

QUT Digital Repository:
<http://eprints.qut.edu.au/>



Ritchie, Stephen M. and Rigano, Donna L. (2007) Writing together metaphorically and bodily side-by-side: An inquiry into collaborative academic writing. *Reflective Practice* 8(1):pp. 123-135.

© Copyright 2007 Taylor & Francis

This is an electronic version of an article published in [Reflective Practice 8(1):pp. 123-135.]. [Reflective Practice] is available online at informaworldTM with <http://www.tandf.co.uk/journals/titles/14623943.asp>

Revised Manuscript for:

Reflective Practice

**WRITING TOGETHER METAPHORICALLY AND BODILY SIDE-BY-SIDE:
AN INQUIRY INTO COLLABORATIVE ACADEMIC WRITING**

Stephen M. Ritchie¹ & Donna L. Rigano²

1 Queensland University of Technology

2 James Cook University

Correspondence address:

Associate Professor Stephen M. Ritchie
School of Mathematics, Science & Technology Education
Queensland University of Technology
Victoria Park Road
Kelvin Grove, Q'ld, 4059
Australia
s.ritchie@qut.edu.au
+61 7 38643332

Stephen M. Ritchie is an Associate Professor in Science Education at Queensland University of Technology, Brisbane, Australia. Steve co-edited *Metaphor and analogy in science education* (2006, Springer) with Peter Aubusson and Allan Harrison. He is also interested in curriculum leadership, science teacher education, and the classroom co-creation of eco-mysteries.

Running Head: Collaborative writing
File: SRRevRPWritingtogether01.doc

Writing together metaphorically and bodily side-by-side: an inquiry into collaborative academic writing

Abstract

Research discourses are permeated by metaphors. As well, metaphors can be used to create new possibilities for action. In this paper, we describe our attempt to apply particular metaphors for writing research gleaned from our study of the research practices of 24 education researchers from Australia and North America. With reference to the metaphor: *writing as a piano duet*, for example, we explore the experience of writing side-by-side with each other for the first time. Our reflexive account not only deals with this writing experience, but also discusses potential benefits and shortcomings of this approach to writing and the application of metaphors to guide research practice. Writing in this way is indicative of the metaphor *writing as research*.

Key words: Collaboration, Academic Writing, Metaphor, Solidarity, Emotional Energy

Introduction

We wrote this article about collaborative academic writing together in two parts. In the first part we wrote about our real-time experience of writing together, bodily side-by-side for the first time. In this part we attempted to write in a way that was informed by our study of collaborative research relations (see Ritchie & Rigano, 2002, in press) where we had heard of particular metaphors for writing together that we considered could have wider application in academic writing and implications for our collaborative writing in particular. The second smaller part, including this brief introduction and various iterations of the entire paper, was written after the original text. We too wrote this together but unlike part 1, we wrote this together metaphorically rather than bodily co-present. More specifically, we wrote this part in the lead-writing tradition of our previous writing practices where one of us (Steve, in this case) would take the lead role in writing the first draft. This was nevertheless still writing together, because the text was written as if we had composed it together side-by-side. We did not use our individual voices but rather what we had imagined as our collective or joint voice.

Researching our writing practice together involved both real-time reflexivity and reflection on the written text after and before our writing sessions. The metaphor *writing as research* then captures how we perceived our work together in constructing this text, as we now begin to illustrate.

Part 1: Bodily co-present (or side-by-side) collaborative writing

A range of interesting metaphors for writing research was identified in our interview study of the research practices of 24 education researchers (Ritchie & Rigano, in press). In particular, one researcher used the *piano duet* metaphor to describe the side-by-side creation of manuscripts by collaborative researchers. Because this metaphor described a very different experience from our own writing practices we wanted to take up the challenge of exploring for ourselves the potential advantages of such an approach. We were interested in whether this new practice resulted in improvements in our productivity and the quality of our writing. As well, we were interested in whether reference to the metaphor guided any shift in our writing practice. On a lighter note, we thought that experimenting with a different writing process could be fun.

We first heard of the *piano duet* metaphor in our interviews with Trina¹. Trina was an associate professor in education at a North American university. Interestingly Trina declared that she had not written a sole-authored paper for publication and that she typically wrote side-by-side with her collaborator(s). In describing her writing practice with Kristin, a colleague at another North American university, Trina explained:

Two of us would sit like you play a duet at the piano and one person would talk and the other person would be writing. And the other person would say, 'wait, I've got an idea.' So I'd move away from the keyboard and they would write. And that's how my collaborative writing has happened in three different instances, in different groups... It was like journaling I guess. So we were taking our live conversation and then capturing it while it was fresh and exciting ...

Writing side-by-side was an alien experience for us, as it was for most of the researchers we interviewed in our study. When Steve first heard of this practice during

¹ Pseudonyms are used for the researchers we interviewed in our study of researcher practices.

the interviews he struggled with the image of him writing side-by-side with another. For example, he reacted to Trina's revelation of this practice as follows: 'I thought I'd be too self-conscious of the bodily presence of another beside me to be able to focus on writing.' In contrast Donna (second listed author) was intrigued by the possibility of capturing one's thoughts as they were developing. Our previous writing practices were better characterized in terms of either turn-writing or lead-writing. The researchers in our study also identified these practices.

Turn-writing was described as a cooperative rather than a collaborative division of labor where contributors negotiated different sections to write before usually the first listed author merged the different sections and voices. For example, one researcher suggested 'Once we got the structure mapped out, and that was through numerous meetings and sitting down with paper [and pen] just dividing up and saying, "Okay, you take the lead on this section and I'll take the lead on this section"' (Ryan). Similarly, another researcher recounted that 'we'd talk for a bit then we'd go off and write and we'd write different chunks and bring them back together and talk some more' (Scott).

Lead-writing involved one person taking responsibility for writing the first draft of a paper. The lead would then be rotated for subsequent papers on the project so that each team member would have the chance of being listed first as an author within a set of papers. This seemed to be a well established 'rule of thumb' for the collaborators we interviewed.

When writing as a piano duet, the bulk of the writing by Trina and Kristin would occur in two-week blocks. According to Kristin much of the reading and some data analysis would be done before the writing sessions. Even though Trina and Kristin forged

a very productive collaboration by writing together side-by-side up to five or six papers, they both acknowledged that not all researchers could work this way. When Kristin tried the same practice with another research team (i.e. with Wesley and Zac), they had to revert to turn-writing or lead-writing practices largely due to Wesley's discomfort with writing side-by-side. Wesley admitted that he could not cope with this dynamic because he needed more time alone to think through the issues. As he explained: 'What bothers me the most is there's a sense that you have to make decisions so quickly. [When] you're together there's pressure to perform or to get the job done and I feel that I need more time to work out ideas. Maybe it's just my own inability to think on my feet.' This was the same reason offered by Trina to explain why the 'piano duet' style of writing failed for some of her other collaborators.

While we were either intrigued or skeptical about writing together in this way we were curious about the potential outcomes from such practice. Also we were inquisitive about whether the application of writing metaphors could be implemented consciously by us in our writing. The literature provided some insights as to the potential success of this strategy.

Recent discussions of research practices inform us that metaphors permeate research discourses (Brew, 2000) and that metaphors can guide or influence our practice (Alvesson & Sköldberg, 2000; Lakoff & Johnson, 1980). Despite arguments to suggest that conceptual metaphor reveals the motivation for cognitive structuring in bodily experience, some scholars have critiqued metaphoric representation in general (e.g., Murphy, 1996, 1997) and specific metaphors for writing in particular (e.g., Matsuda & Jablonski, 2000; Turner, 1993). Several metaphors for research have been canvassed,

critiqued, and accepted or rejected. For example, the metaphor *research as mushroom picking* creates an image of the researcher collecting data, and codifying and classifying the data – an unproductive metaphor for researchers who do not wish to reify empirical processes (Alvesson & Sköldbberg, 2000). *Research as discovery*, *research as a fusion of horizons*, and *research as authorship* are some other examples of metaphors for research identified by Alvesson and Sköldbberg (2000, p. 284), who argued the case for researchers to generate multiple metaphors to influence their practice: ‘the point is that having access to several different metaphors facilitates offering various comprehensive images of research, thus reducing the risk of latching on to a one-sided favorite conception.’ While these authors were arguing for the application of metaphors to research practice, the potential power for metaphors in general to influence our lives stems from the work by Lakoff and Johnson (1980, p. 156) who argued that:

Metaphors may create realities for us, especially social realities. A metaphor may thus be a guide for future action. Such actions will, of course, fit the metaphor. This will, in turn, reinforce the power of the metaphor to make experience coherent. In this sense metaphors can be self-fulfilling prophecies.

Historically academic institutions have been ‘places of isolation and autonomy where individualism rather than joint work is rewarded’ (Kochan & Mullen, 2001, p. 4). In this context it is unsurprising that academic writing has been viewed as a solitary pursuit. So when we picture a writer, we picture someone sitting alone at a desk (Cronin, 2001). Recently, there has been an increasing trend for researchers to collaborate in research writing (Austin, 2001; Milem, Sherlin, & Irwin, 2001; Phelan, Anderson, & Bourke, 2000). For example, in their bibliometric analysis of Australian educational research, Phelan et al. (2000, p. 635) reported that ‘most universities undertake a substantial

amount of collaboration and, in general, the amount of collaboration has jumped substantially in recent years.’ Yet given the frequent reports of turn-writing and lead-writing practices in our study, it is possible that very few researchers write together side-by-side. Can metaphors like the *piano duet* metaphor be useful to collaborators in coauthoring research reports? Even critics of metaphoric representation acknowledge that such an empirical question warrants attention (see Murphy, 1997).

The purpose of part 1 of this paper was to explore the application of the *piano duet* metaphor for our research-writing practices. As we articulate our experience in co-writing using the *piano duet* metaphor researchers might gain greater insight into writing collaboratively.

Methods

In writing this account of our writing experience we adopted a phenomenological stance. From this position writing is a reflexive activity (van Manen, 1990). Writing the text subjectifies our understandings of this experience but at the same time the printed text itself objectifies our experience. In this way ‘writing plays the inner against the outer, the subjective self against the objective self, the ideal against the real’ (van Manen, 1990, p. 129).

Telling a story of our experience writing side-by-side constitutes a fundamental linguistic, psychological, cultural, and philosophical framework for our attempts to come to terms with the nature and conditions of our research partnership (cf. Brockmeier & Harré, 1997). The stories we tell are both models of the world and models of the self. As

Brockmeier and Harré (1997, p. 279) argued, 'It is through our stories that we construct ourselves as part of our world.'

Understanding of self and other is central to knowing and being within social relationships according to Rorty (1979). Constructing our story together has the potential to transform our understanding of self and other in this writing/research partnership (cf. Rex, Murnen, Hobbs & McEachen, 2002). As Bakhtin (1981) theorized, the dialogic properties of our interactional oral and written discourse offer transformative power in this culture-constitutive and self-reflexive process.

Metaphor in Action

We began co-writing our story in the form of a set of responses to questions we generated during the conceptualization of this part of the article.

1. What Was Our Image Of The Metaphor In Practice? Initially the *piano duet* metaphor created for us a shared image of two pianists sitting side-by-side at the keyboard. At the time of performance they present their own subjective interpretation of the musical score crafted through hours of practice. The musical score however is an objectified representation of the composer's creativity. In our work together as coauthors the interview data and the literature on writing were the objects of our initial interpretation and discussion. As we scrutinized our writing practices through writing together the introductory pages of this paper we became aware of nuances and dynamics not adequately described by our initial image of the metaphor. Our writing is not a performance; it is not the end product of hours of practice. We are composing rather than

performing, fine tuning the composition progressively as we interact with the text. In other words, as we replay our provisional text, we critically evaluate it by checking the words against our understanding of our practice; that is, checking whether the music we create is harmonious. What we do as we write is more like an improvised jazz session, where an initial theme is developed and extemporized by all performers depending on their own unique musical backgrounds. It is the process of creating the performance that is satisfying, not just the end product. There is pleasure in the playing and in the audience response to that playing.

Even before we started writing this paper we became aware of our different views of the image of the *piano duet* metaphor. Steve thought that it was not an accurate description of what we would be doing because when performing a duet, we are just performing something that someone else has created, whereas writing is the creative process itself. Donna disagreed because she saw the performance of the duet as a creative process where we were interpreting the music and creating a unique performance – if two other people sat down to play the same duet they would give a different interpretation of the same music. As we discussed our interpretations of the *piano duet* metaphor a shared image of an improvised jazz session became a closer representation of our side-by-side writing practices. The improvised jazz session metaphor, however, also became an object of interpretation and discussion. This metaphor too breaks down under scrutiny, like metaphors generally (see Aubusson, Harrison & Ritchie, 2006), because readers/audience react asynchronously to authors, and this prevents on-the-spot changes to the text unlike improvised compositions by jazz musicians.

The process by which we negotiated and refined the *piano duet* metaphor is an example of how we work together in the interpretive zone (Wasser & Bresler, 1996). In the interpretive zone ‘researchers bring together their different kinds of knowledge, experience, and beliefs to forge new meanings through the process of joint inquiry in which they are engaged’ (p. 13). Generally in our research partnership, one will express an opinion on an issue in the data, and the other will add to that opinion, providing another layer of understanding to the original interpretation. We each come to understand the other’s perspective or point of view as our exchanges progress. This process doesn’t always lead to consensus nor does one view necessarily win favor. Typically our initial articulated ideas blend to form one (hopefully) coherent ensemble of ideas. Sometimes when those initial ideas are not consistent with the vision we have come to share then either of us will rethink how attached we are to that idea. If we are not particularly attached to the idea then it will be discarded, if it was ‘good’ but not part of the focus of the paper then it will be shelved for later reference, and if we felt strongly attached to it we would reshape the idea until we were both satisfied with the form in which it would appear in the text.

2. Did We Need Time Out For Reflection? Our writing project involved scheduling weekly three-hour sessions where we sat side-by-side at the computer constructing text. While composing the text our practice resembled our articulation of the improvised jazz session. During these dynamic sessions we recounted our lived experiences as coauthors and teased out the main ideas to pursue further in composing text – an expression of our experiences in a unified authorial voice. Between writing sessions the text became an

object of our individual reflections to the extent that the first half hour of each session was spent on refining and augmenting previously constructed text. Having that time out provided us with the opportunity to reflect on the text and this new writing experience. On those occasions when either of us had not undertaken reflection on the text or familiarized ourselves with the related literature our writing productivity was noticeably inferior to those times when we came to the writing sessions prepared.

3. Were There Barriers To Overcome Or Negotiate? As we identified earlier, Steve thought that he might be too self-conscious to write side-by-side with another. To his surprise this new writing experience with Donna did not elevate his self-consciousness. There are possibly several explanations for this outcome. First, our long-standing research partnership has involved a history of sharing ideas and experiences that possibly make each of us more comfortable writing side-by-side with each other. Novice coauthors might nevertheless experience an uneasy self-consciousness in writing side-by-side.

Second, the constraint of limited blocks of time for Donna to meet with Steve meant that our time together would need to be highly task oriented. Steve recalled his previous experiences as a student working in groups, where he became sidetracked by social and personal interactions that interfered with productivity. Accordingly, he feared that writing side-by-side would lead to similar distractions that he experienced in group-work. That these fears were not realized in practice might be attributed to the pressure to produce work within restricted periods.

Third, until now Donna had assumed the dual role of co-composer and typist while Steve restricted his attention to thinking aloud and critiquing the text as it was typed. We had previously recognized that Donna had superior touch-typing skills and decided that Donna should type most text. Drawing attention away from self and Steve's less fluent typing skills removed the potential for accentuating our different skills and refocused attention on the created text. By retreating from the central role of typing the text during this writing activity, Steve thereby avoided potential for becoming self-conscious. We put this hypothesis to the test by quickly trading places. Once again Steve was surprised; this time at his ability to type text directly in the presence of Donna. On the other hand Donna was less comfortable in the less active role. From Donna's perspective, she did not know what Steve was thinking until it appeared on the screen – minimizing her role as coauthor. Also, Donna was reluctant to inject her ideas as Steve was typing because she did not want to disrupt his flow of text composition. Subsequently, Donna became frustrated at the amount of waiting around she had to endure before she could provide input. Donna's new role required some adjustment for her as she learnt new ways to provide input.

It was a revelation to each of us that we both found it easier to compose text in the role of the typist rather than thinking aloud and coalescing ideas in the form of joint text. The computer became a tool for thinking, writing and talking; that is, it became a *think pad*. (IBM market a range of computer laptops under the trademark of ThinkPad®, possibly in recognition of this tool-for-thinking role of computers). As each of us took a turn using the keyboard, the words created on the screen talked back to us evoking more text during the typing with such spontaneity that thinking aloud was difficult to sustain.

On the other hand, in the less active non-typing role, we both experienced longer periods where we could focus on critiquing the emerging text. Keyboarding was a powerful role because the keyboarder exercised control of the *think pad* – in essence, becoming the gatekeeper of text composition. This contrasts with the more traditional images and hierarchical roles of dictat(e/o)r and typist.

4. Was It Productive? One of the arguments advanced for the promotion of collaboration in research is the potential for enhanced productivity (e.g., Phelan et al., 2000). Turn-writing and lead-writing strategies have helped collaborators generate multiple papers economically. Writing side-by-side for us is too new an experience to gauge whether our productivity can be improved. However, given the difficulties in scheduling chunks of time where we can write together side-by-side, it is unlikely that this will become our predominant writing style. What this experience has demonstrated to us is that we can write in a focused manner together. Furthermore, the text we create together is substantially more reflexive than otherwise possible. The extent to which the *piano duet* metaphor guided our writing and led to greater productivity is now considered.

5. Was It The Metaphor Or The Image That Guided Our Practice? The *piano duet* metaphor was the initial stimulus that brought us together to consider a new writing practice. In the initial phase we were composing text in a think aloud / type / critique mode without reference to the metaphor. Midway through this writing project we reflected on our side-by-side writing practice in relation to our understanding of the *piano*

duet metaphor, which prompted us to recognize the mismatch between our practice and our initial image of the metaphor. These discussions led to the creation of our *impromptu jazz ensemble* and *think pad* metaphors. Role switching and subsequent reflections evoked richer discussions about our experiences as coauthors that, in turn, led to the identification of new possibilities for our co-writing practices. As we have now experienced, storytelling has pedagogical power to compel transformation through the ‘constructions that tellers make of themselves, others, and “realities”’ (Rex et al., 2002, p. 767). As well, our story might also be useful to other collaborators who are interested in scrutinizing their practice and creating a different dimension to their relationship.

Changing Practice: Synchronized Keyboarding

Earlier, we described how keyboarding was a powerful act for each of us. The coauthor at the keyboard was the composer of text while the other was restricted to think aloud / critique mode until roles were interchanged. At this point we had been working with a single keyboard that meant we physically had to move the keyboard back and forth between coauthors. After becoming aware of the more powerful role of keyboarding, we set up our computer with two keyboards so that role reversals were more seamless and less competitive – ensuring a more even power distribution between us. We both found that possession of our own keyboard gave us direct access to the text without competing with each other for keyboarding time. We were no longer stifled by having to wait for our turn because each of us had the think pad at our fingertips. Now that we both had equal access to the think pad we shared text composition and gate-keeping roles more evenly.

In terms of the *piano duet* metaphor one part was not drowning the other out (i.e., creating an unbalanced ensemble) nor was one trying to knock the other off the stool (i.e., taking centre-stage as soloist). In collaborations involving researchers of different status (e.g., professor and graduate student), writing side-by-side as a piano duet with two keyboards could have the dual role of distributing power more equitably and of scaffolding the writing process.

Conclusion to Part 1

As we progressed through our writing project we modified the original *piano duet* metaphor to the *improvised jazz session* metaphor that provided a better description of our writing partnership, yet neither guided our writing practice together as recommended by Alvesson and Sköldbberg (2000). Rather, the metaphors became reflective devices for our discussions and subsequent actions. These discussions helped us to create new writing possibilities. Even though our research-writing practice was not guided by the *piano duet* metaphor, we hope that our description of our attempt of applying the metaphor in practice might provide insights into new writing possibilities for both novice and experienced researchers, and promote *writing as research*.

While this project worked for us as a long-standing partnership, the question remains whether other teams can also write side-by-side with reference to metaphors like the *piano-duet*. We know that Wesley experienced difficulty despite yearning for sustaining synergy throughout projects with Kristin and Zac. Perhaps Wesley set unrealistic expectations of what could be achieved at writing sessions with his peers. If Wesley attempted the intermediate process of capturing his ideas in text form as they were

developing within the interpretive zone rather than waiting until they were fully formed, then his side-by-side writing experience might have been more successful. In research teams involving different status researchers, writing side-by-side might provide important scaffolding for novice researchers in the preparation of academic text. Extended opportunities to write in this way in mentoring relationships might lead to the development of partnerships that are 'based on mutual respect, admiration, and encouragement' where researchers become partners in learning (Saltiel, 1998, p. 9).

What we thought would challenge our skills and perhaps even strain our relationship, has turned out as an enjoyable and intellectually satisfying project. This experience gives us encouragement to write side-by-side in subsequent projects where it can be scheduled. We now know that we do not need to refer to writing metaphors because through the project we have fine-tuned such skills as writing together with two keyboards and developed a culture of thinking and writing together side-by-side.

Part 2: Writing together metaphorically

Subsequent to writing part 1 of this article together we have completed other research projects, none of which were written side-by-side, and read more widely about collaborative-research relationships. This second part of the article gives us the opportunity to enhance our first part with not only what we have learned from more recent literature, but also our reflections of our writing practices now as well as forecast the possibilities that may present in the future. Accordingly, this article was constructed using both side-by-side and lead-writing practices.

We presented our experience of writing side-by-side (i.e., part 1) to colleagues at a research conference in education. While their reactions mostly confirmed for us that researchers predominantly write together in one of the three modes presented, one researcher claimed that he had coauthored papers in a relatively large team (i.e., five researchers) where the papers had been written from an amalgam of writing practices involving all three practices. Following these discussions, we accept that it is possible to construct a paper in such a way, particularly in larger teams where multiple dyads, for example, might write side-by-side assigned chunks of text together, where these chunks (turn-writing) are then ‘glued’ together by a lead writer who takes responsibility for editing and distributing reiterations of the text to team members for consensus. To what extent then can alternative metaphors influence writing practices in such teams?

Influenced by Lakoff & Johnson (1980), several education researchers, notably Tobin (1990), proposed that teachers could purposefully change their classroom practices by referring to particular metaphors. More recently, Tobin (2006) retreated from his earlier individualistic position to adopt a broader socio-cultural perspective of teaching. Despite this shift, Tobin still argues that metaphors could become discussion starters, so that teachers might talk about their practices with reference to the metaphors rather than using them as guides for action. Similarly, the same argument could be extended to academic writing practices. In our own case, the metaphor of *piano duet* was used in this way rather than a guide to change our practice. As we identified how writing together was different from the image conveyed by the metaphor, we articulated a different metaphor that still imperfectly represented, but not guided, our practice. In this way, research writing might be seen better as a refractory process involving the interaction between metaphors at

different levels rather than the conscious application of a specific metaphor (Alvesson & Sköldbberg, 2000). So it would seem that researchers might be encouraged to refer to a range of metaphors in discussions with collaborators from which similarities to and differences from their actual and possible writing practices might be drawn.

Writing together side-by-side was a highly charged emotional and intellectual experience for both of us. We attributed this energized dynamic to what Saltiel (1998) referred to as ‘synergy’ in a collaborative relationship, where the more intense or powerful that experience, the more research partners could connect intellectually. We can now make better connections to the sociological literature and relate this to our experience writing together.

Collins’ (2004) sociological theory of interaction ritual chains linked successful interaction rituals to outcomes like solidarity and emotional energy. Solidarity here refers to a sense of membership or belonging to a group where ‘our sense of solidarity is strongest when those with whom solidarity is expressed are thought of as “one of us”’ as opposed to ‘one of them’ (Rorty, 1989, p. 191). Collins (2004) argued that interaction rituals have four ingredients that feed back upon each other. These are: group assembly (bodily presence), barrier to outsiders, mutual focus of attention and shared mood or emotional experience, and the latter two variables reinforce each other. More specifically, ‘as the persons become more tightly focused on their common activity, more aware of what each other is doing and feeling, and more aware of each other’s awareness, they experience their shared emotion more intensely, as it comes to dominate their awareness’ (p. 48). Writing side-by-side establishes bodily presence, mutual focus, and affords the possibility for a shared emotional experience.

Generally, successful interactions between participants lead to the production of positive emotional energy or ‘a feeling of confidence, elation, strength, enthusiasm, and initiative in taking action’ (Collins, 2004, p. 49) in individuals and collective effervescence from the group. According to Collins (2004, p. 39), ‘this feeling of emotional energy has a powerful motivating effect upon the individual; whoever has experienced this kind of moment wants to repeat it.’ Saltiel (1998) also recognized how collaborators can co-create an energized dynamic during intense periods of working/writing together. He argued that ‘the synergistic quality inherent in the (collaborative) relationship creates a relationship that is deeply valued as part of the endeavor’ (p. 10). This was the energized dynamic and sense of solidarity that grew out of our experience together writing side-by-side.

The extent to which solidarity and emotional mood lasts depends on the transformation of short-term emotions into long-term emotions, usually through storage in the form of symbols (Collins, 2004). In relation to collaborative writing, the products of such writing, publications, for example, become the symbols of the emotional energy and solidarity experienced. Re-reading such publications, noting a citation to the document in another publication, or reviewing a related study might invoke emotional memories or meanings that influence interactions and personal identities in future collaborations (Collins, 2004, p. 81). Furthermore, the effects of interactions in collaborations are cumulative in that individuals who have taken part in successful collaborative relationships ‘develop a taste for more ... solidarity of the same sort, and are motivated to repeat’ (Collins, 2004, p. 149) the experience. It would then seem a fruitful investment for experienced researchers to encourage novice researchers to join

with them in successful writing projects that would materialize not only in terms of publications, but also an eagerness to experience the same sense of emotional energy and solidarity in subsequent collaborations, thus reinforcing the rewards for participating in the practices of academic communities.

Our writing experience together has been emotionally rewarding, reinforcing our solidarity and desire to continue to write together. We no longer work from the same university and this makes side-by-side writing difficult to schedule. Nevertheless, we each can recall meaningful intellectual and emotional spaces of being together that in turn help us to re-construct these spaces metaphorically. As we enter these metaphorical spaces as we write together we write as if the other was beside us again where we can play out possible reactions of the other in real-time as we construct the text for the other's actual reading and response.

References

- Alvesson, M. & Sköldberg, K. (2000) *Reflexive methodology. New vistas for qualitative research* (London, Sage Publications).
- Aubusson, P. J., Harrison, A. G. & Ritchie, S. M. (Eds) (2006) *Metaphor and analogy in science education* (Dordrecht, The Netherlands, Springer).
- Austin, A. E. (2001) Reviewing the literature on scholarly collaboration: how we can understand collaboration among academic couples, in: E. G. Creamer & Associates *Working equal. Academic couples as collaborators* (New York, RoutledgeFalmer), 130-145.

- Bakhtin, M. M. (1981) *The dialogic imagination: four essays by M. M. Bakhtin*. (M. Holquist, Ed.; C. Emerson & M. Holquist, Trans.) (Austin, TX, University of Texas Press).
- Brew, A. (2001) *The nature of research. Inquiry in academic contexts* (London, RoutledgeFalmer).
- Brockmeier, J. & Harré, R. (1997) Narrative: problems and promises of an alternative paradigm, *Research on Language and Social Interaction*, 30(4), 263-283.
- Collins, R. (2004) *Interaction ritual chains* (Princeton, NJ, Princeton University Press).
- Connelly, F. M. & Clandinin, D. J. (1994) Telling teaching stories, *Teacher Education Quarterly*, 21(1), 145-158.
- Cronin, B. (2001) Hyperauthorship: a postmodern perversion or evidence of a structural shift in scholarly communication practices? *Journal of the American Society for Information Science and Technology*, 52(7), 558-569.
- Kochan, F. K. & Mullen, C. A. (2001) Collaborative authorship: reflections on a briar patch of twisted brambles, *Teachers College Record*. Available online at: <http://www.tcrecord.org/Content.asp?ContentID-10661> (accessed 26 May 2003).
- Lakoff, G. & Johnson, M. (1980) *Metaphors we live by* (Chicago, The University of Chicago Press).
- Matsuda, P. K. & Janlonski, J. (2000) Beyond the L2 metaphor: towards a mutually transformative model of ESL/WAC collaboration, *Academic.Writing*, 1. Available online at: <http://pubpages.unh.edu/~pmatsuda/pubs/aw2000.html> (accessed 20 May 2006).

- Milem, J. F., Sherlin, J. & Irwin, L. (2001) The importance of collegial networks to college and university faculty, in: E. G. Creamer & Associates *Working equal. Academic couples as collaborators* (New York, RoutledgeFalmer), 146-166.
- Murphy, G. L. (1996) On metaphoric representation. *Cognition*, 60, 173-204.
- Murphy, G. L. (1997) Reasons to doubt the present evidence for metaphoric representation. *Cognition*, 62, 99-108.
- Phelan, T., Anderson, D. S. & Bourke, P. (2000) Educational research in Australia: a bibliometric analysis, in: *The impact of educational research*. (Canberra, ACT, Department of Education, Training and Youth Affairs), 573-670.
- Rex, L., Murnen, T. J., Hobbs, J. & McEachen, D. (2002) Teachers' pedagogical stories and the shaping of classroom participation: 'The Dancer' and 'Graveyard Shift at the 7-11', *American Educational Research Journal*, 39(3), 765-796.
- Ritchie, S. M., & Rigano, D. L. (2002, April) Collaborative relationships in qualitative research. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, USA.
- Ritchie, S. M., & Rigano, D. L. (in press) Solidarity through research collaboration, *International Journal of Qualitative Studies in Education*.
- Rorty, R. (1979) *Philosophy and the mirror of nature* (Princeton, NJ, Princeton University Press).
- Rorty, R. (1989) *Contingency, irony and solidarity* (Cambridge, Cambridge University Press).

Saltiel, I. M. (1998) Defining collaborative partnerships, *New Directions for Adult and Continuing Education*, 79, 5-11.

Tobin, K. (1990) Changing metaphors and beliefs: a master switch for teaching? *Theory into Practice*, 29(2), 122-127.

Tobin, K. (2006) How do science teachers teach the way they do and how can they improve practice? In: P.J. Aubusson, A.G. Harrison & S.M. Ritchie (Eds) *Metaphor and analogy in science education* (Dordrecht, The Netherlands, Springer), 155-164.

Turner, J. (1993) Falling into place: conceptual metaphor and western academic culture, *Intercultural Communication Studies*, III(1), 49-61.

Van Manen, M. (1990) *Researching lived experience: human science for an action sensitive pedagogy* (London, Ontario, The Althouse Press).

Wasser, J. D. & Bresler, L. (1996) Working in the interpretive zone: conceptualizing collaboration in qualitative research teams, *Educational Researcher*, 25(5), 5-15.