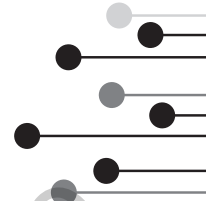


Creating Collaborative Space and Research Teams



What's Coming?

- A Typology of Cross-Disciplinary Research
- A Collaborative Team Story
- Creating Collaborative Space and Research Teams
 - Developing Collaborative Research Relationships
- Barriers to Collaborative Process
- Clearing the Flow for Collaborative Conversations
- Summary
- Questions at the Edge

A powerful and dominating army with a vast arsenal approaches a small, lightly equipped community protected only by a wall. A messenger for the army is sent to the gate and demands surrender; the messenger cannot imagine any feasible alternatives. Behind the wall, in a language unknown to the forces outside, the tiny community grieves, talks, and envisions new possibilities. With refreshed faith and hope, they turn and go to the wall and, using a common language, converse with the overshadowing force. Through the resultant dialogue, the community is preserved and those both outside and inside the wall are transformed.

Do we have your attention and maybe even some anger and distress? Did we really need to invoke a potentially violent, worn-out, polarizing military metaphor, especially as the start of a chapter on collaboration? Yes, this once, because it highlights the importance and seriousness of doing qualitative research with integrity and names three different conversations occurring. This narrative is the story of Jerusalem under siege by the Assyrians in 701 BCE as told in 2 Kings 18–19. Walter Brueggemann, an Old Testament scholar and hermeneutist, highlights two places where the drama unfolds (1991). There is the “conversation behind the wall” and the “conversation at the wall” (1991, pp. 41–42). There is also the conversation outside the wall. For qualitative researchers, outside the wall, within the “kingdom” of the biomedical paradigm and its supporting institutions, a profusion of powerful conversations proliferates through clinical journals, in

academic medical centers and health systems, and among the overseers of the research banks at the National Institutes of Health (NIH).

Behind the wall huddles small groups of qualitative and mixed-methods investigators. They earnestly discuss how to make sense of seemingly paradoxical interview and observational data from a sample of eight primary care practices. Hoping to publish their findings in a high impact medical journal, they are keenly aware that the biomedical paradigm views with suspicion studies where there are no numbers and only small sample sizes, where context is left uncontrolled, where research design changes in the middle of the study, where research questions have more power than design considerations, and where the results don't generalize to the population. Yet these are all features of much excellent qualitative research. This conversation behind the wall concerns how to preserve research integrity in the presence of a powerful paradigm. The conversation remembers how to design good qualitative research in a mixed-methods world, how to do good qualitative analysis and interpretation. It nourishes honest reflexivity and promotes the building of a robust and resilient cross-disciplinary and diverse collaboration. Behind the wall, this small research team develops a language and approach for the conversation at the wall that enables procuring additional funding and new grants, disseminating and publishing results, and even getting promoted while preserving both personal and research integrity.

A foundational assumption undergirds this chapter: doing excellent qualitative research in a mixed-methods world requires a team, and, ideally, one that is diverse and cross-disciplinary. We celebrate the end of the age of the lone researcher. None of us can fully escape our worldview, our unconscious biases, nor fully evade the subliminal messages of our dominant culture (see Chapter 3). Thus, the critical importance in creating an emotionally safe collaborative space for nurturing a cross-disciplinary team that performs like a masterful improvisational jazz ensemble. The need for research teams stems from a number of interrelated changes that have occurred in primary care and clinical research over the past several decades resulting in research questions and collaborations that significantly diverge from much of traditional biomedical research (Miller & Crabtree, 2005). While the ensuing years have seen tremendous development and growth in qualitative methods in clinical research, much of it remains limited to simple focus group or depth interview studies and, sometimes, case studies. In many of these studies, there appears to be a limited grasp of the underpinnings of qualitative research, limited reflexivity, and somewhat superficial analysis and interpretation. Clinical researchers do not need to master all of the finer nuances of qualitative research, but they do need to have access to someone who does and know how to effectively converse with them, that is, have them bring their expertise into the conversation.

For clinical researchers, both funding and research design are often stymied by thinking about potential research problems in the language of clinical trials and epidemiology, especially in terms of individual illnesses and disease models. This larger conversation outside the wall has produced solutions of limited utility to the

delivery of health care and healthcare policy. Like Humpty Dumpty, it cannot be assumed that if the “egg of knowledge” is broken into enough pieces it can be put together again. It is becoming more and more apparent that there are limits to the utility of technological solutions and fragmented care models. We need more good conversations behind the wall that generate learning at the wall.

As primary care research has diverged from being just centered on epidemiology and quantitative methods, qualitative and mixed-methods designs have increased, and older standard research approaches have become outmoded. Collaborative research conversations may further facilitate a paradigm shift within biomedicine while still being consistent with the nature of inquiry (Miller & Crabtree, 2005). The need to communicate in words creates a cultural specificity of language that also serves to erode a universal approach to research (also see Chapter 4).

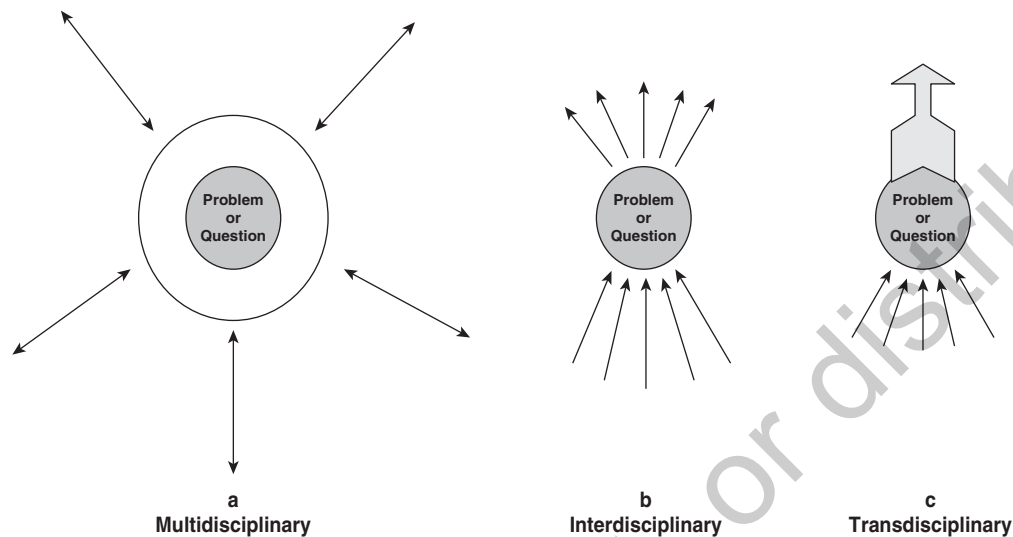
This chapter is about how to build qualitative and mixed-methods research teams, how to create the collaborative space for them to thrive, and how, for these communities of clinical investigators, to not only have conversation behind the wall—the internal discourse that disciplines and traditions have about who they are, what they do—but also how to have transformation and translation at the wall. It is at the wall, where, in a language understood by all participants, a space for more expansive imagination can be created, where tools for listening and seeing can be shared, and where transforming stories are enacted.

A Typology of Cross-Disciplinary Research

To begin addressing the complexities that make up healthcare research (refer back to Figure I.1), research teams need an expanded imagination that includes mixed-method collaboration. Taking off from the work of Rosenfield (1992), we have described three ways to expand the research imagination, or three types of collaborative cross-disciplinary research: *multidisciplinary*, *interdisciplinary*, and *transdisciplinary* research (Crabtree, Miller, Addison, Gilchrist, & Kuzel, 1994). These collaborative research strategies are illustrated in Figure 2.1.

Multi means many. In multidisciplinary research, many disciplines contribute their piece to solving the problem (a in Figure 2.1). Each discipline comes to a research team, gets a question, and then returns to their own confines to work on that question. They have conversations behind their disciplinary walls on a common topic. This is like an edited volume or like hearing separate presentations from many content experts. It may all come together, but sometimes it does not get integrated as a whole. This is the traditional approach to policy issues and one of the most common ways collaborative research teams work together. This segregation of disciplines and expertise often results in the findings from a study being published separately in disciplinary outlets or the qualitative data not fully utilized.

Figure 2.1 Typology of Collaborative Teams



Inter means between and among. In interdisciplinary research, each contributor comes to the research team and talks from their expertise so there is a conversation between and among participants from different disciplines (b in Figure 2.1). Nevertheless, they each still maintain their disciplinary language and work on their parts of the study separately. Examples of these are collaborative health teams consisting, for example, of a psychologist, a social worker, a physical therapist, a physician, and a nurse, who jointly focus on a common topic, problem or patient. This is often seen in teams undertaking mixed-methods designs where qualitative and quantitative teams are created, such as the Direct Observation of Primary Care (DOPC) study described later in this chapter, although multiple manuscripts from the DOPC study were published together in a journal's theme issue (Callahan et al., 1998; Crabtree, Miller, Aita, Flocke, & Stange, 1998; Flocke, Goodwin, & Stange, 1998; Jaén, Crabtree, Zyzanski, Goodwin, & Stange, 1998; Miller, Crabtree, McDaniel, & Stange, 1998; Stange, Flocke, & Goodwin, 1998; Stange, Jaén, et al., 1998; Stange, Zyzanski, et al., 1998).

Trans means across and beyond. In transdisciplinary research, the conversation takes place in a new common space and goes beyond and across what any one discipline offers (c in Figure 2.1). Research teams often create a new shared language that transcends any particular discipline that allows for conversations to escape disciplinary boundaries, much like a jazz ensemble (Purser & Montuori, 1994). Examples of transdisciplinary groups include the emergence of family

systems medicine, some farming research, and conservation biology, each forming out of several different disciplines. Developing such transdisciplinary teams generally takes long-term collaborations, often in the form of a program of research where team members work together over long periods. This was the case in the studies that evolved from DOPC (Crabtree et al., 2011), where the core team added new members over time from different disciplines and created new shared terminology when communicating. Note that this is also present in the analysis organizing styles used in this book (Chapters 10–14) which serve as a new language for primary care qualitative researchers to transcend disciplinary jargon.

In order to develop collaborative research teams, particularly doing transdisciplinary research, it is necessary to build a research community and a language for conversation. This is not an easy task, but the next section illustrates how it can happen.

A Collaborative Team Story

This story evolved over time from different individuals responding to the published literature documenting that the quality of health care in the United States was not meeting expectations and that strategies for improving care had been disappointing. This had been especially true for the delivery of a wide range of clinical preventive services. The United States Preventive Services Task Force (USPSTF, 1989) was initially formed in 1984 by the United States Public Health Service to create recommendations regarding clinical prevention and concluded in a 1989 report that a new paradigm for the role of the primary care clinician was required. Around this same time, the Healthy People 2000 Report of the Public Health Service put forth a number of national objectives for the delivery of clinical preventive services.

At the time the USPSTF Healthy People 2000 report came out, a group of six family physicians in Cleveland, Ohio became interested in doing a clinical intervention to improve preventive service delivery. However, they quickly realized that none of them had good ideas for an intervention. They also realized that care delivery in primary medical practices was largely a “black box” and that there was little understanding of the context where interventions would be implemented. Two of these family physicians, Carlos Jaén and Kurt Stange, had recently completed work on the competing demands of primary care (Jaén, Stange, & Nutting, 1994), leading to the consideration of an observational study to see where prevention fit among the competing demands of primary care. Competing demands became a way of bringing their inside the wall conversations about the essences of family medicine and primary care to the wall to meet the powerful reductionist biomedical paradigm outside the wall. These nascent conversations led to the creation of the Direct Observation of Primary Care (DOPC) Study, which later emerged into a 25-year transdisciplinary program of research.

The original six physicians immediately recognized the need to expand the disciplinary and methodological expertise to move forward. Initially, they enlisted the expertise of Stephen Zyzanski, a psychometrician with extensive experience in measurement, data analysis, evaluation, and research methods. They also brought in Edward Callahan from University of California, Davis who had developed and validated a practice observation tool called the Davis Observation Code or DOC (Callahan & Bertakis, 1991). Kurt Stange and Steve Zyzanski, both at Case Western Reserve University, had earlier explored the integration of quantitative and qualitative methods with family physician anthropologist William Miller and medical anthropologist Benjamin Crabtree, both at University of Connecticut (Stange, Miller, Crabtree, O'Connor, & Zyzanski, 1994). The emerging team began putting together ideas for a grant proposal to study how to better understand the delivery of preventive services in primary care medical practices. After the grant was funded, an initial project retreat was held in Cleveland, where plans were developed for initiating the project and tasks divided into separate teams. The DOPC team thus established a multidisciplinary collaboration with acceptance of each other's expertise and shared expectations.

As DOPC got off the ground, the quantitative team's agenda took precedence because the study design was focused on documenting the frequency of activities in clinical encounters by having nurse researchers observe patient visits and completing the very intense structured observation checklist (DOC) in real time for each visit. This DOC tool included up to 20 different behaviors that might take place, with any of these observed being checked off during each 15 second interval throughout each clinical encounter (Callahan & Bertakis, 1991). Let that sink in as you think about how many 15 second intervals would be in each encounter! Now, consider the intensity when this was done in 4,454 clinical encounters! The qualitative team wanted the study to include interviews and fieldnotes, but these ended up taking a peripheral role. The quantitative team rightly insisted that the nurse researchers could only write or dictate brief impressions at the end of each day without compromising the primary DOC data. This strategy was incorporated into the data collection and eventually generated 2,000 pages of fieldnotes (Crabtree et al., 1998).

However, at the initial retreat, group process was claimed as one of the quantitative team members suggested the qualitative team write a companion grant proposal to do more thorough qualitative work. Accordingly, action consensus was reached, and a companion grant called Prevention and Competing Demands (P&CD) was written and eventually funded by the Agency for Health Care Policy and Research (now AHRQ or the Agency for Healthcare Research and Quality). DOPC had emerged as an interdisciplinary team. The combined teams from the two studies added additional investigators from other disciplines, most notably Reuben McDaniel, Jr. from business and management with expertise in thinking about complexity science in organizations (McDaniel Jr, 1997; McDaniel Jr & Walls, 1997). Over time, the team started using a new shared language of MAP (for multimethod assessment process) as a short cut to describe their mixed-methods

approach, RAP teams (for reflective adaptive process), and terminology like attractors, self-organization, and coevolution from complexity science. Thus, over time, the DOPC team evolved from a multidisciplinary group, to an interdisciplinary team and finally to a transdisciplinary ensemble.

Creating Collaborative Space and Research Teams

Abundance appears when scarcity is shared. This is the hope of immigrants seeking a home. It is also the hope of collaborative researchers as in the previous example. Are we, as clinical researchers, ready to create common space with strangers? Like immigrants, we arrive with past belongings, a particular worldview and initially maintain protective walls and distinctive languages. Nevertheless, shared hurt and hope foster courage to risk humiliation, to seek conversation with strangers, and to co-create new visions, new situated knowledge and expanded worldviews.

Reflecting on the existing literature about mixed-methods and cross-disciplinary research, and on our more than 35 years of researching within developing collaborative teams, we propose a six-stage process for creating collaborative research relationships and teams.

Developing Collaborative Research Relationships

Doing collaborations across disciplines is both exhilarating and exhausting. The process of bringing together people with different languages, different assumptions about ways of knowing, different conceptual frameworks, different values, and different bases for their career success in order to engage an identified problem seems intimidating. It is, but, if approached with patience and aforethought, it becomes a transforming adventure. Knowing how strangers can form community is essential. We identify and describe six stages of collaborative relationship: acceptance/validation, shared expectations, declaring group process, action consensus, common space, and sustained common action. These six stages are developmental and each builds upon the preceding with each successive stage involving more intense group commitment (Table 2.1). These levels of collaborative relationship help define the three types of cross-disciplinary research and also mirror the stages of community development (Peck, 1987).

Collaboration and team building starts with affirmative listening. There is no meaningful conversation without **acceptance/validation** as a professional. A belief in the supernatural power of rationality can lull one into believing that accurate knowledge, good intentions, and the rules of polite academic discourse will automatically result in “progress.” Knowledge, goodwill, and civility are necessary

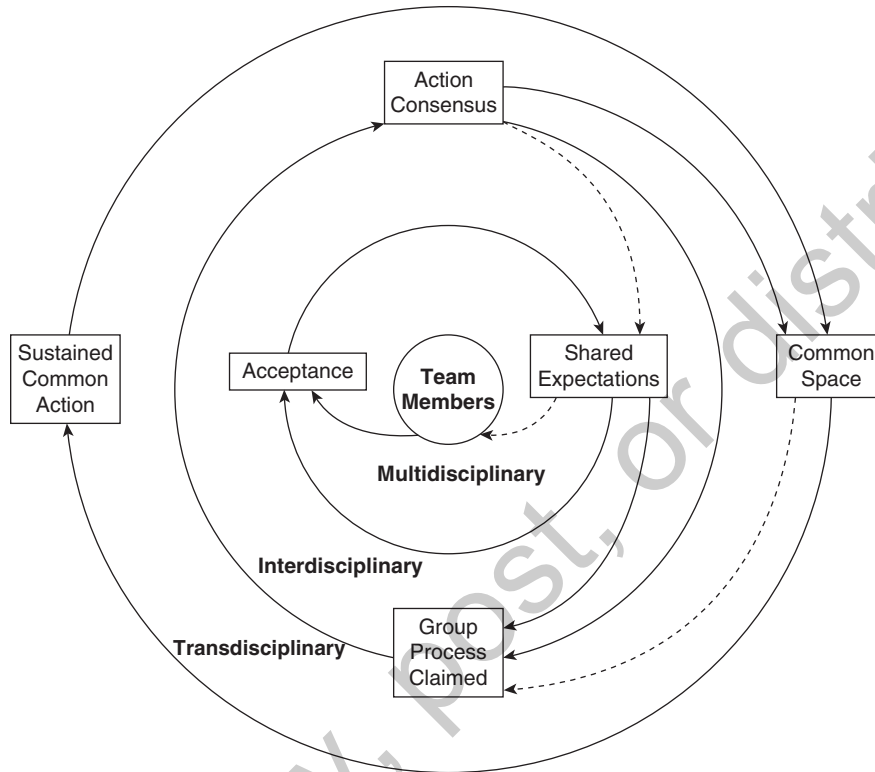
Table 2.1 Six Stages of Collaborative Relationship

Stage	Definition
Acceptance/Validation	Each person reveals his or her disciplinary expertise and status and senses acknowledgment and appreciation by others
Shared Expectations	Each person shares his or her specific agenda for the problem at hand and these agendas are understood and accommodated within a group-defined common task
Declaring Group Process	Group begins working effectively as they name task avoidance issues, openly acknowledge their different worldviews, and confess eagerness to listen to others
Action Consensus	Group agrees on an organizational framework for maintaining group work and staying on task
Common Space	Group defines a shared language and creates a shared conceptual framework that evolves out of unpacking unresolved issues and eliminating communication barriers
Sustained Common Action	Group remains in shared common space and have created true community

but not sufficient for successful collaboration. Knowledge is never accurate enough, intentions never clear enough, and civility not safe enough for people to risk being vulnerable and bold. We each need to feel stroked, listened to, and affirmed by another; without these, we cling to safety and control and retreat into our disciplinary shells. The collaborative relationship stage of acceptance/validation is reached when each person reveals his or her disciplinary expertise and status and senses acknowledgment and appreciation by others.

Once a research group experiences acceptance and validation, they pursue **shared expectations**. This usually begins with each person sharing his or her specific agenda for the problem at hand. Once agendas are understood and accommodated within a group-defined common task, the second level of collaborative relationship is reached. We see groups functioning at this level as doing *multidisciplinary research*. Each person comfortably remains within a disciplinary tradition and independently focuses his or her expertise on the group-defined common task. Relatively little direct group communication needs to take place. This is the most common sphere of collaborative research and avoids the complexities of moving the group relationships into another, more intense, stage (see [Figure 2.2](#)). The group is enjoying “pseudocommunity” (Peck, 1987).

Figure 2.2 Levels of Collaboration and Types of Cross-Disciplinary Research



Staying together, as in marriage, is a different matter and relationships get messier. The group enters the chaos stage of community development. Despite reaching acceptance and shared expectations, most collaborative research groups, if they pursue more intense group interaction, struggle toward accomplishing their task. Bion describes three characteristic patterns of such task avoidance: flight or fight, pairing, and dependence (Roch, 1970). Some members “disappear,” either by physically leaving or by remaining silent. Other members keep creating arguments about off-task issues, while still others pair off and have their own private dialogue. Finally, some members passively wait for the group leader to impose an agenda. Underlying most of these task avoidance behaviors are unexpressed differences and fears of misunderstanding. One’s disciplinary expertise may be acknowledged, and agenda accommodated, but this does not necessarily mean one’s language, paradigmatic assumptions, and values are understood. The

physician's assumption that medical services are inherently valuable is confusing to some social scientists who may assume medical services are a location for social control and potential adverse outcome. One person's everyday language is another's jargon. Unspoken assumptions and differences frequently result in misunderstandings that lead to one person trying to convert another. When a group begins working effectively and behaving as if they named the task avoidance issues, openly acknowledged their different worldviews, and asserted the desire to listen and learn, then a third stage of collaborative relationship is reached, **declaring group process**.

Once group process is manifest, the research team moves toward **action consensus**. One action path is to agree on an organizational framework for maintaining group work and staying on task. Examples of such frameworks include conceptual models developed by the team leader or from a "dominant" discipline and traditional mixed-method design strategies. This latter usually consists of having qualitative researchers do exploratory fieldwork followed by epidemiologists and psychometricians designing survey instruments used in observational epidemiology studies in preparation for the development of randomized controlled trials. We interpret selecting an organizational framework at this stage of collaborative relationship as working within the sphere of *interdisciplinary research* (see Figure 2.2) and as a return to pseudocommunity, albeit at a richer stage.

Another action path is to remain with the group tensions and to continue unpacking unresolved issues and eliminating communication barriers. These barriers include prejudices, hidden expectations and preconceptions, and the need for some, especially clinicians trained in the biomedical model, to fix, solve, and control. Living with tension, disagreement, and public self-revelation is difficult and painful, but it is a way toward **shared common space**. This common space is reached when a group defines a shared language and creates a shared conceptual framework that evolves out of the unpacking process.

If a collaborative research team remains in shared common space, they reach the collaborative relationship stage of **sustained common action** and are now practicing within the sphere of *transdisciplinary research*. They have created true community and function like an accomplished jazz ensemble. The difficulty in doing this, however, is evidenced by how rarely it occurs.

Who speaks what language is an accurate guide to which sphere of collaborative research is operative at any particular moment. When each person consistently speaks in the language of their home discipline, then multidisciplinary research is occurring. If members of the group begin using the language of other disciplines, then the group has moved into the sphere of interdisciplinary research. When the group repeatedly uses a newly agreed upon language, they are engaged in transdisciplinary research.

Barriers to Collaborative Process

Collaborative group process can be blocked at any stage. We identify dams to the flow of group communication—rhetorical stones, the power of hegemony, the tension between pragmatism and reflection, the tension between individual and system focus, budgets, and authorship (Table 2.2). **Rhetorical stones** refer to forms of speech which, often unintentionally, build a protective wall around and/or elevate the speaker while simultaneously wounding and diminishing others. Three such stones include power heaping, shaming, and jargon hurling. *Power heaping* occurs when a speaker uses special expertise, past successes, and/or prestige claims to take over a conversation or win a point: “This is old stuff. I published several definitive works resolving this debate ten years ago.” *Shaming* refers to comments that question the knowledge, intentions, and/or status of others in the group: “I’m

Table 2.2 Barriers to Collaborative Process and Some Strategies to Overcome Them

Barriers to Collaborative Process	Strategy for Overcoming
Rhetorical Stones: Power heaping Shaming Jargon hurling	Create a safe space and opportunities for regular open sharing of ideas. Call out and discuss persistent use of jargon to find alternative language. If not sufficient, the team may need to designate a facilitator.
Power of hegemony	Group acknowledgment and open discussion of power differentials and naming it when it occurs
Tension between pragmatism and reflection	Have agendas in advance of meetings with times allotted to each agenda item and only divert with group consensus.
Tension between individual and system focus	Create space in the discussion and acknowledge that the unit of analysis can change—both are important.
Budgets	Openly share and discuss budgets with the team. Realistically calculate the amount of time it takes to accomplish tasks and try to match the salary or the effort it really requires.
Authorship	Share expectations about publications and contributions. Brainstorm for abundance.

shocked! No one uses the word, 'system,' anymore." *Jargon hurling* is the use of discipline-specific jargon or abbreviations as if the terms were part of common, everyday language: "That's not so. We know that cost centers for HMO's differentially affect provider productivity compared to those in IPA's or PPO's." Armor and delicate dexterity are required for a group to keep ducking the stones, getting hit, picking them up, and going on. The best defense is recognizing that rhetorical stones usually indicate the thrower's perceived need for protection.

Within the Western world of primary health care, physicians and rationality wield a **powerful hegemony**. The dominance of these cultural forces must be acknowledged by collaborative groups. The power of hegemony is often demonstrated in groups. For example, members of groups might keep using the word, "physicians," and keep referring to health care concerns using the language of allopathic physicians despite persistent reminders about alternative primary health care clinicians. Participants may be apologetic, but the cultural hegemony of physicians can prove more persuasive than good intentions.

Groups can also be pervaded by a more powerful and potentially more dangerous belief in rationality as a sole truth-defining force. Whenever tensions surface, someone usually requests more facts or asserts the need to "stay objective." Emotional needs, concerns about the power of bureaucracies and the influence of money, issues about personal security, the biases of gender difference, and insinuations of racism are usually overwhelmed by the powerful hegemony of rationality. The importance of wonder, confession, petition, gratitude, and receptivity to gift and mystery is undermined. What never gets challenged is rationality's role in authorizing existing modes of power. Who is it that seeks to overcome wonder and why? Awe is potentially threatening to those wanting order, prediction, and control, but it is important to recognize these as the needs of managers and not of collaborative clinical researchers. Otherwise, a group's imagination remains trapped by powerful vested interests, deep fears, and unresolved hurts. The effect is to undermine the legitimacy of other modes of knowledge and power and to prevent a group's move into creative emptiness. Shifting from hegemony to the respective use of multiple perspectives opens the space for imagination.

A third stumbling block is the dynamic **tension between pragmatism and reflection**. Clinicians, policymakers, and applied researchers usually strive for the practical implications of knowledge and research and often get annoyed with long, reflective discussions about nuances of meaning and epistemological concerns. On the other hand, academic basic science and humanities researchers care deeply about the reflective discourse concerning issues of definition and core assumptions, which get at the heart of disciplinary identity and purpose. The tension between pragmatism and reflection is further complicated by conflict over the role of values in research. The quest for objectivity and certainty often generates a fear of joining "science" with advocacy. This fear not infrequently sustains a reluctance to even acknowledge values in "scientific" discourse.

The *tension between individual and system focus* is a fourth stumbling block. Sociologists, anthropologists, and policy makers frequently focus on group structure and process; whereas psychologists and clinicians are more likely to focus on the individual as primary causative agent. In the realm of research, this tension manifests as confusion and conflict over the appropriate unit of analysis.

Budget disputes can be a major problem area in collaborative teams, particularly those with representation from multiple departments or institutions. Internal squabbles over which department gets which funds can undermine collaborations. NIH often cuts grant budgets, sometimes on the order of 15–20%. How will these cuts be allocated? Generally, the science requires that staff engaged in recruiting, data collection, and data management not be reduced. What about subcontracts with other institutions? Most budgets are very tight, so there is a tendency to limit the time allocated to staff or even co-investigators. We frequently see staffing covered at 5% effort without realizing that 5% effort is only 2 hours/week. For the collaboration to sustain, it is critical that the time contributed to the team is realistic or that individuals and departments are okay with “in kind” contributions.

In an era where appointments and promotions are driven by metrics, **authorship** can become a major barrier to collaborations. Many social science disciplines only value single authored publications, while medical schools emphasize first authorship, and overall team science is only given lip service. Projects with only one or two publications will result in many members of the collaborative team feeling left out or underappreciated. Early in the collaboration, expectations about publications and contributions should be openly discussed. Content experts are likely to desire publications on study results, while methods experts may benefit more by taking the lead on manuscripts describing the methods. It is also important at this time to pay attention to promotion needs and distribute publications to benefit more junior members of the team, all while paying attention to effort to assure fairness.

Clearing the Flow for Collaborative Conversations

.....

There are a number of tactics that can be used for clearing the flow of collaborative group process including brainstorming, humor, storytelling, silence, and group activities. **Brainstorming** involves the temporary suspension of any debate and asks the group to spontaneously contribute ideas related to some agreed upon problem. As noted in Chapter 6, brainstorming is a group interviewing technique in which people with different backgrounds or perspectives are convened to generate lists of new ideas or questions (Wilson, 2013). This technique works particularly well when a group is starting or generating ideas. Early in a project, brainstorming potential dissemination products can reassure team members that

there are opportunities for everyone. When the DOPC project described above was first funded, at the first project retreat in Cleveland, Kurt Stange as PI (principal investigator) asked everyone to share what they wanted to get out of participating in the study. This was important in early team formation. Ben Crabtree and Will Miller had recently published the 1st Edition of *Doing Qualitative Research* and wanted to do the work they described on a larger scale (Crabtree & Miller, 1992). Harvard economist Daniel Dunn wanted to investigate how “work” was done in clinical encounters using the Resource-based Relative Value Scale (RBRVS), while Edward Callahan was excited to use the DOC being used in lots of practices. Ben Crabtree also shared his ideas for the “vacation study” (P&CD) in a room of strangers. Brainstorming can help create safe collaborative space for listening and finding that there is something for everyone.

Humor, especially in the form of wit, repartee, and irony, is helpful at soothing and lightening moments of tension and conflict. Frequent doses of gentle, clever humor help everyone maintain better spirits and enthusiasm. Humor promotes collaborative relationship when the comedy is not at the expense of a group participant; thus, satire and sarcasm are best avoided. Humor can be extremely useful in team building as long as it is appropriate and sensible. After a contentious day-long meeting, the collaborative team member who was hosting our retreat arranged an evening meal for us at his favorite restaurant, locally known as a haunt of romantic couples. The menu included a beer flight of diverse high-end beers. Kurt Stange had never heard of a beer flight and was amused as some talked about the nose, palate, and finish of different brews. Watching, with amusement, the beer snobs on the team, he started laughing so hard that he literally fell off his chair, much to the dismay of our host who felt he could never go there again. Perhaps the two couples sitting nearby did not share in the humor, but the stresses and conflicts of the day evaporated as we were able to laugh at ourselves.

Storytelling is a powerful tool for helping the diverse participants in collaborative research groups step off their disciplinary turf. Narrative stands on the ground of life experience and comfortably includes emotions, values, and other subjectivities excluded by the powerful hegemony of rationality. It is easier to risk personal vulnerability when you hear others do so within the relative safety of sharing stories. The judicious use of narrative and anecdote are particularly helpful when trying to declare group process, when unpacking communication barriers on the way toward action consensus, and when the group is highly conflicted. People rarely change on account of cognitive or moral appeal; rather, they change because they are part of a group experiencing the possibilities inherent in a new story. Shared stories help make a home, a new community. After a third day of hard work at one of our DOPC Cleveland retreats, we decided to go to an Ethiopian restaurant for dinner. The restaurant had individual rooms arranged in a traditional Ethiopian style, with everyone sharing food off a central basket. The ambiance stimulated Ben Crabtree to start reminiscing about his adventures as a WHO (World Health Organization) Smallpox Eradication Program surveillance

officer in Ethiopia, bringing out a lot of stories that none of the team had heard before and providing an opportunity to get to know each other in new ways.

Silence and taking time out are useful tactics when the group is stuck. Being quiet can still the mental roar and enhance intuitive receptivity to patterns not noticeable when listening to linear discourse. Taking a break and a quiet walk can be especially helpful. As the DOPC collaboration transitioned into a transdisciplinary team, new opportunities opened up. A potentially distracting opportunity came with the family medicine professional organizations deciding to launch a new journal, the *Annals of Family Medicine*, and our team being top contenders to take on the role as editors. During a team retreat at a guest house outside Cleveland, we talked about the pros and cons, with both Ben Crabtree and Will Miller arguing against it as disruptive and potentially destabilizing to our ensemble's other projects. Others argued that it was too good an opportunity to miss as we went for a long walk through the woods along a local trail. At some point, Kurt says, "I want to bring it up one last time and won't bring it up again if the answer is no." We walked in silence for a while longer when Will says, "We should do it." We talked about it more, but the silence in nature got us to a place where we could collectively change our minds.

Group Activities. The joy and spontaneity of play can also serve a similar purpose while boosting fatigued and frustrated spirits. These activities can be retreats or meals as described above or walks or visits to art museums. We regularly scheduled different types of group activities during DOPC team meetings and retreats. This might include a walk around the botanical gardens in Cleveland or long social lunch. After one of our exhausting day-long meetings, we convened for an evening barbeque at Kurt Stange's house. Wanting to impress his "beer snob" out of town guests, he reviewed *Consumer Reports* and purchased one of the recommended beers—Pabst Blue Ribbon. He was surprised when it was not well received and a bit miffed when the out-of-town guests got his 16-year-old son to drive them to get something different. But the barbeque was great, and everyone stayed on the porch talking till midnight. The next day, Kurt apologized to his neighbor after hearing from her that she had heard us chatting all night, but she replied, "I could feel the love."

The reality of collaborative relationships is not as neat and straightforward as the above descriptions and stories might suggest. **Complexity** is the norm. Collaborative working groups move back and forth among the different stages and, at any given time, may demonstrate a blurring and blending of levels. In addition, different group members are likely to perceive that the group is at different stages at any given time. The dash lines in [Figure 2.2](#) illustrate that groups can return to prior stages of relationship. Time pressure is a frequent group destabilizer. Flexibility, tact, patience, and persistence are all necessary in the face of such complexity.

We have found that some projects really benefit from having a **facilitator**, especially for larger teams or longer-term collaborations. This was especially true in a recent project where we worked together with investigators from the United States, Canada, and Australia who envisioned a collaboration to synthesize

findings across five jurisdictions in these three countries to identify common contextual factors from their prior work that appeared to influence implementation of teamwork within primary care practices. The proposed collaboration included eight highly successful senior investigators, many of whom had never met before, but had each completed large studies on teamwork in primary care. We needed to find a way to bring these separate groups together for first time with goal of rapid movement toward becoming a transdisciplinary team. To do this, we brought in a medical anthropologist with experience in facilitation and primary care, Sabrina Chase, to help prevent and mitigate some of the dangers of collaborative research relationships. The facilitator kept the nascent group on task and gained agreement on ground rules for interaction and led the collaboration toward developing focus for the work using brainstorming and census building. Over a two-year period, the collaboration developed a new methodology for meta-syntheses using researchers' experience, tacit knowledge and relevant unpublished materials (Crabtree et al., 2018), and published several groundbreaking manuscripts on primary care teamwork (Harris et al., 2016; Levesque et al., 2018; Russell et al., 2018).

Collaborative research, especially transdisciplinary, may also harbor potential dangers. The dominance of a few group members can lead to others neglecting the critical thinking learned in past disciplinary training. Sloppiness resulting from this **training down** is accentuated by a loss of accountability to disciplinary peers. Three additional dangers relate to downsides of being in community. **Suppression of individuality** is a primary motivating force for leaving community. What starts as a group with exciting diversity can, over time, become oppressive and defensive of its newly claimed territory. As roles become blurred and disciplines become interchangeable, the group may lose perspective and become less tolerant of subtle differences. An eloquent study by McClelland and Sands about the "missing voice" on a collaborative evaluation team sounds a warning (1993), "Even a team working together over a long period of time may be unaware of the observational categories of its disciplines" (p. 88). Open community can also convert to **cultism** and a new hegemony. A more positive twist on this process is the creation of a new discipline. Finally, communities are slow, inefficient, messy, and **political**. That is, people tend to love communities, but can feel oppressed by them as well. If a transdisciplinary group remains open and self-reflective, all of these dangers can be minimized, but substantial energy is required.

SUMMARY

Knowing when to expend this energy and do transdisciplinary research depends on the answer to three questions: For what? How long? What's the future? When the problem area is complex, contextual, resistant to prior interdisciplinary efforts and a regional, national, or international priority, transdisciplinary research should be considered. In addition, there must be sufficient funding and time (at least 5–10 years) to support a successful transdisciplinary research effort. Finally, transdisciplinary research is more helpful during a period of shifting paradigms. We still think there need to be more efforts at effective interdisciplinary research before an investment in transdisciplinary research is justified.

Disciplinary generalists, including primary care and nurse researchers and applied social scientists, are ideal candidates for becoming collaborative clinical researchers. They are often trained in multiple methods, in working within different paradigms, and in collaborating with community groups. Core skills of the collaborative researcher need emphasis. These include grass roots organizing skills such as the ability to work with and process

lots of information, problem-solving skills, and the ability to engage in cooperative decision-making. It also includes sensitization toward differences of gender, ethnicity, race, social class, sexual orientation, and professional cultures, and learning the art and science of listening. The collaborative clinical researcher must also know how to facilitate a group working through the stages of collaborative relationship. This requires consensus-building skills, keeping a problem focus as opposed to a discipline focus, maintaining a creative tension between outcomes and process, and staying flexible to group needs. Standing in the nexus where the languages of multiple disciplines, methods, clinical worlds, community groups, bureaucracies, and public voices meet requires patience, a love of noise, and cultivated skills at translation and negotiation. These are the crucial skills needed for the conversation at the wall. Otherwise, a tower of babble is rebuilt (Miller & Crabtree, 1994). Meanwhile, huddled behind the wall in a safe collaborative space, an ensemble of clinical researchers begin the life changing work of reflexivity.

QUESTIONS AT THE EDGE

- What's the difference between a team and an ensemble?
- How do you know if your team has sufficient diversity?
- How can you ensure that members of your team feel safe to express their opinions?
- What type of collaborative team is optimal for your research agenda?
- When is it worth the investment to create a transdisciplinary ensemble?
- How can you practice as a team or ensemble when your institution only rewards individual accomplishments?
- What's so troublesome about lone ranger research?

Do not copy, post, or distribute