued at $50.

If you have questions or concerns about this release form or about the study, please contact the primary interviewer or her manager:

- Stacy Branham
  Email: stacy.m.branham@intel.com
  Phone: 703 489 4373
- Tad Hirsch
  Email: tad.hirsch@intel.com
  Phone: 503 456 3742

By signing this form, you agree that:

- You have read and understand it, and agree to its conditions;
- Your participation in this study is completely voluntary;
- You will receive a $20 pre-paid American Express card as a thank-you gift for participating;
- You understand that we will take precautions to keep your identity confidential;
- The media recorded during your participation become the property of the parties; conducting the research for use in this research project and possible inclusion in research presentations or publications;
- You are not revealing any of your own private product concepts, inventions, or ideas that you may want to develop in the future.

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<thead>
<tr>
<th>Signature (of primary contact)</th>
<th>Name Printed</th>
<th>Date</th>
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<tbody>
<tr>
<td>Signature (of researcher)</td>
<td>Name Printed</td>
<td>Date</td>
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Intel Corporation
202070 NW Amberglen Ct.
Beaverton, OR 97006
INTRO
* introduce ourselves
* thanks for your time; this should take about an hour; do you have a hard cut-off at that point?
* have you read the consent form?
* we will take measures to make sure your data remains anonymous
* we will record the interview so we don’t miss anything you say; is it alright if I turn on my recorder now?

* legal
* we are interested in learning about argument that takes place in the home—primarily between couples, but also between parents and children. We are trying to understand argument in the home from a number of perspectives, so we are interviewing practicing MFT therapists, MFT researchers, and eventually couples.
* this is completely foreign area to us; you are the teacher
* Any questions?

* what is your background—your training and experience—in MFT?
* have you ever served as a therapist or a counselor to couples or families in distress?
* what are your research interests, briefly? what is the nature of your most recent research?
* what ethical issues are at stake in the field of MFT research and activism?
* what are your thoughts on counseling the marriage vs. counseling the individual?
* what are your thoughts about couples education as opposed to couples counseling?

* to what extent have arguments been present and important in your experiences as a counselor or researcher? Start with counselor.
* have you seen arguments take place between couples? only heard about them?
read about them?
* what do they argue about?
* how do arguments start? escalate? progress? example?
* are there different dynamics to arguments?
* where do arguments take place? example?
* are there different types of arguments? different phases in an argument?
example?
* is some amount of arguing healthy for couples? How can you tell the difference? example?
* to what extent is it important for couples to reflect upon arguments past?
what should they reflect on? when should they move on?

* how prevalent is domestic abuse?
* what situations lead to abuse?
* are incidents corresponded to arguments?
* what are the dangers? how do you approach that situation?
* example?

* could you describe a typical couple in counseling? For example, do your couples tend to fall within a particular demographic?
* why do they come? what are they looking for from counseling?
* what can a counselor give them?
* what are their attitudes toward counseling?
* only married couples?
* how often do counseled couples’ relationships end in divorce?

* at what point do couples seek counseling?
* what are the triggers? What are the symptoms of a relationship in trouble?
* are both couples agreed that they should go to counseling?
* is there a point in their marriage when it is too late to seek counseling?
* do the couples tend to come soon enough?
* are there reasons that people don’t go to counseling even though they probably should? How do you know?

* what is the significance of the home (with regard to couples or families in need of counseling)?
  * what happens in the home?
  * what makes the home special?
  * are arguments in the home different than arguments elsewhere?

* what about families with children?
  * if you were a fly on the wall in the house of a couple in need of counseling, what would you look for?
  * would there be interventions? of what sort?

* tell me about the situation where a couple is in counseling and they have children
  * does this change how they argue?
  * does it change what you would look for if you were a fly on the wall? what interventions there might be?

* how do couples reach resolution?
  * [this is far too leading] does reflection play a role? what is it important for them to reflect on? what is it important for them to forget?
  * more questions on this?

TECHNOLOGY

* have you seen any new technologies that are intended to help counsel couples?
  * what are they; what do you think of them? do you use any of them?
  * have you seen Fix a Fight iPhone App? if not, describe it… reflections on how useful that might be?

WRAP-UP

* is there any part of being a counselor that we haven’t touched on yet that you think is important for us to know?
* can we contact you again if there is something we missed? [perhaps set up another interview if we haven’t made enough progress?]
* gift card—address to send to?

ask about-prenatal:  intimate partner violence: ethical supervision
Interview 1. Audio Start ~3:00

10:35 [argument vs. conflict] "arguments is a pretty broad category; the language we tend to use is 'conflict'. [spiraling out of control] We're interested in how conflict occurs in couples and families, and how that conflict progresses to violence... [reference] Johnson's Typology of Conflict. There's some violence that's... about control. [spiraling out of control] But, most violence that occurs in relationships is actually more about escalating conflict.

11:55 [patterns] MFT was founded on the theoretical basis of general systems theory meaning that we don't focus on inter-psychic phenomena—we're not as interested in what's going on within an individual, the classic view of psychotherapy where people sit down and talk about relationships with their mom, their dreams and stuff like that. We're focused on what happens between the members of the system, so for a couple, we're looking at how all the members of a family or the couple, or whatever the boundary is of the system is that we're looking at, how they interact and we're looking for patterns, ongoing stable patterns of interaction that maintain whatever the problems that they've identified as being the focus of treatment."

12:50 [patterns] The implication for couple conflict is looking at, are there certain types of patterns of interaction that occur that are related to conflict and related to the escalation of the conflict to violence.

13:49 [design] Certainly couples that are under stress, and that stress could be socioeconomic stress, occupational stress, any kind of stress that is introduced into the couple increases the chance that conflict will occur or that conflict could escalate to violence.

14:20 There are different types of violence. There's what's known as situational couple violence, which, this is just sort of couples that... [in the dark] [spiraling out of control] tend to lack conflict resolution skills or communication skills so when they get into an argument they start to escalate and they don't know how to de-escalate and so it escalates to the point of physical violence.

14:45 [spiraling out of control] [in the dark] So, it's like they get caught in a cycle of—a symmetrical cycle of escalation and are unable to interrupt it.

15:00 [when they have agency but not in the dark, no hope] There are couples where—and this is typically referred to as intimate terrorism—where the violence doesn't occur necessarily as a result of conflict; it's about one member of the couple being highly controlling and the violence is a means of controlling the other person's behavior. And that one gets broken down into two types. There's the dependent type—someone who's very needy and dependent and controls the other person because they are afraid of loss and that the other person might leave them. And then there's the antisocial type, which is somebody who controls other people just for the sake of controlling other people just for the sake of controlling other people.

16:00 [patterns] [spiraling out of control] [lack of agency] so, in terms of the patterns, I hesitate to be too specific because the answer is we don't really know yet. There are some sort of typical types of couple patterns that we look at; things like pursue-distance patterns are very common in couples—where one member of the couple has a tendency to handle anxiety or conflict by seeking more contact or more information or more discussion and the other member has a tendency of withdrawing and as the one member withdraws it increase the anxiety of the other member who then pursues more which increase the anxiety for the withdrawing member who withdraws more, and they see how you have a systemic pattern that actually causes the positive feedback in the system and escalation. So, we look a lot at concepts like positive and negative feedback in the system—negative feedback being things that return the system to its homeostatic state and positive feedback being things that cause change within the
Sample Design Brainstorming from my Design Journal
Design Sketches of DB2
Sample Brainstorming from my Design Journal
Study 2 Consent Form

**Partner Communications Study**
Thank you for participating in this study of how couples communicate to connect and how personal logs (diaries/journals) might impact couples’ communication practices. Towards researching this space, we ask that you join us in a series of 3 interviews in addition to maintaining a daily diary/journal for approximately two weeks. Interviews will be audio recorded as a memory aid and will enable the researchers to reflect on what was said. The interview will last an hour to an hour and a half, but you are free to ask us to stop recording or end the interview at any time. Please make sure not to share any plans, inventions, or patents which you feel you may pursue in the future.

Diaries/journals kept by participants will not be collected by the researchers, and participants do not have to show their diaries/journals to the researcher. Participants will, however, be asked to document certain metadata about these logs (e.g. how many entries you made, what dates you made them on, etc.).

All data collected are for research purposes only and will primarily be used for internal analysis. However, we may want to show or use specific portions as examples in research presentations—e.g., at conferences, in classrooms, in journal articles, or with external collaborators. In all presentations and publications, we will take precautions to keep your identity confidential; for example, we will use a pseudonym, not your real name.

To thank you for participating, you will be given an American Express gift card valued at $50. You will also optionally be treated to up to three visits to local eateries for snacks or a meal totaling no more than $25. If you opt to use a paper diary/journal, one will be provided for you.

If you have questions or concerns about this release form or about the study, please contact the primary interviewer or her manager:

- **Stacy Branham**
  Email: stacy.m.branham@intel.com
  Phone: 703 489 4373

- **Tad Hirsch**
  Email: tad.hirsch@intel.com
  Phone: 503 456 3742

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**By signing this form, you agree that:**

- You have read and understand it, and agree to its conditions;
- Your participation in this study is completely voluntary;
- You will receive a $50 pre-paid AmEx card at completion of the study;
- You will optionally receive up to $25 in snacks and meals during interviews;
- You will optionally a paper diary/journal;
- You understand that we will take precautions to keep your identity confidential;
- The media recorded during your participation become the property of the parties conducting the research for use in this research project and possible inclusion in research presentations or publications;
- You are not revealing any of your own private product concepts, inventions, or ideas that you may want to develop in the future.

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Signature (of primary contact)  
Name Printed  
Date

Signature (of researcher)  
Name Printed  
Date

Intel Corporation  
202070 NW Amberglen Ct.  
Beaverton, OR 97006
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1. Decide where you want to keep your diary/journal: in the book provided by us, in the diary/journal you already keep, on your computer in a word processing document, in emails you send to yourself.

2. Write in your diary/journal once a day.

3. Record the date on each entry.

4. Make sure you can bring your entries to our interviews.

5. Stacy will never ask you to see your diary/journal, so write freely :) Thank you!

Notes:

- Ideas: You can print out computer entries or take your computer with you. If you have a book, take that with you.
**Study 2 Interview 1 Protocol**

---

**Interview 1**

*** Consent
*** Audio

Tell me about your relationship.

- how did you meet?
- how long have you been together? are you married? living together?
- what makes you compatible? what is it that keeps your relationship together?
- what do you do about each other?
- what things do you enjoy doing together?
- specific examples?
- what things make you less compatible? are there things that pull you apart?
- most every couple has conflicts or fights? if you had to predict your next fight, what would it be about?
- what causes them?
- how do they get resolved?
- what is the best way to stop a fight?
- specific examples?
- what are the hardest things about keeping your relationship together?

Walk me through your average weekday.

- what do you do when you are together?
- apart?
- how do you communicate?

Walk me through your average weekend.

- is staying connected important to you? how do you stay connected?
- is there a certain time of day or specific way in which you reconnect--any "habits"?
- are there connection breakdowns?
- are there ways you keep on the same page emotionally?
- are there ways you share your daily experiences--let each other know what you’re doing?

Do you ever take time out to think about your relationship?

- is there a time for it or is it situational?
- do you reflect individually or together?
- how?
- why? benefit?

Do you document parts of your life? any joint documentation?

- why or why not?
- what, how, and when do you document?
- what benefit does it provide in the moment, if any, as opposed to the future?
- do you communicate with each other through these documents?
- If you looked through your document type would there be anything you’d share with your partner? why or why not?
- do they provide an awareness that wasn’t there before? are they tools for reflection?
- do you use twitter, facebook... anything like this?

*** study explanation: show cheat sheet
*** where do you want to meet next time?
Interview 1 Transcript Snippet, Couple 4

[00:03:11.07] <F>: What do you think makes you work as a couple?
[F]: I think the fact that we talk all the time.
[M]: yeah, I thi--I think, ah, we're both really interested in people
[M]: I think that's--
[F]: well, which includes each other
[F]: I think we both try to figure each other out like psychologically
[M]: yeah
<F>: oh really?
[F]: yeah
[M]: I guess our parents are not necessarily, at least one of our parents are--
[F]: nuts--<laughs>
[M]: like really don't care--well, yeah, but I mean at least one of our parents--

[00:03:53.28] <F>: what'd you say?
[F]: are nuts <laughs>
<F>: <laughs>
[M]: yeah, we've got some interesting parents
[F]: but they don't really care--what were you saying, like?
[M]: yeah, at least one of, my dad I would say doesn't really like people <laughs>
[F]: yeah, he's, he's a little drama [00:04:05.14][??]
[M]: very much, he's not interested in people
<F>: yeah
<F>: and, yeah. But I mean, I think that like there's something about us that we both like, we try to get like 'oh, ok, this is what the other person is experiencing now--~
[M]: yeah
[F]: like we try to sort of like figure out, figure the--I mean, I try to figure [M] out like--
[M]: yeah, and that--
[F]: on a deeper level--
[M]: <inaudible> I think, too, we're both kind of um--
[F]: neurotic <laughs>
[M]: <laughs>

[00:04:35.20] <F>: neurotic? <laughs>
[M]: I think we both sometimes feel like, uh, small children that are unprepared to deal with the big
world inside, that we're just hiding that from somebody
[F]: <laughs> yeah

[F]: because you feel inferior? <laughs>
[F]: which is like so, and my job is I'm like [M], you've got to be kidding me, that's ridiculous,' you know, and he's like '[F], come on' <laughs>
<F>: ok, so you have to like sort of help the other person
[F]: yeah, talk the other person down
<F>: <laughs>
[F]: <laughs>

[00:05:42.05] <F>: Ok, so--this is what he's experiencing, you said that you're neurotic--
[F]: we are <laughs>
[M]: yeah, we're pretty neurotic
[F]: we're both a little like, we come home and we're like 'I think my professor thinks I'm stupid' or you whatever, like, kind of obsessing about little things--
[M]: <laughs> we avoid--sometimes avoid other people because we feel inferior <laughs>
[F]: <laughs>
[F]: <laughs>

[00:06:35.19] <F>: that's really amazing. um, are there things that cause stress on the relationship, or like areas where you--
[M]: yeah, definitely
[F]: <laughs>
<F>: what are those things?
[F]: well--
[M]: work habits
[F]: yes. [M]--I consider him to work a ton.
<F>: mm hmmm
[F]: which takes away time from me
<F>: huh
[F]: and we have some sort of <pause> different friends.
<F>: mm hm
[F]: I mean just that some of his friends I don't really enjoy hanging out with.
<F>: mm hm
[F]: some of my friends annoy him
<F>: mm hm
[F]: my sister annoys him <laughs>
<F>: uh oh
[F]: that kind of thing, what else [M]?
...
INTERVIEW 2

if you found that writing in a journal was easier for you what do you think you'd make of it

INDIVIDUALLY:
Tell me about your week. Anything happen in your relationship this week? ups, downs?
Is there anything you're eager to tell me about this past week of keeping a diary/journal?
difficulties? surprises? value?
are there things you already do that have similar value or characteristics as journaling?
could you see yourself ever using journal for an extended period?
where do you keep it? when do you write in it? where do you write?
what types of things do you generally write about?
afraid that it might get read? who shouldn't read it? were you holding back content for any reason--
privacy?
what was the impact of writing in your diary this week?
do you look back?
what do you know about your partner and his/her journal?
do you know what's in your partner's journal?
their journaling habits?
did you talk about your journal with your partner?
- what did you share? don't?
- it's sometimes difficult to talk to someone about personal things?

TOGETHER:
did you talk about the your journal with one another at all? What did you talk about?
did the journal impact your relationship at all?
did the journal provide any sense of connection?

it a helpful product to keep in ...
anything about the mental flow of the day that would be
helpful to know?
Interview 2 Transcript Snippet, Couple 4

[F]: Um, first of all about the journal, I wonder if you guys um talked with each other about it at all, like about the content or anything like that?
[M]: we did briefly
[F]: really?
[M]: yes, because I knew the first, well you were done really fast and you were like 'it was easy' and it's like <laughs>
[F]: and I don't know if you told me or I imagined because I could be wrong, I thought that you wrote a list *interesting that she imagined what was in his journal*
[M]: no, not really
[F]: ok, so we didn't talk about it, I just filled in the blanks <laughs>
[M]: we did, we did say, we did remind each other that we had to do the journal <laughs>
[F]: yeah, ok
[F]: and I read you my rant last night
[M]: yeah, you did
[F]: oh you did?
[M]: yeah

[F]: <laughs>
[F]: yeah

[F]: oh, that's so cool. Tell me more about that.
[M]: <laughs>
[F]: well, I had a, a crisis <laughs>
[F]: <laughs>
[M]: <laughs>
[F]: <laughs>
[F]: yeah
[F]: <laughs>
[F]: like, we were talking about, you felt inept?
[F]: yes, feeling inadequate and then I wrote, yeah I told you I wrote this whole list of things that like I _should_ be doing more of but I'm not, but I was really mostly like pissed off about it because I like at that point I was like, I shouldn't have to be doing this, so I, I wrote it all down and I read it to [M]. He said--it was so sweet--he said 'yeah, I could probably write a list like that too.
[F]: aw
[F]: it was like a bonding moment.
[F]: yeah. <long pause> That is so cool.
[F]: <laughs>
[M]: <laughs>

[F]: are you sure there isn't like anything more you can tell me about that, because I want to know like every detail, but I mean, I don't want to, it doesn't--
[M]: well you had two lists
[F]: it started out with like a miscommunication where I thought he was criticizing me and I like got kind of like upset about it and then [M] felt bad and um, so I wrote in my journal and then we talked about it some more and then um--
[M]: because she had a--
[F]: I was like 'you want to hear it?' <teary voice> I was crying <laughs> 'do you want to hear my list?' <teary voice> <laughs>
[M]: you had a 'don't do enough' and then a 'do too much', right?
[F]: yeah, I know. yes. um, and then we briefly we talked about um, where we thought these ideas came from, i.e., parents, society <whispered dramatically>--that's like our favorite one--society makes us feel this way <whispered dramatically>.
[F]: yeah
[M]: <laughs>
[F]: and then I think I, [M] said I could write my own list I said 'yeah' and I like said a bunch of things that I assumed you <laughing>
[M]: <laughs>
[F]: <laughs>
[M]: <laughs>
[F]: no, but it was more of an empathic thing
[M]: yeah
[F]: it wasn't like a criticism, or it definitely wasn't a criticism, I think. They were like absurd things.

[F]: so, there's like two parts of this I want to get at. The first one is like, um, what impact do you think this had on your relationship at the time? And, then the second thing is like how did the journal function as a part of that interaction?
[M]: <laughs>
[F]: Actually, [M] and I hadn't thought about this, but it may have saved our asses. <laughs>
[M]: yeah, we, it was a bad, it was--
[F]: it was a little bit ugly
[M]: yeah, it was a little ugly
[F]: but I was upset and I just didn't want to talk about it, so I, I wrote, wrote it down and then it turned into like a way that we could bond
[M]: I think that, that was really good. ...
how did you record your diary/journal (e.g. in a paper journal, in a word doc, etc.; on your laptop, desktop, mobile device, etc.)?

when did you write in your diary/journal (e.g. whenever I had a spare moment, before bed, during morning coffee, etc.)?

did you use any special format? (e.g. did you make drawings? do you use paragraphs? do you start a new page for new entry?)

please fill in the following table about your diary/journal entries:

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<td>which people, if any, do you mention in each entry?</td>
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how did you record your diary/journal (e.g. in a paper journal, in a word doc, etc.; on your laptop, desktop, mobile device, etc.)?

*In a paper journal.*

when did you write in your diary/journal (e.g. whenever I had a spare moment, before bed, during morning coffee, etc.)?

*Before bed.*

did you use any special format? (e.g. did you make drawings? do you use paragraphs? do you start a new page for new entry?)

*Used paragraphs- block paragraphs. One entry per page. Musical lyrics one day.*

please fill in the following table about your diary/journal entries:

<table>
<thead>
<tr>
<th></th>
<th>Thur. 8/5 (?)</th>
<th>Fri. 8/6</th>
<th>Sat. 8/7</th>
<th>Sun. 8/8</th>
<th>8/9</th>
</tr>
</thead>
<tbody>
<tr>
<td>how many entries did you make?</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>about how long was each entry?</td>
<td>One page</td>
<td>One page</td>
<td>One paragraph</td>
<td>One page</td>
<td>One paragraph</td>
</tr>
<tr>
<td>which people, if any, do you mention in each entry?</td>
<td>My cats.</td>
<td>Hannah, Pierre &amp; Carol</td>
<td>Hannah, my dad</td>
<td>Hannah</td>
<td>Hannah and Carol</td>
</tr>
</tbody>
</table>
Example:

Paraphrase your diary/journal and indicate their spatial location. In other words, take up as many pages as your entry does. Include only as much detail as you are comfortable sharing.

Entry # 3, page 2     8/1/10

Apparently, there is more than one way to write a diary. I guess I just assumed it was for all the emotional, quirky thoughts that I would tell no one else. But, others use it more for documenting their daily affairs, as if it might keep them down amidst the bus of time; it’s a form of self-acknowledgment. The diary is written to the future self, to communicate with the future self rather than the present. It’s no doubt a bit of both, but to degrees. And, there are other types, I’m sure, but I can’t imagine them. Diary-keeping is not a natural tendency for me, as I said. Maybe I should try to read today. Highly, what a task. I can remember what happened (or can I? I think I have a terrible memory), but what a tedious thing.
Yearning for Intense Hike and Description of EE Up-Tight Feeling

8/13/10

Description of Days Activities

Description of Feeling of Presence

Description of Hike

Is Prede in Hannah

Shared
Study Reminder Take-home Sheet, given after Interview 2

Stacy will never ask you to see your “parts” so choose freely :) Thank you!

1. decide how you will share “parts” of your daily diary/journal
   *ideas*: copy “parts” on strips of paper and put them somewhere your partner will find them, send them in text messages to your partner, take pictures of them and send them in an email

2. make sure you can bring the “parts” with you to our last interview
   *ideas*: tuck them in your diary/journal, print them out, take your computer or cell phone with you

3. record the date of each “part”
   *ideas*: if you send a text message or email, it’s already recorded for you! Or, jot it on the back of your paper notes

4. share at least 3 “parts” from your latest entry with your partner every day

5. decide how you will share “parts” of your daily diary/journal
   *ideas*: copy “parts” on strips of paper and put them somewhere your partner will find them, send them in text messages to your partner, take pictures of them and send them in an email

6. record the date of each “part”
   *ideas*: if you send a text message or email, it’s already recorded for you! Or, jot it on the back of your paper notes

7. share at least 3 “parts” from your latest entry with your partner every day

8. decide how you will share “parts” of your daily diary/journal
   *ideas*: copy “parts” on strips of paper and put them somewhere your partner will find them, send them in text messages to your partner, take pictures of them and send them in an email

9. make sure you can bring the “parts” with you to our last interview
   *ideas*: tuck them in your diary/journal, print them out, take your computer or cell phone with you

10. Stacy will never ask you to see your “parts” so choose freely :) Thank you!

I found something unexpected in the mail today. It was two DVDs from Amazon: 500 Days of Summer and some murder mystery. I couldn’t remember if I had ordered them for myself or not. Then I caught a message on the screen: “Jason loves Stacy!” I was so tickled, Jason sent them to me as a surprise gift!
Couple Interview 3 Protocol

INDIVIDUALLY:

How was this week, what happened?

- What is shareable? Are there things that are important for you to hear from your partner regularly?
  - things upset when they don’t tell?
  - things happy when they do?

Tell me about this week of keeping your journal.

- was it hard to share? how did you share? what did you share?
  - are you sharing different things than you normally would? difference in phrasing?

- how did you decide what to share?

- did you change what you wrote in order to share? did you change the phrasing of what you shared?

- where did shared things end up, or what impact did they have? Where will they?

- difficulties? surprises? value?

- are there things you already do that provide similar value to you? [ritualizing? Is it a new “place”?]

- are you keeping your journal in the same place? journaling at the same time?

- afraid that it might get read? who shouldn’t read it?

- were you holding back content for any reason—privacy?

- what was the impact of writing in your journal this week? [reflecting? re-storying?]

- what do you think your partner thinks about journaling?

- why doesn’t your partner like it?

TOGETHER:

- are you going to keep keeping your journal? together?

- did you talk about the study or the journal with one another at all? What did you talk about?

- do you know what’s in each others’ journals?

- was the journal a source of connection? [re-connecting?]

- what was your experience of this study?

- Is Hannah a “smooth” one when it comes to him
  - example of love—would you get that in a journal? go to source when school
  - example of love—what happens next after? What are they doing?
  - how does your partner think you should? 
  - mutual validation? understanding?
Interview 3 Transcript Snippet, Couple 4

[F]: so, tell me about this week
[M]: oh, um--
[F]: or, 10 days
[M]: well it was, it was kinda funny because [F] and I ended up spending so much of it together. At least uh, we were, we were together from Thursday through Sunday, like basically, well Thursday morning through Sunday, like every minute of the day and um, and actually we didn't, I mean, I guess there were some minor conflicts but uh, I don't think, there weren't really any major conflicts. I think we both had, we had, there were some, we both had some different ideas about what we wanted to do when we went to the Olympic National Forest which was just great and there's kind of all kinds of hikes there and some of them are short and there's like hot springs at the end and some of them are longer and there's like a really great view at the end and they're harder and I was kind of all for the the longer harder great view at the end and [F] was all about the shorter hot springs at the end. And so we compromised but uh--

[F]: how did you compromise?
[M]: [F] basically said what she, she hinted what she wanted to do and I was like 'well, maybe we can do both' and of course we went to one and then we didn't have enough time to go to the other. But then I, I ended up, that was, that was fine. That was probably the closest thing to a compromise--

[F]: cool
[M]: but we, I mean, I don't know if we've. It's been a long time since we've spent that much time together.

[F]: really?
[M]: yeah. Because it was like, it was like 5 days. I don't think we've taken, I mean, even when you're, when you're um at home and you're on a break, you don't spend like--

[F]: every minute
[M]: yeah every minute together. But that, it worked out very well.

[F]: cool. So, maybe it was difficult finding things to share?
[M]: yeah, it was a little difficult because you know when we wrote in our journals so much of it was what we did that day. And, I think there was, when we shared there, sometimes there were, we did kind of, there was one instance where I think we revealed something to each other um about the, that we didn't know, that was kind of our, it specifically was related to the kind of conflict we had about where we wanted to go and I think we both kind of, because we, I kind of got a little, for whatever reason I kind of got, I felt like myself kind of close up and I don't know why, I I guess, and then, so I I kind of, I talked to, I wrote about that in the journal and then I talked with [F] about that. And she kinda shared what she had been thinking because at the time we both kind of were um--no one really wanted to ask the other person what they were saying, we we both just kind of read a lot of body language and took a lot, I guess more just took hints and so when we went back and kind of analyzed how we felt and talked to each other about it, that was kind of a novel thing, for sure.

[F]: hm, cool. Was it the same thing as like last week where there was a literal reading from the journal, or was it just that the journal kind of primed the conversation?
[M]: I think the journal kind of primed--there's um, some, I mean because especially how we write in the journal is I think we do it at the end of the day and a lot of times--and I remember this even when I was in high school and you'd write in the journal and sometimes you'd be really surprised at the kind of insight you would have into your--you're just kind of writing and then you you would write something, and it might be about something like this or kind of silly, you know, and then you'd write something and you'd say that's kind of a profound insight into my own behavior or the consequences of my behavior or something. And it was, it was kind of like that where it was, I was writing and then I was like, oh, well [F], I I felt like this, it did these things for me and I and I kinda listed things and ah, that's not, I mean, I would never have thought about that because also I just I would have forgotten about it or distracted myself or something--

[F]: <laughs> yeah. So, like last time, I want to know every detail <laughs>. So, um, maybe you can tell me about how--was there distance between the kind of conflict you guys had and when you wrote in the journal?
1. when did you share your journal?

2. how did you share your journal?

3. please fill in the following table about your diary/journal entries:

<table>
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<tr>
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<td>8/11</td>
<td>8/13</td>
<td>8/14</td>
<td>8/15</td>
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<tr>
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<td>1</td>
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</tr>
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<td>1 1/2 pgs.</td>
<td>1 2/5 pgs.</td>
<td></td>
</tr>
<tr>
<td>People</td>
<td>Jeff, Dan, Carrie, Natalie, Molly</td>
<td>Me, Jeff</td>
<td>Hannah, Me</td>
<td>Hannah, Me</td>
<td>Alex, Dave, Me</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>8/17</th>
<th>8/12</th>
<th>8/18</th>
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<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Size</td>
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<tr>
<td>People</td>
<td>Hannah</td>
<td>Hannah</td>
<td>Jeff, Dan, Natalie, Molly, Hannah, Me</td>
<td>Hannah</td>
</tr>
</tbody>
</table>
Journal Summary Sheet, Interview 3, Couple 4, Male Participant