

Chapter 2

Water, Cooperation, and Peace in the Palestinian West Bank

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Abstract This chapter tests the conflict transformation potential of environmental peacebuilding, exploring the possibility for engagement between conflicting parties over shared natural resources in building trust and fostering cooperation in other areas, positively influencing wider conflict dynamics. *Nested conflict theory* (NCT) serves as a conflictual roadmap for judging transformative potential as it conceptualizes a single conflict at four discrete yet interacting levels: issues-specific, relational, structural, and cultural. A critical examination of a joint Israeli-Palestinian greywater reuse system is employed as a case study to run the model. Our examination finds the environmental peacebuilding case study fails to show progress at the structural level. The initiative's efforts are stuck within a "peacebuilding purgatory." The authors believe this indicates a need for environmental peacebuilding initiatives to consciously develop mechanisms that can leverage gains at the issue-specific and relational levels into counter-normative institutions and behaviours.

Keywords Water and conflict • Wastewater • Greywater reuse • Israeli-Palestinian cooperation • Environmental peacebuilding • Nested conflict theory • Conflict transformation • Epistemic communities

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2.1 Introduction

This chapter explores the extent to which cooperation over natural resources can catalyze movement from violent conflict to positive peace. Using nested conflict theory as a conceptual roadmap for gauging environmental peacebuilding's potential, we assess the ability of a particular environmental peacebuilding initiative to make a positive impact at different levels of the Israeli-Palestinian conflict.

We begin with a review of key literature on conflict transformation and environmental peacebuilding theory. Mapping the theoretical landscape is key as we seek to highlight the links and lacks between theory and practice. We will examine at length (1) the meaning and mechanisms of conflict transformation, (2) environmental peacebuilding's claims to transformative power and, (3) how conflict theory frames the Israeli-Palestinian issue.

Following the theoretical discussion, a brief summary of why the Israeli-Palestinian conflict, and our case study initiative in particular, will be provided. Lastly, the initiative's relative successes and failures are analysed. The hope is that the level analysis will not only highlight the idiosyncratic successes and failures of the case study, but that they can provide guidance and direction in conceiving of environmental peacebuilding elsewhere.

2.2 Literature Review

2.2.1 *Conflict Transformation*

Curle (1971: 1–23) describes conflict as ‘unpeacefulness’ stemming from a relational imbalance where one party in a relationship is able to dominate another—with or without the knowledge of the parties involved. Galtung (1996: 72, 79–80) also refers to conflict in terms of domination, however, he refers more broadly to the domination of disharmonious aspects of a formation with both harmonious and disharmonious elements. In Galtung's view, conflict in its latent and manifest forms can be thought of as a formation of attitudes or assumptions, behaviour and contradictions, the interactions of which form a conflict triangle. Burton (1996: 7) understands conflict as, “struggles between opposing forces.” For Francis (2002: 3), conflict is, “the friction caused by difference, proximity, and movement ... [ultimately] a sign of life.” Rupesinghe (1995: 73) notes that conflict can be viewed as a situation where different actors pursue incompatible—or seemingly incompatible—goals. Lederach (1995: 15–6, 2003: 23) suggests that conflict is a transformative phenomenon lodged naturally in human relationships—with personal, relational, structural, and cultural implications. Lederach (2003: 3–4, 13–4, 18) further emphasizes the normality of conflict calling it a gift, an opportunity, a necessity, and a motor of change. As Ramsbotham et al. (2005: 164) share, “[i]n many cultures conflicts are explained as ‘tangles’ of contradictory claims that must be unravelled ... at the root of conflict is a

knot of problematic relationships, conflicting interests and differing world-views.” For Wallensteen (1991: 151), conflict can be thought of as, “... processes, where ‘resolutions’ are often only part of continuous development.”

When expressed violently, conflict may serve as a mechanism for taking or preserving power, maintaining internal cohesion, or pursuing external expansion (Väyrynen 1991: 1). Violent conflict can become “... an ideology, a form of life without any clear-cut objectives ... an instrument intended to produce desired political effects ... a means of communication ... [or] ... a method of destruction ...” (Väyrynen 1991: 2). Importantly, Deutsch (2014: 27–38) adds that conflicts can be interpersonal, intergroup, organizational, or international in scope and character. Whether conflict is viewed by theorists and practitioners as a process, discrete incident, facet of human relationship or other such formation, its acknowledged presence becomes a meaningful starting point for change and a foundation for the study of conflict transformation.

Väyrynen (1991: 4–6) acknowledges the continuously transforming nature of conflict and proposes that intractable conflicts may require a process of transformation in order to find solutions. To this end, he offers a taxonomy of transformation distinguishing between actor, issue, rule, and structural transformation. Actor transformation may be characterized by the emergence or recognition of new actors but can also result from internal changes within major parties. Issue transformation makes, “dissonant issues less weighty and salient, while making consonant ones more clearly perceived and stronger” (Deutsch 1978: 195–7). It promotes an opening of the agenda and a focus on issues of commonality. Rule transformation focuses on changing the rules of the game by redefining the norms that typically guide the actors in their relationships. Structural transformation is more comprehensive as power between actors is substantially redistributed or mutual relations undergo qualitative change.

According to Francis (2002: 26), conflict transformation, “... embraces the different processes and approaches that are needed to address conflict constructively in different contexts and at different levels, in the short term and the long term, including engagement in conflict as well as its management and resolution.” Emphasizing conflict transformation’s social justice demands, Francis outlines a series of dynamic stages and processes needed “if a situation of oppression, with an extreme imbalance of power, is to be transformed into one of genuine peace.” She begins with situations of latent conflict where there is an unequal distribution of power but oppressed parties are not aware of their oppression. She then moves through shifting power relations, conflict resolution, long-term cooperation, and continuous peace maintenance and violence prevention. Francis suggests that conflict resolution processes and nonviolent methods work together to realize conflict transformation—like two sides of the same coin.

Ramsbotham et al. (2005: 29), however, suggest that conflict transformation is conflict resolution at its deepest level; engaging in the underlying tasks of structural and cultural peacebuilding by transforming the parties in conflict, the relationships between those conflicting parties, and the institutions and discourses that perpetuate

violence. For Galtung (1996: 90), transforming conflict becomes identifying the parts that make up the conflict triangle and then engaging in processes of (dis) articulation, (de)conscientization, complexification and simplification, (de)polarization, and (de-)escalation across time, recognizing that conflict transformation is a never-ending process responsive to old and new contradictions as they arise.

According to Galtung (1996: 73–8, 90–1), articulation refers to a fully realized conflict with all elements (attitudes, behaviors, contradictions) clearly articulated; disarticulation considers the dissipation of conflict with, “attitudes dying out, behavioral patterns receding into oblivion and contradictions dissolving.” The concept of conscientization is borrowed from the work of Freire (1993: 35–40) and refers to the process of making conflict attitudes and contradictions visible. As Galtung asks, “... how can a conflict be consciously transformed unless the parties to the conflict are conscious subjects, true actors?” The opposite process is thought of as deconscientization. Complexification considers the balance between understanding conflict elements at a high enough level of complexity to identify opportunities for transformation while not overcomplicating the elements thereby making them too complex for the human mind to handle. When reducing complexity—or engaging in the process of simplification—Galtung warns against reductionist tendencies favoring a healthy balance between complexity and simplicity. The process of simplification may produce polarization as conflicts are pared down to their more basic, elemental parts—“assigning all parties ... to one or the other of *two* camps, wrapping all ... conflict themes together in one supra-theme.” Escalation and de-escalation refers to the increase or decrease of violent behaviors in a conflict.

Expanding on the concepts of simplification and complexification, Galtung (1996: 93, 103) suggests that, to transform structural conflicts, other structural arrangements that reinforce verticality, repression and exploitation must be transformed—namely those preventing conscientization and those preventing mobilization. Arrangements that prevent conscientization, tend to manifest as either the oppressed being conditioned by the oppressor (penetration) or exhibiting a limited view of reality (segmentation). The prevention of mobilization occurs when the oppressed are either split away from each other (fragmentation) or isolated from others (marginalization). Galtung suggests a number of strategies for overcoming these structural arrangements but adds that transformations do not happen on their own; rather, they must be willed. Conflict transformation can occur at any time and in any location between a range of actors including, but not limited to, state, civil society, corporations, or individuals, by engaging in a communication process with other actors in the conflict.

Although not directly using the term conflict transformation—but building on the work of Galtung (Miall 2004: 4)—Curle (1971: 15) notes that, in order to transition from unpeaceful to peaceful relationships, the relationship itself must undergo radical change focused on mutuality—mutual understanding, assistance, and concern—rather than domination or imposition. He argues that peacemaking is born of the changes—both incremental and large-scale—that bring relationships to the point that full development can occur.

Rooted in the work of Galtung and Curle, Lederach (2003: 22) describes conflict transformation as a capacity “to envision and respond to the ebb and flow of social conflict as life-giving opportunities for creating constructive change processes that reduce violence, increase justice in direct interaction and social structures, and respond to real-life problems in human relationships.” Influenced by Dugan’s (1996: 9–19, 2001: 365–9) nested conflict theory, Lederach offers a taxonomy of change goals in conflict transformation suggesting that constructive processes in the personal, relational, structural, and cultural domains of social conflict can promote transformation. Goals focused on personal change seek to minimize the destructive aspects of social conflict while maximizing the potential for physical, emotional, intellectual, and spiritual growth. Relational change goals minimize poor communication and maximize understanding of hopes and fears as connected to emotions and interdependence in a relationship. Structurally oriented change goals focus on understanding and addressing the root causes of conflict while promoting nonviolent methods and substantive and procedural justice. Culturally oriented change goals focus on uncovering and understanding the underlying cultural patterns that can lead to the violent expression of conflict.

As noted by Lederach, when transitioning from conflict transformation theory to practice, a key challenge emerges, “... how to develop and sustain a platform or strategic plan that has the capacity to adapt and generate ongoing desired change, while at the same responding creatively to immediate needs” (Lederach 2003: 33–4). Lederach asserts that change is simultaneously circular and linear; the circular nature of change recognizes that things are connected in relationship with growth emerging from its own multi-directional process. The linear nature of change demands thoughtful consideration of the overall flow of change—both its direction and purpose. Creative balance of the circular and linear aspects of change is key to creating transformational platforms that are both responsive in the short term and strategic in the long term. Transformational platforms provide, “a base to stand on and jump from.” (Lederach 2003: 45) They include, “an understanding of ... the ‘big picture’..., processes for addressing immediate problems and conflicts, a vision for the future, and a plan for change processes which will move in that direction.” (Lederach 2003: 45). Lederach (2005: 48–9) elaborates on this concept further sharing that platforms for ongoing change should be,

1. Built by supporting the constructive engagement of people who have been historically divided and who are or may remain in significant levels of conflict,
2. Permanent and continuously adaptive; platforms to produce change are more important than the individual solutions they create,
3. Capable of producing solutions that meet particular demands in temporary discrete timeframes providing answers to pressing problems, but ephemeral rather than permanent.

To consider the applicability of environmental peacebuilding as a viable means of conflict transformation, the concepts highlighted by these key theorists in aggregate provide a useful framework for analysis.

2.2.2 *Environmental Peacebuilding*

In understanding the concept of environmental peacebuilding, it is critical to first understand peacebuilding in a broader sense and then consider what possibilities for conflict transformation emerge when linking peacebuilding directly to environmental cooperation.

2.2.2.1 *Peacebuilding*

Despite its ubiquitous use in peace and conflict studies, there is no one agreed upon definition of peacebuilding (Call/Cooke 2003: 235; Jenkins 2013: 35). Galtung is often credited with first using the term in reference to structures that encourage sustainable peace by addressing the underlying causes of conflict and supporting indigenous capacity-building for conflict management and resolution.¹ For Bertram (1995: 388–9), peacebuilding is also thought of as tackling the roots of conflict but by fostering the political conditions necessary for a sustainable, democratic peace including—but not limited to—remaking a state’s political, security, and economic institution or arrangements.

The UN Agenda for Peace (UN 1992: 822–5), makes distinctions between preventative diplomacy, peacemaking, peacekeeping, and peacebuilding. Preventative diplomacy refers to actions intended to either prevent disputes or their escalation. Peacemaking describes processes that bring parties to an agreement while peacekeeping involves deploying forces for a region to keep the peace. Peacebuilding activities are critical in post-conflict settings as they are meant to deter a return to violence. Further illuminating these concepts, the Brahimi Report (UN 2000: 2–3) notes that peacemaking attempts to end conflicts that are in progress by employing the tools of diplomacy and mediation while peacekeeping involves both military and civilian forces engaging in the work of building peace in the, “dangerous aftermath of civil wars.” Peacebuilding, however, “defines activities undertaken on the far side of conflict to reassemble the foundations of peace and provide the tools for building on those foundations something that is more than just the absence of war.” The UN (2010: 5) revisited the concept of peacebuilding again in 2007 determining:

Peacebuilding involves a range of measures targeted to reduce the risk of lapsing or relapsing into conflict by strengthening national capacities at all levels for conflict management, and to lay the foundations for sustainable peace and development. Peacebuilding strategies must be coherent and tailored to specific needs of the country concerned, based on national ownership, and should comprise a carefully prioritized, sequenced, and therefore relatively narrow set of activities aimed at achieving the above objectives.

¹UN (United Nations); at <http://www.un.org/en/peacebuilding/pbso/pbun.shtml> (1 June 2015).

Call/Cooke (2003: 235), note an additional body of literature in the peacebuilding arena that make no clear distinctions between peacemaking, peacekeeping, and conflict prevention. Rather, these scholars assert that peacebuilding can be thought of as an umbrella term that captures peacemaking, peacekeeping, conflict prevention, and related concepts (Jarstad 2008). It is this broad concept of peacebuilding that is employed herein.

2.2.2.2 Peacebuilding and Environmental Cooperation

In their seminal work, *Environmental Peacemaking*, Conca/Dabelko (2002: 8–12, 220–32) consider the extent to which environmental cooperation can bring about, “movement along a peace continuum, rendering violent conflict less likely or less imaginable.” They outline two pathways for exploiting environmental challenges to promote synergies for peace—by reframing these challenges as opportunities or by emphasizing the transboundary nature of environmental issues to promote shared identities. They suggest that environmental peacemaking can help to “create cooperative knowledge ... [,] establish a tradition of cooperation ... [and] push actors to broaden the time horizons that frame bargaining processes.” Furthermore, they assert that “a strategy of environmental peacemaking would emphasize creating and exploiting positive forms of trans-societal interdependence, building transnational civil-society linkages, fostering new norms of environmental responsibility and peaceful dispute resolution, and transforming opaque, security-minded institutions of the state.”

By viewing the environment with a peacemaking—or peacebuilding—lens, an opportunity emerges to examine the extent to which environmental cooperation can serve as a platform for conflict transformation. In the following subsections, claims that the environment can be leveraged to promote peacebuilding through its emphasis on long time horizons, potential to create shared identities, and ability to encourage mutual cooperation will be subjected to an analysis rooted in the tenets of conflict transformation.

Emphasis on Long Time Horizons. According to Conca and Dabelko, negotiations and discussions about the environment are unique because they demonstrate the need for reciprocity and cooperation by emphasizing long time horizons (Conca/Dabelko 2002: 10–11; Conca 2000: 225–250; Axelrod 2006: 3–24). The long time horizons afforded to environmental planning and management are especially important given that, as Saunders and Slim found, sustained dialogue is needed to change conflictual relationships (Saunders/Slim 1994: 43–56). For environmental peacebuilding to effectively leverage its potential to “push actors to lengthen ‘the shadow of the future’” (Conca/Dabelko 2002: 10) and promote conflict transformation, it must allow actors to create solutions that are both circular and linear. That is, it must be responsive to the needs of the present moment and the anticipated future.

For examples of how peacebuilding practitioners hold the dual concepts of present and future in constructive tension, consider the works of Boulding and

Dugan. Inspired by Polak's *Image of the Future* (1973), Boulding (2001: 373) and her contemporaries developed a workshop format in the late 1970s designed to empower peace activism. In the workshop, participants were invited to imagine a peaceful world thirty years into the future and then work backwards in time to identify the steps needed to secure that future. Since then, others have borrowed from that workshop format to actively engage in the work of conflict transformation. For example, in explaining her nested conflict theory—which emphasizes the interconnectedness of issue-specific, relational, and structural layers of conflict—Dugan (2001: 365–72) notes the importance of acknowledging the shortcomings of existing social arrangements in spaces of intractable conflict, and then in conceptualizing new arrangements that could be implemented in the future. For conflicts expressed in the relational and structural arenas, Dugan outlines a six stage process for parties to envision transformation: goal statement, clarification, future present moment, futures history, policy team creation, and action planning in the present. By working through this process, parties to a conflict identify goals they would like to work toward achieving, clarify the meanings associated with those goals in an effort to build a shared vocabulary, share a vision of what their imaged future looks like, imagine the steps it took to get to that future, self-identify others present who they could work with to achieve their imagined future, and then develop a plan to make that imagined future a reality.

As Dugan (2001: 371) reflects, engaging in this type of envisioning provides, “an enhanced possibility of fashioning a way out of ... existing turmoil ...”. Notably, however, Dugan suggests that conflicts expressed primarily as issues may not lend themselves to envisioning processes because they are resolved primarily by analytical means and do not necessarily challenge existing relational or structural patterns. This point becomes especially important when considering the extent to which environmental cooperation can promote transformation as environmental efforts can easily remain in the issues-specific domain focusing on, “urban air and water quality, sanitation and toxic contamination” (Conca/Dabelko 2002: 3). To capitalize on the peacebuilding potential associated with long time horizons, structures must be in place that allow actors to actively connect the issue of the moment to the long term goals of an imaged future. Otherwise, the transformative potential of long time horizons remains latent, at best.

Potential to Create Shared Identities. A similarly vital tenet in environmental peacebuilding theory is the relevance of shared identities around the natural environment. Environmental peacebuilding implies that there is an emotional and spiritual sentiment that is tied to the natural world and influences how people perceive and value their communities (Cheng et al. 2003, 87–104). According to Carius (2006: 12), transboundary environmental cooperation has the strategic ability to substitute mutually-exclusive, territory-based identities with ones envisaged by a shared environmental community. More than just a physical space, such transboundary ecosystems have intrinsic cultural significance resulting in ecological, historical and symbolic ramifications on communities' perceptions of their shared identities (Greider/Garkovich 1994: 1–24). Through the creation of shared environmental identities, environmental peacebuilding is distinct from territorial

boundaries and can transcend national identities that have been developed by political borders. By catalyzing a shared identity around natural resources, environmental peacebuilding can provide a basis for opposing groups to act collectively.

Critics to the environmental peacebuilding field argue that there are deep-seated political and cultural barriers to the creation of a shared identity over natural resources. National identity is a highly critical factor, especially in regards to normalization campaigns between such parties. Given asymmetrical power relations, the creation of a shared and unifying identity might not be possible if inequality and injustice are rampant within the regional community. Critics contend that the creation of a shared identity may actually contribute to the normalization of such oppression. In anti-normalization efforts, the conflicting groups perceive their identities and their understanding of their “own humanity in contrast to the demonized other” (Abu-Nimer/Lazarus 2007: 23). A Middle Eastern human rights activist organization surmised such perspectives by explaining that “[i]t is helpful to think of normalization as a ‘colonization of the mind’ whereby the oppressed subject comes to believe that the oppressor’s reality is the only ‘normal’ reality ... and a fact of life that must be coped with.”² From this understanding, transboundary environmental cooperation might not be meaningful since beliefs on normalization and hegemonic oppression are tied to the identity of the oppressor in conflict situations, thereby negating the key functions of environmental peacebuilding.³

To counteract these claims, environmental peacebuilding theory suggests that conflict actors can be brought together by a shared common identity by emphasizing collective problem solving and understanding about their transboundary environment in addition to shifting conflict-driven interests (Clayton/Opotow 2003: 1–24). Environmental cooperation can debunk normalization concerns in the effort to promote the development of shared values, norms and practices that result in building such a shared identity (Harari/Roseman 2008: 12). Transboundary environmental cooperation can create awareness of the transboundary nature of ecosystems and of commonality between communities. Scholars Akçali/Antonsich (2009: 944) suggest that this environmental perspective is “seen to generate a ‘we’ feeling inclusive of the whole population, beyond ethnic or religious divides, thus confirming the discursive strategy of using the environment to foster a common identity.” With changes in identity, “individuals may come to see commonalities in their experience. They may come to consider themselves members of a community and view themselves in collective terms” (Miller 1992: 32).

Ability to Encourage Mutual Cooperation. Conca/Dabelko (2002: 11) consider the potential positive side effects associated with environmental cooperation including “trust-building ... the identification of mutual gains, or a growing habit of

²Palestinian Campaign for the Academic and Cultural Boycott of Israel (PACBI); at: <http://www.pacbi.org/etemplate.php?id=1749> (1 June 2015).

³PACBI; at: <http://www.pacbi.org/etemplate.php?id=1749> (1 June 2015).

cooperation ...” Carius (2006–2007: 62) suggests that environmental cooperation can be utilized as a platform for dialogue, particularly when diplomatic or political approaches have not produced significant gains. As Carius (2006–2007: 62) shares, “[i]n many instances, hostile—if not openly warring—countries have found that environmental issues are one of the few topics on which they can sustain an ongoing dialogue.” He further asserts, “... common environmental challenges can also be used to replace distrust, suspicion, and divergent interests with a shared knowledge base and common goals, and thus could transform relationships marred by conflict.”

To test the hypothesis that environmental cooperation can transform relationships, it is valuable to keep in mind Lederach’s notion of a transformational platforms and, in particular, the way that these platforms are built. According to Lederach, transformational platforms are built by supporting the constructive engagement of people who have been historically divided and who are or may remain in significant levels of conflict. To better understand what is meant by supporting constructive engagement, a brief primer on contact theory and its limitations is essential.

Efforts rooted in contact theory are, “based on the assumption that working together toward a common, superordinate goal reduces intergroup hostilities, increases liking and cooperation, and fosters a common identity transcending the separate identity of each group” (Moaz 2011: 115–25). As Allport (1954: 206–220) notes: positive interpersonal contact between members of different groups reduces prejudice, in turn leading to cooperation. Contact theory’s assertion that limited, interpersonal contact can broaden into intergroup amicability is based on the notion of generalization, or the transferring of a positive view of an individual to an entire group (Pettigrew 1998: 65–85).

The aspirations of initiatives rooted in the ideals of contact theory can fall short if prevailing power relations and social discourses retard the process of generalization. As contact theory asserts, institutional or authority support for changing attitudes is considered part of the ‘optimal’ conditions under which contact theory operates. A second optimal condition is that representatives must share equal status in order for positive intergroup contact to occur (Allport 1954: 261–84). More recent meta-data research has found that “although authority support appears to play an important role, this condition should not be conceived of or implemented in isolation. Institutional support for contact under conditions of competition or unequal status can often enhance animosity between groups, thereby diminishing the potential for achieving positive outcomes from contact” (Pettigrew/Tropp 2006: 751–83). Indeed, studies have shown that certain contact theory methods replicate the macro power asymmetry within the group microcosm (Moaz 2000: 259–77). Contact exercises thus may inadvertently reinforce normative, culturally violence attitudes and perceptions. Moreover, even when positive personal interaction does occur, personal affinity and understanding are not enough to reduce structural inequality. In fact, it is possible that positive intergroup contact “may nurture bonds of affection yet leave intact political commitments that sustain institutional discrimination” (Dixon et al. 2005: 697–711). These findings suggest that, while

environmental cooperation may promote engagement, it may not be of a constructive nature and, as a result, may not be sufficient for building transformational platforms capable of promoting sustained and adaptive peacebuilding.

2.2.3 *Conflict Theory*

This final theoretical review concerns the typological classifications of the Israeli-Palestinian issue. Having reviewed the means of and claims to conflict transformation above, it is necessary that we indicate what is in exact need of transformation. This section will frame the Israeli-Palestinian conflict as asymmetric, hegemonic, and protracted. In each instance, the classification necessitates a transformative approach at the expense of traditional tools of mediation and dialogue.

2.2.3.1 **Asymmetric Conflict, Hegemonic Power, and Protracted Conflict**

The Israeli-Palestinian conflict is neither a strict inter- or intrastate conflict but rather a case of a recognized nation-state occupying a semi-autonomous, displaced and stateless people. By nature, the conflict is characterized by extreme power asymmetries. These institutionalized power asymmetries contribute to the conflict's intractability (Azar et al. 1978: 41–60; Azar/Farah 1981: 317–35, Azar 1985: 59–70). Thus it is necessary to describe and develop the concepts of asymmetry and protraction which will lead into a discussion of hegemonic power. Throughout this exploration, we will refer back to the Israeli-Palestinian conflict as an illustrative tool that both gives shape and form to the theoretical literature as well as contextualizes our case study examination.

At its most basic definition, asymmetric conflicts “are those in which conflict parties are unequal in power, either quantitatively (e.g. strong vs. weak states) or qualitatively (e.g. state vs. non-state actors) or both” (Ramsbotham et al. 2011: 59). Respectively, these are inequalities in power of *force* and power of *status* (Miall 2004: 3). Suleiman further disaggregates asymmetry by naming five key areas by which conflicting parties can be compared: political status, access to resources, institutional development, external support (e.g. moral, financial, political), and the privilege to discriminate (i.e. agency to determine one's own future) (Suleiman 2000: 40, cited by Abitbol 2013: 6). As an example, consider the notion of external support. In the form of arms, external support bolsters a party's power of force. In the form of political recognition of a party's statehood or independence, however, external support augments the party's power of status. These two notions of power while distinctive are also interactive in nature: recognition of one's statehood can help legitimize marital support. In either case, Cascão/Zeitoun (2010: 28) state that “power asymmetries

determine to a significant (not total) extent the fundamentally political distributional issue of ‘who gets what, when, where and why’ (Lasswell 1936).”

In the case of the Israeli-Palestinian conflict, relative strength is extremely asymmetric (Zeitoun/Allan 2008: 10). In both force and status power, Israel is a clear heavyweight: it is an officially recognized state with full United Nations privileges, possesses the most quantitatively and qualitatively superior armed forces in the region—let alone in comparison to Palestine⁴ and continues to grow and modernize its economy (OECD 2013: 1–37). The extent of Israel’s asymmetry may be said to be hegemonic.

The denotation of hegemony is important as it explicitly incorporates ideational power:

... the concept of hegemony provides a means of analysing and communicating about asymmetric international power relations. The hegemon has a disproportionate capacity to coerce a weaker [party]. As the greatest form of power lies in the realm of ideas, hegemons have the option to write the agenda. They have the ability to determine the knowledge that is included, regardless of how analysts judge the merit or legitimacy of the outcomes (Zeitoun/Allan 2008: 9).

The power of ideas is the power of discourse. Fröhlich (2012: 126) notes that discourse differentiates “between ‘right’ and ‘wrong’ knowledge, between different constructions of reality, between that which is ‘sayable’ and that which is ‘unsayable.’” By all accounts, Israel has “the option to write the agenda for ... contestation”—that is, what is sayable—within the hydrological conflict. As an example, the Israeli-Palestinian Joint Water Committee (JWC) which is responsible for writing the agenda for hydrological contestation/cooperation has been criticized on a number of grounds, most notably for “dressing up domination as cooperation,” and effectively reproducing Israeli hydro-hegemony (Selby 2003: 121–138). As a result of this domination, the JWC is able to leverage bureaucratic and discursive arrangements to effectively hinder Palestinian water sector development which is well acknowledged to be sorely lacking (World Bank 2009: 9–25, 33–42, 47–53).

In addition to being asymmetric and hegemonic, the Israeli-Palestinian conflict can further be understood as a protracted social conflict. Protracted social conflicts, or intractable conflicts, are conflicts where antagonistic relations between different communal groups persist over a long period of time (Azar et al. 1978: 41–60; Azar/Farah 1981: 317–35; Azar 1985: 59–70). Mitchell (1991: 245–26) notes that such conflicts are commonly waged between competing ethnonationalist groups within discrete jurio-territorial borders—essentially, a competition between competing identity groups over the mechanisms of political power. The stakes of this conflict are existentially high as it is a contest to either preserve or invalidate a political system that innately favours a single and exclusive ethnocentric definition of citizenship and personhood.

As a result of the difficulties associated with maintaining high levels of violent intensity over extended periods of time, protracted asymmetric conflicts thus tend to

⁴Haaretz; at: <http://www.haaretz.com/news/diplomacy-defense/1.623249> (28 October 2014).

wax and wane in their expressions of direct, physical violence with structurally and culturally violent frames and relationships remaining intact. Given the length of the conflict, violent expressions may alter their forms of expression in accordance to changing historical circumstances (Azar et al. 1978: 41–60; Mitchell 1991: 28). Miall (2004: 3) observes that protracted conflict cross “repeatedly into and out of violence and thus [defy] cyclical or bell-shaped models of conflict phases. By virtue of this undulation, it is highly unlikely that parties will reach a mutually hurting stalemate, a qualification that a significant portion of the conflict resolution literature holds as a necessary precondition for a negotiated settlement (Mitchell 1991: 35–37). As contests for ethnonational supremacy, protracted conflicts present little to no space for altering the basic grievance. Rather (Azar et al. 1978: 51),

They tend to generate, reinforce, or intensify mutual images of deception. They tend too to increase the likelihood of confusion in the direct and indirect communications between the parties and their allies. They increase the anxieties of the parties to the conflict, and they foster tension and conflict-maintenance strategies. In the protracted conflict situation, the conflict becomes an arena for redefining issues rather than a means for adjudicating them; it is therefore futile to look for any ultimate resolution. The conflict process becomes the source rather than the outcome of policy.

Resolving protracted social conflicts requires addressing the undergirding notions of group incompatibility and the associated notions of belonging, citizenship, and personhood.

The preceding designations—asymmetry, hegemonic power, protracted social conflict—all have meaningful repercussions vis-à-vis conflict resolution: “In these circumstances critics have seen traditional negotiation/mediation, dialogue and problem-solving approaches as inadequate, if not counterproductive, insofar as the assume equivalence between the conflict parties” (Ramsbotham et al. 2011: 59). It is clear that a conflict transformation approach, one that fundamentally alters relationships on the immediate interpersonal level, structural and cultural level, and all points in between must be initiated.

2.3 Case Study

2.3.1 *Israeli-Palestinian Context*

The Israeli-Palestinian conflict is characterized by extreme power asymmetries with Israeli hegemony expressed through many capillaries of power. It is not our purpose here, however, to critique them all. This exploration will focus squarely on Israeli’s *hydrohegemony*. We acknowledge this is an incomplete picture of the conflict but one that, nevertheless, carries great weight and great potential for transformation.

In the water sector, conflict asymmetry results in an Israeli hydrohegemony whereby Israel denies Palestinians equal access to water—a shared and necessary resource. Strict water access regulations imposed by the 1967 occupation of the

Palestinian West Bank remain in place today with Israel disproportionately controlling shared surface and—most importantly—groundwater. Roughly 90 % of Israel-Palestine's groundwater comes from the Mountain Aquifer, which lies underneath both Israel and the Palestinian West Bank land. The Mountain Aquifer serves as a major source of freshwater for key Israeli population centers and is the only water source for most Palestinians in the Palestinian West Bank. Israel abstracts approximately 80 % of the aquifer's estimated potential and the Palestinian West Bank extracts the remainder.

The Oslo Interim Agreement of 1995 sought to facilitate cooperative water management by establishing the Israeli-Palestinian Joint Water Committee (JWC). Like many initiatives implemented throughout the peace process, however, the JWC has not lived up to expectations. A brief consideration of the permitting process does much to illustrate the asymmetric patterns that are reproduced, rather than interrupted, by the JWC. Any infrastructure project in Area C of the West Bank—approximately 60 % of the territory designated for the future Palestinian state—requires JWC and Israeli Civil Authority permitting. Anecdotal complaints about the JWC's near systematic refusal to grant permits for Palestinian water projects (e.g. Christian et al. 2013: 16–17) have been supported by academic inquiry (Selby 2007: 203–212; World Bank 2009; Zeitoun 2008: 149). Reasonable technical or regulatory concerns no doubt account for some number of JWC permitting decisions. Still, numerous technical experts believe the Israeli government blocks or delays large-scale water infrastructure projects in the Palestinian West Bank “even when no permitting objections or Israeli conditionalities are raised.” Thus there remains a perception that the Israeli government's blocking of infrastructure projects is “a means of limiting Palestinian populations and strengthening Israeli control” (Christian et al. 2013: 18).

Curtailing Palestinian capacity building contributes to the discourse of water securitization that supports Israeli hydrohegemony. Water securitization frames national survival as predicated upon access to a sustainable and unpolluted water supply. One of the perceived central threats to water security is the Palestinian other (Sherman 2001: 188–191; Fröhlich 2012: 129–130). Within this narrative Palestinians are perceived as unable and/or unwilling to be environmental stewards, thereby compromising the quality and quantity of water available for Israeli consumption (Abitbol 2013 28–33; Christian et al. 2013: 61). This is an example of Mitchell's ethnonationalist competition over jurio-territorial control in action through the use of ideational power. The discourse is self-reinforcing (Foucault 1980: 40–46) as Israeli hydrohegemony and the occupation severely handicap Palestinian development, thus preserving Israel's metropole-like control (Cairo 2006: 305). Water access, rights, and governance are not only reflective of the ongoing conflict but also potentially affective (Zeitoun et al. 2013: 86–106). Water is one of the “final status” issues in Israeli-Palestinian negotiations, as well, meaning that any future peace agreement must address the cooperative management of shared water resources.

2.3.2 *The Arava Institute of Environmental Studies and the Palestinian Wastewater Engineers Group*

The Arava Institute of Environmental Studies (AIES) is an Israeli-based institution that focuses on environmental education and research programs, including The Center for Transboundary Water Management (CTWM) which provides an institutional basis for developing projects that ensure equitable access to ground and surface water in the Middle East. The Palestinian Wastewater Engineers Group (PWEG) is a Palestinian nonprofit NGO dedicated to capacity building and professional development within the wastewater and solid waste sectors. The two organizations have partnered to provide a cooperative model for providing sustainable wastewater infrastructure in the Palestinian West Bank.⁵

The initiative is designed to address environmental, technical, and social components of wastewater infrastructure⁶ on a small scale. The initiative's key feature is a low-cost domestic greywater treatment and reuse system that protects groundwater degradation by diverting wastewater from household cesspits and making it available for agricultural use. System installation and monitoring is a cooperative process meant to encourage transboundary communication between Israelis and Palestinians.

The CTWM-PWEG initiative is comprised of unique characteristics that make it a viable testing ground for our framework. Firstly, CTWM and PWEG have a close and long-lasting partnership. In analyzing their relationship in the conflict context, we see that they are prime examples of the “power with” that transcends asymmetries. Both CTWM and PWEG “seem to understand the potential generated through pooling resources and are leveraging their individual and collective skills and influence to effect change in the region. In this way, they are highlighting the importance of building ‘power with’ rather than ‘power over’ partnerships” (Christian et al. 2013: 49–50).

Secondly, the CTWM-PWEG partnership is centered around shared goals and agreement on the intended benefits from the initiative which include increased water availability; increased income from reduced water costs—e.g. “cash savings on cesspits emptying and on drinking water cost,” and greater agricultural productivity; and a reduction in hygienic and environmental risks meant to protect and to save the scarce water resources (Christian et al. 2013: 32).

Finally, the two organizations are positioned as mid-level actors whose ability to engage actors both ‘above’ and ‘below’ allows for a bridging of the divide between civil society/grassroots and elite actors. To be sure, the organizations, and most

⁵“4.2 The Implementing partner organizations”, in *Decentralized Wastewater Treatment and Reuse: A transboundary approach to environmental, social and technical issues of wastewater infrastructure development, A Pilot Project in Al ‘Oja Village, Palestine*: 5.

⁶“4. Problem Statement”, in: *Decentralized Wastewater Treatment and Reuse: A transboundary approach to environmental, social and technical issues of wastewater infrastructure development, A Pilot Project in Al ‘Oja Village, Palestine*: 3–4.

particularly their program staff, do not share the same degree of agency. As an organization registered in Palestine and staffed almost exclusively by Palestinians, PWEg's ability to efficiently and effectively develop international partnerships is severely truncated. For instance, despite being approved by the Joint Water Committee and the Israeli Ministry of Finance, an EU funded water treatment plant to service the Palestinian villages of Taybeh and Ramoun has been delayed for over two months due to the Israeli government, citing security concern, withholding crucial technology provided by a German manufacturer (Christian et al. 2013: 18). While this plant is not a wholly PWEg project, the example is illustrative of the general issue of curtailed privilege to discriminate, i.e. agency to determine one's own future, experienced by Palestinians. In this instance, the ability to enter into equal partnerships designed to improve one's quality of life.

2.4 Results and Discussion

The following analysis borrows from nested conflict theory as first developed by Dugan (1996: 9–19, 2001: 365–9) and then further elaborated upon by Lederach (2003: 27) to organize the research findings. Before engaging in our analysis, however, it is important to note that, while we have chosen to organize our findings in such a way so as to illuminate potential strengths and challenges associated with environmental peacebuilding as a tool for conflict transformation, neither CTWM nor PWEg have explicitly identified their joint partnership and the potential fruits of their work as 'peacebuilding' in nature. Rather, they have focused their attention on achieving environmental and development goals and fostering capacity building. However, the influential Brundtland Report (UN 1987: 240–3), which emphasized the centrality of environmental concerns for development and the importance of sustainability for societal stability, provides a strong foundation and implicit justification for our analysis as we consider the rich nexus between the environment, development, and peacebuilding. Additionally, it is relevant to note that the CTWM-PWEg initiative represents one of many similar transboundary-based projects in the region. This analysis is a modest attempt to consider ways that projects like the CTWM-PWEg initiative could deepen the impact of their efforts and potentially produce change-oriented ripple effects throughout the conflict strata. In the following subsections, we have grouped research findings into issue-specific, relational, structural, and cultural levels in an attempt to better understand the extent to which the CTWM-PWEg initiative—which has been successfully executed and fully realized on an issue-specific level—could also produce relational and societal gains.

2.4.1 Issues-Specific Level

From an issues-specific standpoint, the CTWM-PWEG initiative is primarily concerned with improving wastewater treatment capacity in underserved Palestinian communities. Wastewater infrastructure is sorely lacking in the Palestinian West Bank; 10 % of wastewater is treated and very little is reused (Christian et al. 2013: x). Only 31 % of Palestinians in the Palestinian West Bank were connected to sewerage networks in 2009 and only four major towns had wastewater treatment plants (World Bank 2009: v). Existing sewerage networks are over 50 years old and poorly managed. The World Bank estimates that 25 MCM of raw sewage is discharged from 350 locations annually, and Israeli sources estimate annual discharge rates at up to 64 MCM.

The wastewater problem stems from and is exacerbated by the broader political conflict, which hinders the development of large-scale, centralized wastewater treatment plants in the Palestinian West Bank. Though centralized treatment plants are the preferred solution, small-scale “off-the-grid” wastewater interventions are more politically feasible. Recognizing this, the CTWM-PWEG initiative is designed to skirt intractable political arenas by adopting a decentralized and collaborative approach. The project focuses on installing low-cost greywater recycling technology in individual Palestinian households. This can, in theory, augment household water availability; protect shared water supplies from contamination; and provide more agricultural water to improve livelihoods, food security, and income generation.

Treating and reusing greywater increases water availability and decreases the volume of wastewater entering household cesspits, creating additional economic and environmental benefits. Recycled water can be used to irrigate crops for production and consumption, in some cases enabling agricultural diversification. Water is five to six times more expensive in rural areas without piped water (Assaf et al. 2004: 185–228). Greywater recycling can help lower water costs by 30 % after overhead,⁷ in part by reducing cesspit pumping expenses (Christian et al. 2013: 5). Household cesspits are often unlined, allowing wastewater seepage to contaminate transboundary water supplies. Because there are few cesspit pumping companies and few centralized treatment facilities, wastewater is often collected at the household level only to be discharged into shared water supplies elsewhere. The CTWM-PWEG thus has a positive impact at the issues-specific level of conflict by effectively addressing wastewater concerns shared by both Israelis and Palestinians.

⁷“Cost Effectiveness”, in: *Environment Agency, Greywater for domestic users: an information guide* (May 2011): 18–20.

2.4.2 Relational Level

The Israeli-Palestinian conflict encompasses much more than a particular set of issues. Shared water supplies are central to the conflict, for example, but it is unlikely that focusing on water alone will achieve enduring peace; relationships between Israelis and Palestinians are critical. The notions of contact theory and generalization are an assumed mechanism at the relational level in the CTWM-PWEG initiative's theory of change. Indeed, the initiative progress report states:⁸

Collaboration is envisaged by combining Israeli and Palestinian expertise in wastewater treatment and reuse. The cross fertilization of ideas will allow for both Israelis and Palestinians to resolve the wastewater treatment problem in the West Bank to the benefit of both parties... Relationships yield partnerships, regional environmental projects and inter-municipal agreements and thereby reduce conflict.

In practice, relationship building is primarily evidenced between CTWM and PWEG project staff, but also, to a much lesser extent, relationships between CTWM staff and Palestinian project beneficiaries and stakeholders. In conversation, a number of technical actors associated with this project—and similar projects in the region—focused on the importance of placing their identity as ‘professionals’ above ‘Israeli’ or ‘Palestinian’ identities in order to help projects move forward. The initiative has helped develop a cadre of technical experts from both sides of the conflict that work together toward shared goals around wastewater treatment. As AIES notes, it provides “a platform whereby ... real and long-lasting relationships built on trust and integrity are created among those who are responsible for the sustainable management of the region’s fragile water resources.”⁹ Likewise, PWEG’s brochure speaks to its ambitions to build technical and organizational capacity by connecting like-minded professionals.¹⁰ Professional cooperation in regional wastewater management may be a particularly advantageous mechanism for forging relationships, since “focusing on common environmental harms (or aversions) is psychologically more successful at producing cooperative outcomes than focusing on common interests” (Ali 2007: 6). By establishing and strengthening new relationships, the CTWM-PWEG initiative is realizing gains at the relational level.

⁸“2. Project Goal”, in: *Decentralized Wastewater Treatment and Reuse: A transboundary approach to environmental, social and technical issues of wastewater infrastructure development, A Pilot Project in Al ‘Oja Village, Palestine*: 3.

⁹“4.2 The Implementing partner organizations”, in: *Decentralized Wastewater Treatment and Reuse: A transboundary approach to environmental, social and technical issues of wastewater infrastructure development, A Pilot Project in Al ‘Oja Village, Palestine*: 5.

¹⁰‘Mission’, in: *Palestinian Wastewater Engineers Group (PWEG) Information brochure* (2013): 2.

2.4.3 *Structural and Cultural Levels*

Reducing conflict at the structural level involves addressing institutions and behaviors that reproduce structural violence. Tackling cultural violence, requires shining a light on the, “symbolic sphere of our existence—exemplified by religion and ideology, language and art, empirical science and formal science” (Galtung 1990: 291) in hopes of better understanding how these aspects of culture are used to, “justify or legitimize direct [or physical] or structural violence.” (Galtung 1990: 291)

Research findings suggest that the issue-specific and relational gains associated with the CTWM-PWEG initiative are not translating into structural or cultural change. To cite an example, when a respondent interrupted a conversation about regional infrastructure and water management to give an impassioned soliloquy about the injustices and affronts to human dignity that he encounters daily, other respondents became silent and failed to comment directly on the issues he raised. Instead, after a brief pause, individuals returned to their conversations. In this way, the moment—and its potential—went largely unacknowledged by the group. This example suggests that, while the CTWM-PWEG initiative has successfully created a space for facilitating dialogue and venting frustrations, the dialogue produced is not being used to extend action beyond the relational sphere. This can be problematic given that dialogue without action can, in the long run, reinforce rather than transform conflict dynamics and existing oppression (Abu-Nimer 2004: 405–422).

Building peace requires purposeful contact between conflict actors (Lederach 1997: 23–35): relational contact is unlikely to be effectual beyond the relational level unless it translates into sustained social action. Evidence suggests that the CTWM-PWEG initiative is not currently promoting these actions which, we believe, explains why peacebuilding does not occur beyond the relational level.

2.5 Conclusion

This chapter has explored the potential of a cooperative wastewater development initiative in the Palestinian West Bank to be a lever for transformative change within the greater asymmetric conflict in which it is situated. The initiative has made positive impacts at both issues-specific and relational levels but was unable to leverage those gains to realize structural and cultural change. Conflict theory makes clear that the necessary targets of transformation are deeply rooted, namely the asymmetric (not one-sided, non-collaborative) ideational power and the ethnonationalist discourse sustaining Israeli hegemony and incompatible notions of belonging and personhood, respectively. Christian et al. (2013: 29–35, 46–54, 57–64) posit potential rectifying mechanisms in epistemic community capacity building, institutionalizing benefit sharing, and curating peace constituencies. These hold potential promise to directly address the structural, and subsequent cultural, levels of conflict left untransformed. While grounded in the specifics of the Israeli-Palestinian conflict,

this examination makes clear the need for conscious and coordinated targeting of the structural and cultural layer of conflict on the part of able actors to build in multiplying and leveraging measures into peacebuilding initiatives widely.

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