

# Improvisatory Activist Scholarship: Dance **Practice as Metaphor for Participatory Action** Research

## Paul Rogé

The Cooperative New School for Urban Studies and Environmental Justice proge@cooperativenewschool.com

#### Abstract

I define improvisatory activist scholarship as attempts to disrupt commonly-held meanings in research through the skilled negotiation of unexpected circumstances and through attention to the circulation of power among collaborators. Metaphors from the dancing of contact improvisation (CI) serve as a bridge to highlight improvisational aspects of participatory action research (PAR). I also trace movement between PAR and engaged ethnography in my research with CEDICAM, a farmer-to-farmer training network in Oaxaca, Mexico. Improvisation is the creative negotiation of an encounter with the unknown or unexpected, sometimes due to a lack of options. In iterative cycles of PAR, improvisational skill increases receptivity to emerging pathways for investigation when unexpected circumstances arise. This is important in transdisciplinary fields like agroecology that closely interface with the complex realities of land-based livelihoods. Extending awareness from the individual to the group and to society at large helps identify effective leverage points for analysis and action. Finally, recognition of the privilege embodied by the activist scholar may encourage power to circulate more equitably in multiple directions to stimulate horizontal communication between actors. These are some of the practical suggestions presented for how an embodied scholarship may embrace improvisation as par for the course.

#### **Keywords**

Activist scholarship; agroecology; engaged ethnography; improvisation; Mexico; participatory action research

#### Introduction

This reflective essay presents ideas on the everyday practices of activist scholarship. I discuss personal investigations in dancing in the form of contact improvisation (CI) and research in the field of agroecology as two distinct experiences bridged conceptually through metaphor. Metaphors from the dance practice of CI illuminate distinctions between participatory action research (PAR) and engaged ethnography. I use language from CI to describe the negotiations that occur between activist scholars and collaborators. This is not an essay on performance-based or qualitative methods. I do not suggest the application of improvisational dance to activist scholarship however compelling and appropriate that may be in certain contexts. Rather, I propose a definition of *improvisatory activist scholarship* as attempts to disrupt commonly-held meanings in research, such as notions of success and failure, through the skilled negotiation of unexpected circumstances and through attention to the circulation of power among collaborators.

Activist scholarship is "the production of knowledge and pedagogical practices through active engagements with, and in the service of, progressive social movements" (Sudbury and Okazawa-Rey 2009, 3). In some cases, a commitment to action by scholars from academic institutions involves complementing the existing knowledge and expertise of non-university based activists (Calhoun 2008, xxiv). At the same time, the term activist scholarship attempts to avoid a conceptual separation between scholars and social movements. As Sudbury and Okazawa-Rey (2009, 7–8) suggest, scholar activists and activist scholars create possibilities for emancipatory knowledge production by transgressing boundaries to "become 'bilingual,' fluent in both activist and scholarly cultures and languages [and form] new solidarities and accountabilities that both sustain and inform our work."

Activist scholarship is described by Calhoun (2008, xxiv) as an embodied practice. To me, embodiment is a process and a state of embeddedness in a world of relations that rejects false dualities such as mind-body, observer-subject. This perspective on embodied practice reflects the writing of John Wylie (2002, 2009) on landscape phenomenology. Through the enactment of ascension and elevation, Wylie (2002) critiques the Cartesian epistemological model that associates elite social status with the locus of knowledge production, mastery, and control. Wylie (2002) quotes Merleau-Ponty (2001) as stating that "the body is the vehicle of being-in-the-world...it is enacted at every instant in the movement of existence", and is "caught in the fabric of the world." Wylie (2002) writes that immersion is

"synonymous with being situated," and the seeing, feeling body enables witnessing and meaningful engagement. Bodily immersion with landscapes provides the foundation for meaningful engagement, and also solicits absence, loss, and haunting (Wylie 2009).

Participatory action research is one well-established form of embedded and situated activist scholarship. PAR democratically co-constructs knowledge between scholars and people most directly affected by problematic situations so that they themselves may more effectively address the problems that they face. There are many interpretations of PAR and its origins. For instance, Kindon, Pain, and Kesby (2007) explain, "for us, the key [in PAR] is an ontology that suggests that human beings are dynamic agents capable of reflexivity and self change, and an epistemology that accommodates the reflexive capacities of human beings within the research process." They connect contemporary PAR to the action research process that Kurt Lewin (1946) described as an iterative research process between action and reflection. Miriam Giguere (2015) traces the history of PAR to the early ideas of educator John Dewey (1915; 1966; 2012), and to the recursive research practice of action planning, implementation, and reflection proposed by Indian Affairs Commissioner John Collier (1945). Many authors credit the Brazilian educator Paulo Freire with outlining PAR as a process of cyclical, non-hierarchical dialogue for self-realization (Cuéllar-Padilla and Calle-Collado 2011; Giguere 2015; Putnam et al. 2014). Freire (1970, 99-100) proposed a praxis for research in which elite researchers relate to people involved in a study as co-investigators, rather than as research subjects, arguing that it is impossible to think for others or without others.

Kindon, Pain, and Kesby (2007) trace three waves of PAR: the first beginning in the 1970s, and influenced by Freire, when PAR spread through the Global South as "a new epistemology of practice grounded in people's struggles and local knowledges;" the second, in the 1980s when PAR was integrated into development practice aimed at making local people the agents of their own development (see also Chambers 1994); and the third, more recently, an umbrella term for diverse democratic and participatory processes that challenge dominant epistemologies (see also Putnam et al. 2014; Reason and Bradbury 2008).

PAR provided a foundation for my activist scholarship with farmers in the Mixteca Alta of Oaxaca, Mexico from 2009 – 2011, which I reflect on later in this essay. However, some aspects of my scholarship moved from PAR into the realm of engaged ethnographies over the course of this project in the Mixteca Alta. How does PAR differ from engaged ethnographic research? Although a full answer is beyond the scope of this essay, I offer some initial thoughts. PAR is a democratic intervention that produces locally applicable knowledge. Engaged ethnographies disregard the artificial separation between the scholar and the research subject, but do not necessarily prioritize democratic processes or the direct relevancy of knowledge generated to the communities implicated in the research.

An example of engaged ethnography comes from Garrett Broad (2016). The author identifies as a researcher, an activist, and an engaged scholar who hopes his writing will lead to a better understanding of social change and also promote long-term social justice (Broad 2016, 2–5). Broad (2016, 14) attempted to serve the group that was the focus of his study, Community Services Unlimited Inc. (CSU), in various capacities such as volunteering during their workshops, assisting organizing meetings, writing portions of grant applications, and supporting grassroots fundraising efforts. Broad (2016, 14) admits that his engaged ethnography with CSU might be critiqued by scholars grounded in "a traditional model of objective ethnographic investigation," and yet the old ideal of separation and distance from research subjects is no longer practical or desirable.

However, a lack of democratic process or direct applicability of Broad's research to CSU differentiates his research from PAR. The primary aim of his research "... is to highlight the capacity of community action to serve as a power base for a twenty-first century food justice movement" (Broad 2016, 3–4). Meanwhile, PAR focuses on social change as a goal of the research process itself. While processes and outcomes differentiate PAR from engaged ethnography, attitudes of affinity and solidarity with stakeholder groups are similar for the activist scholar involved in either process. Though this essay focuses primarily on PAR, the arguments I make for an improvisatory activist scholarship apply to both approaches.

Like PAR, no standard understanding of improvisation exists. In some ways, descriptions of improvisation risk reinforcing negative stereotypes of the people who improvise. Improvisation is often used to describe provisional or temporary solutions – such as houses built by urban dwellers of limited means – that take shape out of necessity (Silver 2014). Yet, improvisation is not always provisional. In studying childhood education, Kerawalla et al. (2012) argue that improvisatory interpretations are key to student learning in the context of co-curricular field trip activities, and that "unpredictable, emergent challenges require improvisatory solutions." The same may be said of processes of environmental management. According to Lippert, Krause, and Hartmann (2015), practices are:

... not so much the execution of previously designed blueprints, as they are series of improvisation and making-up on the go, that, if at all, relate in practical and messy ways to formal plans. Environmental managers do not appear as autonomous agents external to the environment but as enmeshed with configuring environments.

For the purposes of this essay, I interpret improvisation as the creative and skilled negotiation of an encounter with the unknown or unexpected, sometimes due to a lack of options. Improvisation is an important skill for activist scholars. In subsequent sections, I trace how improvisation has influenced my own research process in the field of agroecology, as it has moved between PAR and engaged

ethnography. I borrow metaphors and language from the practice of improvisational dance for the purpose of more colorful, fanciful, and playful illustration.

#### **Methodological Notes**

I am an activist scholar of European ancestry from the United States. I am white-presenting and of cis-male gender identity. My writing is informed by over 15 years of engagement in agroecology as a researcher, educator, farmer, student, and community organizer. I am currently an agroecology educator and researcher at the Multinational Exchange for Sustainable Agriculture (a non-profit in Berkeley, CA); a faculty-owner at the Cooperative New School for Urban Studies and Environmental Justice (an online institution for popular education and activist scholarship); and a lecturer and researcher in food systems at the University of California, Berkeley.

From 2009-2011, I coordinated agroecological research in partnership with the Center for Integrated Farmer Development of the Mixteca Alta of Oaxaca (CEDICAM), a farmer-led network in southern Mexico (see Rogé et al. 2014, 2016; Rogé and Astier 2015). This fieldwork was the basis for my doctoral dissertation, and both the fieldwork and my positionality as described above provide grounding for this essay. The reflections here are also the product of my dance practice in the form known as contact improvisation (CI) that occurred between 2014-2016. I danced at weekly CI "jams" – CI lingo for open community dance gatherings – in Ann Arbor, Michigan. I also attended regional jams, workshops, and artistic residencies in the United States (California, Iowa, Wisconsin, and New York) and in Canada (Ontario and Québec). I support my reflections on these experiences with academic literature that examines PAR and/or improvisational dance.

I use metaphors from CI to describe activist scholarship in the field of agroecology. Metaphors are part of conceptual systems that shape our everyday lives (Lakoff and Johnson 1980, 4), and yet they are culturally specific and subjective rather than universal (Schaffman 2003, 198). "The essence of metaphor is understanding and experiencing one kind of thing in terms of another" (Lakoff and Johnson 1980, 5). Metaphors open mental pathways beyond the ordinary to "figurative, poetic, colorful, or fanciful thought and language" (Lakoff and Johnson 1980, 13).

## **Metaphors from Contact Improvisation**

What is CI's relationship with metaphor? One perspective on this question comes from Karen Schaffman (2003, 198–99) who suggests that "the moving body, defined by momentum and touch, defies traditional Western codes, though not through an inversion of conceptual metaphors. Instead, as a practice, contact improvisation presents alternatives to these conceptual metaphors that we hold as common language." For example, the embodied act of CI offers alternatives to the

Western association of success with balance and uplift, and failure with disequilibrium and falling. "Not only do up and down exist simultaneously through ongoing negotiations between partners," she explains, "but by practicing falling, dancers learn to venerate 'the down' and revel in disorientation" (Schaffman 2003, 198–99). Failure "remains valid, but it is not measured in terms of stability or instability. Rather it has to do with such issues as reluctance, manipulation, and a lack of attentiveness to the moment" (Schaffman 2003, 199). People committed to the practice of CI may come to retrain their commonly-held and socially-specific notions, including the very meaning of success and failure, to focus more on the kinds of bodily exchange that create varying degrees of tension and interaction between bodies in motion.

Perhaps the reader would appreciate more of a background on the origins and practice of CI. This section begins with notes on improvisational dance practice followed by a more focused discussion of CI. Improvisation in dance has often connoted a deep "immersion in the chaotic evanescence of physicality, one that was dismissed as insignificant by many" (Foster 2002, 30). Perhaps unsurprisingly, given its proclivities to view non-Western societies as less 'developed,' the mid-20th century Western world often characterized improvisational dance as instinctual, animalistic and less demanding since many such practices originate from non-Western traditions (Goldman 2010, 16, 51). However, improvisation is an embodied practice that requires training to hone skills so that both mind and body act decisively (Gere 2003, xiv).

Improvisation may be described as the interplay between that which is known and unknown. As Foster (2003, 3) notes, "the improvising dancer tacks back and forth between the known and the unknown, between the familiar/reliable and the unanticipated/unpredictable." The "known" in this context may refer to rules – the *score* – established for a performance in advance, the lexicon of movements ingrained in the body's memory through training, the "allied medium with which the performance is in collaboration," and even "that which has already occurred previously in the performance of improvising" (Foster 2003, 4). In turn, the unknown is "that which was previously unimaginable, that which we could not have thought of doing next. Improvisation presses us to extend into, expand beyond, extricate ourselves from that which was known.... Yet we could never accomplish this encounter with the unknown without engaging with the known." Improvisation emerges at the moment of "contemplating how, exactly, to execute an action already deeply known."

Improvisation is a means to test movement of the body under both outward and internal constraints. As stated by Lisa Nelson, "Without limitations you don't have any freedom, because if you could do whatever you want to do, how are you free?" (De Spain 2014, 160). To Steve Paxton, improvisation benefits from exploring constraints, even if they are self-imposed: "The more limitations, somehow, the more you come to the point, or some point" (De Spain 2014, 164). Moreover, in recognition that the body itself presents its own structures for

movement, "the notion of moving with an unstructured freedom recedes" (De Spain 2014, 159).

Improvisation occurs within the social and historical tight places that literally and figuratively constrain the dancer's ability to move (Goldman 2010, 4–5). The concept of tight places is borrowed from Houston Baker (2001, 69), who asks who moves and who does not in relation to social mobility. Such a concept applied to dance improvisation offers perspective on the real conditions that people face (Goldman 2010, 27), in addition to "deciding how to move in relation to an unsteady landscape. To go about this endeavor with a sense of confidence and possibility is a powerful way to inhabit one's body and interact with the world" (Goldman 2010, 146).

Finally, memory also plays a part in improvisational dance (Paxton and Smith 1972), including "muscle memories; what has been seen, done, imagined – all inform current dancing decisions" (Smith and Koteen 2008, 43). Without an outwardly defined score, improvisers draw on previous experiences or define their own point of focus (Smith and Koteen 2008, 48–49). Memory in combination with conscious and unconscious attentional capacity to the present moment – *tracking* – enables quick decision-making by the dancer (De Spain 2014, 45). In later sections, I apply the notions of embodiment, success and failure, knowledge creation, operation within constraint, and the importance of memory in quick decision making to the practice of PAR in agroecological research.

#### **The Practice of Contact Improvisation**

Any number of dance traditions could serve as a starting point for discussing embodied research practice. However, the seed idea for this essay emerged from my practice of CI, so I use it as a focus. In August 2015, I attended a CI workshop entitled The Dance We Live For hosted in by Aaron Brando and Tanya Williams in Kitchener, Ontario, Canada. The workshop explored the mutuality between dancers through attention to fascia, the web of tissue that envelopes all muscles in our bodies. This subtle form of movement presents opportunities for enhanced sensitivity to the needs of oneself and the other. In one exercise, my partner and I practiced a score of staying aware of each other even when our bodies were not in physical contact. Reviewing a recording at a later date, I observe mimicry, repetition, and symmetry in our movements that suggests an awareness of what had already happened in our dance. Questions constantly surface from such practices. How do we interpret and respond to our partner's cues without projecting what we think they may be experiencing onto them? How to engage in intimate, mostly non-verbal, improvisational work with only a partial knowledge of what our partners are experiencing? How does this tension manifest itself?

CI may be described in many ways, and continues to take on new forms through the years and in different parts of the world. Ever since its origins, CI

included professional and non-professional dancers in performance and in group dance events known as jams (Foster 1992; Novack 1990). The dance form is also inclusive to dancers with different physical abilities (Curtis 2003). Expansion continues as in the case of *Parcon*, a "playful new movement form emerging from the intersections between Parkour [an often-urban training practice originally derived from military obstacle training] and Contact Improvisation" (Beckwith et al. 2016).

The language describing CI was secondary to the dancing, and those involved in its origins decidedly chose to discourage attachment to any given definition (Smith and Koteen 2008, xii). Nevertheless, one definition follows (Smith and Koteen 2008, xiii):

CONTACT IMPROVISATION is a duet movement form, originated in 1972 by choreographer Steve Paxton, based on the communication between two moving bodies that are in physical contact and their combined relationship to the physical laws governing their motion – gravity, momentum, friction, inertia, centrifugal force, etc.

In another sense, CI involves experimentation with small movements and extreme situations – falling in particular – that prepare dancers to retain agency in a landscape of shifting constraints (Goldman 2010, 96–97). One important early contribution to CI was Steve Paxton's small dance, which involves staying upright and motionless for several minutes. Standing leads to small waves of movement through the body in response to the forces of gravity, which "troubles the notion of absolute verticality or bodily stillness" (Goldman 2010, 105). The less visible muscular structure of the small dance compared to prior modernist dance techniques was in fact preparation for various kinds of more extreme improvising (Goldman 2010, 106).

Calmness is present and critical to decision-making while dancing. Standing "was used as a discipline, teaching the dancer that the body works reflexively in a dependable way to protect itself when falling. The goal eventually became to maintain the calmness of the stand even in extreme, adrenalized states of dancing" (Goldman 2010, 105). The release of muscular tension combined with abandoning willfulness to the flow of movements opens up the body to greater sensitivity (Smith and Koteen 2008, xiv). This leads to a healthy approach to "disorientation, confusion, and dis-ease ... [that] in fact, stimulate the balance mechanism. Stimulate us to ask questions: what is dis-ease, what does healthy mean, how do we recognize and maintain it? How can we stay awake during the fall" (Smith 1979).

The perceptual systems that sense the external and internal environments – known as *proprioception* – require a complex coordination between different parts of the body (De Spain 2014, 102–3). "Contact [Improvisation] can engage all systems [of the body] and has the potential for multidimensional, multiquality dancing and relationships. Bones are useful and clarifying to return to" (Smith and

Koteen 2008, 13). The concept of following through "seems to ensure finding a way to play out the physical energy of the dancing (e.g., a fall) rather than having it hit a dead end (floor, joint), thus impacting unhappily into either body. Curvilinear forms work well for continuity and follow-through. The spiral is in that family" (Smith and Koteen 2008, 39).

To Steve Paxton, "the exigencies of the form dictate a mode of movement which is relaxed, constantly aware and prepared, and onflowing.... [The dancers] do not strive to achieve results, but rather, to meet the constantly changing physical reality with appropriate placement and energy" (Smith and Koteen 2008, xiii). In a partnered dance more generally, improvisation may be conceptualized in linguistic metaphor to a middle voice verb tense, neither passive or active (Foster 2003, 7–8). Weight, momentum, and shared sensibilities produce a "double bodied co-motion" that can break apart or experience moments of lucid synchrony (Foster 2003, 7–8). "The concept of an operation that is neither active nor passive such as the middle voice profoundly challenges hegemonic cultural values that persistently force a choice between the two" (Foster 2003, 8). This view offers an alternative to the classic conceptualizations of the body as instrument instructed either from the self or from social systems of control.

While improvisation articulates human agency by shifting power and avoiding static structures (Foster 2003, 9), the cultural and political embeddedness of those who dance also matters (Goldman 2010, 15). While acknowledging that CI is a practice of becoming ready for constantly changing constraints that lead to greater agency in unfamiliar or difficult situations, Goldman (2010, 110) questions – in reference to the early years of CI practice – "the extent to which a meaningful 'exchange of identity' can occur within contact improvisation, especially if it represses or doesn't acknowledge the sexual, gendered, raced body."

In contrast to CI, Goldman (2010, 113) reads freedom in the works of postmodern dancer Bill T. Jones to consist of "perpetual readiness demanded by a critical stance toward oneself and the world in general." Improvisation in Jones' early career was focused on his personal history and politics of identity, which he used to challenge notions of formal purity (Goldman 2010, 117). He also explored what may be interpreted as the impossibility of breaking free from one's own identity (Goldman 2010, 135). This is quite distinct to Paxton's expressed interests in improvisation; discussing *Material for the Spine*, Paxton observes "You notice that there's no emotion, no politics, no space, none of the other things that might trigger improvisations in this. It really is a sort of academic study of work that I did before and recasting it" (De Spain 2014, 41–42). This contrast demonstrates the wide breadth of embodied exploration in improvised dance from the realm of identity politics to systems of the body.

#### Improvisational Dance, PAR, and Agroecology

The previous section on improvisational dance – and CI specifically – provides inspiration for discussing how improvisation may be embodied in activist scholarship. Embodiment is described by geographers and political ecologists as the embeddedness and interconnectivity of the self with environmental landscapes and power structures. Stacy Alaimo (2012) describes the body as a trans-corporal embodiment with "the more-than-human world." PAR itself may be approached as an embodied practice to realize a sometimes-unexpected transformative potential from social interventions. As an example, workshops in Malawi, East Africa, that invited men to participate in cooking activities for group meals led to greater sharing of household chores across genders and improved growth of children in the households that participated compared to those that had not (Patel et al. 2015).

The goal is for PAR to become an increasingly "implicated, embodied, reflexive and responsible" form of inquiry (Janes 2016). The embodiment of activist scholarship requires a heightened appreciation for improvisation in research collaborations. I draw on examples from my own experience with PAR in the field of agroecology to show how improvisatory activist scholarship disrupts commonly-held meanings through the skilled negotiation of unexpected circumstances and through attention to the circulation of power among collaborators.

Agroecology distinguishes the ecological agriculture of small farmers, indigenous people, and peasants from agroindustrial models of production (Rosset and Torres 2016). In its more political iteration, the focus of agroecology has increasingly broadened from ecological processes in farmers' fields to critical examinations of food systems (Francis et al. 2003). For the international farmer movement La Vía Campesina, for example, agroecology goes beyond ecological principles of production to social, cultural, and political principles (Rosset and Torres 2016). In this vein, agroecology and PAR share many principles in the context of engaging stakeholders in research. Both focus on empowering people; recognize endogenous and context-dependent processes; conceptualize issues systemically; act at multiple scales; seek to maximize long-term benefits and relationships; and value diverse systems and voices (Méndez, Bacon, and Cohen 2013).

An interpretation of agroecology as a transdiscipline that transgresses disciplinary silos and that emphasizes action-oriented approaches (Francis et al. 2013) parallels the embodied practice of improvisational dance. The vision of transdisciplinarity includes among others acceptance of the unknown, unexpected, and unpredictable (Alvarez-Salas, Polanco-Echeverry, and Ríos-Osorio 2014; Anes et al. 1994). In such a context, the university-based activist scholar undoubtedly encounters moments that call for improvisation. Unpredictable situations arise when such activist scholars embed themselves in complex systems and interact with people dependent on land-based livelihoods.

Cuéllar-Padilla and Calle-Collado (2011) identify science with people to be a guiding approach to agroecology, which differs from traditional conceptualizations of science that distance the researcher from the object of investigation. At the farm scale, "more sustainable and resilient farming can emerge from better listening and integration of the practitioners' way of knowing with the structured experiments of agronomists" (Vogl et al. 2015). More generally, the inclusion of stakeholders provides space for oversight and democratic control over the conditions of knowledge production (Levidow, Pimbert, and Vanloqueren 2014). Contrasted with linear forms of logic in Western scientific research, the inclusion of diverse voices in PAR may be better described in curvilinear forms that provide continuity and follow-through when faced with the unpredictable. This is reminiscent of the flow of energy describing bodies in contact (Smith and Koteen 2008, 39).

### Case Study of Improvisation in Activist Scholarship

Building on these observations, I next consider how improvisation influences the everyday practices of the activist scholar, as exemplified by my research in the field of agroecology. Improvisational opportunities presented themselves during my collaboration with CEDICAM in the Mixteca Alta from 2009-2011. Researchers from multiple institutions and CEDICAM farmers decided to study the question of whether the agroecological practices promoted by CEDICAM increased the resilience of rainfed farming systems to climatic variability – and drought specifically – compared to the conventional model based on external inputs (like synthetic fertilizers). To study this question, researchers and CEDICAM farmers carried out two years of on-farm field experiments.

However, from the beginning, statistical challenges were associated with an overly complex experimental design and far fewer replicates on farmers' fields than originally anticipated. Adjusting the course of the field experiments was challenged by the rapid pace at which the project moved from conceptualization to implementation. My personal capacity to influence the research process was further constrained by limited experience with field research as a second year graduate student. In response, the team added other pathways for PAR, specifically workshops with farmers to identify climate resilience strategies for rainfed farming systems in the region (see Rogé et al. 2014).

These negotiations also distanced researchers from the "dance" of PAR to pursue research more in the domain of engaged ethnography. University-based members of the team used participant observation and semi-structured interview methodologies that did not depend as much on CEDICAM's involvement (see Rogé et al. 2016; Rogé and Astier 2015). To highlight these negotiations, I offer an excerpt of a meeting in June 2009 between Jesús León Santos (JLS) of CEDICAM, Marta Astier (MA) of the Autonomous University of Mexico (UNAM), and myself (PR). Jesús León Santos had expressed reluctance to engage in comparative cropping systems research even though CEDICAM generally supports the

recuperation of traditional cropping systems. Rather, he was more interested in agronomic studies of farming practices for seasonal maize systems (*maíz de temporal*, maize planted at the start of the rainy season) that would retain soil moisture, conserve appropriate crop varieties, and regenerate soil fertility.

JLS: Conserving soil moisture, genetically resistant varieties, and soil fertility are the three most important things for the topic of drought.

MA: Might we consider focusing more on traditional farming methods? We could make a map of the cajete-producing regions, such as ecological zones and their evolution?

PR: We might consider a participatory mapping exercise.

JLS: I doubt that cajete is making a comeback. The fact is that the production of cajete is falling dramatically.

MA: Have you studied the topic of cajete?

JLS: It can grow with low levels of soil moisture, this we know, but nothing scientific. CEDICAM published something about the technical aspects of how to produce it.

PR: So it would be interesting to understand why people use cajete, why it is limited in scale, and why it is climatically resilient.

JLS: The problem is that farmers are not interested in cajete.

Even though research on cajete maize was less clearly aligned with CEDICAM's programmatic priorities, university-based researchers decided to compare traditional cropping system known locally as cajete maize (maize de cajete, maize planted in the dry season) to the more commonplace practice of seasonal maize production. This research may not have been as directly relevant to CEDICAM. However, it provided insight on the larger dynamics of environmental and social conditions that lead to the outmigration of young adults, the loss of soil-conserving traditions, and ultimately changes in farmers' cropping systems.

This field research experience with CEDICAM, similar to the practice of CI, demonstrates the importance of honing improvisational skills and building trust. The aspiration of participatory methodologies is to achieve transformative learning and social change. Transformative learning – described by Jack Mezirow (2000, 7–8) as changing frames of reference to become more empowered, flexible, reflexive, and emotionally conscious – mirrors what happens in agroecology when a "participatory dynamic challenges research and extension organizations to become flexible, innovative and transparent" (Levidow, Pimbert, and Vanloqueren 2014). In this way, transformative learning provides opportunities to question hegemonic cultural values, similar to what Susan Leigh Foster (2003, 8) describes as the middle voice of improvisational dance.

Just as embodied consciousness makes the dance and the dance makes itself (Foster 2003, 8–9), so too does approaching PAR with confidence, trust, and sensitivity. At every moment, the activist scholar may consider how to place their weight to nourish satisfactory interactions with colleagues. Improvisation in PAR may also benefit from releasing tension to willfully follow the process with greater sensitivity, and embrace disengagement from the "dance" when deemed necessary or beneficial by those involved. Additionally, we may draw connections between spatial awareness; the sensitivity of fascia; and the structure offered by bones in dance to the potential for including stakeholders in guiding knowledge production (see Levidow, Pimbert, and Vanloqueren 2014), and to the beneficial relationship between practitioners' way of knowing and the agronomists' more structured research (see Vogl et al. 2015). Indeed, a willingness by university-based researchers to exchange methodological ideas and questions with non-academic colleagues may in fact enhance scientific rigor rather than detract from it (Stoudt, Fox, and Fine 2012).

And yet, perspectives on participation and exchange differ. For instance, I would describe my interactions with farmers as a dialogue of knowledges (diálogo de saberes) between scientific, cultural, local, and indigenous perspectives (see Cuéllar-Padilla and Calle-Collado 2011). Farmer-organizers with CEDICAM prioritize the development of local leaders and educators through a farmer-to-farmer training methodology. They form partnerships for student dissertations and exchanges, mostly with Mexican educational institutions like the Autonomous University of Chapingo and the Technological Institute of the Valley of Oaxaca. At the same time, they avoid dependencies on individuals with formal institutional training. Jesús León Santos (2011) explained his view:

CEDICAM tries to avoid bringing in external experience, but rather creates its own knowledge internally to avoid contracting external support, such as agronomists, that for one part do not know about the local ecosystems, and also may make people dependent on external resources.

Different perspectives of individuals involved in PAR produce improvisations that involve tracking the shifts in research interests, levels of commitment, and willingness to collaborate. The situational awareness of improvisational dance that senses inward and reaches outward is similar to engagements within the ensemble of individuals and broader social contexts of PAR. Memory and perceptions inform present strategies and visions of possible futures. The notion of tracking that enables quick decision-making in dance (De Spain 2014, 45) is a useful skill given the unpredictable real-world context in which PAR normally operates. This notion of tracking is similarly advocated for the use of PAR in agroecology, which aims to promote a broad set of goals by tailoring data collection and analysis to community needs, by identifying factors affecting food security, and by deriving locally appropriate strategies to achieve sustainable food systems (Putnam et al. 2014).

PAR and the notion of tracking were best exemplified by a series of annual workshops with farmers on climate resilience (see Rogé et al. 2014). Groups of farmers collectively recalled histories of climate impacts and adaptation strategies. In the second and third years, farmers met to design metrics for evaluating the resilience of farming systems in their communities, and they evaluated their farms using their own indicators. CEDICAM and researchers approached farmers as agents capable of interpreting their situation and identifying practical solutions to enhance the resilience of their farming systems to climatic variability.

During these years of collaboration the PAR team shifted their level of effort as competing – and yet complementary – opportunities took shape. Workshops in years two and three occurred at the same time that CEDICAM independently implemented a peasant school (*Escuela Campesina*) dedicated "to educating promoters in a more systematic way. It is also a means to educate other institutions, such as the National Commission for Protected Areas [CONANP]" (León Santos 2011).

In this way, CEDICAM built local capacity while influencing agencies of the Mexican State. In the first year of our collaboration, all hands were on deck to establish the PAR project, and in later years specific members of CEDICAM sustained it. Their organizational priorities understandably shifted to the peasant schools. The PAR workshops were affected by a reduced organizational capacity. Nevertheless, the interventions made through the workshops on climate resilience successfully complemented the continuing efforts by CEDICAM to restore degraded landscapes using agroecological principles.

#### Implications of Improvisation for Research Teams engaged in PAR

The dynamic described above is not uncommon for PAR research operating in multidimensional, embedded, and interconnected contexts. Structures that constrain movement exist both inside of PAR collaborations and in relation to society. In dance, engaging all systems of the body may enhance sensitivity to the different desires expressed by partners while negotiating power dynamics. Skillful improvisation in the ensemble of PAR may eventually lead to observations on the discourse created by collaborators, and where attention to the spaces between bodies engaged in PAR register the circulation of power. An analogy comes to mind of power circulating in multiple directions like blood flowing through the circulatory system rather than becoming a structural impediment.

It is recognized that university-based activist scholars are often in a privileged position of bringing resources, connections, and also an "embodiment of historical legacies" (Putnam et al. 2014). In practical terms, such activist scholars might meditate on the power that they may release to achieve a kind of PAR that more equitably empowers all collaborators. This may very well lead to real consequences, including less-than-ideal experimental designs, incomplete or

insufficient data, more gradual outcomes, and even topics of interest that are better left unexplored.

Yet, PAR challenges research and extension organizations to become more flexible, adaptable, and transparent (Levidow, Pimbert, and Vanloqueren 2014). It is akin to the stretching of muscles that imparts strength and resilience. Stretching over and beyond my dance partner, I create lift that lightens the weight that I share with them. This may occur in similar ways to Stoudt, Fox, and Fine (2012) in which a theater production socializes the findings from a PAR project, and thus reinforces interconnections among viewers and actors. Recognition of spatial and energetic relationships may allow for greater synchrony in co-motion between colleagues engaged in PAR.

Awareness of the external and internal constraints under which PAR occurs may also provide focus, and open lines of communication to help identify opportunities for collaboration that at the same time avoid projection and misunderstandings. As an example, I personally embody contradictions in my relative freedom to cross borders and to extricate myself from engagements in the Mixteca Alta compared to the Mixtec farmers with whom I worked. My differential privilege resulted from my nationality, class, and racial identity. Economic and political conditions had driven many Mixtec farmers to seek alternative routes for crossing borders that in some cases left lasting imprints on them. I am still in a process of learning how to identify and respond to these tensions toward the goal of an activist scholarship with the potential to disrupt oppressive systems. However, an awareness of these tensions may actually indicate important focal points for activist scholarship.

Returning to research design, incremental experiments and research questions may be more convincing to stakeholders than are grand research designs undertaken all at once. This point is akin to CI in that those who practice CI begin with small movements in preparation for more extreme circumstances (Goldman 2010, 96–97). Consider the sometimes externally invisible muscular movements of the small dance. In the last meeting I held with CEDICAM in May of 2013, farmer-leaders expressed that knowledge does not just stay with CEDICAM. Techniques are tested and evaluated with farmers at a small scale before others consider adopting them. This is similar to Rosset and Torres' (2016) point that horizontal communication strategies between farmers has made incredible progress in recuperating traditional knowledge on farms. Indeed, as Jesús León Santos (2011) communicated, "farmers want to see outcomes from the beginning."

Multidimensionality is also reflected in the use of embodied experiences in the interpretation of socio-ecological disturbance (Tschakert, Tutu, and Alcaro 2013), and in the study of phenomena at scales that communities can impact before considering higher level dynamics (Tschakert et al. 2014). Researching the familiar or locally-relevant issues is a good place to start. Such an approach may address the

concern raised by Julia Janes (2016) about dislodging collaborative knowledge from the context through which it was produced.

#### Challenges for PAR and Transformational Change

Nonetheless, challenges remain in extending PAR in agroecology beyond the community level to include the social and economic drivers that are "at the core of the farming sector crisis" (Guzmán et al. 2013). A transformative and engaged agroecology critiques the political and economic structures that shape current food systems, studies power relations that strip farmers of access to natural resources, and articulates alternative visions through social movements (Méndez, Bacon, and Cohen 2013). Expanding awareness in PAR to beyond the community level may identify points of leverage for the social and economic drivers that are causing food systems crises (Guzmán et al. 2013).

In some cases, societal structures that appear to constrain social movements may be bypassed rather than directly confronted. I provide an example. At the time of my field research, numerous organizations were in discussion about the risk that native maize might become appropriated by seed companies, or that genetically modified seed might contaminate landraces in the State of Oaxaca. While members of CEDICAM did engage in direct political discussions, León Santos (2011) believed that there would be no real demand for genetically modified maize as long as farmers valued and retained their seed sovereignty. To this end, CEDICAM promoted *in situ* and decentralized family seed reserves. CEDICAM engaged in a strategy of engendering sovereignty to buffer families from catastrophic crop failures, as exemplified in the following statement from Jesús León Santos (2011):

It is too difficult to conserve all the varieties of maize that families grow [in seed banks]. Some farmers, investigators, and even I say that every family has their own varieties of seed. We have created this system to simply create a reserve. We are also working with farmers to select their seeds ... So we encourage farmers to select their seed separately based on what the farmers want... And food sovereignty goes further to conserving productive systems and conserving autonomy from the national markets. As farmers and indigenous communities we should avoid being too immersed in markets. Farmers should decide what to grow without it being dictated by others.

In this way, higher-level issues are engaged locally. CEDICAM's efforts center on the pursuit of dignified peasant and indigenous ways of life. Though frequently the topic of discussion, the dynamics that lead to outmigration and the abandonment of traditional farming practices still eluded the PAR project with CEDICAM, as well as CEDICAM's own work. Again, Jesús León Santos (2011) explained:

In two years, we have not found the answer to what to do when families migrate, how to recuperate the seed. It is a worrisome. Not only does one lose the family, but also the knowledge and biodiversity that the family had kept. So far I don't have a clear answer to this question. However, when people leave, they can give their seed to another family. But we don't know yet.

#### Conclusion

When it comes down to it, we are all improvising. University-based activist-scholars should consider their comfort level with improvisation, taking the lead from one dancer who suggests that improvisation is "a skill that becomes more and more valuable as the pace of social, climatic, and technological change accelerates.... I write to encourage the current expansion of our art outward from the studio and into our relationships with land and community" (Walla 2008, 30–31). The reflections in this essay suggest pathways for an embodied practice of activist scholarship that embraces improvisation. To conclude, I synthesize the previous discussion around the themes of methodology, analysis, and interpersonal interactions involving the activist scholar.

The curvilinear forms of iterative reflection, investigation, and action provide continuity and follow-through when unexpected challenges present themselves. In the case of the Mixteca Alta, new pathways of investigation – a shift from PAR to engaged ethnography – provided insights into higher-level dynamics that caused farmers to shift their cropping systems. Awareness of leverage points and tensions at different scales may achieve a more effective form of activist scholarship. In addition, altering frames of reference through processes of transformative learning lead to the questioning of hegemonic cultural values.

The dimensions of awareness, sensitivity, and structure offer ways to envision methodologies for activist scholarship that facilitate the exchange of ideas and research questions between academic and non-academic colleagues. Dialogue of knowledges between people from different backgrounds draws on history, memory, and present observation. Agroecology and PAR emphasize the agency of all collaborators to interpret situations and identify solutions to the problems they encounter. Agroecology and PAR may be useful structures for the agency of academic and non-academic colleagues, yet at the same time attention to the flow of power between collaborators is essential for effective partnership and action.

The metaphorical weight of the university-based activist scholar may be placed judiciously to influence interactions and dynamics that lead to satisfactory outcomes for all colleagues involved in research. As a counter point, it is important for these activist scholars to recognize the privilege that they embody, as well as what the releasing of positions of power implies. The interconnectivity between actors with complementary commitments may increase the chances for meaningful and what Paxton might call "onflowing" collaboration. Solidarity and open lines of

communication may lead to greater understanding, mutual respect, and transformational change.

#### Acknowledgments

In addition to the two anonymous reviewers and three editors of this special edition, my appreciation extends to Carolina Bergonzoni, Andrew Friedman, Bronwyn Preece, Barbara Sniderman, Justin Veuthey, and Yingyue Liu for their critical feedback on this manuscript. This research was made possible by my doctoral advisors Miguel Altieri and Marta Astier, and by the farmers at CEDICAM, notably Abelino Célis, Anastasia Velasco López, Eleazar García Jiménez, Estela Rosendo Palacios, and Jesús León Santos. This work was supported by the Garcia Robles-Fulbright under the scholarship "Enhancing the resilience of rainfed agroecosystems to climatic variability in Oaxaca, Mexico" and by UC MEXUS under the grants "Importance of social networks in resilience theory" and "Climate change research in Mexico."

#### References

- Alaimo, Stacy. 2012. "Insurgent Vulnerability and the Carbon Footprint of Gender." *Kvinder*, *Køn & Forskning*, no. 34:22–35. https://tidsskrift.dk/index.php/KKF/article/view/44306.
- Alvarez-Salas, Lizeth Marelly, Diana Nayibe Polanco-Echeverry, and Leonardo Ríos-Osorio. 2014. "Reflexiones Acerca de Los Aspectos Epistemológicos de La Agroecología." *Cuadernos de Desarrollo Rural* 11 (74):20. https://doi.org/10.11144/Javeriana.CRD11-74.raea.
- Anes, José, André Astier, Jeanne Bastien, René Berger, Francois Bianchi, Gérard BLUMEN, Lais P. BRANDINI, et al. 1994. "Carta de La Transdisciplinariedad." In *Convento de Arrábida*. Portugal.
- Baker, Houston A. 2001. *Turning South Again*. Durham, NC: Duke University Press.
- Beckwith, Dean, Cecilia Fontanesi, Javaka Steptoe, and Andrew Suseno. 2016. "PARCON." *CQ Contact Improvisation Newsletter* 41 (2). https://contactquarterly.com/contact-improvisation/newsletter/view/parcon.
- Broad, Garrett. 2016. "Introduction: Food Justice and Community Change." In *More Than Just Food: Food Justice and Community Change*, 1–15. University of California Press.
- Calhoun, Craig. 2008. "Forward." In *Engaging Contradictions*, edited by Charles R. Hale, xiii–xxvi. Berkeley: University of California Press.

- Chambers, Robert. 1994. "The Origins and Practice of Participatory Rural Appraisal." *World Development* 22 (7):953–69. https://doi.org/10.1016/0305-750X(94)90141-4.
- Collier, John. 1945. "United States Indian Administration as a Laboratory of Ethnic Relations." *Social Research* 12 (3):265–303. http://www.jstor.org/stable/40982119.
- Cuéllar-Padilla, Mamen, and Ángel Calle-Collado. 2011. "Can We Find Solutions with People? Participatory Action Research with Small Organic Producers in Andalusia." *Journal of Rural Studies* 27 (4):372–83. https://doi.org/10.1016/j.jrurstud.2011.08.004.
- Curtis, Bruce. 2003. "Exposed to Gravity." In *Taken by Surprise: A Dance Improvisation Reader*, edited by Ann Cooper Albright and David Gere, 13–20. Middletown: Wesleyan University Press.
- De Spain, Kent. 2014. Landscape of the Now: A Topography of Movement Improvisation. Oxford: Oxford University Press.
- Dewey, John. 1966. Logic: The Theory of Inquiry. New York: Holt, Rinehart; Winston.
- Dewey, John. 2012. School and Society & the Child and the Curriculum. Dover Publications.
- Dewey, John, and Evelyn Dewey. 1915. *Schools of to-Morrow*. New York: Dutton. http://catalog.hathitrust.org/Record/001117418.
- Foster, Susan Leigh. 1992. "Dancing Culture." *American Ethnologist* 19 (2):362–66. http://www.jstor.org/stable/645041.
- Foster, Susan Leigh. 2002. Dances That Describe Themselves: The Improvised Choreography of Richard Bull. Middletown: Wesleyan University Press.
- Foster, Susan Leigh. 2003. "Taken by Surprise: Improvisation in Dance and Mind." In *Taken by Surprise: A Dance Improvisation Reader*, edited by Ann Cooper Albright and David Gere, 3–10. Middletown: Wesleyan University Press.
- Francis, C., G. Lieblein, S. Gliessman, T.A. Breland, N. Creamer, R. Harwood, L. Salomonsson, et al. 2003. "Agroecology: The Ecology of Food Systems." *Journal of Sustainable Agriculture* 22 (3):99–118. https://doi.org/10.1300/J064v22n03\_10.
- Francis, Charles, Tor Arvid Breland, Edvin Østergaard, Geir Lieblein, and Suzanne Morse. 2013. "Phenomenon-Based Learning in Agroecology: A Prerequisite for Transdisciplinarity and Responsible Action." *Agroecology and Sustainable Food Systems* 37 (1):60–75. https://doi.org/10.1080/10440046.2012.717905.
- Freire, Paulo. 1970. Pedagogy of the Oppressed. New York: Herder and Herder.

- Gere, David. 2003. "Intoduction." In *Taken by Surprise: A Dance Improvisation Reader*, edited by Ann Cooper Albright and David Gere, xii–xxi. Middletown: Wesleyan University Press.
- Giguere, Miriam. 2015. "Dance Education Action Research: A Twin Study." Research in Dance Education 16 (1):16–32. https://doi.org/10.1080/14647893.2014.971231.
- Goldman, Danielle. 2010. I Want to Be Ready: Improvised Dance as a Practice of Freedom. Ann Arbor: University of Michigan Press.
- Guzmán, Gloria I., Daniel López, Lara Román, and Antonio M. Alonso. 2013. "Participatory Action Research in Agroecology: Building Local Organic Food Networks in Spain." *Agroecology and Sustainable Food Systems* 37 (1):127–46. https://doi.org/10.1080/10440046.2012.718997.
- Janes, Julia E. 2016. "Democratic Encounters? Epistemic Privilege, Power, and Community-Based Participatory Action Research." *Action Research* 14 (1):72–87. https://doi.org/10.1177/1476750315579129.
- Kerawalla, Lucinda, Karen Littleton, Eileen Scanlon, Trevor Collins, Mark Gaved, Paul Mulholland, Ann Jones, Gill Clough, and Canan Blake. 2012. "Doing Geography: A Multimodal Analysis of Students' Situated Improvisational Interpretation During Fieldtrips." *Learning, Culture and Social Interaction* 1 (2):78–89. https://doi.org/10.1016/j.lcsi.2012.05.001.
- Kindon, Sara Louise, Rachel Pain, and Mike Kesby. 2007. "Participatory Action Research: Origins, Approaches and Methods." In *Participatory Action Research Approaches and Methods*. New York: Routledge.
- Lakoff, George, and Mark R.D. Johnson. 1980. *Metaphors We Live by*. Chicago: University of Chicago Press.
- León Santos, Jesús. 2011. "Personal Interview." Asunción Nochixtlan, Oaxaca, Mexico.
- Levidow, Les, Michel Pimbert, and Gaetan Vanloqueren. 2014. "Agroecological Research: Conforming or Transforming the Dominant Agro-Food Regime?" *Agroecology and Sustainable Food Systems* 38 (10):1127–55. https://doi.org/10.1080/21683565.2014.951459.
- Lewin, Kurt. 1946. "Action Research and Minority Problems." *Journal of Social Issues* 2 (4):34–46. https://doi.org/10.1111/j.1540-4560.1946.tb02295.x.
- Lippert, Ingmar, Franz Krause, and Niklas Klaus Hartmann. 2015. "Environmental Management as Situated Practice." *Geoforum* 66 (Supplement C):107–14. https://doi.org/10.1016/j.geoforum.2015.09.006.
- Méndez, V. Ernesto, Christopher M. Bacon, and Roseann Cohen. 2013. "Agroecology as a Transdisciplinary, Participatory, and Action-Oriented

- Approach." *Agroecology and Sustainable Food Systems* 37 (1):3–18. http://www.tandfonline.com/doi/abs/10.1080/10440046.2012.736926.
- Merleau-Ponty, Maurice. 2001. *Phénoménologie de La Perception*. 4. Paris: Gallimard.
- Mezirow, Jack. 2000. Learning as Transformation: Critical Perspectives on a Theory in Progress. San Francisco: Jossey-Bass.
- Novack, Cynthia Jean. 1990. Sharing the Dance: Contact Improvisation and American Culture. Madison, Wisconsin: University of Wisconsin Press.
- Patel, Raj, Rachel Bezner Kerr, Lizzie Shumba, and Laifolo Dakishoni. 2015. "Cook, Eat, Man, Woman: Understanding the New Alliance for Food Security and Nutrition, Nutritionism and Its Alternatives from Malawi." *The Journal of Peasant Studies* 42 (1):21–44. https://doi.org/10.1080/03066150.2014.971767.
- Paxton, Steve, and Nancy Stark Smith. 1972. *Chute*. https://www.youtube.com/watch?v=9FeSDsmIeHA.
- Putnam, Heather, Wendy Godek, Susanne Kissmann, Jean Luckson Pierre, Santos Humberto Alvarado Dzul, Hector Calix de Dios, and Stephen Richard Gliessman. 2014. "Coupling Agroecology and PAR to Identify Appropriate Food Security and Sovereignty Strategies in Indigenous Communities." *Agroecology & Sustainable Food Systems* 38 (2):165–98. https://doi.org/10.1080/21683565.2013.837422.
- Reason, Peter, and Hilary Bradbury, eds. 2008. *The SAGE Handbook of Action Research: Participative Inquiry and Practice*. 2nd ed. Los Angeles: SAGE.
- Rogé, Paul, and Marta Astier. 2015. "Changes in Climate, Crops, and Tradition: Cajete Maize and the Rainfed Farming Systems of Oaxaca, Mexico." *Human Ecology* 43 (5):639–53. https://doi.org/10.1007/s10745-015-9780-y.
- Rogé, Paul, Andrew R. Friedman, Marta Astier, and Miguel A. Altieri. 2014. "Farmer Strategies for Dealing with Climatic Variability: A Case Study from the Mixteca Alta Region of Oaxaca, Mexico." *Agroecology & Sustainable Food Systems* 38 (7):786–811. https://doi.org/10.1080/21683565.2014.900842.
- Rogé, Paul, Aida C. Ríos, Silvia V. Ruiz, Patricio Sánchez, Francisco Mora, Miguel A. Altieri, and Marta Astier. 2016. "Manejo de Agroambientes Para La Resiliencia Agroecológica Al Cambio Climático: Los Sistemas Maíz Cajete Y Maíz de Temporal En San Miguel Huautla Nochixtlán Oaxaca." *Agroecología* 11 (2). https://paulroge.net/sites/default/files/publications/roge-2016-manejo.pdf.
- Rosset, Peter Michael, and María Elena Martínez Torres. 2016. "Agroecología, Territorio, Recampesinización Y Movimientos Sociales." *Estudios Sociales* 25 (47):275–99. http://foodfirst.org/wp-

- content/uploads/2016/02/Agroecolog%C3%ADa-territorio-recampesinizaci%C3%B3n-y-movimientos-sociales.pdf.
- Schaffman, Karen. 2003. "Weighting Metaphors: A Response to Raymond W. Gibbs and 'Hilary'." In *Taken by Surprise: A Dance Improvisation Reader*, edited by Ann Cooper Albright and David Gere, 245–54. Middletown, Conn: Wesleyan University Press.
- Silver, Jonathan. 2014. "Incremental Infrastructures: Material Improvisation and Social Collaboration Across Post-Colonial Acera." *Urban Geography* 35 (6):788–804. https://doi.org/10.1080/02723638.2014.933605.
- Smith, Nancy Stark. 1979. "Editor Note." Contact Quarterly 5 (1):2.
- Smith, Nancy Stark, and David Koteen. 2008. Caught Falling: The Confluence of Contact Improvisation, Nancy Stark Smith, and Other Moving Ideas. Northampton: Contact Editions.
- Stoudt, Brett G., Madeline Fox, and Michelle Fine. 2012. "Contesting Privilege with Critical Participatory Action Research." *Journal of Social Issues* 68 (1):178–93. https://doi.org/10.1111/j.1540-4560.2011.01743.x.
- Sudbury, Julia, and Margo Okazawa-Rey. 2009. "Introduction: Activist Scholarship and the Neoliberal University." In *Activist Scholarship: Antiracism, Feminism, and Social Change*, 1–14. Boulder: Paradigm Publishers.
- Tschakert, Petra, Kathleen Dietrich, Ken Tamminga, Esther Prins, Jen Shaffer, Emma Liwenga, and Alex Asiedu. 2014. "Learning and Envisioning Under Climatic Uncertainty: An African Experience." *Environment and Planning A* 46 (5):1049–68. https://doi.org/10.1068/a46257.
- Tschakert, Petra, Raymond Tutu, and Anna Alcaro. 2013. "Embodied Experiences of Environmental and Climatic Changes in Landscapes of Everyday Life in Ghana." *Emotion*, *Space and Society* 7:13–25. https://doi.org/10.1016/j.emospa.2011.11.001.
- Vogl, Christian R., Susanne Kummer, Friedrich Leitgeb, Christoph Schunko, and Magdalena Aigner. 2015. "Keeping the Actors in the Organic System Learning: The Role of Organic Farmers' Experiments." *Sustainable Agriculture Research* 4 (3). https://doi.org/10.5539/sar.v4n3p140.
- Walla, Nala. 2008. "The Embodied Activist: Where Permaculture Meets the Arts." *Contact Quarterly* 33 (2):28–31.
- Wylie, John. 2002. "An Essay on Ascending Glastonbury Tor." *Geoforum* 33 (4):441–54. https://doi.org/10.1016/S0016-7185(02)00033-7.
- Wylie, John. 2009. "Landscape, Absence and the Geographies of Love." *Transactions of the Institute of British Geographers* 34 (3):275–89. https://doi.org/10.1111/j.1475-5661.2009.00351.x.