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HYDROPOLITICAL PEACEBUILDING

Volume 1 of 2

E. ABITBOL

PhD

2012
HYDROПOLITICAL PEACEBUILDING

Israeli-Palestinian water relations and
the transformation of asymmetric conflict in the Middle East

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of Doctor of Philosophy

Department of Peace Studies
School of Social and International Studies

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Eric ABITBOL

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Sub-Title: Israeli-Palestinian water relations and the transformation of asymmetric conflict in the Middle East

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ABSTRACT

Recognising water as a central relational location of the asymmetric Israel-Palestinian conflict, this study critically analyses the peacebuilding significance of Israeli, transboundary water and peace practitioner discourses. Anchored in a theoretically-constructed framework of hydropolitical peacebuilding, it discursively analyses the historical, officially-sanctioned, as well as academic and civil society water and peace relations of Israelis and Palestinians. It responds to the question: How are Israeli water and peace practitioners discursively practicing hydropolitical peacebuilding in the Middle East? In doing so, this study has drawn upon a methodology of interpretive practice, combining ethnography, foucauldian discourse analysis and narrative inquiry.

This study discursively traces Israel's development into a hydrohegemonic state in the Jordan River Basin, from the late-19th century to 2011. Recognising conflict as a power-laden social system, it makes visible the construction, production and circulation of Israel's power in the basin. It examines key narrative elements invoked by Israel to justify its evolving asymmetric, hydrohegemonic relations. Leveraging the hydropolitical peacebuilding framework, itself constituted of equality, partnership, equity and shared
sustainability, this study also examines the discursive practices of Israeli transboundary water and peace practitioners in relationship with Palestinians. In so doing, it makes visible their hydrohegemony, hydropolitical peacebuilding, and hydrohegemonic residues.

This study’s conclusions re-affirm earlier findings, notably that environmental and hydropolitical cooperation neither inherently nor necessarily constitute peacebuilding practice. This work also suggests that hydropolitical peacebuilding may discursively be recognised in water and peace practices that engage, critique, resist, desist from, and practice alternative relational formations to hydrohegemony in asymmetric conflicts.
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<td>ARIJ</td>
<td>Applied Research of Jerusalem</td>
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<td>IWA</td>
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INTRODUCTION:

HYDROPOLITICAL PEACEBUILDING IN THE MIDDLE EAST

Introduction
Asymmetric, violent and protracted conflicts may be understood as both social systems and relational orders. As social systems (K. Boulding, 1989), such conflicts are typically characterised by relations of dominance and subjugation between the parties. As relational orders (Jabri, 2007a), specific conflicts of this nature appear resistant to fundamental change and transformation. Established and perpetuated over lengthy periods, such conflicts manifest in and through the deployment of ideas and practices of the conflict parties. It follows that dominant conflict parties tend to steer the course of asymmetric conflict relations to favour their political priorities.

At the same time, asymmetrically conflictual orders are inherently reliant upon, even rooted in the participation of societal actors for their construction, circulation and (re-) production (Foucault et al., 2007). What people do, what they think they are doing, and why they believe in the necessity of doing so, i.e. their discourse, is the mortar that binds, and ensures the coherence and perpetuation of asymmetric conflict systems. Where such actors do, interpret and believe otherwise, socio-political contestation against relational orders perceived as illegitimate or unjust may be underway. Thus, a focus on power and discourse in the study of conflicts promises to generate insight into the

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1 In this study, the late-Kenneth Boulding (K. Boulding) is distinguished from the late-Elise Boulding (E. Boulding; See for example, E. Boulding, 2000), noting that both were eminent theorists and practitioners in the field of Peace Studies.
perpetuation, contestation but also possible transformation of asymmetric, violent and protracted relations.

While there are undoubtedly important similarities between conflicts, all specific conflict relations are in many ways unique. Thus, the study of power and discourses constitutive of particular conflict environments likely entails analysis of the history, ideations and practices of specific and contextual conflict relations. It may also proceed through the study of a particular relational location (e.g. natural resources management and cooperation). Informed by such an epistemology, the current research project focuses on the asymmetric Israel-Palestinian conflict. More specifically, it seeks to understand the hydropolitical relations of Israeli and Palestinian conflict parties and actors, intent on appreciating their conflictual but also transformative significance.

This focus on water, and hydropolitics more specifically, stems from the fact that water has been a central relational location of the Israel-Palestinian conflict, ideationally, materially and politically, from its very origins to the present time. It remains one of several key areas of disagreement and contestation between Israel and the Palestinians, such that the Israeli-Palestinian relationship is meaningfully and significantly (if only partially) appreciable as hydropolitically conflictual. In recent decades, water has also been a domain of transboundary, cooperative practice between Israel and the Palestinians/Palestinian Authority (PA), and between Israeli and Palestinian transboundary water-domain practitioners. Today, water is frequently referred to as the simplest of the Israel-Palestinian final status issues to resolve.
Such water-based cooperation between the Israeli state and the Palestinians has been the focus of significant academic and political interest over the years (Amnesty, 2009a; Zeitoun, 2009; Selby, 2003; Allan, 2002; Kliot and Shmueli, 1998; Lowi, 1993). Far fewer energies have been dispensed in the study of practices of Israeli and Palestinian water-domain practitioners themselves, notably where these practices are peacefully intended. The current study specifically contributes to filling this relative paucity in the literature.
Situating the Study

In principle, cooperation pursued by rival parties and conflict actors regarding transboundary water resources seems promising as a path of peace. Thus, contemporary water cooperation in the Middle East has been identified as a source of environmental peacebuilding and peacemaking (Harari and Roseman, 2008; Sosland, 2007; Schoenfeld, 2005; Wolf et al., 2005; Conca and Dabelko, 2002; Shuval, 2000). Not all theorists and practitioners agree. Some argue convincingly that water cooperation between Israel and the Palestinians serves to perpetuate Israel’s overall occupation and dominance, i.e. its hegemony, over the Palestinian people, its national territory, as well as resources that include water (Zeitoun, 2009; Selby, 2003; Elmusa, 1997; Lowi, 1993).

The current study is situated within this corpus on water, conflict, cooperation and peace in the Middle East. It demonstrates that both sides of the argument regarding the intentions, practices and effects of water domain cooperation are essentially with merit. To understand why and how this is the case, it is insightful to examine the different discourses of water domain cooperation. In doing so, this study theoretically draws and elaborates upon the concept of hydrohegemony (Zeitoun, 2009). It also develops the concepts of hydropolitical peacebuilding and hydrohegemonic residues, drawing on literature in the fields of water, conflict and peacebuilding. These concepts are explained and then leveraged to examine Israeli-Palestinian transboundary water cooperation, management and development practice.
Given that Israel is argued to be the dominant power of the asymmetric Israel-Palestinian conflict, the current study describes, narrates and analyses the practices of Israeli transboundary water-domain practitioners against a framework of hydrohegemonic necessity. At its core, this study is intent on appreciating whether, why, and if so how Israeli water-domain practitioners are engaged in critique, resistance to, desistance from, and/or the creation of alternative relational formations to Israel's hydrohegemony. It aims to understand if, why and how these Israeli water-domain practitioners are diversely contained by and/or engaged in discursive practices oriented to transform Israel's hydrohegemony in partnership with Palestinians. It fundamentally seeks to appreciate if, why and how Israeli water-domain practitioners contribute to transforming violence and building peace in the Middle East, thus engaging in hydropolitical peacebuilding.
Recognising the Water/Peace Community

This study is theoretically, methodologically and politically grounded in an Israeli-Palestinian transboundary community of water-domain practitioners who have leveraged their work in terms of Middle East peace. As such, these people are referred to herein as water/peace practitioners. They are recognised as constituting a transboundary epistemic community (Jägerskog, 2003; P. Haas, 1990) and more poignantly, a community of practice (Adler, 2005; Wenger, 1998).

This Israeli-Palestinian, transboundary water/peace community finds its proximate origins in the Madrid and then Oslo peace talks of the early-1990s. When Israel and neighbouring Arab states and leaders launched these negotiations, they elaborated both bilateral and multilateral processes. The bilateral processes explored possibilities for establishing peace agreements between Israel and those Arab countries with whom a state of belligerency prevailed. In an effort to support these bilaterals, a multilateral process was pursued on key issue areas, including water resources. This multilateral process effectively enabled the development of an Israeli-Palestinian, epistemic community of water experts, and eventually a larger community of transboundary water/peace practitioners.

As with most Israelis and Palestinians up to that time, these water experts had little direct experience of one another, let alone of working together. The multilateral process provided a sustained opportunity for these people to get to

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2 In this study, Peter Haas (P. Haas) is distinguished from Ernst Haas (E. Haas) through the inclusion of first initials in referencing their work.
know one another, as water domain specialists, as Israeli and Palestinian nationals, and as individuals. Almost immediately, the activities of Israeli and Palestinian water experts were pursued along two tracks. One was formal and government-sanctioned, the other was unofficial and generally civil society and/or academically situated.

On the formal and official side, from 1992 onwards, Israeli, Jordanian and now Palestinian physical and natural scientists, hydrological engineers, and then also social and political scientists engaged with one another through officially-sanctioned processes of the Multilateral Working Group on Water Resources of the Middle East Peace Process (MWGWR). Their original mandate, a harbinger of challenges to come, was to conceptualise and articulate the techno-political basis of a cooperative, regional approach for the management of ‘shared’ water resources.

The second unofficial track was initially largely project-based, and varyingly academically-oriented and/or civil society-led. It quickly drew in a wider network of diverse technical and politically-minded academic and civil society water domain experts and cooperation practitioners. As early as 1992, the first Israeli-Palestinian Academic Conference on Water was held in Zurich, Switzerland. From 1992 through to the present time, literally hundreds of water-specific projects were undertaken with the participation of Israeli and Palestinian water/peace practitioners directly concerned with the cooperative and peaceable significance of their efforts.
Some of these initiatives, particularly in the early years, expressly focused on supporting the dominant Israel-Palestinian peace process. Academic and civil society efforts also sought to leverage water as a component of environmentally-based, peace-oriented activities, notably with the first signs of deteriorating relations between Israel and the Palestinians from the latter-1990s onwards. The efforts of three transboundary organisations remain pivotal in this respect. They are the Israel/Palestine Center for Research and Information (IPCRI), the Arava Institute for Environmental Studies (AIES), and Friends of the Earth Middle East (FOEME). This study is specifically intent on appreciating the peacebuilding significance of Israeli water/peace practices undertaken in the context of their transboundary programmes, projects and activities.
Conceptualising Hydropolitical Peacebuilding

As a product of the last 20 years of sustained, transboundary, hydropolitical engagement and relationship-building, a community of water/peace practitioners emerged and has been situated at the hopeful intersection of water and peace in the Middle East (Schoenfeld et al., 2007; Schoenfeld, 2005; Twite, 2004; Dinar, 2002). From the origins of their work in 1992, these and subsequent generations of Israeli and Palestinian practitioners have framed, leveraged and/or justified their work in discourses of peace.

While hopeful and promising, the invocation and circulation of peace as embedded in water-related cooperative practice also allows for important discursive distinctions to be obscured. It is therefore important, in the context of the current study, that peace and peacebuilding are unpacked3. This must be done in broad terms, and also in relation to water and with reference to water domain and water/peace community practice, given this study’s hydropolitical focus. Bringing these fields together, the concept referred to herein as hydropolitical peacebuilding has been developed and is discussed. This discussion of peace and peacebuilding is a necessary precursor to an assessment of the peacebuilding and transformative significance of transboundary water/peace practitioner discourses against the powerful hydrohegemony of Israel.

In the current study, positive peace is used to mean relations between groups reflecting discourses of equality, partnership, equity and shared sustainability.

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3 See Baranyi (2008) for insightful conceptual discussions on the framings of peace and peacebuilding in the context of various interventions.
Positive peace is rooted in the development of relations and relationships of equality between conflict parties and actors. As distinguished from the hegemonic pursuit of dominance and subjugation, positive peace is appreciable as a relation of equality and equitable partnership. It is both the concern with, and the endeavour to build material and perceived equity. Where resource management and development is particularly focal, positive peace entails the pursuit of shared environmental sustainability as a practice of partnership. By extension, ‘peacebuilding’ is understood as the pursuit and practice of positive peace.

Given the current study’s hydropolitical focus, situated as it is at the intersection of water and politics, it is informed by an international legal and political framework of sustainable and peaceful water resources management and development, namely the Berlin Rules on Water Resources (Berlin Rules on Water Resources, 2004). Crafted by the International Law Association (ILA) in 2004, the Berlin Rules articulate globally-recognised legal and political obligations according to which water should be managed and developed, with notable reference to transboundary water resources.

These rules are broadly congruent with the principles of positive peace outlined above\(^4\). They create obligations on states to pursue the implementation of sustainable and peaceful water management and development. Further, they provide a valuable framework against which hydropolitical framings, priorities and activities can be gauged. Informed by the Berlin Rules, the conceptual

\(^4\) It bears noting that water was specifically recognised by the United Nations General Assembly (UNGA) as an individual and collective human right on 26 July 2010.
framework of positive peace developed for this study conceives of a peaceable water resources management and development as based in the active pursuit of relations of equality, partnership, equity and shared environmental sustainability.

Where one party is hydropolitically dominant and the other subjugated, as discussed in terms of relations between Israel and the Palestinians, there is profound incongruity between the articulated priorities of peacebuilding and sustainable water resource management and development on the one hand, and actual relational structures, practices and modes of thought on the other. Therefore, in such conflict environments, hydropolitical peacebuilding may be understood as water-related ideations and practices intent on and engaged in transforming asymmetric, violent hydropolitical relations between conflict parties. Where peace is leveraged as a principal motivating or justifying factor for hydropolitical engagement, but without meeting the exacting criteria of hydropolitical peacebuilding, we may speak of hydrohegemonically residual, if not outright hydrohegemonic practice.
Contextualising Hydropolitical Relations

To assess hydrohegemony, hydrohegemonic residue and hydropolitical peacebuilding in the Middle East, notably among Israeli transboundary water/peace practitioners, it is essential to appreciate the historical and socio-political context of Israel-Palestinian hydropolitical relations. In the Israeli-Palestinian region, water is many things to many people. It is a transboundary resource and a relational location of the asymmetric, violent and protracted Israel-Palestinian conflict. As a transboundary resource, it comprises the Mountain Aquifer, the Coastal Aquifer, the Jordan River, the Dead Sea and a host of rivers and streams that cross the Green Line. Additionally, and more controversially, the Mediterranean Sea, the Red Sea and purified sewage may increasingly be recognised and included as transboundary water resources given they are components of desalination, treatment, purification and reuse projects involving Israel, the Palestinians and the Jordanians.

Symbolically, ideationally, politically, economically and socially, water is a key issue of the Israel-Palestinian conflict, on par and even entwined with borders, refugees and Jerusalem. It is a relational location of the conflict, both violent and alienating as well as unifying, and potentially the source and location of peacebuilding practice. Thus, given the ongoing reality of the Israel-Palestinian conflict, this study provides a critical historically-framed examination and discursive analysis of the hydropolitical dimensions of the conflict. In doing so, this study distinguishes between Israel-Palestinian relations before and then after the 1967 Six-Day War; when Israel became an occupying power over West Bank populations, land, water and other resources.
The critical historical examination pursued in this study details the construction, circulation and (re-) production of Israel’s hydrogemony. It is also the context through which Israel’s narrative of hydrohegemonic necessity is made visible. As shall be made clear, Israel’s hydrohegemony has become an intentional and self-justifying relational order with respect to the Palestinians. The elements of this justificatory narrative, having emerged over some one hundred years and more, are constructed in the telling of Israel-Palestinian hydropolitical relations. The chapters on the emergence, implementation and enforcement of Israel’s hydrohegemony and its justificatory narrative provide the very context against which water/peace ideations and practices are discursively assessed.
Analysing Discursive Practice

While Israel’s hydrohegemony is argued to prevail, the current research project has been motivated by a desire to ascertain if Israeli transboundary water/peace practitioners are indeed hegemonically constrained and contained, as might be expected. Are they discursively supporting or challenging, transforming or circumventing this hydrohegemony in modes of thought and in practice? In what ways and to what extent can we speak of hydrohegemonic residues among Israeli water/peace practitioners? In an effort to respond to these and related questions, the current research project has sought to assess if, how and to what extent Israeli transboundary water/peace practitioners are discursively engaged in hydropolitical peacebuilding.

Responding to these questions, the current research project has pursued a methodology of interpretive practice (Holstein and Gubrium, 2005), combining ethnomethodology and foucauldian discourse analysis, supplemented herein with narrative analysis. In so doing, it has engaged in a critical examination of both context and practice. In the current study, the methodology of interpretive practice has been used to describe and tell the story of transboundary water/peace practitioners. Its use has made visible both the dominant discourse that is Israel’s hydrohegemony and the discursive practices of Israeli water/peace practitioners. Its specific method of analytic bracketing has made it possible for critical comparisons to be drawn between these two, and for them to speak to one another. Through the process of doing so, this study makes visible the discursive content and power of Israeli water/peace practitioners, in terms of hydropolitical peacebuilding and in historical, discursive context.
Gauged by its use herein, the methodology of interpretive practice may prove valuable for the further study of conflict and peacebuilding.
Concluding Thoughts

The findings of this study are left to unfold in the telling of each chapter and then in the final conclusion. These findings reflect six years of doctoral research and study, as well as longstanding personal interest in the ideas and practices of Israeli transboundary water/peace practitioners.

Before delving into the theoretical, methodological and substantive chapters of this study, it bears noting that its overall importance stems in no small part from the fact that Israeli and Palestinian water/peace practitioners have worked together for some twenty years now. They have built, sustained and are now expanding their community of transboundary water/peace practitioners. Most, if not all of these people have held dear a belief that their efforts contribute, albeit modestly, to building a peaceful future for the region’s people, communities and nations.

The rationale for this study resides in my having come to know and appreciate many of these water/peace practitioners and their sometimes diverse, sometimes collectively-held beliefs. Further informing a critical understanding and appreciation of the peacebuilding significance of transboundary cooperation, an epistemological choice was made to interrogate, critically examine and discursively analyse water/peace practitioner ideations and practices. This study is the very product of that critical choice. It is hoped that its findings will in some modest way inform the peacebuilding efforts of these transboundary water/peace practitioners as well as the work of theorists.
interested in the discursive study of transboundary cooperative practice in conflict regions.
CHAPTER 1:
THEORISING HYDROPOLITICAL PEACEBUILDING AND THE
TRANSFORMATION OF ASYMMETRIC CONFLICT

Introduction

Water is one of several relational domains of the Israel-Palestinian conflict. Neither inevitably conflictual nor inherently peaceful, transboundary water continues to draw Israel and the Palestinians into relationship with one another. Through water (as with other relational domains), these conflict parties deploy various forms of power in the ideas they leverage, the institutions they build, and the practices they realise. Also through water, diverse peace-related efforts are pursued on the ground, actualising the values and aspirations of conflict parties who recognise in one another partners for shaping and building desired futures. Thus, throughout this study, water is conceptually discussed as a hydropolitical issue, in theory and with reference to the Israel-Palestinian conflict specifically. In other words, water may be understood as a relational location that is fundamentally constitutive of broader, diversely conflictual and/or peaceful relations between Israeli and Palestinian parties and political actors.

Water is a cause and an instrument of violent conflict (Fisher, 2006; Shiva, 2002; Beschenorer and IISS, 1992). It is a factor of security (Dinar, 2002; Kolars, 2000). It is a location of development practices that may be catalytic of conflict or peace processes (Abitbol, 2009; Brandes and Brooks, 2006; Swain, 2004; Bush and Opp, 1999). It is occasionally, even increasingly an issue-area
of peacemaking (Conca, 2002; Conca and Dabelko, 2002). It is also a domain both of hegemony, or hydrohegemony (Zeitoun, 2009), and of environmental peacebuilding (Harari and Roseman, 2008), or more specifically hydropolitical peacebuilding (as herein theorised). Of the many ways that water plays into and effects the Israel-Palestinian conflict, both hydrohegemony and hydropolitical peacebuilding are given prominence in this study. Additionally, this study will develop and leverage the concept of hydrohegemonic residues (drawing on Paris, 2009; Jabri, 2007a; Jabri, 2007b; Balibar, 2005; Conca and Dabelko, 2002), to indicate peacefully-intentioned water-related initiatives, actions and practices that are nonetheless significantly contained by and/or circulate discursive elements of hydrohegemony.

A conceptual construct of power anchored in water, hydrohegemony is used to mean the hydropolitical power of leading actors to construct and practice water management and development in ways that reflect and secure their interests, values, priorities and projections (Zeitoun, 2009). The power of hegemons and by extension that of hydrohegemons is multi-pronged and generally very difficult to dislodge or transform. An extension of hegemony, hydrohegemony operates through multi-faceted coercion and consent (Cox, 1987; Gramsci, 1929-35 in Gramsci et al., 1971). Anchored in hard threat power (Foucault, 1995; K. Boulding, 1989) and justified through ideational power (Lukes, 1974 in Zeitoun, 2009), hydrohegemony is itself generally constitutive of a wider hegemonic, discursive regime of truth (Foucault, 1978 in Foucault and Faubion, 2000: 209).
Discursive regimes are of course constituted of ‘discourse’, which may be understood as follows (Hajer, 1997: 44 in Zeitoun, 2009: 41):

A specific ensemble of ideas, concepts, and categorisations that are produced, reproduced and transformed in a particular set of practices and through which meaning is given to physical and social realities.

Discourse is what people do together and what they interpret in such doing, with specific reference to the (re-) production of power relations. It may also be understood as the ideational power, or truths constructed, produced and circulated relationally. Discourses powerfully produce subjects and subjectivities, i.e. selves and others, categorisations of people that are reified through relationships\textsuperscript{5}. Thus, discursive regimes are systems of power that produce and justify particular relational orders (Foucault, 1978 in Foucault and Faubion, 2000: 209).

In the current analysis, Israel is constructed into and presented as the hydrohegemon of the Israel-Palestinian conflictual relation. Israel’s hard, threat power is enabled and supported by the ideational power of a multi-faceted justificatory narrative, also understood as its “convincing rationale” (Cairo, 2006). Taken together, threat and ideational power constitute a powerful, hegemonic discursive regime deploying Israel’s continued dominance over a subjugated Palestinian people, through water and other domains. Said otherwise, Israel’s hydrohegemony and its associated justificatory narrative are

\textsuperscript{5} I use the concept of \textit{reification} as used by Giddens (1984: 25): “The reification of social relations, of the discursive ‘naturalization’ of the historically contingent circumstances and products of human life, is one of the main dimensions of ideology in social life.”
together constitutive of a powerful discursive regime for Israeli and also broader Jewish security as against a threatening Palestinian other.

Such power is often, as in this case, a response to perceived existential threat. The State of Israel has pursued and practices hydrohegemony as a discourse of necessity rooted in its unilateral national, human and environmental security. In this case, hydrohegemony has also been interpreted as a system of direct, structural and cultural violence against the Palestinians. To maintain such a system is also to perpetuate asymmetry between the parties, framed as Israeli dominance and Palestinian subjugation. Among other things, this asymmetric relation also comprises a continued Palestinian (and in some cases, Israeli) perception of hydropolitical injustice.

In examining Israeli hydrohegemony, it also bears analysing if, why and how water is a location of peacebuilding. Generally speaking, peacebuilding is understood as the discursive practice of critique, resistance to, desistance from, and alternative relational formations to violently conflictual relations. In water-specific terms, hydropolitical peacebuilding is understood as the pursuit of discourse that specifically, critically and reflexively takes hydrohegemony and its justificatory narrative to task. It is also understood as a discourse of renewal and transformation, rooted in the ideation and practice of alternative hydropolitical relationships between Israeli and Palestinian conflict actors rooted in positive peace.
Overall, the current research project pursues a foucauldian path, critically analysing relational, domain specific discourses that variously constitute, challenge, resist, desist from, and pursue alternatives to hegemonic systems and orders of power. Following this train of thought, the current study makes visible the discursive practices and modes of thought of transboundary water/peace practitioners constitutive of the Israel-Palestinian conflict milieu. In so doing, it specifically analyses and theorises the hydrohegemony, hydropolitical peacebuilding and hydrohegemonic residues of Israeli transboundary water/peace practitioners in socio-political context.

As a fundamental building block, the present chapter provides the theoretical basis for an analysis of the conflictual hydrohegemonic context and the discursive practices of transboundary water/peace practitioners. It begins with a theoretical discussion of conflict asymmetry that is then applied to the Israel-Palestinian conflict, nuancing the difference between comparative and relational power asymmetry. It then theorises hydropolitical peacebuilding, drawing on literature at the nexus of power, water management and environmental peacebuilding. Finally, this chapter provides the theoretical contours of what is referred to in this study as hydrohegemonic residues. Overall, the current chapter provides the theoretical basis for the methodological choices articulated in the subsequent one.
An Israel-Palestinian Conflict Asymmetry

To examine Israel’s hydrohegemony vis-à-vis the Palestinians, it is helpful to recognise the Israel-Palestinian conflict as a protracted, violent and asymmetric relation. This conflict is longstanding and resistant to peace efforts (Azar, 1986). It was initiated some 130 years ago and has evolved over more than a century since. Its violence is multifaceted, manifesting in direct, structural and cultural ways (Galtung and PRIO, 1996). The parties to this conflict are vastly unequal in their power (Zeitoun, 2009). Today, Israel is the hegemonic bilateral (and arguably multilateral) power in the Middle East. And its hydrohegemony is constitutive of this wider hegemony, itself constructed and consolidated over time in multiple relational domains.

Originating in the late 19th and early 20th centuries, the Israel-Palestinian conflict finds expression in several domains, including territory and borders, refugees and diasporic populations, Jerusalem and other holy sites, and water and other resources. It is rooted in an existential human need for secure recognition of the legitimacy and equality of Israeli and of Palestinian national self-determination struggles. Indeed, human needs theory identifies the denial of such identity, recognition and security needs as fundamental conflict generating and perpetuating factors (Burton, 1990b)6.

The Israel-Palestinian conflict may be framed as a complex, relational power struggle for dignity, security and justice. It is a struggle that permeates all

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6 Burton argued that recognising, addressing and satisfying such human needs are practices of ‘provention’, contributing to the resolution of a contemporary conflict and the prevention of subsequent conflict cycles.
domains of relationship between Israel and the Palestinians. This struggle is not one between equals, where each is able to determine their future autonomously and with relative equality. Rather, over the course of the past century, Israel has cultivated its political, economic, military, technological and ideational power in ways that remain unmatched by the Palestinians. Israel’s power and preferences continue to have disproportionate and seemingly inequitable effect upon the Palestinians. Understanding this broad power asymmetry between Israel and the Palestinians provides the context through which the construction, operation and power of hydrohegemony may be understood.

Comparative Power Asymmetry

By most counts, Israel has become the more powerful actor in this asymmetric conflictual relation with the Palestinians. Suleiman (2000: 40) identifies the following five areas to consider in appreciating asymmetry:

- Status;
- Resources;
- Institutions and institutional organisations;
- Support; and
- Ability to discriminate.

Each is used as a point of comparison and discussion, establishing the wider context of power in which hydrohegemony operates and will be discussed.

Status

Perhaps most straightforward of all, the status of conflict parties is a fundamental gauge of asymmetry. A state, like Israel, is widely considered more powerful than a social or political movement, like that of the Palestinians.
The state of Israel became independent in 1948. It has spent the last sixty-three plus years developing its infrastructure, institutional base and resources. Its legitimacy is largely uncontested from within, in contrast to the Palestinian situation. The vast majority of Israelis and Jews across the world maintains a strong national emancipatory tie to the Jewish nation-state, committed to its raison d’être and to its security.\footnote{For a nuanced and critical approach to the relationship between Jews and Israel, see Kushner and Solomon, 2003.}

The Palestinians are primarily governed by the Palestinian Authority (PA), a body established by the Palestinian Liberation Organisation (PLO) in 1994 as part of the Oslo peace process. Support for the PA among Palestinians has waxed and waned. Such support has been sensitive to factors that include the PA’s agenda for negotiation with Israel, its ability to deliver benefits to occupied Palestinian populations, and to the popular perception of corruption among its officials. Parallel to the PA, and frequently in direct competition, HAMAS (the Islamic Resistance Movement) has critically offered itself as an alternative to the PA since the late 1980s, along an Islamist, anti-Zionist and anti-corruption agenda (HAMAS, 1988). This important political and ideological cleavage in Palestinian leadership fragments and undermines the power of Palestinians on multiple fronts, certainly in terms of Palestinians’ ability to favourably establish and stabilise an effective, widely-recognised status.

Asymmetric power may also be reflected in terms of the parties’ status with different regional and/or international organisations, like the United Nations General Assembly (UNGA), the World Trade Organisation (WTO) and the Arab
League. Israel is a full and active member of most leading global and regional governance organisations. This includes the UNGA, most UN bodies and committees and the WTO, though it does not include the Arab League. This situation is contrasted to the Palestinians’ limited status with respect to such international organisations, but for a few notable exceptions.

The PLO was established by the Arab League in 1964. Since 1988, “Palestine” has been a full member of the Arab League, and is represented there by the PLO. Beyond that, the Palestinians do not have regular, full representation at the WTO. On this point, a partially successful bid initiated in 1997 to secure Observer Status at the WTO on the path to full membership received notable European Union (EU) support (Cottier and Arpagaus, 1997). In 2005, the PA participated in the WTO Ministerial Conference held in Hong Kong, as an observer. In another case and for the time being, the Palestinians have a Permanent Observer Mission of Palestine to the United Nations, with limited wider United Nations (UN) presence and participation.

The difference in status between Israel and the Palestinians is evident in developments surrounding the recent Palestinian attempt at securing full UN membership. While their UNGA bid remains uncertain (at the time of writing), the Palestinians have thus far succeeded only in securing full membership with the United Nations Educational, Scientific and Cultural Organisation (UNESCO; on 31 October 2011). A notable success, this nonetheless triggered an important backlash from Israel, the United States, and other leading powers,
targeting both the organisation and the Palestinians themselves\textsuperscript{8}. Israel continues to play a global leadership role in preventing the Palestinians from acquiring full UN membership, so long as they do not first finalise their status through agreement with Israel. Ultimately, the status of Palestinians now depends upon a political settlement with Israel, its more powerful negotiating counterpart. Similarly, the final status of transboundary water resources in the region is hostage to an eventual agreement between Israel and the Palestinians, much to the relative and continued detriment of the Palestinians, politically and otherwise.

\textit{Resources}

The second factor of power asymmetry, \textit{resources} refers to the military, financial and human resources of a state or governing authority, as well as those allocated and leveraged for use in conflict and peace processes. Israel’s well-financed, organised, experienced and conscript-based military is considered vastly more powerful than either the Palestinian security forces or the armed wing of the Islamic Resistance Movement and its sub-regional allies. While the PA security forces are reasonably well-equipped and trained, they are no match for Israel’s armored divisions and air force, not to mention its unconfirmed nuclear arsenal. The Islamist organisations frequently rely on cottage-industry armaments and peripatetic supplies smuggled into their

\textsuperscript{8} In response to the successful UNESCO bid of the Palestinians, Israel demonised the Palestinians for not pursuing a negotiated end to the conflict, while accelerating settlement building in the West Bank. The US withheld US$60 million in membership dues to UNESCO, constraining the organisation’s ability to operate.
possession with the assistance of the Muslim Brotherhood, Iran, Syria\textsuperscript{9} and other sponsors. These groups rely on volunteer militias and on irregular financial resources often acquired, at least in-part, through illicit dealings.

Israel has effectively developed its human and environmental resource base, including water and water-related resources, while the resources of the Palestinians remain significantly under-exploited and under-utilised. The Israeli economy is market-based, technologically-driven, diverse and thriving. That of the Palestinians is to a large extent dependent on both Israel and the international community\textsuperscript{10}; though in the last few years, it has experienced a notable expansion. A comparison between the Israeli and Palestinian economies is telling. Israel’s 2008 Gross Domestic Product (GDP) was about US$208 billion and its average GDP per capita was US$29,300 (CIA Israel Website)\textsuperscript{11}. By comparison, the West Bank’s GDP is about US$12 billion, of which US$3 billion is provided by international donors (CIA WB Website). In 2008, GDP per capita in the West Bank was US$2,900. The overall situation in the Gaza Strip is significantly worse given that Israel (and also Egypt) has strictly controlled maritime, air and land routes into and out of Gaza since it withdrew its settlers from there in 2005.

\textsuperscript{9} In 2011, HAMAS initiated a move of its head offices from Damascus to Cairo, in response to the dramatic political changes underway in the Middle East stemming primarily from the Arab Spring and subsequent military crackdowns on popular movements.

\textsuperscript{10} For example, Israel collects customs revenues on behalf of the Palestinians, which it must then hand over at predictable intervals. Frequently, when tension escalates between them, as in the wake of the Palestinian UNESCO bid, Israel has been known to withhold these financial resources, putting severe strain on the Palestinian administration and economy.

\textsuperscript{11} However, income and other forms of socio-economic inequality are growing within Israel. See Avishai, 2008: 177.
Institutions and Institutional Organisations

The third factor of power in Suleiman’s framework, *institutions and institutional organisations*, denotes the extent to which conflict parties have developed and consolidated a national and as appropriate, globally-integrated institutional base. The distinction between Israel and the Palestinians, here as elsewhere, is significant. Israel’s is a democratic system, historically dominated by two parties – Labour and Likud – with an average of 12-15 parties vying for seats in any national election. The country has an established rule of law with a relatively independent judiciary. Civil rights are guaranteed to all national citizens, and a reasonably healthy measure of socio-economic rights are supported by the government through welfare state provisions\(^\text{12}\). Israel has its own stock exchange and overall, the country and its citizens are active participants in transnational, cultural, technological and other globalised flows\(^\text{13}\). It must however be recognised that Israel’s institutional power is somewhat weakened by the fact of the widely perceived illegitimacy of its institutionalised occupation over the Palestinians, undermining the state’s democratic character.

The Palestinians, by comparison, have a relatively recent institutional system of national laws and civil rights, which currently operates largely under a system of Israeli occupation. Palestinian governance is managed by the PA in the West Bank and by HAMAS in the Gaza Strip. At district level, it is managed by the Palestinian Legislative Council (PLC). This body has lost a measure of its legitimacy and its ability to govern since 2006, when the HAMAS electoral

\(^{12}\) In 2011, a massive social movement erupted in Israel, demanding that the government invest greater effort in responding to social inequalities there.

\(^{13}\) For a discussion of globalised flows, see Appadurai (1996: 37), notably his framework comprising *ethnoscapes, ideospaces, technoscapes, financescapes, and mediascapes*. 

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victory was rejected by the PA of President Mahmoud Abbas. On another matter of interest, the country’s judicial system is a cumulative body of Ottoman, British Mandate, Jordanian and Egyptian laws. The PA continues to strive for the unified coherence of its legal system, making incremental progress.

While the Palestinians have sought to develop an independent institutional base, they have had only a modicum of success, given the continued Israeli occupation. Many institutional relations pursued by the Palestinians at regional and international levels are mediated and often curtailed by Israeli institutions. For example, the authority of Israel’s Civil Administration of the West Bank, a branch of the Israel Defence Forces (IDF) under Israel’s Ministry of Defence, shapes and curtails the reach of many Palestinian institutions. Notably, the PWA must ensure it has Civil Administration approval before moving forward on significant water development planning for which international funding has already been secured (Personal interview, PW5 2010; Personal interview, PW7 2010; World Bank, 2009). As such, the PWA has been referred to as an implementing “sub-contractor” of Israel’s occupation (Personal interview, PW8 2010).

Support
The financial, moral and political support received by conflict parties from other states, from international civil society, and from diasporic communities all contribute to the comparative analysis of conflict asymmetry, according to Suleiman’s framework. In financial terms, Israel is the single largest recipient of
American aid and support in the world. US military aid alone to Israel amounts to some US$3 billion (JVL Aid Website) in addition to extensive loan guarantees in the hundreds of millions, sometimes even billions of dollars annually. Israel continues to receive massive support from a highly mobilised and committed Jewish Diaspora.

Politically, Israel is protected from Security Council reprisals for West Bank settlement building and other violent practices thanks in large part to American vetoes, reflecting the unique US-Israel relationship. For example, on 19 February 2011, in a 14-1 vote, the US vetoed a Security Council condemnation of “all Israeli settlements established since 1967 as illegal” which also called “for an immediate halt to all settlement building.” (IJVL US Vetoes Website)

The notion of support is intimately tied to questions of legitimacy. The degree of success a state or political movement may have in delegitimizing the status, claims or practices of another informs such an analysis of asymmetry. In this sense, the Palestinians have received increasing international civil society support in recent years through major global political campaigns. By way of example, and inspired by strategies pursued to end South African apartheid (Zunes, 1999), the contemporary Palestinian Boycott, Divestment and Sanctions (BDS) movement has actively sought to isolate Israel economically, culturally and politically, with limited through growing success (BDS Website).

The Palestinians receive immense financial support from the international development sector on the one hand, and the anti-Zionist Islamist bloc led by
Iran on the other (MFA Financing Terror Website). For instance, between 1994 and 2009, the EU became the leading donor in the Palestinian territories, providing €4.26 billion (about US$5.3 billion) in assistance during this time (EuropeAid Website). Massive sums of European and American aid have specifically been invested in the Palestinian water sector. For example, the US committed some US$200 million to Palestinian water development between 1994 and 1998 (Sosland, 2007: 169). The Palestinians are thus reasonably well and increasingly supported by the global community, both in developing their comparative power and in pursuing a multi-faceted struggle against Israeli occupation and dominance.

**Ability to Discriminate**

The *ability to discriminate* may be understood as the extent to which parties are able to determine their future, based on opportunities they both create and that are made available to them. It can refer to their desire, ability and willingness to impose solutions on the other, to reject or renege on agreements, or to leverage the perception of partisan justice. In this sense, both Israel and the Palestinians have a measure of power, but Israel more fundamentally and extensively so.

Learning from their strategic shortcomings revealed in the wake of the earlier Oslo agreements, the Palestinians refused to come to any agreement perceived as unjust at Camp David in 2000. They have succeeded in securing control of the Eastern Mountain Aquifer. They have initiated membership processes with global governance institutions, with some tangible success,
notably with respect to UNESCO and the WTO (as noted above). These efforts demonstrate, and amplify, a measure of Palestinian power in determining their future.

By comparison, Israel has the ability to enforce or release the grip of its occupation over the Palestinians through multiple Israeli institutions. It has continued to pursue settlement activity in the West Bank, against the general will of the Palestinians and most of the international community. It refuses to concede additional West Bank water resources to the Palestinians. Perhaps most poignantly, it continues to seek solutions to the Israel-Palestinian conflict that would ensure its dominance over the Palestinians. This is evident in the Israeli proposal for the creation of a fragmented and demilitarised Palestinian state as a solution to the long-standing conflict, what Israeli Prime Minister Netanyahu has referred to as “Allon Plus” (Shlaim, 2001: 583)\textsuperscript{14}.

Overall, Suleiman’s (2000) framework is particularly effective for an analysis of comparative power, as done here with respect to Israel and the Palestinians. By this approach, Israel is undoubtedly the more powerful actor of the Israel-Palestinian conflict. The analysis of asymmetry is further developed through a relational approach to the study of power, reflecting how power is produced and leveraged between parties. The next section provides the theoretical framework, with relevant examples, of Israel’s relational dominance and power asymmetry.

\textsuperscript{14} In 1997, Netanyahu proposed giving 40 percent of the West Bank to the Palestinians, while keeping water resources and a ring of settled and strategic lands and roads under Israeli sovereignty. He called this the “Allon Plus” plan. In subsequent years, Netanyahu proposed that this Palestinian ‘state’ should be demilitarised.
Relational Power Asymmetry

At their core, conflicts are relational phenomena. Stemming from this premise, the ideas and practices constitutive of relations and relationships are now central theoretical and analytical concerns of the Conflict Resolution (CR) field. More to the point, the discursive power of such ideas and practices is a key area of study for contemporary scholars, also building on multiple generations of scholarship (Ramsbotham et al., 2005). The current study is epistemologically situated in this field of concern and study.

Much has been said about the 'changing nature of violent conflicts' by scholars and practitioners over the last twenty years. There has been recognition that violent conflicts are most often waged by parties that are not structurally similar, as in cases involving a state and a political movement (Rupesinghe, 1998; Rupesinghe, 1995). Research projects have been developed on the threat and violence experienced by minority and marginalised groups at the hands of more powerful states around the world, as with the Minorities at Risk project (Gurr, 1993). A survey of at least one database that tracks violent conflicts, the Uppsala Conflict Data Program (UCDP), reveals the long-standing and protracted quality of such asymmetric conflicts (see UCDP Website). This is specifically the case with the Israel-Palestinian conflict which, like many other asymmetric conflicts, continues to prove difficult to resolve.

The contemporary CR literature on relations and relationships drawn upon to inform this study insightfully frames some asymmetric conflicts in terms of
dominance and subjugation (Jabri, 2007a: 39; Knox, 2000: 112; Maoz, 2000: 261). Such a framing also provides insight into the transformation of asymmetric conflicts. Literature stemming from the contact hypothesis argues the merits of encounter and relationship-building between conflict parties (Coleman, 2007: 387-388; Azzi, 2004: 57), which some argue creates opportunities for social learning (Burton and Dukes, 1990). The reconciliation literature refers to the righting of relationships, premised on the notion that relationships are constructed of genealogy, material practice and imagination (Lederach, 1997; Assefa, 1993; Anderson, 1993). Fundamentally, this body of work is premised on the illegitimacy and violence inherent to relations and relationships of dominance and subjugation. In this broad relational tradition, the current study develops an approach to the analysis and transformation of conflict based in relational power. It takes as a point of departure the analytic constructs of critical theorist Michel Foucault on power.

Foucault understands power as the ordering of relations, secured through infinite relationships at multiple societal levels and domains. Such ordering is the very analytic ‘thing’ he privileges for critique, discussion and indirectly, transformation (Foucault, 1978 in Foucault and Faubion, 2000: 209). It is essential then to appreciate the power of such ordering. In a foucauldian analysis, the ordering of relations and relationships is constituted by and through practices and modes of thought, i.e. discourses. These produce, reproduce and reinforce the assumptions, values, subjective categorisation, priorities, ways of doing and overall ontologies of hegemonic powers. They (re-)
produce and enforce the order against which resistance and transformation are situated and pursued.

A relational approach to the analysis of asymmetric conflict specifically entails examining the ordering of relations and relationships of conflict parties and actors. It entails identifying recognisable relational dimensions, characteristics and patterns of the conflict system. A specifically foucauldian approach to analysing relational power is also grounded in a historical perspective of continuity and change. It accounts for the construction of subjecthood as well as the justifications implicit to relational complexes.

Focused on the deconstruction of discourses that produce and justify particular relational orders, a foucauldian analysis of relations and relationships may be pursued in diverse domains. In Foucault’s own work, critical deconstruction is undertaken with reference to penal systems (i.e. Discipline), governance systems (i.e. Governmentality), gender relations (i.e. Sexuality) and other domains. It can also be leveraged to analyse power in conflict environments (as with Jabri, 2007a; Jabri, 2007b; Jabri, 2005) and hydropolitical power more specifically (the specific concern of this study). In conflict environments, it is essential to appreciate how comparative power shapes relations, and how relationships themselves are constructs of power. Given that conflicts are discursively dynamic, such relational ordering is frequently also the location of contestation and resistance. Therefore, the transformation of conflict is specifically situated in the transformation of the relational complex.
Drawing on these foucauldian insights, the current project is framed as a study of the relations and relationships of, and between, Israel and the Palestinians, and also of and between Israelis and Palestinians. In the simplest terms, Israel has imposed and perpetuated a relation of dominance over, and a subjugation of the Palestinians, leveraging and thereby translating its extensive comparative power into relational power. As an overarching response, the Palestinians have pursued a politics of resistance as against the imposition and perpetuation of such asymmetric relations. This overall relational order, of dominance and resistance, is produced, reproduced, and at times circumvented, even transformed, through the discourses privileged by conflict parties and actors over time. It is also particularly interesting to note that an active minority of Israelis also pursues a politics of critique, resistance, desistance, alternatives and ultimately transformation, in relationship with Palestinians; a matter subsequently discussed.

**Governmentality**

To appreciate the constitution and operation of relational power, it is helpful to turn to Foucault’s framework of Governmentality, itself comprising sovereign, disciplinary and biopolitical power. In his lectures at the Collège de France, 1977-78 and elsewhere, Foucault makes visible the historical evolution of a layered system for the deployment of power (Foucault et al., 2007). This system of power is articulated and secured via historically-grounded discourses that (re-) produce and perpetuate hegemonic relations through time. Such discourses are constructed of (shared and/or unilateral) practices (e.g. technological deployments) and modes of thought (e.g. narrative justifications)
which relationally produce stratified populations and subjectivities in the hegemonic interest (Foucault, 1982 in Foucault and Faubion, 2000: 327; See also Cairo, 2006). Foucault’s analytic framework of power is herein discussed both theoretically and in relation to the Israel-Palestinian conflict.

The first pillar of this framework, sovereignty may be understood as the power of states to define territorially-based boundaries and communities, a fundamental construct of the Modern, Westphalian system. The power to establish and impose sovereignty, to separate and unite territories and communities, is the basis upon which other forms of power are established. Thus, sovereignty is the first power, at the root of a power complex. In the Israel-Palestinian conflict, the Israeli state is unique in possessing full sovereign power. The PA, by comparison, has limited sovereign power over Palestinian territories, resources and populations. In maintaining its occupation over Palestinian territories, populations and resources including water, Israel persists in specifically denying the Palestinians full sovereign power. Israel also continues to expand its sovereign relations over the Palestinians, in key domains that include water, infrastructure and Jerusalem. In so doing, Israel perpetuates its specifically asymmetric conflictual relation with the Palestinians.

The second pillar, discipline, is formulated as the power to define, construct and regulate ‘normal’ behaviour and ‘subjecthood’. In Discipline and Punish: The Birth of the Prison, Foucault (1995) explains the hegemonic power of what he terms “panopticism”, drawing on the work of 18th century social philosopher

15 While Foucault did not write extensively about conflict environments, he has written about the Iranian Revolution, and increasingly his analysis is leveraged in the field of discursive CR.
Jeremy Bentham. The panopticon is a disciplinary prison system that trains inmates to behave ‘normally’, integrating such constructed normalcy into their personal and cultural practice and identity. Panopticism is a structural technology for the construction of the normal subject and for the production of ‘normalcy’, a process through which normal culture is pursued, legitimated and reproduced. Panopticism may also be understood as a system that is reliant upon such a technology. Thus, disciplinary power may be understood as the power to construct normal, orderly subjects.

In the Middle East, Israel’s disciplinary power is aimed at producing Palestinian populations that accept Israel’s legitimacy through continued dominance, as a fait accompli, a fact on the ground. In the meantime, Israel leverages its disciplinary power to produce docile Palestinian subjects, intent that they become accustomed to Israel’s dominance. Israeli surveillance and separation technologies, which include its security barrier and the IDF, are constitutive of its disciplinary power. Among other things, these disciplinary mechanisms serve to powerfully monitor Palestinian activity, to bring Israel into the lives of Palestinians, to normalise its presence there and in the Middle East. It amounts to a separation and surveillance-based relational regime between Israel and the Palestinians. Such disciplinary mechanisms are regularly imposed by Israel on Palestinian farmers, with the security barrier and militarised checkpoints violently mediating the Palestinian relationship to land and water resources they have used and relied upon for decades if not centuries.
The third pillar, that of biopolitical power, may be understood as the power to judge life itself and to determine what ‘populations’ (to mean people, practices, cultures and institutions) merit recognition as either ‘life-giving’ or ‘life-threatening’. The analysis of biopolitical power is rooted in the construction, recognition, development, marginalisation, even elimination of populations. Populations are therefore the location for the deployment of such power. Israel’s biopolitical power is deployed against Palestinian populations that threaten the legitimacy and secure existence of Israel and the Jewish self-determination project. In this respect, Israel endeavours to distinguish between supportive and threatening Palestinian populations, pursuing separation, coordination and integration practices accordingly.

Israel’s blockade of the Gaza Strip since 2005 may be understood as a biopolitical technology. This blockade has been justified by Israel as a means of containing the Islamist Palestinian threat, notably HAMAS and the Izz ad-Din al-Qassam Brigades, from acquiring resources to threaten and undermine the Jewish state. On the other hand, Israel seeks to coordinate security matters with the PA in the West Bank, ensuring they share complementary biopolitical ideals as well as the means to implement them. Blockades, policy coordination and institutional integration have all been leveraged as biopolitical technologies.

Hydropolitically, Israel has consistently cultivated its control over water distribution mechanisms throughout the West Bank, thereby maintaining a hand

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16 Given the bluntness of the biopolitical instrument, both in general and in Israel’s hands, its deployment has on occasion resulted in accusations of ‘collective punishment’. Amnesty International accused Israel of collectively punishing the people of Gaza through its 2008-2009 Operation Cast Lead (Amnesty, 2009b).
on the tap of water for Palestinians, often in imposed coordination with the
PWA. Increasingly, Israel has sought to ensure that Palestinian human needs
for water are reasonably met in the West Bank (a matter discussed at length in
chapter 4). By comparison, the more militant Gaza Strip population has been
left to fend for its hydropolitical self, under the HAMAS regime.

Foucault’s work allows us to see and appreciate the deployment of power by
dominant, hegemonic (and also other) parties and actors in any system of
power. For the purposes of this study, the asymmetric Israel-Palestinian conflict
environment is understood as one such hegemonic, and as shall become clear,
hydrohegemonic system of power. Israel’s sovereign, disciplinary and
biopolitical power have hegemonically shaped the relational order. Here, the
discursively legitimated deployment of Israel’s hegemonic and also
hydrohegemonic power is based upon the operation of, participation in, and
reproduction and perpetuation of such power in relation and through
relationships between Israel and the Palestinians (as major conflict parties),
and also between Israelis and Palestinians (as diverse conflict actors). The next
two sections further develop these arguments with relevant examples.

**Threat Power**

Anchored in an analytics of relations and relationships, this study is further
informed by K. Boulding’s theory of power (1989; See also Ramsbotham et al.,
2005: 20). K. Boulding theorises power as social structure, grounded and
expressed in and through relationships and relational structures, practices and
ideas, much like Foucault. The types of power he defines are:
1. Threat power (primarily destructive): Hard, coercive power
2. Exchange power (primarily productive): Softer, bargaining power
3. Integrative power (primarily creative): Soft, collaborative power

This typology frames the merits and limitations of three forms of relational power based on an interpretation of their predominantly destructive, productive and creative qualities and force.

K. Boulding argues that all forms of power are inherent to social systems, thereby playing a central role in our social practice and evolution. As a tool for the analysis of asymmetric conflict and its transformation, the typology directs the analyst to identify imbalances in, and practices of threat power. It also directs analysis towards locations and practices of exchange power, with an interest in what may happen when parties are perceived as roughly symmetric overall or in specific relational domains. Finally, the concept of integrative power, itself rooted in respect and even love (at least, a love of self, and a love of the other’s dignity), generates an epistemology for the study of cooperative power, i.e. the intentional and reflexive imagining, doing and claiming/believing together (in this case across conflict lines).

Relational theorists recognise that these various forms of power frequently operate concomitantly in socio-political systems, though in different ways and degrees. More to the point, asymmetric systems are characterised by the prevalence of threat power, with some exchange power being leveraged, notably where negotiations have been initiated and pursued. Only rarely is integrative power leveraged by political parties engaged in asymmetric conflict,
given that one party is generally unprepared and unwilling to relinquish
hegemonic threat power. As shall be made clear, this is evidently the case for
Israel in the Israel-Palestinian conflict.

This framework of power is also informative of why peace processes between
asymmetric parties often fail to produce mutually-satisfactory final outcomes.
Notably, threat power contains the ability to selectively deploy the power to
reject, i.e. veto power (Azzi, 2004: 85). It is also made up of power stemming
from the ability to discriminate (as noted in Suleiman, 2000). Threat power is a
prominent feature of conflicts characterised by an “asymmetric dependency
construct” (Scarpa, 2006). The continued operation of such threat is reinforced
by psycho-social dynamics, including the notably self-fulfilling, narrative self-
perception of marginalised groups of their own marginalisation and marginality
(Halabi and Sonnenschein, 2000: 49).

K. Boulding’s framework is insightful as a lens through which to assess the
Israel-Palestinian conflict, and specifically, Israel’s asymmetric power. The state
of Israel continues to maintain and expand its threat power over the
Palestinians, with some willingness to bargain, but almost no visible desire to
cultivate and share integrative power. The final status issue of Jerusalem is
revealing in this regard. Israel continues to impose its sovereign control over
ever-expanding territories and populations, in unilateral articulation of the
Jewish Israeli idea of Jerusalem as the unified capital of modern Israel. Since
capturing East Jerusalem in 1967 (after some 2,000 years of exile), Israel has
unified, expanded and/or annexed much of its core and surrounding areas.
Jerusalem area settlements have been built in an expanded Jerusalem municipality, to include Gilo, Har Homa, Pisgat Ze’ev, Ramat Shlomo, Neve Ya’acov, Atarot and others. In so doing, Israel has reified its sovereign arrangement over Jerusalem, nurturing Jewish life in Jerusalem biopolitically, drawing on the power of disciplinary mechanisms in pursuit of Jewish security. At the same time, the Palestinians contest the legitimacy of the entire Jewish project for an expanded, Israeli Jerusalem.

Map 1.1. Israeli Settlements and Palestinian Neighbourhoods in East Jerusalem, 2000. Published by the Palestinian Academic Society for the Study of International Affairs (PASSIA – PASSIA Settlement Website)

Such ideation and practice contains, reflects and perpetuates Israel’s asymmetric threat power. Israel rejects even the suggestion that Jerusalem should be considered an internationalised city, under UN or other governance arrangements (as proposed by the 1947 UN Partition Plan). It also marginalises the value and limits possibilities for bargaining or sharing power over the city as
a practice or outcome of peacemaking (and sometimes bandied about as part of a ‘one-state solution’). Nonetheless, under the prime ministership of Ehud Barak, it is widely believe that Israel offered to recognise an arguably distant portion of East Jerusalem, namely Abu Dis, as the official capital of an eventual Palestinian political entity (whether a state or not remains unclear). Abu Dis was neither considered a part of the Jerusalem municipality under Jordanian rule (1950-1967) nor under Israeli rule before Oslo (1967-1993). Today, Abu Dis lies to the east of the Israeli security barrier.

Overall, Israel’s asymmetric threat power vis-à-vis the Palestinians affords it the ability and latitude to pursue and impose its preferences, and/or selectively reject those of the Palestinians. On the issue of Jerusalem, there is evidence of Israel’s limited willingness to bargain within a wider relational complex distinguished by its dominant, hegemonic, threat power. There is no evidence of Israel pursuing integrative power on this issue. In the meantime, Israel maintains full sovereignty over an expanded Jerusalem municipality reflecting a zero-sum arrangement from which the Palestinians acquire little power or benefits. Thus, Israel’s hegemony is meaningfully and effectively perpetuated, with domain specific and wider implications that are also hydropolitical, as shall become evident in the next chapter.

**Justificatory Narrative as Ideational Power**

The production, reproduction and legitimation of hegemonic power is reliant upon the discursive perpetuation of asymmetric relations and relationships, in practices and also modes of thought. Such discursive ideation and practice
takes place throughout society and not simply ‘at the top’. This point is eloquently explained by foucauldian theorist Colin Gordon (Foucault and Faubion, 2000: xxiv-xxv):

Foucault was interested… in showing that power “comes from below”, that is, that global and hierarchical structures of domination within a society depend on and operate through more local, low-level, “capillary” circuits of power relationships.

Such hegemonically aligned circuits of power relationships are not inevitable but are (re-) produced, both coercively and consensually (Cox, 1987; Gramsci, 1929-35 in Gramsci et al., 1971). Coercion is structured through a system of governmentality, as explained above, with respect to the Israel-Palestinian conflict. It is deployed through the inclusions/exclusions of sovereignty, the panopticism of disciplinary mechanisms, and a host of biopolitically intentioned technologies, mechanisms and interventions. Coercion is practiced as threat, and is often present in the process of negotiation. Coercion is specifically distinguishable from shared, integrative power.

Consent is the other pillar of hegemony, based on convincing and legitimating modes and constructs of thought that are themselves constitutive of discursive practice and power. While practice, the how of politics, is fundamentally constitutive of power, it is underpinned by both a why and a what, i.e. modes of thought, ideologies and ideations of ‘convenient ends’ (Foucault, 1978 in Foucault and Faubion, 2000: 210). Thus, practices of power are complemented by mentalities of power, providing the interplay between the doing and seeing that constructs legitimated discourses. Similarly, Tilly (1991 in Mirumachi and
Allan, 2007: 11) argues that the imposition of an ideological frame at the exclusion of others equates the enforcement of hegemonic power.

Drawing on the work of Lukes (1974 in Zeitoun, 2009: 26), Zeitoun argues the merits of considering relational, material and ideational dimensions of power in his analysis of hegemony, and hydrohegemony more specifically, in the context of asymmetric conflict environments like the Israel-Palestinian conflict. He constructs and draws upon the following framework of power (2009: 26):

1. Hard Power
2. Bargaining Power
3. Ideational Power

Having considered the first two factors of this framework in discussing both Foucault and K. Boulding (to the extent necessary for the current study), the emphasis here will be on the third factor, *ideational power*, comprising “perception, ideas and ideology…” (Zeitoun, 2009: 29).

The study of ideational power may be approached as an examination of regimes of truth, and the pillars that construct and sustain them, in both relational and historical context. Ideational power is the power to define truth, to provide a legitimated framework through which to perceive the world, and to generate ideas that have affective and (re-) productive traction. Ideational power supports material deployments of power, constituting, producing and strengthening hegemonic discourses in practice. In conflict environments, the entire system of power rests upon the production and reproduction of relationships rooted in hegemonic ideational power, itself reinforcing the need
for and legitimacy of hierarchical relations. What is then systemically produced
is a self-replicating and self-justifying, enforced (even securitised) cycle of
power-begetting-power, drawing on sovereign, disciplinary and biopolitical
threats and deployments.

In this foucauldian sense, the study of conflict relations is the study of
discursive power as well as the concomitant production of political
subjectivities. Doing so involves studying the genealogy and practices of
discursive regimes of truth (Foucault, 1976 in Foucault and Faubion, 2000: 115,
118, 133), themselves providing the justificatory narrative for the deployment of
a security apparatus (le dispositif) and coercive power more broadly. The
security apparatus ensures the right ordering of the relations of people, i.e. the
the ordering of relations and relationships also entails recognition of the
corollary production of subjecthood and subjectivities, or more simply, the
legitimated construction of the self in relation to, and as differentiated from
others.

Looking to the Middle East, Israel and the vast majority of Israelis are
existentially committed to a discourse of Israeli dominance and Palestinian
subjugation. In this sense, the discourse of Israeli dominance over the
Palestinians is empowered to operate, in significant part, because Israelis
participate in reproducing this relationship, believing it to be a necessary one. In
the Israel-Palestinian conflict, Israel's ideational (and broader discursive) power
is anchored in what is referred to herein as the Israeli justificatory narrative, or
convincing rationale (drawing on Cairo, 2006). In so doing, Israel’s hegemonic discourse constructs, (re-) produces and perpetuates significantly and meaningfully differentiated Jewish Israeli and Arab Palestinian subjects, as of necessity.

As shall be developed in forthcoming chapters, Israel’s hegemonic justifications are both general and domain specific. Both the general and water domain specific elements of this justificatory narrative are outlined as:

1) A Jewish manifest destiny in redemption of biblical Zion;
2) A universal Jewish historical victimisation;
3) Jewish historical use as a premise of Israel’s water rights and of equitable use;
4) Israel’s hydropolitical imperative as a national state;
5) Israel’s strategic pursuit of integrated water resources management;
6) Israel’s benevolence towards the Palestinians, conceived as ensuring the satisfaction of Palestinian water (and other basic and development) needs;
7) The exclusive Zionist/Israeli prerogative of environmental sustainability, as compared with the relative unsustainability of the Palestinians; and
8) The construction and perpetuation of a Palestinian subject that continues to be a threat to Jews and the Jewish self-determination project, both generally and hydropolitically.

Taken together, the ideational elements of this narrative comprise a powerful rationale of Jewish Israeli necessity for maintaining conflict asymmetry and powerful hegemony/hydrohegemony as protection against the other; the threatening Palestinian subject. Relations of Israelis and of Palestinians are thereby ‘rightly’ and convincingly understood and ordered as hegemonic and hierarchical, and this so by the state of Israel with the participation of the vast majority of Jewish people in Israel and around the world.
The maintenance of Israel’s hegemony and its justificatory narrative, in general and in specific relational domains (like water), is self-reinforcing, self-perpetuation and very difficult to transform. It is a recipe for continued conflict between Israel and the Palestinians. It does not permit a great deal of space for integrative or even bargaining power to be pursued in creative resolution of the Israel-Palestinian conflict. The maintenance of Israel’s hegemony and justificatory narrative allows for Israel’s national, human and environmental security to be sustained, at least into the foreseeable future, while further undermining Palestinian dignity, rights, security and perceptions of equity. The perpetuation of such conflictual asymmetry, violence and injustice is not tenable, neither for Israel nor for the Palestinians. Theorising the transformation of such asymmetric conflict is therefore the next matter of concern.
Critical Peacebuilding and Asymmetric Conflict Transformation

...those who are enmeshed, involved, in these power relations can, in their actions, their resistance, their rebellion, escape them, transform them, in a word, cease being submissive. And if I don’t say what needs to be done, it isn’t because I believe there is nothing to be done. On the contrary, I think there are a thousand things that can be done, invented, contrived by those who, recognizing the relations of power in which they are involved, have decided to resist them or escape them (Foucault, 1980 in Foucault and Faubion, 2000: 294).

Asymmetric conflicts, characterised by totalising hegemonic threat and ideational power, are profoundly resistant to change and transformation. Dominant, hegemonic conflict parties generally seek to contain the discursive terrain, privileging the circulation of practices and ideas that reflect, (re-) produce and perpetuate hegemonic assumptions and framings. Their asymmetric comparative and relational power enables them to preclude, deflect or assimilate counter-hegemonic challenges while constraining the space for alter-hegemonic discourses to be pursued.

At the same time, asymmetric conflicts are unstable, even susceptible at multiple levels. Ethically, life-giving relations are preferred to violent and destructive ones in the contemporary age (Adler, 2005; Lederach, 2005). The UN system is premised on the construction, maintenance and promotion of global peace and security (Willetts, 2006). Also, relations marred by the perception of injustice, as in asymmetric conflicts, are unstable and pressured (Homer-Dixon, 1999). In these and other ways, asymmetric conflicts attract broad-based interest and interventions intent on transforming violent relations. At the same time, there is solace and strength derived from recognising that complex relational systems inevitably change over time (Cederman, 2010).
Looking to the Middle East, we find an Israeli hegemonic relational system such that discursive violence permeates many aspects of Palestinian (as well as Israeli) life (Makdisi, 2008; Reinhart, 2003). Palestinians, and also Israelis, express a desire for an end to the conflictual relation and the devastating effects of its multidimensional violence (Shulman, 2007). The perception of injustice associated with this relational regime of power is indeed high (Carter, 2007; Bishara, 2002). Drawing on evidence from conflict environments around the world, it seems that where the perception of injustice is high, the likelihood of conflict is heightened, as is the motivation for resistance and transformation (Homer-Dixon, 1999; Homer-Dixon, 1993; Homer-Dixon, 1991). In other words, the Israel-Palestinian conflict continues to demand critical and transformative attention.

**Hydropolitical Peacebuilding**

Given such asymmetric relations, what is today termed *peacebuilding* may be understood as those discursive engagements effectively countering, circumventing and transforming comparative and relational asymmetry in the interest of positive peace (Harari and Roseman, 2008: 6; Lederach, 1997: 20). Peacebuilding may be pursued through critical, resistant, desistant and alternative discursive ideation and practice, and this in each (and eventually every) relational domain located within specific conflict contexts.

In hegemonic, asymmetric conflict environments, building positive peace demands a critique of the relational foucauldian 'object', resistance to and
desistance from perpetuating hegemonic discourse, as well as the active pursuit of alternative relational formations (and relational subjectivities). In terms specific to the relational domain of water management and development, the peacebuilding outlined above is referred to herein as hydropolitical peacebuilding. It builds on the concepts of environmental peacebuilding (Harari and Roseman, 2008) and also environmental peacemaking (Conca and Dabelko, 2002), both of which have been used to mean leveraging environmental cooperation in the pursuit of positive peace.

In the current research project, and drawing on insights from the environmental peacebuilding, peacemaking and CR literature, peace is understood as a construct and practice of relationship, rooted in equality, partnership, equity and shared sustainability. It is fundamentally premised on the broad-based and continued recognition of equality, dignity and rights of others, i.e. those with whom relationships are shared. Under-girded by the satisfaction of basic human needs such as shelter and water provision, it is ensured through the cultivation and maintenance of material and perceived equity between groups.

Peace is practiced in partnership, through an informed engagement with respect to framing and decision-making processes on issues that collectively affect and effect groups. It is a commitment to the resolution of disputes without recourse to violence or armed conflict. It is a commitment to the integrity of agreements reached through fair processes, and a willingness to reconsider agreements reached under duress. Finally, peace is rooted in the shared (though often differentiated) perpetuation of a sustainable environment,
ensuring the earth’s rich biodiversity and its ability to provide equitably for current and future generations. Such a construction of peace is generally termed positive peace, contrasted to the more common and attainable negative peace associated with the termination of a state of belligerency (Galtung and PRIO, 1996).

The practice of positive peace is generally termed peacebuilding, despite itself being marred by over-generalisation and conceptual slippage. In the current work, peacebuilding is understood as action-oriented, to mean the engaged construction of relational equality and partnership between actual or former parties to conflict. It is the practice of mutual-recognition and pursuit of equity in relationship with others. Peacebuilding involves the active satisfaction of human needs, while promoting the political agency that stems from a commitment to individual and collective human rights.

Peacebuilding entails the action-oriented transformation of structures, institutions, and cultural practices and modes of thought (i.e. discourses) that (re-) produce dominance/subjugation, structural inequality, indignity and exclusion, and perceptions of relational inequity. It supports the construction and implementation of socio-political structures and institutions that ensure fair processes, and their dynamic transformation when doubt and concern are raised as to their legitimacy. Finally, though no less importantly, peacebuilding entails an ecologically-informed commitment to, and the active and frequently shared pursuit of environmental sustainability.
Far from being simple abstract concepts, positive peace and peacebuilding must be anchored in both specific relational contexts and domains. Thus, peacebuilding in the Middle East discursively entails the promotion of the equality of Jewish and Palestinian self-determination movements. It involves working for structural equality between these parties, through a relationship of partnership which is notably critical of Israel’s dominance over a subjugated Palestinian people. Peacebuilding entails the promotion of equity in material and perceptual terms, such that Israeli and Palestinian human needs and human rights are valued equally and with equitably perceived effects for all. It involves working to ensure the political agency of Israel and the Palestinians, so that they may pursue these needs and rights with dignity and political freedom. Finally, peacebuilding involves cultivating an ecologically-sound, sustainable relationship across boundaries and with respect for the environment. Accordingly, the environment, its management and development must not become a source of discord and violence between Israel and the Palestinians, but a domain of relational and inter-generational equity and sustainability. Specifically, environmental peacebuilding implies that prerogatives of environmental sustainability are not used by Israel to favourably, misleadingly and violently distinguish itself from an ‘unsustainable’ Palestinian subject.

The concern for water relations between Israel and the Palestinians focuses this study on the specific development and framing of *hydropolitical* peacebuilding. In this sense, the study is intently informed by the Berlin Rules on Water Resources (Berlin Rules on Water Resources, 2004), developed by the International Law Association (ILA) for the peaceful and equitable
management of transboundary surface and underground water resources.

While they are elaborately and extensively formulated by the ILA, the Berlin Rules may be distilled into the following relevant obligations of states:

1. Ensuring the rights of access to water for all individuals, with specific consideration for the rights, interests and special needs of ‘particular communities’ and vulnerable groups;
2. Privileging vital human needs over other uses;
3. Recognising inter-generational sustainability and ecological integrity;
4. Establishing preference for shared, integrated water resources management (IWRM) where waters are transboundary;
5. Promoting the reasonable and equitable use of water resources;
6. Requiring proper impact assessments for all proposed major developments;
7. Advancing public participation in water development, pursuing corollary information and transparency requirements; and
8. Prioritising the resolution of water disputes through peaceful means, subject to arbitration or litigation that is both final and binding.

Brought into a Middle Eastern context, these rules conceivably create the following obligations for Israel, as they relate to its hydropolitical relationship with the Palestinians on shared and disputed transboundary water resources¹⁷.

First, as hydrohegemon, Israel must ensure that Palestinians’ human needs and human rights to water are met and/or not hindered, as appropriate, acknowledging that Palestinians are a particular and vulnerable group stemming principally from Israel’s continued occupation.

Second, Israel must privilege both Israeli and Palestinian basic human needs before its own agricultural, industrial or even long-term political security prerogatives.

Third, Israel must work towards protecting water resources in the present and inter-generationally.

Fourth, Israel must orient itself to work in equitable partnership with the Palestinians with respect to their shared/disputed transboundary water resources.

¹⁷ They also amount to values and principles that are to be pursued by the Palestinians, both in the present and as they aspire towards full self-determination and statehood, with concomitant hydropolitical obligations.
Fifth, Israel must ensure that shared/disputed water resources are equitably used, also building new institutions and/or transforming existing institutions where they interfere with this obligation.

Sixth and seventh, any new Israeli developments associated with water resources must be assessed transparently for their environmental and socio-political impacts, in consultation and/or partnership with the Palestinians, as appropriate. Israel must desist from unilaterally pursuing water management and development where its practices are reasonably and appropriately disputed by the Palestinians.

Finally, all water-related disputes between Israel and the Palestinians must be addressed through peaceful means and processes, with the possibility of binding litigation and third-party arbitration ever-present.

Drawing on the above discussion of positive peace as informed by the Berlin Rules, a framework for practicing and also evaluating hydropolitical peacebuilding in the Middle East is simply and poignantly framed as follows:

a) Critiquing, resisting and desisting from the relation of hydrohegemony pursued by Israel and imposed upon the Palestinians;

b) Critiquing, resisting and desisting from the Israeli narrative of hydrohegemonic necessity; and/or

c) Building and practicing alternative relationships with Palestinians, premised in equality, partnership, equity and shared sustainability.

Such water domain-specific peacebuilding, in general and as related to the Middle East, is premised in the formulation and pursuit of critical discursive challenges to the inequalities, inequities, and other forms of relational violence that are ordered hydrohegemonically by Israel. Hydropolitical peacebuilding is grounded in relational human experiences that resist and desist from participating in the assumptions, ideations, practices and truths of Israel’s hydrohegemonic regime of power. It is found in the pursuit of alternative hydropolitical relations of Israelis with Palestinians as compared to the violent imposition of hegemonic relations upon them. At a core level, hydropolitical
peacebuilding is appreciable as the pursuit of a just transformation of the violent relational order, of asymmetric subjecthood and subjectivity, and of hydrohegemonic discourses that enable the Israel-Palestinian conflict. In the Middle East (as elsewhere), hydropolitical peacebuilding is rooted in a critique of that which is violent as well as that which justifies such violence, while defined in the building of positive, alternative, water-related transboundary relationships between Israelis and Palestinians (and other relationally similar conflict parties and actors).

**Transforming Power Relations**

Hydropolitical peacebuilding is herein understood as a domain-specific approach to the transformation of the Israel-Palestinian conflict. This approach is informed by the Galtungian theory favouring the strategic, discursive production of symmetry between conflict parties and actors (Galtung, 2004: 103-109 in Ramsbotham et al., 2005: 183). Others have also written about the practice and merits of producing greater symmetry in specifically hydropolitical terms and contexts (Jägerskog and Zeitoun, 2009). Doing so, it is believed, entails strengthening the weaker party (Lederach, 1995; van der Merwe, 1989; Curle, 1971) and/or weakening the stronger party (Moscovici, 1980 and Moscovici, 1985 in Maoz, 2000: 261-262).

Conflict transformation is understood to be favoured and produced by and through peacebuilding efforts intent on altering hegemonic power relations between conflict parties and actors, in both general and in domain specific terms. The pursuit and production of symmetry are important in and of...
themselves in relational contexts (and orders) of dominance and subjugation. Pursuing peacebuilding and transforming conflict relations may also favour the creation of requisite political space for difficult conflict issues to be addressed peacefully and justly in context. In the Middle East, these difficult issues are generally referred to as final status issues, and include Jerusalem, borders, refugees, security arrangements, and water resources. Addressing these issues is fundamental to justly and peacefully resolving the Israel-Palestinian conflict.

Favouring the alteration of power relations, i.e. transforming the foucauldian relational object or order, may be pursued through any number of possible approaches. The one privileged and theorised in this study is concerned with the possible transformation of powerful hegemonic discourses and their legitimating narratives. It is theoretically rooted in the assumption that peacebuilding, and hydropolitical peacebuilding more specifically, produces a weakening of the stronger party, in this case Israel. It strengthens the weaker party, in this case the Palestinians. It creates a favourable context for final status issues to be addressed meaningfully and justly. Such peacebuilding is also believed to favour the emergence of greater openness among and between all conflict parties to the possibility of a new relational order rooted in positive peace. It specifically does so by virtue of its discursive construction and production of alternative relational formations, themselves offering glimpses into possible and desirable futures.
It is of course impossible to know for sure what will be the outcomes and effects of ostensibly peacebuilding engagements, however much theorised. Nevertheless, intent on favouring the transformation of asymmetric conflicts, this study’s focus is in identifying if, where and how Israeli water/peace practitioners engage in hydropolitical peacebuilding, as defined in this study, and thus contributing to the transformation of Israel’s violent hydrohegemony. In the Israel-Palestinian conflict, this would imply a critical discursive engagement with, an escape from and a transformation of the Israel-Palestinian hydropolitical relationship of dominance/subjugation as well as the justificatory narrative that underpins it.

**Peacebuilding as Limit Experience**

Peacebuilding in general and hydropolitical peacebuilding more specifically are intentional relational pursuits. To engage in peacebuilding reflects a human and political desire to transform violent relations perceived as unfair, inequitable, unjust and untenable between conflict parties and actors. The transformation of such relations, in multiple domains and at multiple levels of relationship, is one of the very purposes being pursued in and as peacebuilding. Thus, peacebuilding is constructed of discourse, of intention and even of hope.

Asymmetric conflicts, as relational systems of hegemonic power, may be transformed by the discursive action and engagement in thought and in practice of conflict actors themselves (Arendt and Kohn, 2005: 193; Foucault, 1980 in Foucault and Faubion, 2000: 256; Foucault, 1976 in Foucault and Faubion, 2000: 128). As theorised above, such peacebuilding involves the intentional...
critique of existing relations of power and the discourses that (re-) produce them. It entails the pursuit of alternative relations or relational formations rooted in meaningful positive peace. It also involves working to intentionally extract, remove and/or disentangle particular relational domains (e.g. water, religion, etc) from the hegemonic regime of truth and its (re-) production. Indeed, each societal domain is potentially constitutive of, enabling and (re-) producing hegemonic violence. Thus, peacebuilding involves the active transformation of relations within particular domains, as part of a wider praxis of conflict transformation.

As seen, hegemonic power is premised on the discursive operation of ‘truth’, to mean the production of truth claims circulated for, and as, general agreement. Reconsidering, deconstructing and challenging such truth claims, as a basis for the transformation of power, does not happen in an ideational vacuum. It may, and often is rooted in intentionally pursued, critical, dissonant and frictional though nonetheless relational human experiences and engagements. Foucault refers to these as “limit experiences” (Foucault, 1980 in Foucault and Faubion, 2000: 256). Limit experiences are those experiences through which political actors as subjects do and see differently, alternatively, thereby constructing new knowledge in and of relationship, and also of the self and the other. The discursive construction and hegemonic production of dominance/subjugation, and the corollary differentiated subjectivities, thus become the foci of action, resistance, escape and even revolt, in thought and in action.
In this sense, peacebuilding is partially but nonetheless very significantly a discursive engagement of conflict actors actively pursuing limit experiences, i.e. those that challenge, resist, desist from, circumvent, create alternatives to, and ultimately contribute to the transformation of existing relations of hegemonic power. Anchored in the pursuit of limit experiences, Foucault’s theory of change, adapted in terms of peacebuilding, is articulated as follows (and then further developed below):

1. The pursuit of limit experiences
2. The construction of new knowledge
3. The transformation of the subject

Drawing on Foucault himself, to this list must of course be added another point:

4. The transformation of the object

A critical perspective and approach to hegemonic relations, and in this study to hydrohegemony, is the basis upon which peacebuilding is pursued and transformation is enabled. Critique is essential in opening the way for counter-hegemonic resistance and alternative practice. Thinking critically and doing otherwise are thus intimately and mutually constitutive. Deleuze (in Jabri, 2005: 74) expounds helpfully on Foucault’s notion of limit experiences in his discussion of critique as a limit-attitude.

Criticism, for Foucault, must precisely focus on ‘analysing and reflecting upon limits’. But such reflection must be transformed into a ‘practical critique that takes the form of possible transgression’. The possibility of ‘thinking otherwise’ is hence always related to practices of the self upon the self, practices that engage with the limits and seek to move beyond them.
The pursuit of relationally-based limit experiences, in thought and action, contribute powerfully to the construction of new relational knowledge. An unraveling of hegemonic relations is enabled as these are contested from within and across power-determined boundaries, through diverse relational experiments and engagements. These discursive relational experiments and relationships enable and are enabled by the ongoing “subjectivation” of conflict actors. Jabri (2005: 73) explains subjectivation as:

the emergence of the subject always already engaged in an encounter with self, with history, the self’s own historicity... The encounter with self is at once an encounter with history.

Fundamentally, the transformation of power, i.e. of the relational object and of hegemonic violence, is based on the subject being brought, bringing itself, into history. The subjectivity thereby produced is one of discursive resistance, innovation and relational transformation based on critical and alternative discursive ideations and practices. The historical catalysis and transformation of the subject in power-determined contexts and conflict environments weakens, undermines and transforms hegemonic power through transgressions and the pursuit of alternatives, in critical thought and practice.

While all conflict actors may pursue limit experiences, an important burden of responsibility for initiating and doing so resides, in particular, with conflict actors who are themselves identifiable with the disproportionately powerful parties. The reason for this being that it is usually their very discursive productions that generally sustain hegemonic asymmetry. In the Middle East, such a burden falls into the hands of Israeli conflict actors, notably those who operate
throughout the capillary circuits of power, and whose discursive practices
contribute to the perpetuation of the Israel-Palestinian conflict. In the current
study, this burden falls into the hands of Israelis and more specifically Israeli
water/peace practitioners engaged in transboundary community with
Palestinian colleagues. Noting this point, at this stage it bears saying a few
words as to the discursive significance of water and of Israeli water/peace
practitioners specifically.

**Water, Scientific Statements and Power**

Water is of course a scientific, but also broader knowledge-based, relational
domain of the Israel-Palestinian conflict. As will be elaborated upon in the
coming historical chapters, water has been the source of conflict and
peacemaking between Israel (and earlier Zionist Jews) and the Palestinians
(and Arabs more broadly) over more than one-hundred years now. As a
transboundary, knowledge-based domain, water has also been both a technical
and a political issue. Transboundary water management and development in
the Middle East has received the diversely shared, frictional (Tsing, 2005) and
fragmenting attention of engineers, hydrologists, geophysicists, as well as
ecologists, economists, sociologists and political scientists. Further, any
relational knowledge-based domain, perhaps especially one that is both
scientific and political like water, inherently participates in discursive regimes of
power, and therefore of violence and possibly of peacemaking and/or
peacebuilding in conflict environments (Matthew et al., 2009; Conca and
Dabelko, 2002).
As a relational domain, water and water-related discourses are neither apolitical nor politically neutral. In *Truth and Power*, Foucault argues that science, scientific statements and knowledge production more broadly are imbued with the power of discursive regimes. Practitioners engaged in knowledge construction, including water-related knowledge construction, are indeed politically implicated because of the operation of discursive regimes of which they are constitutive. One of Foucault’s concerns imported into the current study is to make visible “what governs statements… [and] of what effects of power circulate among scientific statements…” (Foucault, 1976 in Foucault and Faubion, 2000: 114). Stated context-specifically, one may ask: what governs water management and development-related knowledge production in the Israel-Palestinian conflict milieu? What effects of power circulate through water management and development discourses of Israeli (and Palestinian) water, and more specifically water/peace practitioners?

Scientists, and knowledge-producers more broadly, frequently turn a blind eye to the context and effects of power, unable and/or unwilling to engage with power directly; and generally benefiting directly from doing so. In so doing, they are participating in the discursive production of systems of power, whether they choose to or not. More directly, scientists, in their scientific claims and productions, participate in discursive regimes that produce and reproduce hegemonic and violent power18. Yet, scientists and knowledge-producers have been known to intentionally refuse to participate in such aberrant productions. Indeed, some of them may be, and throughout history have been reflexively,

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18 One need only look to the eugenic underpinnings of the violent Nazi experiment, grounded in politico-scientific framings, objectives and justifications.
vocally and practically critical of regimes of power in which they are implicated, and this through their domain-specific knowledge-based practices and relationships\(^1\). These are Foucault’s *specific intellectuals*.

In his broad usage, Foucault defines *the intellectual* “in the political sense of the word, ... the person who uses his knowledge, his competence and his relation to truth in the field of political struggles.” (Foucault, 1976 in Foucault and Faubion, 2000: 128) Scientists and knowledge producers who discursively engage with a critical and alternative perspective and practice, who pursue limit experiences, who challenge the truths of hegemonic relations, who draw on their knowledge in doing so, are referred to in Foucault as *specific intellectuals*. They are engaged “within specific sectors, at the premise points where their own conditions of life or work situate them (housing, the hospital, the asylum, the laboratory, the university, family and sexual relations).” (Foucault, 1976 in Foucault and Faubion, 2000: 126) Specific intellectuals are engaged in immediate and discursive struggles. Such people include:

…technicians, magistrates, teachers... Magistrates and psychiatrists, doctors and social workers, laboratory technicians and sociologists have become able to participate – both within their own fields and through mutual exchange and support – in a global process of politicization of intellectuals. (Foucault, 1976 in Foucault and Faubion, 2000: 127)

In violent conflict environments, scientists as knowledge and discourse producers are powerful mediating actors of sorts. Scientists and knowledge producers more broadly have within their discursive abilities limited but

\(^1\) The late-Sir Joseph Rotblat was one such scientist, having left the Los Alamos research and testing facility for reasons of conscience. The Pugwash Conferences on Science and World Affairs (inspired by Albert Einstein and Bertrand Russell among others), in which he played a leading role, advocated for a responsible use of scientific knowledge in the peaceful human interest. Both Sir Joseph Rotblat and Pugwash were awarded the Nobel Peace Prize in 1995.
nonetheless real sovereign, disciplinary and biopolitical power to participate in either supporting life or bestowing death. They can legitimate regimes of violence, of hierarchy, of occupation, in practice and ideation. They can also engage in discursive dissidence and transgression, making visible the violence of regimes through practice, working to remove their specific domains of practice from the wider realm of discursive violence and legitimation. While they are often hegemonically ascribed actors, themselves subjects of history, they may and sometimes do choose and endeavour to leverage their domains of thought and action, as means of bringing their own critical subjectivities into history. In conflict environments, such critical and alternative discursive ideation and practice is understood as one important dimension of peacebuilding in general, and of hydropolitical peacebuilding more specifically with respect to the relational water domain.

**Hydrohegemonic Residues**

In addition to being formulated as a discourse of critique, resistance, desistance and alternatives, peacebuilding is also identifiable as a practice of intention and hope. In this sense, peacebuilding reflects a profound human desire to build more peaceful, rightful and life-giving futures. In the Middle East, there are innumerable programs, projects and initiatives that articulate a claim to peace, invested as they are with good intention and hope. These efforts are found in multiple relational domains, including water.

Yet, the claim to peace is not necessarily congruent with peacebuilding generally and hydropolitical peacebuilding more specifically (as conceptualised
and discussed in this work). Indeed, general and water-related endeavours articulating a claim to peace may also contain and reflect limiting (hydro-) hegemonic residues. These are understood to mean practices and ideations that aspire to and/or claim emancipatory or transformative power while reflecting, producing and/or circulating significant hegemonic elements. Thus, it bears asking if and how hydrohegemony is residually identifiable in peaceably-intentioned water/peace practices and ideations. Indeed, where hydrohegemonic residues are in evidence, such practices and ideations threaten to undermine their own aspirations for peace, as well as the meaningful significance of the idea of peace itself.

The concept of hydrohegemonic residues is inspired by the work of Jabri (2007a; 2007b), Balibar (2005), Paris (2009) and Conca and Dabelko (2002) in particular (with influence from the linguistics literature, e.g. De Costa, 2010). Both Jabri and Balibar are concerned with the construction, production and transformation of hegemony. Jabri (2007a; 2007b) focuses on the formulations and actions of a politics of peace as against a hegemonic, global logic of war. Balibar (2005) critically focuses on the hegemonic construction and reification of exclusive social and communitarian categories. For both Jabri and Balibar, an emancipatory and transformative politics is constructed specifically and critically of transgressive thought and action, situated at and beyond the limit(s) of systems of truth and power, similar to and inspired by Foucault. Where there is evidence that peacebuilding efforts are discursively contained by and within such limits, it bears considering and analysing the presence and effects of (hydro-) hegemonic residues.
In their foundational edited work in the field of environmental peacemaking, Conca and Dabelko (2002: 228) join Blum (2002) in arguing the discursive significance of making visible the “lingering mentality” of conflict actors that threatens to undermine peacemaking and peacebuilding efforts (e.g. with respect to the Caspian Environmental Program (CEP), as examined by Blum). Similarly, Paris (2009: 105) argues the merits of assessing the “echoes (italics in original) of particular relational orders in contemporary practices” of peacebuilding. Informed by Paris’ notion of echoes and the work of others discusses above, the concept of (hydro-) hegemonic residues entreats the analyst to make visible the remnants, the residues, of (hydro-) hegemony in practices and ideations understood, claimed and/or framed as peace. This concept is anchored in an understanding of the critically peaceable merits of looking at the discursive practices, effects, power and political implications of such residues, themselves difficult to dislodge, remove, circumvent or avoid; but not entirely impossible.

In the context of the current study of hydrohegemony and hydropolitical peacebuilding, *hydrohegemonic residues* are discursively identifiable where water practitioners articulate a claim to peace but where they are reproducing fundamental constituent ‘categories’ of hydrohegemony in thought and practice. Such residues may appear in multiple forms, as will be made evident over the course of this study. At the current time and in general terms, hydrohegemonic residues are certainly recognisable by what they are not. Hydrohegemonic residues are distinguishable from the active and intentional construction of
hydrohegemonic discourse and necessity. From another perspective, hydrohegemonic residues are evident where hydropolitical ‘peace’ efforts fall short of hydropolitical peacebuilding, as defined in this work, given that the bar of peacebuilding has been set high.

Hydrohegemonic residues are indeed highly visible where discursive practices claim to act upon the future without critically engaging with the contemporary and structural violence of particular conflict environments. In other words, a hydrohegemonic residue is specifically evident where a system of asymmetric, hegemonic relations remains largely, discursively unchallenged by what are ostensibly peacebuilding initiatives. Essentially, hydrohegemonic residues are evident in water and peace related discourses that aspire to hydropolitical transformation without being rooted in or practicing critical engagement.

The (re-) production of violent, hegemonic orders of truth is simply contradictory to the claim of peace. In this sense, the continued presence and circulation of hydrohegemonic residues threatens to undermine the transformation of violent conflict. This marginalises transformative efforts, masking hydrohegemonic discourse with peaceful hope and intention. It undermines the power of critical discourses, often apologising for dominance, selectively reproducing justificatory narratives, and reifying hegemonic constructs of subjecthood and subjectivity. In the Middle East, hydrohegemonic residues violently affect both Israelis and Palestinians. In studying the political nexus of hydropolitics and peacebuilding, it is therefore insightful to factor in an examination and assessment of hydrohegemonic residues, to recognise the fundamental
contradictions they raise and reflect, in addition to studying and making visible hydrohegemony and hydropolitical peacebuilding.
Concluding Thoughts

The significant core of what it means to work for peace, as explained by Jabri (2007a: 172), may be understood as a politics of peace in the following terms:

[T]he politics of peace, the capacity at once both to resist violence and struggle for a just social order, is not just within the purview of the liberal state or indeed an international civil service, but is primarily located with individuals, communities and social movements involved in critical engagement with the multiform governance structures, as well as non-state agents, they encounter in their substantial claim for human rights and social justice.

Jabri (2007a: 173), inspired by Hannah Arendt, argues that working for peace entails working together, in relationship, always grounded in critical engagement. Among others, Foucault’s specific intellectuals may be appreciated as a few among many, with such practitioners comprising epistemic communities-cum-critical communities of peacebuilding practice.

In many ways, specific intellectuals hold a privileged but nonetheless very difficult and exacting societal position. This is by virtue of their knowledge practices, as explained by Foucault, and also for the fact that they are frequently what Lederach has termed “middle-range actors” (1997; 1995). Indeed, endogenous as they are to specific conflict environments, they often hold a position of influence with respect to governing bodies and actors, often engaged with NGO actors, even having a relatively grounded connection with the grassroots. The discourses they choose to privilege, the practices they choose to pursue, the relationships they cultivate, their engagement with power at all of these levels, resonate through the halls of political authority and in the broader socio-political environment. Indeed, specific intellectuals may be
understood as discursive political actors whose action is constitutive of a much wider discourse of peace, with endogenous, relational and systems-level relevance.

The presence and significance of actors who meet the exigencies of Foucault’s specific intellectuals must however be ascertained not only theoretically, but also empirically, through their speech acts and domain specific actions and practices. In doing so, it is possible to appreciate their contribution to the transformation of systems of dominance, hegemony and asymmetry, and in this case, more specifically, Israel’s dominance over the subjugated Palestinians.

Within any such system, where discursive power operates at multiple levels, there are those people who find the personal and political courage to develop a critical approach and discursive practice referred to herein as (hydropolitical) peacebuilding, intent on transforming systems and relations of power perceived as unjust and violent. Such a critical perspective is based upon and specifically engages with the discursive constructions of inequality, of inequity, of relationship-building, of necessity and justification, of imagination, and of alternative futures. At the same time, such engagement must be situated within historical moments, given that a politics of peace is immanent, emergent, also contextual and in some ways contingent. One cannot help but wonder if Israeli water/peace practitioners are appreciable as such specific intellectuals, practicing peacebuilding by virtue and means of their hydropolitical discourses.

Peace researchers are motivated by a desire to recognise the pursuit of
peacebuilding and the operation of positive peace, both in general, but also with respect to particular conflict environments. The current work is specifically concerned with the Israel-Palestinian conflict and hydropolitical practices pursued therein. Water is frequently a relational domain where the claim to peace is articulated among water practitioners, as individuals and as participants in a community of water/peace practice. There is much debate in the water and peacebuilding literature about their contribution to both the violence of the Israel/Palestinian conflict and to peacebuilding processes on the ground despite, and in recognition of the violence.

The current project contributes to these deliberations, drawing on a foucauldian and interpretive analysis of their discursive ideations and practices, in terms of hydrohegemony, hydrohegemonic residues, and hydropolitical peacebuilding. In many ways, this study continues on from some of Jabri’s work, which she articulates as “…tracking agency and political subjectivity in the face of discourses of war and violence that seek conformity and proclaim totalising certainty.” (Jabri, 2005: 70) Thus, this study examines and analyses transboundary water/peace discourses for hydropolitical peacebuilding, itself understood as engaged critical, alternative and transformative discursive practice within the Israel-Palestinian conflict milieu. The next chapter provides the methodological basis for this study of hydropolitical peacebuilding in the context of the Israel-Palestinian conflict.
CHAPTER 2:
A METHODOLOGY OF INTERPRETIVE PRACTICE – THE STUDY OF
POWER AND TRANSFORMATION

Introduction

Methodology may be understood as a kind of theoretically-directed roadmap for
research. It reflects the ontological assumptions and epistemological
preferences of the researcher. Its articulation generally contains the motivation,
questions, methods, trajectory, practices and forms of knowledge constructed in
and through research. A research methodology frequently shares ethical issues
and other challenges associated with implementing particular research
methods, and this with regards to research in and about conflict environments.
In these many ways, this chapter articulates and discusses the methodological
approach and practices pursued over the course of the current research project
on hydropolitics and peacebuilding in the Middle East.

This research project is concerned with the study of hydrohegemony,
hydropolitical peacebuilding and hydrohegemonic residues in the context of the
Israel-Palestinian conflict. It is a normative project that engages with discourses
of violent, protracted, asymmetric conflict and its transformation, ideationally
and in practice²⁰. Located at the nexus of critical constructionist and
interpretivist traditions, it is rooted in the assumption that socio-political worlds
are constructed, produced and transformed discursively, through the way social
and political actors ‘see and do’ in the world (Yanow, 2006; Yanow and

²⁰ For an appeal to normative theories and methodologies, see Freedman, 2006: 690.
This research project is anchored methodologically so as to make visible the operation of hegemonic power and the pursuit of peacebuilding, focusing on hydropolitical relations within the context of the Israel-Palestinian conflict. Situated within a framework of contemporary hydropolitical debates, this study is contextualised in a critical historical examination of the asymmetric hydropolitical relations definitive of the Israel-Palestinian conflict, what is referred to herein as hydrohegemony (Zeitoun, 2009). Such contextualisation also includes a historically grounded articulation of Israel’s justificatory narrative, a rationale through which the nation-state’s hydrohegemony is enabled and perpetuated. It is both within and against this powerful context that the study of hydropolitical peacebuilding is undertaken.

For their reification, regimes of power and truth rely upon the system-wide, coerced and consensual, congruent discursive participation of socio-political actors. Therefore, the transformation of contested relational orders may be recognised where such actors critically challenge orders of power and truth, both in their constitutive practices and in their narrative necessity. Transformation may also be in evidence where socio-political actors resist and refuse to participate in the (re-) production of such relational orders, while discursively engaged in the production of alternatives in practice and in truth.
In this respect, the current study discursively analyses the practices and ideations of Israeli transboundary water/peace practitioners, people who regularly work in relationship with Palestinian colleagues. Their participation in the current study stems from the fact that they have articulated a ‘claim to peace’ in association with their transboundary water-related practices. This study analyses if and how these practitioners are constrained by Israel’s hydrohegemonic relations and its corollary justificatory narrative. It assesses their practices and ideations in terms of hydropolitical peacebuilding, also bringing to light hydrohegemonic residues where they are evident.

Specifically, this study asks if and how Israeli transboundary water/peace practitioners are discursively constrained by Israel’s hydrohegemonic relations with the Palestinians. Can we say that they are (re-) producing Israel’s relational hydrohegemony, in modes of thought and in practice? Alternatively, can we say that Israeli water/peace practitioners are discursively practicing hydropolitical peacebuilding in the Middle East? How are they critiquing, resisting, desisting from, and transforming Israel’s hydrohegemony through relational practices understood as hydropolitical peacebuilding, if at all? Finally, can we speak of hydrohegemonic residues among Israeli transboundary water/peace practitioners who believe theirs to be peace-related actions?

To answer these questions, the current study has been anchored in a methodology of interpretive practice (Holstein and Gubrium, 2005: 484). This approach to the study of power and transformation privileges both “discourse-in-practice” and “discursive practices”, bringing together foucauldian discourse
analysis and ethnomethodology. It seeks to account for the construction, production and constraints of systems of power, looking to their “constitutive resources, possibilities and limitations” (Holstein and Gubrium, 2005: 491). It also makes visible an accounting of “real-time talk and social interaction” (Holstein and Gubrium, 2005: 491), the how of changing systems of power and truth.

This study presumes that socio-political systems are unfinished, immanent and thus in becoming (Holdaway, 2000: 164; Mead, 1934). By extension, relational orders are also fundamentally undergoing change. While hegemonic states intentionally pursue and supportively perpetuate particular and narrowly beneficial relational orders, a diversity of socio-political actors operating within such systems contribute meaningfully, and potentially powerfully, to their transformation. Such actors are understood to inform their direction, challenge their assumptions, even create new relational possibilities in and through practice.

Therefore, rooted in a methodology of interpretive practice, the current study makes visible dominant, intentional and narratively justified Israeli hydrohegemonic relations with the Palestinians, what Holstein and Gubrium refer to as discourse-in-practice. It also tells the story of Israeli-Palestinian water/peace practitioner relations from the early 1990s to 2011. In so doing, it analyses what is understood to be their discursive practices of relationship. This study then juxtaposes and compares the discourse-in-practice and myriad discursive-practices, through a method of analytic bracketing (Holstein and
Gubrium, 2005: 496). It thus diversely makes visible the *capillary* operation of hydrohegemony, hydropolitical peacebuilding and also hydrohegemonic residues. In this way, the study allows us to draw specific, politically significant conclusions about Israeli peacebuilding discourses and the hydropolitically-pursued transformation of the Israel-Palestinian conflict.

A somewhat more practically-oriented methodological note serves to close this introduction. The data, or more precisely, the social facts for this study have been constructed theoretically of academic and civil society literature, as well as of ethnographic and interview materials. The diverse research practices involved in constructing these social facts are explained in this methodological chapter. Also, given the violent context of this research, and the centrality of ethnographic and interview methods, numerous personal, political and practical challenges emerged *in situ*. Issues of research ethics related to confidentiality, transparency and also intention were ever-present, demanding theoretical and practical attention, and even negotiation. Such issues are discussed in this methodological chapter, given that the study of peace and peacebuilding frequently brings researchers directly into potentially threatening conflict environments.
**Methodological Grounding**

The current study is rooted in the assumption that the socio-political world is in dynamic social construction. It is practically and reflexively constructed of relations and relationships (K. Boulding, 1989); and of the institutions that shape them (E. Haas, 1990), the behaviors that structure them (Giddens, 1984), the actions that challenge and transform them (Arendt and Kohn, 2005). As social beings, humans are also meaning-makers, infusing their socio-political practices with sensible interpretations. In other words, human beings are ontologically engaged in continuously constructing, interpreting, re-interpreting and even re-constructing their worlds. Such engagement may be appreciated as both a powerful motivation for, and even a socio-political practice of critique, resistance, creativity and transformative change. Anchored in these social constructionist assumptions and beliefs, the current study is intent on discursively appreciating the immanence, circulation and perpetuation of potentially transformative practices, understood as peacebuilding, in protracted and violent asymmetric conflict environments.

For the current study of conflict and peacebuilding, a methodology has been selected that requires the discursive analysis of systems (or orders) of relations on the one hand, and the analysis of ideas and practices of relationships constituted of “real-time talk and social interaction” on the other (Holstein and Gubrium, 2005: 491). This methodology of interpretive practice is appreciable as “a new, hybridized analytics of reality construction at the crossroads of institutions, cultures and social interaction…” (Holstein and Gubrium, 2005: 492). It draws specifically on foucauldian discourse analysis and
ethnomethodology in creating what poignantly has been referred to as a “dialectics of discourse and the everyday” (Smith, 1990: 202 in Holstein and Gubrium, 2005: 495), an interplay of discourses-in-practice (the what) and discursive practices (the how).

Studies anchored in a methodology of interpretive practice may effectively begin by making visible the dominant discursive context. Doing so is premised on the notion that dominant, hegemonic discourses situate, frame, inform, influence and mediate social practices. However, they do not necessarily and inevitably pre-determine them. In other words, relationally transformative change is assumed possible, even probable and inherent to socio-political systems. Such change may be recognised and made visible in examining what members of socio-political groupings do and what may be discursively recognised in their doing as against the dominant discursive context. The current study of Israeli water/peace practitioner engagements follows such a methodology of interpretive practice.

The Study of Interpretive Practice

As a hybridised methodology, interpretive practice comprises foucauldian discourse analysis and ethnomethodology. Each of these constitutive approaches brings a particular insight to the study of systems of power and of practices of change and transformation. Each will be discussed in significant detail, both theoretically and as they relate to the study of Israeli hydrohegemony and Israeli water/peace practitioner engagements.


Contextualising Practice

A foucauldian discourse analysis supports a critical examination of the relations and relationships that constitute social systems. It entails making visible particular relational orders, epistemologically examining them as objects or things of study (Foucault, 1978 in Foucault and Faubion, 2000: 208-209). Foucauldian discursive analysis entails making visible the ideas and practices that constitute relational orders. Doing so makes it possible to appreciate the operation of power in terms of the practices and ideas, i.e. the discourses, that constitute and perpetuate orders of power.

In a foucauldian sense, the current study makes visible the violent, protracted and asymmetric conflict relation of Israel and the Palestinians, with a particular focus on hydropolitical relations. It examines the contours and operation of Israel’s hydrohegemony with respect to the relationally-subjugated Palestinian people. It looks at the hydropolitical ways in which Israel and the Palestinians are deeply, relationally and conflictually engaged with one another; a social fact they are compelled to live with and confront everyday. The current study pursues such analysis as an elaborate epistemological point of departure, given the methodological prerogative of “starting where people are at” (Holstein and Gubrium, 2005: 496).

Any particular conflict environment, as a social system and relational order, is

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21 “A social fact is every way of acting, fixed or not, capable of exercising on the individual an external constraint; or again, every way of acting which is general throughout a given society, while at the same time existing in its own right independent of its individual manifestation (Durkheim, 1964: 13)” (emphasis in Mikkelsen, 2005: 160-161).

22 It is also a basic principle of community development practice, as inspired by Freireian problem-posing education. See Freire and Ramos, 1972.
both historically extensive and complex. The co-constitution of practices and ideas takes place both over long periods of time and in multiple relational domains. Therefore, to understand the operation as well as the raison d’être of any regime of power and truth, it is necessary to appreciate the historical context, contingencies and constructions of relationships over time, both hydropolitically and more broadly. Theoretical insights for doing so have been drawn from Comaroff and Comaroff’s “historical anthropology” (1992).

Informed by such an approach, the discursive study pursued in the coming chapters is historically informed, drawing on research materials going back to the late-19th century and covering the period through to early-2011. It weaves historical context into the discursive analysis, accounting for key historical moments while also subjectivising and endogenising the analysis, notably from Israel’s perspective (the reason for which was explained in the previous chapter). In so doing, an analytics of power and truth has been developed and pursued that accounts for the what and how of this particular hydrohegemonic Israel-Palestinian relational order, with a nod as to why this is and has become so. It recognises that over the course of this time, Israel’s discourse of hydrohegemonic relations with the Palestinians became increasingly consolidated such that today, hydrohegemony in Israel is interpreted as a practice of (negative) peace (as well as of security) in some dominant quarters. The current study makes visible this historical trajectory and relational complexity, through a foucauldian discourse analysis.

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23 On the “endogenization of actors”, see Cederman, 2010: 141.
Of course, Israel's hydrohegemony in relation to the Palestinians is only one constitutive domain of a wider Israeli hegemonic relational order with the Palestinians. The discursive elements characteristic of the one are also reflective of the others and of the whole. Therefore, the current study of Israel-Palestinian hydropolitical relations is also a study of Israel-Palestinian relations more broadly. The discourse analysis pursued herein thereby engages with hydrohegemony as constitutive of a wider relational order of hegemony (Zeitoun, 2009). The constant interplay of study concerned with the broader context and then the hydropolitical domain specifically has been useful as a historically-imbued, theoretically-informed approach towards appreciating the discursive context, ideations and practices of hydrohegemonic relations.

Such a historically-imbued discursive analysis also makes it possible to understand the raison d'être of any particular relational order. Indeed, in the Middle East as elsewhere, the pursuit of any particular relational order and the corollary practice of power are rarely primary goals in and of themselves. They emerge and become widely accepted and self-referentially evident over time, as narratively justified and necessary. In this particular study, Israel is not assumed to have any sadistic desires for domination over the Palestinians or more broadly. Rather, first on behalf of the Jewish people, then of the Zionist movement, and finally through its own institutions, Israel has cumulatively, over time, constructed a narrative of hegemonic and hydrohegemonic necessity and justification. In this narrative is found the why constituting a regime of truth; why Israel continues to perpetuate and justify its hydrohegemonic dominance over

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24 For caricatures of Jews and the Jewish state in the media, see Tom Gross Website; B'nai Brith Cartoons Website.
the subjugated Palestinians.

**Describing Practice**

For the most part, members of dominant, comparatively powerful groups participate in the construction and (re-) production of hegemonic, asymmetric relational orders (like the Israel-Palestinian conflict) almost by definition. Indeed, they often benefit from such participation, directly, culturally and structurally. However, their behaviours and actions cannot be assumed to be pre-determined by any regime of power. Rather, the possibility of imagining and more poignantly practicing something other remains ever-present, notably manifesting where people simply refuse to accept and participate in constructing and/or (re-) producing the internal coherence and relational necessity underpinning regimes of power and truth.

In this sense, one of the key concerns and interests of conflict theorists and practitioners is to recognise and then appreciate practices that may be understood as discursively *transformative*. As understood herein, this refers to practices that first and foremost escape from totalising containment under the umbrella of hegemonic relations. Such practices are understood as rooted in critique of a particular asymmetric relational order as well as the narrative elements by which it is under-girded. Diverse in their manifestation, such practices reflect the unwillingness of conflict actors to perpetuate the hegemonic relational order, notably as it manifests domain-specifically. They reflect conflict actors’ intentions to circumvent or escape the hegemonic relational order, while discursively materialising such actors’ construction and

To assess whether and how particular practices are transformative, the current study turns to ethnomethodology, as indicated by the methodology of interpretive practice. This is premised on the belief that practices are not discursively pre-determined by social systems. While generally constrained by hegemonic regimes, human beings also engage in social practices that critically and transformatively effect such relational orders. In an effort make such practices visible, an ethnomethodological study of Israeli water/peace practitioner engagements provides the material for an eventual discursive analysis of such practice.

In general, ethnomethodological approaches to research and analysis are rooted in the assumption that everyday practices (re-) produce and effect social orders (Pollner, 1987 in Holstein and Gubrium, 2005). Ethnomethodological studies rely in part on ethnographic methods rooted in observation, while drawing on literature and talk/speech-acts (e.g. interviews). This allows for social interaction to be recognised and then assessed, reflexively by practitioners and also by researchers. Focusing on the latter, the ethnomethodological researcher draws on this material to provide theoretically-laden *thick description* of cultural practices (Geertz, 1973). Thick description may be understood as “an interpretation blending behaviour and meaning.” (Rosen, 2000: 48 paraphrasing the work of Geertz, 1973) Thus, Geertz (1973), Comaroff and Comaroff (1992) and others encourage researchers to investigate, understand and describe the cultural context of meaning in their
work (Stevenson, 2000: 27). This is particularly pivotal given that behaviour and meaning-making are both embedded contextually in culture, i.e. the “knowledge structure” (Geertz, 1980: 2 in Rosen, 2000: 46).

Drawing on this ethnomethodological approach, the current research project has pursued an ethnographic study of Israeli (and implicitly also Palestinian) water/peace practitioner behaviours and actions, i.e. practices. It reflects a strong appreciation of the historical, political and narrative context of their practices. It describes their practices, also discussing the claim to peace that is articulated in relation to such practice, as the basic elements of meaning-making pursued. At the same time, this ‘recounting’ is in many ways different than if it were done by any particular member of the research participant group. Ethnographic researchers are inherently invested in the research process at nearly every stage (i.e. conceptualisation, research, writing-up, presentation and discussion). Theoretically-laden, ethnographic research is shared with both proximity to, and distance from, research participants and their ‘texts’. In general, it is shared through what has been understood as second order, and in some cases third order recounting (Geertz, 1973: 15 in Rosen, 2000: 54). In the current study, this recounting was undertaken with the specific intention of analysing Israeli practitioners’ discursive practice within and against both the context of Israel’s hydrohegemony and a theoretical framework of hydropolitical peacebuilding.

**Analytic Bracketing**

Thus far, two foundational methods of the current study’s methodology of
interpretive practice have been articulated, both theoretically and with reference
to hydropolitics in the Middle East. The first method, foucauldian discourse
analysis, entails an analysis of the overall context and discursive environment,
the very operation of hydrohegemonic power and truth as it has been
constructed and continues to (re-) produce an asymmetric Israel-Palestinian
conflict relation. The second method amounts to an ethnographic study of
contemporary Israeli (and also Palestinian) transboundary practitioners
engaged in water/peace within the wider contextual and discursive environment
of the Israel-Palestinian conflict.

The methodology of interpretive practice draws on these two methods in
guiding researchers to conduct an analysis of discursive practice among those
engaged in contemporary socio-political behaviour and action. In the current
research project, these are Israeli transboundary water/peace practitioners. The
project’s stated purpose has been to assess whether and how these
practitioners are constrained by a hydrohegemonic discourse-in-practice. It
aims to assess the transformative significance, if at all, of their discursive
practices both contextually and in terms of hydropolitical peacebuilding.

The specific method for doing so is referred to as analytic bracketing (Holstein
and Gubrium, 2005: 496). It is premised on the notion that performing
comparisons between the discursive context and ongoing socio-political
practices makes visible the discursive content and power of these practices. In
the current study, two chapters have focused on examining and detailing the
hydrohegemonic context and discourse of the Israel-Palestinian conflict, while
capturing the narrative elements that Israel has constructed and uses to justify its dominance. This hydrohegemonic relation is indeed the point of departure, where people are at. Two subsequent chapters then examine the practices of transboundary water/peace practitioners. These chapters amount to an ethnographic recounting and then discursive analysis of water/peace practice, as against the discursive landscape of hydrohegemony. Essentially, the latter speaks to and with the former.

The recounting process is of course theoretically-laden. It bears reiterating that the theory of hydrohegemony (Zeitoun, 2009) has been used to inform the entirety of this analysis. In contrast, hydropolitical peacebuilding has been conceptualised to reflect both contemporary constructions of positive peace (Galtung and PRIO, 1996) and also valued perspectives of equitable, participatory, sustainable and peaceful water management and development (Berlin Rules on Water Resources, 2004). The constructed framework of hydropolitical peacebuilding, rooted in equality, partnership, equity and shared sustainability provides the discursive counterpoint to hydrohegemony for analysing hydropolitical practices of water/peace practitioners. It also allows for a discussion of hydrohegemonic residues, where water/peace practitioners claim and invest their practice with peace (or peaceful intentionality) while varyingly and diversely practicing and perpetuating hydrohegemony. As shall become clear in the current work’s overall concluding discussion, such hydrohegemonic residues are major discursive impediments to the practice of positive peacebuilding and of peacemaking in the context of the Israel-Palestinian conflict.
Overall, the purpose underpinning the methodology of interpretive practice is to assess if and how research participants are engaged in contributing to the transformation of relational orders, or if they are discursively (re-) producing and perpetuating them. It is often said that the Israel-Palestinian conflict will never be resolved, that there are too many conflictual issues between Israelis and Palestinians, that there is too much distrust and too much ongoing violence, with little else. Questioning these very assumptions, the current study has been intent on understanding if, and if so how, discursive transformation is appreciably already underway, notably where Israeli (and Palestinian) transboundary water/peace practitioners are critically and reflexively engaged in cooperative water management and development.
**Detailing the Research Project**

Methodology, theory and research methods are all intimately tied to one another. “Theory and method cannot be separated.” (Holdaway, 2000: 160) They are implicitly and mutually co-constitutive. Bearing this in mind, the current research project has been *designed* to reflect and put into practice its stated theoretical and methodological preferences. The following section thus describes and discusses the project’s research design and its very practical research activities. It does so in recognition of the distinctions, complementarities and ongoing debates about the relative merits of quantitative and qualitative research, descriptive and interpretive research, and fixed and flexible research designs (Robson, 2002).

**Research Design**

The current project is best understood as critical, interpretive and largely qualitative research of flexible design, drawing on a few of the strengths and benefits of more structured approaches (Robson, 2002: 18). This research design has enabled the research process to draw on a wide range of materials in constructing an interpretive understanding (Yanow, 2006: 10-11) of socio-political practices of water/peace in the Middle East. Much of the material gathered has been qualitative in nature, e.g. research participant interviews. However, quantitative data has also informed this study, as the published results of quantitative and fixed research projects have been leveraged to support arguments throughout.
Research design and methods are intimately linked to one another. Cognisant of this point, the current research project has been designed along a mixed or multiple methods approach, itself not uncommon in the social sciences (Robson, 2002: 5; Silverman, 2000: 48-51). As discussed, interpretive practice (Holstein and Gubrium, 2005) is constituted of multiple methods associated with foucauldian discourse analysis, ethnomethodology and to a lesser extent narrative inquiry (Chase, 2005; Gubrium, 2005). The mixed methods approach adopted herein has enabled the construction of different kinds of knowledge through this project. It has resulted in a detailed and discursively informed hydropolitical analysis of the Israel-Palestinian conflict and of Israeli (and Palestinian) practices of water/peace. It has also enabled the (re-) construction of Israel’s justificatory narrative of hydrohegemony.

While pursued methodically, the study benefited from its flexible design, which is not uncommon in the social research and particularly conflict research tradition, given the latter’s inherently uncertain nature. The benefits of flexible design became evident at multiple stages of research. Perhaps most obviously during fieldwork in the Middle East, the interviews differed from one another in terms of their length, the location in which they were conducted, the specific formulation of questions used, and the like. This will be discussed in greater detail in the section below on interviewing.

Perhaps more profoundly, the timing of fieldwork was chosen to coincide with a rather last-minute invitation to participate in a regional water-related conference
Several potential and difficult to reach Palestinian research participants were scheduled to attend. Meeting them in Jordan rather than deep in the occupied Palestinian West Bank would both simplify interviewing and decrease the risks associated with research in a conflict environment. Also, participating in this conference provided the opportunity to engage in participant observation, both as a researcher and as an active participant. The flexible design made it possible to take advantage of such valuable research opportunities as they emerged and to adapt as circumstances warranted.

Research Activities

Framed in a research design, a study such as this one is pursued through a relevant set of research activities. Research activities provide the sources and materials for accessing and constructing data, or social facts, which are then analysed at multiple stages. Along with the research methodology, its corollary methods and the research design, research activities are theoretically-laden. Indeed, these all comprise a coherent whole that is the research project. Bearing this in mind, this section describes the current project’s research activities.

Overall, six principal research activities were pursued throughout the course of this research project, as follows:

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26 As a participant, I hosted a poster session and discussion forum entitled ‘Peace and the Transboundary Hydro-Communitarian Imaginaire’ on the evening of 11 July 2010. A copy of the poster has been appended to this research project (Appendix 1).
1. Compilation, review and analysis of relevant published material;
2. Participant observation, in part through event participation;
3. Interviewing;
4. Data construction and analysis;
5. Composition; and
6. Presentation.

A brief discussion is undertaken about each of these research activities below. An elaborate discussion will then follow in a subsequent section on the specific matters of fieldwork and interviewing.

Keeping track of these activities, and any insights stemming from their pursuit, a research diary was maintained throughout the six-year research period (Silverman, 2000: 193; Lofland and Lofland, 1995: 93-95 in Robson, 2002: 323). Included in the research diary are the extensive notes recorded over years of reading relevant articles and other materials. The research diary details the field research process, as it was undertaken in 2010. It contains notes taken during research-related events. It is full of jottings, reflections, draft frameworks and analyses collated over years of research. A good portion of the reading notes, also comprising the research diary, are compiled into easily referenced EndNote™ programme files. The research diary has been an essential tool throughout the research project. It has also served in the composition of the current section on research activities.

1. *Compilation, review and analysis of relevant published materials*

Water in the Middle East is sometimes referred to as one of the most widely researched issues in the world. As such, there is no shortage of published materials addressing this topic. Also, the CR and Peace Research fields are by
now well developed, and there is no paucity of materials in either of these areas (see Ramsbotham, et al., 2005 for an overview of the field’s historical and recent developments). Therefore, a principal research activity has been to compile, review and then theoretically analyse relevant published materials.  

In addition to the academic literature (journals, book chapters, books), which is extensive, research activities involved critically reading a variety of publications from diverse sources. These include publications produced by Non-Governmental Organisations (NGOs, including Friends of the Earth Middle East (FOEME)), multilateral organisation (e.g. World Bank, ILA) and government issued documents. The range, breadth and sheer volume of materials reflect the fact that Middle Eastern water is a domain of multi-sectoral and multi-national interest and engagement.  

The largely bi-weekly electronic news compilation now known as Environment and Climate in the Middle East (formerly EnviroNet) provides links to articles on water and peacebuilding issues (among others) from regional and international newspapers, as well as other media sources. Reading this listserve in particular, but also other online sources has been an essential way to stay informed of water and peace-related developments in the region. Analysis of some of its contents has valuably informed this dissertation.

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27 The key academic texts are evident from references provided throughout this dissertation.  
28 The Environment and Climate in the Middle East newsletter is located at: http://mideastenvironment.apps01.yorku.ca Accessed 22 March 2012.  
29 This wordpressblog is co-edited by Professor Stuart Schoenfeld from York University (Toronto, Canada) and Itay Greenspan, doctoral student at the School of Social Policy and Practice, University of Pennsylvania.
2. Participant observation, in part through event participation

Both during and subsequent to research conducted with published materials, an ethnographic study of the Israeli-Palestinian transboundary water/peace community was conducted, detailing its transboundary practices. This study was based in no small part on participant observation stemming from having lived among transboundary water/peace practitioners as a researcher, practitioner, participant, theorist and consultant for the better part of the last decade. This has been the case both before and throughout the entire period of doctoral research activities.

This ethnographic study has been further informed through my own participation in key events, providing direct insights into the practices, framings, priorities, obstacles and discursive practices of transboundary water practitioners in the region. Events which have broadly informed the ethnographic character of the study through direct participation include:


Management, in cooperation with Israeli, Palestinian, Jordanian and international partners.


5. Red Sea Dead Sea Conveyance Project (RSDSC). Participant as an International Peace and Development Specialist and consulting author of the project’s Conflict and Peace Effects Study (CPES); 2010-2011.

The following event and its related activities has more specifically informed the ethnographic component of this study:


Drawing on participation in key events related to water/peace in the Middle East, informed by relevant published materials, the ethnographic portion of this study has been guided by Spradley’s nine points of descriptive observation (1990 in Robson, 2002: 320). It has been constructed to reflect individuals and organisations, projects and programs, conferences and other sites of encounter and dialogue, funding sources, and other elements arising from the investigation. It further develops the context in which practice takes place (Comaroff and Comaroff, 1992). Finally, and perhaps most powerfully, it has engaged in thick description of practice (Geertz, 1973). The emerging ethnographic account highlights cooperative, transboundary practices at the nexus of water/peace in the Middle East. This work has also informed the development of interview questions and the selection of research participants.
3. **Interviewing**

A core research activity, interviewing was primarily conducted in Israel and the Palestinian West Bank between 4-22 July 2010 (with some variation, as discussed below in detail; See Appendix 5 for a list of research participants). A total of thirty-three people agreed to be involved as research participants. The fieldwork was a notably intense, challenging and informative period of research. Interviews were specifically pursued with Israeli and Palestinian water domain practitioners, who have articulated a claim to peace and who are thus appreciably engaged in water/peace practice. Interviews themselves were recorded in their entirety (with minor exceptions, discussed below), transcribed and coded to reflect the principal theoretical and discursive concerns of the research project. Interview material provided the rough data for a subsequent discursive analysis of the water/peace practice of Israeli practitioners. A discussion of interviews in the context of fieldwork is elaborated upon in a section below.

4. **Data construction and analysis**

The construction and analysis of data, i.e. social facts, are obviously central research activities to such a project, from the initial formulation of research questions through to the articulation of concluding thoughts. The processes and practices of data construction and analysis are intimately linked to both the body of theory and the methodology of interpretive practice leveraged in this study. This section will briefly describe the key activities involved in constructing and analysing data herein pursued, with reference to the earlier discussion on interpretive practice and also to the previous theoretical chapter.
As per the selected methodology of interpretive practice, this study discursively examines the hydropolitical relations of Israel and the Palestinians, notably in chapters 3 and 4. Explicit about the water resources at stake in the conflict, it draws an important distinction in Israel-Palestinian relations both before and after 1967, when Israel occupied West Bank populations, land and resources, including water. From the primary vantage point of the Zionist movement and the Israeli state in their relations with the Palestinians (and Arabs more broadly), this study makes visible the significance of water, the occupation of water resources, and the development and institutionalisation of hydrohegemony. This is done with reference to conventional (or *natural*) and non-conventional (or *produced*) water resources related to the conflict. As a backbone to this study, a Jewish, Zionist and Israeli justificatory narrative is developed, providing the framework through which such an assessment is pursued. Doing so also brings clarity to the underlying socio-political meaning and rationale for the evolving pursuit of Israel’s hydrohegemony in relation to the Palestinians.

Subsequently, this study tells the story of Israeli (and Palestinian) transboundary water/peace practitioners over a twenty-year period, notably from the early-1990s to early-2011. A distinction is drawn between officially-sanctioned activities (chapter 5) and those of Israeli academic and civil society practitioners (chapter 6), notably those engaged in three transboundary water/peace organisations. In both of these chapters, the theoretical frameworks of hydrohegemony and hydropolitical peacebuilding are used to
analyse the discursive practices of Israeli water/peace practitioners. Yet more specifically, analysis is pursued to make visible Israeli practices of critique, resistance to, desistance from, and alternative relational formations to hydrohegemony, where they are evident. The key concepts of equality, partnership, equity and shared sustainability informing the theoretical formulation of hydropolitical peacebuilding serve as guides for this analysis.

Finally, and in process, drawing on the method of analytical bracketing, an overall assessment of Israeli, transboundary water/peace practice is undertaken in terms of hydrohegemony, hydropolitical peacebuilding and also hydrohegemonic residues. In other words, does this study provide the basis for saying that the transboundary practice of Israeli water/peace practitioners amounts to hydropolitical peacebuilding? Stemming from this and as a final point, it is valuable to appreciate that as with many interpretive qualitative and flexible research projects, the formulation of a final (set of) research question(s) was pursued through multiple iterations before being finalised (Robson, 2002: 55-61). In part, the selected methodology of interpretive practice contributed to finalising this, informing the direction of the research throughout (Silverman, 2000: 39-40). In the end, the analysis and conclusions produced stem directly from the methodological choices and formulated question(s). Thus, analysis itself amounts to a central research activity.

5. Composition
A theoretically-laden endeavour, composition (and publication) has been a principal activity throughout the research project, both directly and indirectly
related to the current dissertation. Over the six-year period of doctoral research, several publication were produced on the broad topic of water and peacebuilding in the Middle East. A listing of publications has been included as an appendix to this dissertation (Appendix 2). Also, after being contacted by the RSDSC Feasibility Study team (mandated by the World Bank, the governments of Israel and Jordan, and the PA), I conducted a CPES of the proposed RSDSC initiative, along the methodological lines of Peace and Conflict Impact Assessment (PCIA; Bush, 2003; Bush and Opp, 1999). The process of composing and publishing articles, book chapters and reports has been critical to the development of the current research project. Finally, the act of writing-up this dissertation has also been a theoretically-productive and insightful research activity, as is most writing.

6. Presentation

The final main research activity to be discussed here, albeit briefly, is that of presentation. Throughout the study period, many presentations have been made at conferences, in the context of university-based courses, as guest lectures, in the form of workshops and the like on the broad topic of water and peace in the Middle East. A listing of presentations has been included as an appendix to this dissertation (Appendix 3). From conceptualisation, into public delivery and then through ensuing Q&A and discussions, the whole presentation process has contributed meaningfully to the final formulation of research questions and other dimensions of the current dissertation. Thus, presentation amounts also to a research activity worthy of mention.
Fieldwork and Interviewing

Fieldwork and interviewing are often central components of interpretive and flexible research projects. The current research project on water and peacebuilding in the Middle East is no different. While interviewing has already been identified as a principal research activity above, the current section describes and discusses interviewing and fieldwork at greater length and depth.

Interview Practice

For the most part, fieldwork on this project was conducted in the Middle East, given that most research participants were based there. Fieldwork amounted to ethnographic observation, conference attendance and participation, and interviewing. The current section will deal specifically with interviewing, while inevitably touching on the others.

Most of the interviews for this project were conducted in Israel and in the Palestinian West Bank. The use of interviews was effective for eliciting the worldviews, motivations, beliefs, values and meanings that research participants associate with their articulated practices (Silverman, 2000: 122). Further, given language considerations stemming from the fact that many research participants’ first language was neither English nor French, a physical presence in the region during fieldwork was invaluable. It provided important researcher opportunities for clarifying questions, discussing side issues, participating in informal conversations, and of course ensuring that interviews were not constrained by language or other similar barriers.
Given the relatively large size and multinational scope of the transboundary water/peace community observed, it was evident from the outset that it would be impossible and unnecessary to access all of its participants. Noting that the current project is situated in an interpretive research tradition, there is generally no need to identify and secure a representative sample of research participants (Stroh, 2000). It was however necessary to ensure a compelling and broadly insightful body of interview material to work with. Thus, interviewing was pursued until an assessment of data saturation was made (Silverman, 2000: 144). Drawn from the methodology of *grounded theory*, the concept of data saturation essentially recognises qualitative researchers’ ability to decide when they have sufficient and adequate material to support theoretical development (Charmaz, 2006; Robson, 2002: 62-63; Silverman, 2000: 144; Glaser and Strauss, 1967). With this in mind, a total of thirty-three face-to-face interviews averaging 72 minutes each were conducted, reflecting a broad, discursive cross-section of transboundary water/peace practice.

Much preparation was invested in interviewing ahead of going into the field. On 22 June 2010, one interview was conducted in person with a research participant based in Ottawa, Canada. This interview was framed as a useable pilot in preparation for the extensive fieldwork that ensued in the Middle East. Between 4-22 July 2010, thirty-one interviews were conducted with transboundary water/peace practitioners in Israel and the Palestinian West Bank. Finally, an additional interview was conducted in Israel on 27 October 2010 with a person in the water sector who was unavailable during the earlier round of interviewing.
Since completion of the interview process, a number of people have remained in direct contact with me. They have continued to forward information on water/peace issues, predominantly by email. In some cases, a telephone and/or face-to-face relationship has ensued, allowing for continued experience-sharing on issues of relevance to the current doctoral project. This suggests that the interview process can be understood as a component of a wider dialogical and intersubjective engagement (Comaroff and Comaroff, 1992: 9) on matters of water/peace in the Middle East.

**Participant Composition**

The composition of transboundary water/peace practitioners interviewed for the current project is of relevance. Of the thirty-three people interviewed, eighteen are Israeli, nine are Palestinian, five are Israeli-internationals, and one is a Palestinian-international.

While it is frequently claimed that a majority of water experts in the region are in their 70s or 80s, a significant effort was expended to invite the participation of people with a broad range of professional and life experience. Participants in this project all had experience equivalent to a minimum of direct involvement in either two major transboundary projects or at least 5 years in the field. Overall, just under 34 percent of research participants were aged 60 or more. Some 30 percent were in their 50s, 21 percent were in their 40s, and about 15 percent of research participants were in their 30s.
In identifying research participants, a mixed approach to sampling was pursued, including convenience sampling, theoretical sampling, snowballing and opportunistic sampling. A sampling strategy was of central importance given that there is no unified list of transboundary water/peace practitioners in the region. As a point of departure, key transboundary water/peace practitioners were identified and contacted (Bernard, 2000: 172; Stroh, 2000: 196-198). Some of the people interviewed had been involved in research and advocacy projects in which I had also been a participant, which was convenient. Others were generally well-known and respected throughout the region for their work on transboundary water/peace issues.

An effort was made to interview women involved in the water community. Nonetheless, a distinct gender imbalance is discernable among research participants. Of the thirty-three people interviewed, seven (about 21 percent) were women. Interestingly, one research participant expressed his belief that there are no gender-related obstacles to engagement in water/peace in the Middle East (Personal interview, IF2 2010). The current project’s experience of sampling would suggest otherwise. All but one woman interviewed was under 60, with most under 50 years of age. Also, one of the key Palestinian women involved in water and cooperation efforts, Dr. Fadia Daibes Murad, perished in a March 2009 car accident. She had been returning to Palestine from the World Water Forum meeting in Istanbul (WASH Website).

A snowballing approach to sampling was central for identifying and interviewing relevant people on this project. Snowballing was pursued both in advance of
going to the field, via email exchange or telephone conversation, and also while in the region and engaged in interviewing. Snowballing and theoretical sampling were in many ways combined, so as to include a breadth of experience into the project. Finally, on several occasions while in the field, the opportunity arose to meet people in the offices of research participants who would then accept to participate in the research project. In such circumstances, research participants were immediately briefed on the project outline, practices and intentions. They would read a copy of the email that had been exchanged with other research participants for establishing informed consent. They would verbally confirm their informed participation before launching into the substantive matters of the interview.

**Informed Consent, Confidentiality, Anonymity**

In advance of going into the field, a real concern emerged with respect to protecting the identity of research participants, given the research milieu of political and violent conflict. While conducting research in conflict environments like the Middle East, it is undesirable, dangerous and even unethical to move around, crossing borders and militarised checkpoints with sheets of paper associating specific people with research projects such as this one (Robben and Nordstrom, 1995).

Of course, the establishment of informed consent was necessary for the project to move forward (Israel and Hay, 2006: 61; Robson, 2002: 67). Having discussed the matter and received the support of one of my research supervisors, Professor Michael Pugh, it was agreed upon and decided that
informed consent could be established via email communication, ideally confirmed orally and then digitally recorded at the start of interviews. In all but one case, verbal confirmation of informed consent was recorded on a digital mini-disk player. A copy of the typical email for informed consent has been included as an appendix to this project (Appendix 4).

While in the field, the potential for having research materials confiscated or used for purposes other than for which they were intended was ever-present (Lee, 1995: 19). On several occasions, I was stopped at border crossings or sat in public buses that were searched by Israeli security personnel. Therefore, a personal research security system was devised to keep the interview materials as well as the identity of participants secure (Weiss, 1994: 124). All the disks were kept and then transported safely to Canada for analysis. Every effort was made to ensure that the identity of research participants was protected during the research process, while in the field and subsequently upon return to Canada. Still, about half of research participants waived their right to anonymity and confidentiality. A good number of these people described themselves as public people, perfectly comfortable with going on the record for their thoughts, activities and interpretations regarding practices of water/peace.

Respecting the right to anonymity, confidentiality and security of research participants was not always simple and without difficulty. While in the field, many research participants wanted to know who else had either been or would be interviewed for this project. Ensuring confidentiality while building researcher-research participant trust frequently required subtle negotiation. At
the same time, it is generally believed that “everybody knows what everybody knows what everybody is doing in the Middle East” [sic], as one research participant stated (and this not without irony; Personal interview, IA1 2010).

In response to being told that the disclosure of participant identities was not possible, a research participant simply told me to “have fun” with a smirk, intoning that concerns over confidentiality and anonymity could not seriously be maintained in the region. On other occasions, the names of selected research participants were indeed shared with others, but only of those that had clearly waived their right to confidentiality. This was used as a confidence-building measure, notably where it was clear that specific research participants had a continued history of working together on water development, cooperation and peacebuilding issues. In no way has this compromised either the right to confidentiality and anonymity of research participants, or the integrity of the project’s research ethics on such matters.

Accessing Data

The principal purpose of interviewing is to access, collect and construct data (Yanow and Schwartz-Shea, 2006: xviii; Mikkelsen, 2005: 160-161). This is obviously a central component of the researcher journey. It is also a researcher’s responsibility to make the experience of participants known (Weiss, 1994: 131). Thus, research interviewing is not necessarily an extractive exercise but a dialogical, even emancipatory and political one.
In the context of the current research, interviewing was indeed approached as a dialogical and intersubjective encounter between researcher and research participant. Specific efforts were expended to elicit research participant stories and experience as well as meanings ascribed to such practice. In the context of the current research project, research participants widely agreed to express and share their thoughts, knowledge and experiences, the narratives of their practice and the meanings they ascribe to them. Thus, the interviews amounted to *speech acts*, significant and meaningful statements in conflictual environments (Silverman, 2000). The interviews are thus situated discursively and politically (Holstein and Gubrium, 2005).

With this in mind, semi-structured interviews were developed and implemented. Conducted one-on-one and face-to-face, the interviews were composed of open-ended questions. In advance of being used in the field, the questions were tested on one long-standing water/peace practitioner who provided feedback on the questions themselves. This was also a valuable opportunity for refining interviewing styles, which contributed to the interviews being delivered in a 'conversational' rather than a formal approach.

In the field, questions were adapted and/or re-ordered as required, to respond to the context or person being interviewed, all the while maintaining theoretical coherence. Such an interviewing style invites and encourages participants to share stories and to engage in reflexive analysis. One participant described the interview process as “cathartic” (Personal interview, IE2 2010). Another stated: “How did you chose these questions today? You are well prepared!” (Personal
Such statements reflect the poignancy of interview questions, but also participants’ willingness to engage with them.

The interviews averaged 72 minutes in length. In one case, an interview lasted only 35 minutes, while another extended to nearly 120 minutes. All interviews but one were recorded on a digital mini-disk player and later transcribed (Bernard, 2000: 174; Oates, 2000: 193). This followed the advice of Pile (1990: 217 in Stroh 2000: 209) who argued the importance of having a complete record of research interviews. This is especially the case where interviews are cultivated as reflexive spaces, and where participants might change their minds about something they had said earlier in the exchange, as was indeed the case on more than one occasion. A full recorded account also provides the required material for conducting a richer, more textured discursive analysis. Regardless, extensive notes were taken both during and subsequent to interviews. The notes offered the security of knowing that something would be left for analysis should the recordings fail (Burton, 2000: 222-224). Luckily, all thirty-one recorded interviews were captured digitally without any problem.

A few words are warranted on the remaining two interviews. The first was not recorded in its entirety, the second not at all. On the first occasion, part of the meeting with the research participant was not recorded. This particular meeting started out as a field visit on the Israeli shores of the Dead Sea. The site visit’s purpose was to ascertain the continued proliferation of sinkholes on the Sea’s
shores. Subsequent to this field visit, the formal component of this research interview was recorded. On the second occasion, the meeting with a research participant was not recorded. This interview was undertaken opportunistically and it was simply not possible to record it in the context. Extensive notes were taken during this meeting.

Throughout the July 2010 research period, an average of two interviews were conducted daily, though occasionally only one and sometimes as many as three were undertaken. While it is not ideal to hold three semi-structured interviews in a single day, opportunities sometimes presented themselves that could not be missed. Of the thirty-three interviews, thirty-two were conducted in English and one was conducted in Hebrew, at the request of the research participant. My command of the Hebrew language was up to the task, and was also complemented by the research participant’s occasional and selective use of English.

Given the sheer mass of interview material, into the hundreds of transcribed pages, analysis was built from selected components of the interviews. As a practice of reading and of then becoming intimately familiar with the interviews, “excerpt files” were constructed of the most relevant interview passages (Weiss, 1994: 155-156). Once coded, these files were used for both ethnographic treatment and discursive analysis which form the core of this dissertation. On occasion, the original recordings and their transcriptions were revisited as analysis progressed.

30 Sinkholes are understood as areas of land subsidence partially resulting from the vertical drop and horizontal retreat of the Dead Sea’s level.
Interview Process and Research Questions

At the start of every interview, the purpose and contours of the research project were explained. For the vast majority of participants, this followed on from a prior email exchange with details of the project and relevant biographical information about the researcher. Having ensured that participants were comfortable with a recorded interview, the digital device was turned on, and both informed consent and willing participation were confirmed. In raising matters of confidentiality, a good many participants waived their right to confidentiality at this time.

The process of defining research questions was theoretically informed both by the subject-matter of water/peace and by the selected methodology of interpretive practice. In this regard, participants were asked to describe their practices of water management and development, and to interpret the significance of their practice in terms of peace. This line of questioning was further informed by Rothman’s (1992) and Rothman and Olson (2001) reflexive approach to the telling of self and identity-based negotiation. In this way, the interview process would introduce a reflexive discussion on water management and development practice in terms of peace and peacebuilding in the region. It would then contribute to the process of critically identifying discourses of violence and peace reinforced or challenged through such practices.

Informed by this approach, a set of open-ended research questions was developed, delivered in a semi-structured format. This maintained a structured coherence to the interview process while also making it possible to investigate
issue areas as they arose (Robson, 2002: 278). Guided by such considerations, the research questions have been included in Box 2.1.

As evident from the outline and *rhythm* of the research questions (see Box 2.1.), interviews were initiated with a warm-up and closed with a cool-off question. These were important in terms of building trust with research participants. The primary warm-up question allowed research participants to define themselves, in dialogue with the researcher. The final cool-off question was designed to ensure that research participants were both understood and had the opportunity to add anything they thought might not have been covered up to that point. Finally, the cool-off question was also an opportunity for research participants to engage reflexively with their own analysis; an analysis which would often be reflected back to them in the latter portions of the interview.
Research Questions

Preamble/Self-definition
I understand you to be a transboundary water and peace practitioner, situated within the Israel-Palestinian conflict. Do you agree with this description? How do you describe yourself (in terms of identity, profession, practice, related to water and peace)?

Question 1
You are a water practitioner. What do you do as a water practitioner? (i.e. activities, networks, institution-building, negotiating, community-building, basic human needs delivery, etc…)

Question 2
What is the significance of ‘water’ to your engagement? Is water particular in some respect?

Question 3
a. Describe the community of water practitioners… How many people? Who they are? Gender? Identity? Politics?
   b. Do you understand yourself to be part of a ‘community of water and peace practitioners’? How are you ‘in community’ with other ‘water practitioners’ and ‘peace practitioners’, Israelis, Palestinians, regionals, internationals, and others?
   c. Were you once, and are you no longer, in community with the ‘other’, with other water practitioners, and why?

Question 4
What is the underlying vision of a national and collective future that is being projected through your practice?

Questions 5
How do you understand the effect of what you do, in terms of peace? How does your water-related engagement advance your vision of peace, and claim to peace?

Question 6
What are some of the supports, constraints and opportunities you experience, in advancing peace through water-related practice?
   • Identity, nationalism, changing identities
   • Spoilers (settlers, HAMAS)
   • Regionalism as ideology
   • Global discourses. Internationals
   • Acknowledgement and reflexivity

Question 7
How has your engagement, and interpretation of your engagement, changed through time?
   • through key moments in the political history of the Israel/Palestinian conflict
   • in response to what specific factors, events, activities…?

Question 8
Thinking overall about your water and peace efforts, what are you most concerned about today? What would you consider doing differently today, given contemporary circumstances? How and why?

Question 9
If your vision of peace could translate into water management practically, what would be its central characteristics?

Question 10
Why do you do what you do? And how does this relate to ‘peace’?

Question 11
Additional reflections…? Final thoughts…?

Box 2.1. Research questions
Political and Ethical Challenges

The research process itself is one of trust and relationship-building. This has notable bearing on research practice overall, particularly in conflict environments where the interviewer is identifiable with one of the conflict parties, as was the case with this research. At the same time, important ethical considerations arise in such circumstances. They are essential to acknowledge, if sometimes challenging to negotiate and resolve. In this section, political and ethical issues of research are discussed as they pertain to research in and about the Israel-Palestinian conflict environment.

Going to the Other

The fieldwork component of this research was undertaken during a period when there was no real discernable first-track peace process underway between Israel and the PA. The Arab Peace Initiative (API) and the Geneva Initiative (GI) were seemingly dead on the table. Efforts to move a US-brokered dialogue forward were faltering. The Israeli security barrier was still under construction, rendering it increasingly difficult for Israelis and Palestinians to meet and work together in face-to-face contexts.

Taken from a wider perspective, tensions between Iran and both Israel and the UN had been rising over the development of the former’s nuclear technology and capabilities. The Iranian-backed and Syrian-supported HAMAS organisation persisted in digging and using tunnels to smuggle goods, including

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31 Both my name and pronunciation of words in Arabic and Hebrew reveal my identity as a Jew and possibly as an Israeli. Additionally, I was fully transparent with all research participants about my Jewish identity and my dual Israeli-Canadian nationality.
dual-purpose materials into the Gaza Strip. Efforts to establish and maintain a ceasefire between HAMAS and Israel were fruitless in real terms. Relations between Israel and Turkey were showing signs of strain. In other words, from both regional and sub-regional perspectives, the threat of conflict escalation was ever present throughout the period of doctoral research.

Given this context, in pursuit of methodological and ethical dimensions of research praxis, I made a point of going to Palestinian research participants, wherever they found it convenient and safe to meet. In many cases, this meant that research meetings were held in West Bank locations that were generally awkward, almost impossible for Israelis to access. At other times, research meetings were held in small pockets on the ‘seam’, where Israelis and Palestinians could still meet safely and openly. Such places still exist, for the time being.

*Going to the other* has been a practice of building partnership and mutual respect as a component of the research process (Weiss, 1994: 127). To leave Israel and enter Palestine, as it has come to be framed, was frequently a physically, emotionally, and psychologically challenging practice. Doing so was usually experienced by this Israeli researcher as breaking through an enforced, securitised, physical, ideational and psychic boundary (or ‘limit’, to use foucauldian terminology). Having been placed in a vulnerable position as a dimension of the research process, I also had the experience of receiving support from Palestinian colleagues who sought to ensure my safe and trouble-free passage between the Palestinian West Bank and Israel. It is rather
uncommon for Israeli Jews to place their safety and security in the hands of Palestinians. One Palestinian expressed their appreciation and concern as follows (Personal interview, PW6 2010):

There is something about being face-to-face with somebody. And there is something about going to someone else’s place. Going, it is like going to someone’s house. I would host you better. I would feel that you are sharing the same worries. It is different. The power relationship is different, the concerns... There are so many different factors. I think it is important, humanly, methodologically, politically. I think it is different. You should try to travel as a Canadian and try to mention to the people that you interview you are Israeli.

These have become cherished moments of building affinity across borders and of solidarity with Palestinians as an Israeli-Jewish-Canadian.

Research as a practice of intention and political solidarity has been written about extensively elsewhere (e.g. Gillies and Alldred, 2002). To this body of literature and reflection should be added the practice of going to the other as an epistemology of doing so. In the context of the current research project, this has entailed intentionally undertaking many of the research interviews in the Palestinian West Bank rather than conducting them by telephone or insisting that they take place in Israel, for instance. This creates an encounter where both the researcher and research participant are vulnerable, though in different ways. For the Israeli researcher, such vulnerability is largely experienced in terms of personal security. For the Palestinian research participant, such vulnerability is predominantly structural, as the interview is conducted in an over-arching situation of Israeli occupation. Going to the other, as articulated herein, is thereby one means of weakening a dominant actor and strengthening a weaker actor through the interview process. Pursuing such a practice with
intentionality and solidarity opened the door to meaningful and insightful research-based exchanges. One Palestinian research participant interpreted my having done so as having accepted their terms for the discussion, i.e. engaging directly with the conflict asymmetry, thus creating “a way to open, honest dialogue.” (Personal interview, PW3 2010)

**Disclosure**

Given my dual nationality, I made a point of disclosing both my Israeli and Canadian citizenships to all research participants, as well as my Jewish identity. This was done based on the assumption that researching conflict issues as a researcher identifiable with the dominant regional actor (in this case, Israel) has significant implications on the research process, on issue framing, on writing-up, and on initial and continued relations with research participants. The implications of providing such disclosure were far-reaching. They were also experienced differently in relationship with Israelis and Palestinians, while reinforcing a sense of solidarity with both.

With Israeli research participants, as an Israeli and a Jewish man, I was generally (and accurately) perceived as someone who was invested emotionally and politically in the security of the Jewish people and the continued existence of Israel. This did not necessarily imply a shared politics, and it was almost never assumed that it would. Instead, the research process and interviewing more specifically were understood as a space for discursive reflection and shared deliberation. That I was Jewish and Israeli contributed to creating a space of openness and transparency in addition to the expected
professionalism generally assumed in the context of academic research. Of course, the ensuing interviews informed the process of formulating and writing-up the dissertation.

In one notably terse exchange, an Israeli participant used the opportunity of our interview to express frustration directed at Jews who were vocally and publicly critical of Israel without consideration of the wider context of Israel’s relations with the Arab and Islamist worlds. He insisted on framing water development, the Israel-Palestinian water agreement and critiques of Israel’s practices in the joint water institutions in terms of the wider conflict context (Personal interview, IW1 2010).

I don’t have a problem with the world. I have a problem with the Jews that turn against us, in the academy, in such areas. It seems bizarre… We live in a tough neighbourhood… this is the point. What, we want to kill people? People on the outside do not understand this, or do not want to understand this… Listen, if the Arabs put down their arms, there would be peace. All the wars would disappear. If Israel were to put down her arms, Israel would disappear. It is simple… There is no Israel. No one thinks, in the Arab world, that anything else would happen. It is clear.32

This research participant also insisted that any legitimate research on water and peace issues in the region would account for Jewish and Israeli perspectives and interpretations of the hydropolitical situation. As much as Israel is the stronger political actor in comparison to the Palestinians on multiple fronts, he argued that the Palestinians now received the uncritical support of the international community, with this being a threat to regional peace and security (Personal interview, IW1 2010). His views echo many established diasporic

32 Almost 10 years ago, I wrote an article to which this research participant would provide an indirect response. Abitbol, Eric (2003) “Demilitarizing the Imagination: What If Israel Chose to Disarm Unilaterally?”, Rant Peace, a Working Group of the Québec Public Interest Research Group (QPIRG) – McGill University.
Jewish voices, reinforcing my own perception of the need to embark on this project with a measured yet critical approach to peace, security and justice. It is also fair to say that his critique informed the inclusion of a justificatory narrative of Israel’s hydrohegemony in this study.

The meetings I held with Palestinians were interesting, and frequently very challenging, in that they too were based in disclosure of my identity as a Jewish, Israeli and Canadian researcher. All but a couple of the Palestinians interviewed had no obvious prior knowledge of my Jewish-Israeli-Canadian identity. In meeting with all interviewees, every effort was made to carefully select the earliest possible moment to comfortably, effectively and honestly disclose this information. Such an approach partially stems from the advice of one Jewish participant, himself a strong advocate of a form of reflexive Zionism, who had worked with Palestinians on water and peace issues since the early-to-mid 1990s (Personal interview, IF2 2010). It proved to be sound and fruitful advice. A timely disclosure of my identity appeared to clear the way for frank interlocution. It also seemed to heighten the relevance of the exchange, given that the interview process became a kind of meaningful dialogue on water and peacebuilding in the Israel-Palestinian conflict context.

Research Ethics

Standard ethical considerations, generally defined as informed consent, confidentiality, anonymity and the protection of research participants more widely were pursued as important dimensions of the current research project.

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33 This has also been the case for other Israeli water researchers and practitioners (Personal interview, IE2 2010).
Guided by the University of Bradford’s *Code of Practice for Ethics in Research* (Committee on Ethics in Research, 2003), this research project received formal ethical approval from the University in a timely manner.

Supplemental ethical expectations and requirements stemmed from the relationship established with funding bodies that generously supported this research. Notably, funding was provided by the British Council/Foreign and Commonwealth Office (FCO) in the form of a British Chevening Scholarship, and by the Quebec Government through the *Fonds québecois de recherche sur la société et la culture* (FQRSC) in the form of a Doctoral Scholarship. Overall, it can be stated that this project has been pursued ethically *in research*, as discussed throughout this methodological chapter.

A second and more recent field of research ethics entreats researchers to consider the ethics of a research project. With respect to a project in the field of Peace Studies, the ethics of a research project can be situated with regards to intentionality, understood as the *ethics of intention* (Gillies and Alldred, 2002: 32-33). Three points at the nexus of ethics and analysis are identified here, informed by the traditions of emancipatory research and action research (Robson, 2002: 215; Bernard, 2000). The first point of ethics is to give voice to research participants. The second is to contribute to the emancipation of individuals within the communities where research is taking place. Third, such research ideally would contribute to a transformation of the conditions and structures which enable violations of human dignity (Gillies and Alldred, 2002).
Addressing these points, this research project has been pursued with the intention of giving voice to participants in a socio-political, transboundary community comprising Israeli and Palestinian water/peace practitioners (as well as a limited number of other regional and international actors). Undertaken by a Jewish-Israeli-Canadian sensitive to Said’s (1980) critique that Palestinian voices have historically been silenced and replaced by politically-motivated powerful regional and international actors (e.g. Syria in the 1960s, Egypt in the 1970s, Israel in the 1980s, etc), this research project has endeavoured to faithfully amplify the voice of Palestinian participants where and how appropriate, as they speak to and respond to perceived injustice (Robben and Nordstrom, 1995: 11).

This project also seeks to amplify critical and alternative Israeli voices, as a matter of ethics and intention, given the continued marginalisation of such voices both inside and outside of Israel. Acknowledging the unpopularity among mainstream Israelis of engaging in meaningful political dialogue with Palestinians, notably since the second Intifada, this research project has sought to bolster the presence of such engagement in the Israeli and wider Middle Eastern ideoscape (a concept borrowed from Appadurai, 1996). Also, this is a potent reminder that the act of selecting research participants is a question of politics and therefore of ethics (Freedman, 2006; Gillies and Alldred, 2002).

In considering the parameters of the proposed research project, its intentional transformative, emancipatory aims have been outlined and pursued (Freedman, 2006; Robson, 2002: 58; Fuller, 1992). This supplements more traditionally
defined research aims which Robson outlines as exploratory, descriptive and explanatory (Robson, 2002: 58). In other words, this research project was designed and pursued with emancipatory intentionality. Its intended outcome is to contribute broadly to the relative social justice of Israeli and Palestinian societies, with specific reference to the transformative capacity and agency of societal members associated with an evolving transboundary water/peace community of practitioners. The study also brings to light important limitations of their practice, as juxtaposed against these wider aims. The methodology of interpretive practice has made it possible to specifically do this and contribute to our understanding of transformative discursive practice.

**Ethical Constraints**

In more practical terms, this research was constrained by a few ethical considerations of note. First, I was discouraged by several members of the transboundary community of water/peace practitioners from traveling to certain areas of the West Bank that had seen active HAMAS organising. It was made clear that the presence of an Israeli national, even a dual Israeli-Canadian citizen, if it were discovered, could become the cause of a potentially life-threatening incident with international repercussions. On more than one occasion, the advice proffered in the form of a warning from both Israelis and Palestinians was to “remember Gilad Shalit.”

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34 Gilad Shalit is an IDF soldier, of dual French and Israeli nationality, who was captured by HAMAS in the Gaza Strip. He was held in captivity from 25 June 2006 to 18 October 2011 at an undisclosed location. His release was negotiated with Israel as part of a prisoner exchange.
While travel to particularly insecure and threatening areas of the West Bank was avoided, it was necessary to find ways of circumventing the constraint, while still meeting research participants face-to-face. One of the strategies of doing so involved meeting with Palestinians in relatively accessible areas of the Palestinian West Bank (e.g. Ramallah, Beit Jala). This carried on a tradition of notable Israeli activists like Amira Hass, journalist from the Ha’aretz Israeli newspaper who lives and writes from Ramallah. This thriving Palestinian city is relatively safe, welcoming a steady flow of internationals. The same is true of Beit Jala and some other locations in the West Bank.

Undoubtedly, conflict environments raise a set of ethical safety and security issues for the researcher (Lee, 1995: 27-29). In a moderate change of strategy, I followed my then supervisor, Dr. Karen Abi-Ezzi’s advice in creatively identifying safe interview sites and/or events for interviewing. Thus, every effort was made to minimise my presence in precarious environments. It is for this very reason that several interviews were held with Palestinian and Israeli transboundary water/peace practitioners at the GLOWA event held in Petra, Jordan. While there to deliver a poster session and facilitate a dialogue on water and peace issues, I interviewed five people and established commitments for follow-up meetings with several others. Most importantly, as a Common Law partner35 as well as a father of two young children, I was ever concerned to minimise risks to my physical security while accessing the data required for my research. In the end and in the field, the methodological choices made reflected a heightened sensitivity to these considerations.

35 Common Law partnerships are equivalent to legal marriages on most counts, under Quebec Civil Law in Canada.
Concluding Thoughts

Research methodologies must be appreciated for their significance as pathways to knowledge construction. There are of course many different choices to be made within the context of any given research project, with extensive repercussions for the entirety of the research endeavour. While it is unnecessary to revisit the many issues discussed in this chapter, a few points about the choices made within the current research project are nonetheless warranted.

The first point of note is to reiterate the significance of having chosen to pursue a methodology of interpretive practice. Its use is testament to the belief that while threat and ideational power undoubtedly establish the context and relational object of any given conflict, it does not inevitably pre-determine the actions of people within such environments. As stated by Holstein and Gubrium (2005: 486 drawing on the work of Garfinkel, 1967), people are not “‘cultural dopes’ who automatically put into place the effects of external social forces and internalized moral imperatives.” Indeed, change is presumed to take place through critical, reflexive and engaged social and political action.

Building on this, the second point is that this study is rooted in a tradition of critical and emancipatory research by its very methodology and design. This project deals with a conflict environment, underpinned by a political desire to make visible and support practices of positive peace in general and hydropolitical peacebuilding in the Middle East in particular. It has been motivated by a desire to support the transformation of conditions that underpin
and perpetuate violence, perceived injustice and the tragic loss of life and environment in the region.

The third point addresses another ethical issue. Some of the research participants waived their right to confidentiality and anonymity, while others have asked that it be retained and protected. A decision was taken to code and therefore veil the identity of all research participants so as not to compromise that of others, except in a few circumstances where such threat has been deemed not to exist. For example, where it was deemed important, the name of an organisation was listed, which may allow for inferences to be drawn about research participation. Again, this was only done where research participants waived their right to confidentiality and where the risks of inference were deemed negligible.

Thoughts about fieldwork comprise the fourth point. This project reaffirmed the merits of conducting conversational semi-structured interviews for the purposes of discourse analysis. Their character and tone allowed for layered, textured and reflexive experience-sharing, contributing to the detail, nuance and insight evident in the current analysis. In a related vein, the disclosure of my researcher’s identity, where it had bearing on the conflict, also proved immensely valuable. Doing so created the conditions for meaningful exchange, situated as part of the wider narrative of conflict and peacebuilding processes. At least, this has been the experience of researching this project on water and peacebuilding in relation to the Israel-Palestinian conflict.
On a related fifth point, there are moments of discomfort, fear, even alienation that often accompany research activities in conflict regions. This is true whether or not there is a pre-established researcher connection to the region where research is pursued (though the emotional implications are surely quite different in some respects). There are many opportunities for psychic and emotional strain, and it is up to the researcher to find ways of managing the stress. It can be very helpful emotionally to share the most challenging moments of the research project with a trustworthy person through timely communication from the field. It may also prove grounding to always notify them when planning to enter particularly challenging circumstances. In the context of the current research project, such communication was experienced as a kind of stabilising lifeline during particularly difficult periods.

The sixth point relates to the self-perception of researchers in conflict environments. Notably, a modest though real effort was made to push some of the boundaries that constrain good research, peacebuilding practice and potentially transformative change. In part, this involved going to the other, as discussed above, as part of the wider conflict narrative. Doing so created valuable and life-changing experiences that became methodological anchors of the project overall. As a product of this process, as a researcher, I have come to understand myself as an insider-partial, discursive mediator to the Israel-Palestinian conflict, with corollary implications for this study.

Finally point seven and most aleatory of all, as a researcher I am prepared to assume a measure of responsibility for the consequences and implications of
this research and the dissemination of its results. Doing so is of particular significance with respect to critical and emancipatory research in conflict environments because the dissemination of research will likely have an effect on research participants, if not directly and personally, then on their practice and on that of others like themselves. The hope, of course, has always been and remains that published conclusions from this research project will contribute to supporting and amplifying the peacebuilding significance and effects of transboundary practices; in terms of water and on other issues, in the Middle East and elsewhere.
CHAPTER 3:  
SITUATING THE ORIGINS AND JUSTIFICATIONS OF ISRAEL’S HYDROHEGEMONY PRIOR TO 1967

Introduction

Of the many possible relational domains for analysis of the Israel-Palestinian conflict, this study focuses on water. It analyses the hydropolitical relations of the State of Israel and the PA, and the relationships of Israeli and Palestinian water/peace practitioners. This chapter launches the substantive, analytical dimensions of the overall study, situated within wider, still ongoing debates about the peaceful and/or conflictual significance of water, and its transboundary management and development in conflict environments (Katz, 2011; Jägerskog and Zeitoun, 2009; Kramer, 2008; Fisher, 2006; Ma’oz, 2006; Jägerskog, 2003; Selby, 2003; Trottier, 2003).

Famously, in 1995 the World Bank’s then Vice-President (Environmentally Sustainable Development) Ismail Serageldin stated that as previous wars had been fought over oil, so the wars of the coming century would be fought over water. This view is informed (though not necessarily supported) by a body of theory and research (Frederiksen, 2003; Shiva, 2002; Barlow, 2001). Certain hydropolitical researchers disagree with it on empirical grounds, arguing that the extended history of water relations has been far more peaceful than conflictual, with only a handful of wars directly attributable to water in the modern era (Amery and Wolf, 2000; Wolf, 1998). Recent research in this field convincingly argues that both conflictual and peaceful relations and
relationships operate, often simultaneously, through water issues in transboundary resource environments (Mirumachi and Allan, 2007; Wolf et al., 2005; Yoffee et al., 2003).

Informed by a review of this hydropolitical literature, the current (and next) chapter examines the significance of water with respect to relations between Israel and the Palestinians, from the late 19th to the early 21st centuries. It identifies the natural and non-conventional water resources at stake in the conflict, including rivers, aquifers, recycled wastewater and desalinated seawater. The analysis of hydropolitical relations in the Israel-Palestinian region (and elsewhere) must first be grounded in a clear description of all relevant water resources.

Building upon such awareness, the current chapter historically examines hydropolitical relations until 1967 between the Zionist movement and then Israel on the one hand, and the Arabs and Palestinians on the other. It narrates the hydropolitical struggles of and between the Zionist movement and the Palestinian and Arab leadership. It makes visible the conflicted discourses of water management and development that emerged in the wake of Israel’s 1948 Independence. It considers Israel’s national hydropolitical imperative as well as its pursuit of strategic, limited integration of water resources management and development (with notable success on the Jordanian front). Finally, this chapter discusses the hydropolitical emergence of the PLO in the mid-1960s, as part of the build-up to the 1967 Six-Day War. The chapter after this one examines the post-1967 period, starting with Israel’s occupation of West Bank people,
territory and water (and other) resources, and through the intentional consolidation of its hydrohegemony.

Articulating an elaborate and critical hydropolitical history foregrounds the significance of water (and its management and development) to the Israel-Palestinian conflict from its very origins. This theoretically-informed study makes visible the context in, and the practices through which Israel has developed its hydropolitical power, both in relation to the Arabs and to the Palestinians more specifically. It also provides the foundational constructs of Israel's evolving narrative of necessity, underpinning its evolving control of regional water resources and its eventual hydrohegemonic power. Methodologically speaking, the analysis undertaken in the current and next chapters provides the hydrohegemonic context and discourse against which the hydropolitical practices of Israeli transboundary water/peace practitioners will then be gauged in later chapters. Framed first theoretically and then historically, this study of Israel-Palestinian relations begins with a review of key debates from the hydropolitical literature.
Reviewing Hydropolitical Debates

This chapter begins with a concise survey of key hydropolitical debates, as they specifically intersect with conflict and peace issues and considerations. Doing so serves to situate this work theoretically. It brings clarity to the epistemological choice of studying hydrohegemony, hydropolitical peacebuilding and hydrohegemonic residues with reference to Israeli-Palestinian relations.

A framework for the study of debates on water, conflict and peace is appreciable as follows:

1) Water as a cause of violent conflict
2) Water as an instrument/technology of violent conflict
3) Water as a factor of security
4) Water as a domain of hegemony/hydrohegemony
5) Water development and conflict sensitivity
6) Water as an issue-area of peacemaking
7) Water as a domain of peacebuilding/hydropolitical peacebuilding
8) Water as a domain of overlapping conflictual and peaceful interactions

Each of these areas will be discussed briefly below with examples, cognisant of the fact that there is some overlap between them.36

Water as a Cause of Violent Conflict

Water is among the most fundamental human needs, along with food and shelter. It has also been recognised as a basic human right by the UNGA (28 July 2010) and by UN Secretary-General Ban Ki-Moon (22 September 2010; South Centre Website). Where this basic human need and human right is

36 It is beyond the scope of this study to detail each of the elements of this framework. Nonetheless, key theoretical issues are raised and supported with relevant examples from around the world.
denied or rendered increasingly difficult to secure, people across the world have demonstrated their willingness to resist and struggle\textsuperscript{37}.

This is often the case where efforts are made to replace one regime of water governance with another, and where the perception of injustice attached to doing so is high. Notably, people and communities have resisted and struggled against the wave of privatisation of water resources governance pursued across the Global South in the 1990s, as in Bolivia, India and South Africa (See Shiva, 2002; Barlow, 2001). Water, its management and development, has also factored directly as one cause of the Israel-Palestinian conflict and its escalations, a point discussed below.

**Water as an Instrument/Technology of Violent Conflict**

Once violent protracted conflicts are underway, water can be leveraged as one of several instruments or technologies deployed by conflict parties, as in the Tigris-Euphrates basin during the 1980s and 1990s. Water can be denied outright or severely restricted during periods of escalated conflict, as Turkey did against Syria during this period. Water distribution infrastructure can be damaged or destroyed strategically or collaterally, as pursued by the Kurdish guerilla movements against the Turkish Southeastern Anatolia Project (GAP) on water development (Soffer, 1999: 112). Also, water can be kept from crops as a way to enable the re-appropriation of land and water resources, as has been done by Turkey against its Kurdish population, thereby contributing to Kurdish food insecurity and cultural devastation. Water has also been used as

\textsuperscript{37} On human needs theory, see Burton, 1990a; Azar, 1986.
an instrument and technology of violence as part of the Israel-Palestinian conflict.

**Water as a Factor of Security**

Once understood primarily with reference to states, the concept of security has been developed to address human as well as environmental considerations. The classic state-centric paradigm recognises water as a resource that ensures the viability of states. There are 263 transboundary rivers and 273 transboundary aquifers recognised in the world today. Many of these surface waters form borders between states around the world, demanding to be secured and defended. The management and development of transboundary waters by any one state has security implications for other riparians and users, as made evident by ongoing tense hydropolitical relations between Turkey, Syria, Iraq and even Iran in the Tigris-Euphrates basin (Altinbilek, 2004; Kolars, 2000; Soffer, 1999: 73-119). This is also the case between Israel and the Palestinians regarding both the Jordan River and the Mountain Aquifer.

More broadly, over the last decade or so, security has increasingly been valued from a human-centric perspective (Nuruzzaman, 2006; Marclay, 2005; David, 2000). We speak of human security in terms of the freedom from fear and the freedom from want (Duffield, 2005; Jesse and McLean, 2005; Paris, 2001). As a basic human need, water is an obvious factor of human security defined in both these ways. Also, environmental security has increasingly become valued through the paradigm of sustainable development and the principle of intergenerationality (Kates et al., 2005). Environmental security is generally
understood as ensuring and perpetuating the integrity of ecological systems, 
cognisant of both their inherent and utilitarian value (Prugh and Assadourian, 
2003).

States and communities pursue these multiple forms of security with respect to 
water resources governance, sometimes unilaterally and with detrimental 
effects on weaker others (Frederiksen, 2003). Such has been the case of 
India’s dam development on the people, land and resources of Bangladesh in 
2008 to name one of several Himalayan cases (Dharmadhikary, 2008: 21-29). 
The same can be said of Israel’s development of the National Water Carrier 
(NWC) which has benefited Israelis to the detriment of both Palestinians and 
the natural environment.

**Water as a Domain of Hegemony/Hydrohegemony**

Concisely rearticulating the discussion pursued in chapter 1, hegemony may be 
understood as the ordering of asymmetric relational power. Hegemony 
operates via multiple relational domains through coercion and consent. 
Hegemons have the ideational and practical power to impose their preferences 
upon, through and in relationship with the other parties and actors in the context 
of particular socio-political systems. Where water is a border and/or a 
transboundary resource, it is one domain in and through which hegemonic 
power operates. Such power is referred to in the literature as *hydrohegemony* 
(Zeitoun, 2009; Zeitoun and Warner, 2006).
While water specific, hydrohegemonic power frequently reflects and further structures broader asymmetric power relations between parties. Hydrohegemony is also reproduced and justified discursively, in both general and water-specific terms. Like hegemony, hydrohegemony is deeply anchored discursively (i.e. materially, relationally and ideationally), and is difficult to dislodge and transform. Currently, Israel in the Jordan Basin, Turkey in the Tigris-Euphrates Basin, and Egypt in the Nile Basin are all broadly recognised hydrohegemons. Notably, Israel’s hydrohegemony is constitutive of the wider Israel-Palestinian conflict.

**Water Development and Conflict Sensitivity**

Greater development does not result in greater peace, as was once axiomatically claimed (Duffield, 2005; Uvin, 2002). Rather, the approaches, practices, values and ideas underpinning and comprising development processes will effect, often quite powerfully and dramatically, the relations between groups already in conflict with one another. The development of water resources is similar to other areas targeted for developmental change. It has the potential to both build socio-political equity or to further bolster and justify violent engagements against perceived enemies. Water development may in effect cause harm unless serious efforts are pursued to prevent it from coming about.

In response to such an awareness and concern, a body of literature and a concomitant field of practice have evolved over the last 15 years to prevent development-related conflict and promote development-related peacemaking
and peacebuilding. In this vein, major development projects now generally require that impact assessments are undertaken ahead of implementation, benefiting from knowledge generated through Environmental Impact Assessments (EIA), Social Assessments, and Economic Studies. Development projects are also now being assessed for their anticipated conflict and peace effects, through a practice and toolkit usually referred to as PCIA (and its variants, including Do No Harm, Conflict Sensitive Development, Aid for Peace; See Paffenholz and Reychler, 2007; Bush, 2003; Galama and van Tongeren, 2002; Anderson, 1999; Bush and Opp, 1999).

In an effort to ensure that Middle Eastern water development supports and does not undermine Israel-Palestinian peace efforts, a PCIA/CPES has recently been undertaken of the proposed RSDSC initiative. However, it remains unclear how it will inform the deliberations and developments associated with the RSDSC so as to ensure its greater conflict sensitivity.

**Water as an Issue-Area of Peacemaking**

Classically, peacemaking refers to the efforts of conflict parties to come to agreement through a negotiated process, often with the assistance of third parties. In protracted social and violent conflicts (Azar, 1990; Azar, 1986), where identity groups, and usually at least one state, are in conflict with one another, multiple issue-areas are frequently at stake. These may include human needs deprivation, bordering, access to holy sites, refugees and repatriation, demobilisation and other security matters, and resources management, including water. Such issues are then tackled and become inscribed in
agreements signed between parties for the resolution of conflict(s) between them. Where water is a border between parties, or where it is a transboundary resource, it is frequently addressed specifically and directly in peace processes and in peace agreements.

Perhaps more proactively, water cooperation can under certain circumstances support peace processes as a practice of environmental peacemaking (Conca, 2002; Conca and Dabelko, 2002). This has been found to be the case, with important caveats and nuances, in the Aral Sea Basin (Weinthal and Marei, 2002). In the Middle East, water cooperation throughout and following the second Palestinian Intifada has continued to provide a domain for ostensible peacefully-oriented interaction (Personal interview, PW7 2010; Personal interview, IF2 2010).

**Water as a Domain of Peacebuilding/Hydropolitical Peacebuilding**

The concept of peacebuilding is used herein in reference to the pursuit of critical, counter-hegemonic and alternative ideations and practices aimed at resisting, circumventing and/or transforming discourses underpinning and perpetuating violent asymmetric conflicts (Lederach, 2005; Ramsbotham et al., 2005: 30, 215-230; Lederach, 1997; Galtung and PRIO, 1996). Peacebuilding is based in a critique of relational forms of direct, cultural and structural violence and the narratives that justify and sustain them. Peacebuilding, and more specifically, hydropolitical peacebuilding (as used in the current study) also entails the building of relationships rooted in and constituted of ideations and practices of *equality, partnership, equity* and *shared sustainability*. 
While it may be difficult to bring conflict parties together, certain domains like borders, shared holy sites and transboundary water resources harbour the potential to become and sometimes are relational domains of peacebuilding between socio-political actors. In the Middle East, it has been argued elsewhere that water-related environmental peacebuilding is being pursued by civil society actors like FOEME, contributing to meaningful relationship-building, trust-building and deep-rooted identity-based understanding (Harari and Roseman, 2008).

**Water as a Domain of Overlapping Conflictual and Peaceful Interactions**

In recent years, an impressive body of research has focused on the examination of simultaneous, overlapping and even mutually-constitutive violent and peaceful dimensions and relations of water management and development in conflict environments. Notably, the Basins at Risk Project (BAR) constructed a weighted continuum of cooperation and conflict related to water. This continuum ranges at one end from the “Voluntary unification into one nation over water” (+7) (which hardly ever happens), “Major strategic alliance (regional or international). International Freshwater Treaty” (+6), and “Military economic or strategic support” (+5) through to “Small scale military acts” (-5), “Extensive War Acts causing deaths, dislocation, or high strategic cost” (-6) and “Formal Declaration of War” (-7) over water at the other (also very rare) (Yoffee et al., 2003: 1112).
Critically building on this work, Mirumachi and Allan (2007) developed the Transboundary Water Interactions NexuS (TWINS) approach. They argue that conflict and cooperation are largely independent from one another as variables, such that they could and often do exist simultaneously. Their reasoning is in part based on a recognition that contextually-based states are not themselves the only hydropolitical parties and actors of relevance in conflict environments (2007: 4). In this respect, it is necessary and insightful to acknowledge the likelihood (and implications) that such states may be pursuing violent or hydrohegemonic relations while (at least some) civil society actors are engaged in peaceful interactions.

The current doctoral study draws insight and is informed by the extensive field of research on water, conflict and peace, as framed and discussed above. More specifically, it is situated within the growing body of work that recognises and theorises about the simultaneous presence and operation of hydropolitically conflictual and peacefully-oriented practices and ideations of relevant parties and actors within conflict environments. As such, the current study discursively analyses Israel’s hydrohegemony in relation to the Palestinians. It also analyses the discursive practices of Israeli transboundary water/peace practitioners in hydropolitical relationship with Palestinian colleagues. Through a methodology of interpretive practice (Holstein and Gubrium, 2005), this study discursively makes visible the hydrohegemony, hydropolitical peacebuilding and hydropolitical residues of Israeli transboundary water/peace practitioners. Towards doing so, the next step in this study involves identifying the water resources of the Israel-Palestinian conflict.
Water Resources of the Israel-Palestinian Conflict

Water resources historically at stake in the Israel-Palestinian conflict context are both natural and non-conventional. They typically include natural surface waters (including seasonal runoff) and groundwaters, respectively the Jordan River Basin and the Mountain Aquifer. They also include non-conventional recycled wastewaters, used primarily for agricultural purposes since the 1960s. Additionally, non-conventional desalinated seawater has become an important source of water through a production process that has accelerated over the last 15 years. At the other end of the technological spectrum, traditional cisterns are also important sources of natural water for Palestinians. Finally, of note, Lebanon’s Litani River and to a lesser extent the Nile River have been drawn into the region’s conflict dynamics and peace efforts over earlier decades. Today, they factor hardly at all into Israel-Palestinian hydropolitical relations.

Natural Water

Surface Water

The Jordan River Basin has provided water to tens of millions of people from diverse communities of the Middle East. Its geographic reach extends from Lebanon, Israel and Syria in the north, through Jordan, Israel and the West Bank, and down to the Dead Sea as its southern terminal lake. Overall, the Jordan River itself has an annual natural flow estimated between 1.25 Billion Cubic Metres (or BCM; Amnesty, 2009a: 8) and 1.476BCM (Amro, 2006: 25).

38 While the Mediterranean Sea remains the primary source for such water, the Red Sea is increasingly being targeted for large-scale desalinated water production.

39 For many years, Israel sought to integrate the Litani River into Jordan Basin water management, with little political or material success. Further, while the Nile River is geographically distant from the Jordan Basin, integration of the Nile into regional peacemaking plans was considered, notably at the initiative of Egypt’s President Anwar Sadat. Little came of this effort on the ground.
Jordan River headwaters find their source in three different countries. Amounting to some 50 percent of water feeding the Jordan, the Dan River originates in Israel. The other 50 percent comes from the Syrian Banias and the Lebanese Hasbani. In its Upper region, the Jordan River has been estimated to discharge between 640 Million Cubic Metres (or MCM; Charles T. Main, 1953 in Sosland, 2007: 22-23) and 750MCM (Kliot and Shmueli, 1998: 217).

The Upper Jordan River discharges into Lake Tiberias (also known as the Sea of Galilee and Lake Kinneret), the largest natural reservoir of the basin with a storage capacity averaging between 500MCM (EXACT, 2005 in Fischhendler, 2008a: 82-84) and 520MCM (Lowi, 1993: 29). In 1953, Charles T. Main measured and averaged the Lower Jordan River’s annual flow at 538MCM (Main, 1953 in Sosland, 2007: 22-23). However, in recent decades, with some 350MCM withdrawn annually to supply Israel’s NWC, only about 20MCM (Kliot and Shmueli, 1998: 217) to 40MCM (Lowi, 1993: 25) is regularly released from Lake Tiberias to the Lower Jordan River.

Another major tributary, the Yarmouk River flows predominantly through Syria and Jordan before passing through Israel at Point 121 on its way to meeting

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40 Once a small reservoir of some 13km² in a valley of about 177 km², the Huleh Lake and marshlands of the Upper Jordan River system were drained by Israel in the 1950s (Tyler, 1994: 826).

41 Point 121 is the location at which a portion of Yarmouk waters are pumped towards Israel while the rest flows southward into Jordan’s East Ghor canal. It is also the location where extensive and discrete water management and problem-solving meetings took place between Israeli and Jordanian water practitioners throughout the 1980s. This discussion is pursued in a later chapter.
the Jordan River confluent. With an annual flow varying between 200MCM and 1BCM, the Yarmouk averages 400-500MCM. Its measured average in 1953 was 475MCM (Main, 1953 in Sosland, 2007: 22-23). An important source of water for Jordan, notably contributing to Amman’s municipal system, the Yarmouk represents almost 50 percent of the country’s surface water
(Fischhendler, 2008b: 120). From about 1992, the Yarmouk’s contribution to the Lower Jordan has dwindled to almost nothing.

The Lower Jordan flows through Israel, Jordan and what would become the Israel-occupied West Bank in 1967. Only Israel and Jordan have had direct access to the Lower Jordan since 1967, a situation much disputed by the Palestinians. However, Jordan River seasonal flood runoff in the West Bank has been estimated at some 64MCM (Isaac, 2000: 14).

The Dead Sea also straddles Israel, Jordan and the occupied West Bank. No more than 78-90MCM of Jordan River water was believed to actually reach the Dead Sea annually throughout the 1990s and early 2000s. A recent study has presented figures indicating that only 20-30MCM/yr reaches the Dead Sea, or 2% of the river’s historic flow (Gafny et al., 2010: 16). The Jordan River Basin’s terminal lake, the Dead Sea has been in continued decline since the mid-1960s, when both Israeli and Jordanian national water infrastructure projects went online.

Groundwater

Transboundary water resources of direct relevance to the Israel-Palestinian conflict include groundwater. The most important such resource is the Mountain Aquifer, shared between Israel and the West Bank. The Coastal Aquifer runs along the Mediterranean coast, from the Gaza Strip up to Haifa in Israel. In the south, Wadi Araba/Arava Valley (WAAV) aquifers there have been an important factor of Israeli-Jordanian relations. Mention must also be made of the massive
The Mountain Aquifer is shared between Israel and the West Bank. It is divided into Western (Yarkon-Taninim), North-Eastern (Schem/Nablus-Gilboa) and Eastern sections. Its total available safe yield has been estimated scientifically and agreed to politically through the Israel-Palestinian Oslo process at about 679MCM (Kliot and Shmueli, 1998: 217). Largest of the three, the Western Mountain Aquifer has an estimated annual safe yield of 300-350MCM (Shuval, 1993), although another estimate is 335-450MCM (World Bank, 2009: 9).
North-Eastern Aquifer is estimated to have an annual safe yield of about 130-150MCM (Shuval, 1993), though up to 200MCM (World Bank, 2009: 9). The Eastern Aquifer’s annual safe yield is variously estimated at 151MCM (Shuval, 1993), 237MCM (World Bank, 2009: 9) and 250MCM (Kliot and Shmueli, 1998: 217).

These transboundary, underground waters are central sites of dispute between Israel and the Palestinians, based on quantities and locations of extraction, as well as principles of transboundary water usage. On an annual basis, Israel has used about 480MCM of the Mountain Aquifer and the Palestinians some 110-180MCM (Kliot and Shmueli, 1998: 217). About 80-85 percent of the Western and North-Eastern Mountain Aquifer’s recharge occurs in the West Bank while about 70 percent is withdrawn in Israel (Weinthal and Marei, 2002: 461). The Eastern Aquifer primarily recharges in the West Bank, where it also discharges most of its available waters for Palestinian use. In its entirety, the Mountain Aquifer meets about 30 percent of Israeli needs and approximately 90 percent of Palestinian consumption (Sosland, 2007).

The Coastal Aquifer is situated in both the Gaza Strip and in Israel (as far north as Haifa). Often referred to in the singular, it is uniquely structured into what may be understood as several underground pockets of water. Thus, Israeli and Palestinian coastal water may be framed as ‘shared’ just as it may be framed as ‘separate’ or ‘independent’, with significant political repercussions. For the purposes of the current study, these will considered separate sources of
Therefore, the Gaza Coastal Aquifer itself has an annual safe yield estimated at some 55-60MCM, though it has been depleted through severe over-pumping (Personal interview, IF2 2010; Isaac, 2000: 16-17; Kliot and Shmueli, 1998: 217). The Israeli Coastal Aquifer has a safe yield of some 450MCM (Amnesty, 2009a: 8).

In the WAAV, a few pockets of water straddle the Israeli-Jordanian border. It is believed that these aquifers recharge at about 50MCM/yr. These waters and those of the Jordan River have been the source of both tension as well as innovative agreement between Jordan and Israel as part of their 1994 Peace Treaty (Fischhendler, 2008a; Fischhendler, 2008b). Finally, the Nubian Sandstone Aquifer extends from the Egyptian Sinai through to the Israeli Negev. These fossil waters are pumped at a rate of 30MCM/yr and are non-replenishable (Issar, 2000).

**Non-Conventional Water**

While much of the hydropolitical literature focuses on natural water, the last 20 years has seen impressive and important growth in the production, use and reliance on non-conventional water. This refers primarily to recycled wastewater and to desalinated seawater. Also, virtual water has been recognised as a significant source of ‘embedded’ water and will be discussed below. Finally, experimental efforts to promote water imports have been pursued, notably with Turkey (though detailing such efforts is beyond the scope of the current study).

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42 This is based on the Coastal Aquifers’ hydrology and on the separate regimes of water management pursued by Israel, the PA and the HAMAS authority of the Gaza Strip since 2006.
Recognising Recycled Water

The first, and for decades most important, non-conventional water in the Israel-Palestinian region was generated from the recycling of wastewater. Originally considered a possible source for all purposes, it has primarily been used by Israel since the 1960s to meet agricultural demand as well as municipal landscape irrigation (Feitelson and Abdul-Jaber, 1997: 21-22). Given that agriculture is the single largest user of water both in the Middle East and globally (averaging about 70 percent of available water), use of recycled water for this purpose releases important quantities of freshwater for domestic and industrial uses.

In 2008, Israel generated 500MCM of wastewater. Of this, about 430MCM or 86 percent received secondary or tertiary treatment. Overall, about 70 percent of 2008 wastewater was reclaimed, according to the Israeli Ministry of the Environment (MOE WW Website). This is comparable to the Western Mountain Aquifer’s total safe yield. The Palestinians are relative newcomers to the recycling of wastewater. While quantitatively not yet very significant for the Palestinians, transboundary wastewater governance is an important factor of the Israel-Palestinian conflict.

Desalinated Seawater

The last 15 years or so have seen a massive rise in seawater desalination in the Middle East, notably in Israel, with major plans involving Jordan and the PA.

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43 Thus, the multiple recycling and reuse of wastewater must be taken into consideration when assessing a country’s Water Poverty Index (WPI). The WPI may be understood as a composite measure of both available water resources and adaptive capacity (Salameh, 2000: 471; see also Lawrence, Meig and Sullivan, 2002 in Tamimi et al., 2007: 333).
Israel’s first seawater desalination plant was sited at Ashkelon, on the southern Mediterranean coast, producing some 40MCM/yr. Given the success of this initiative, Israel has since moved to construct a water strategy over 20 years, predominantly reliant on desalinated seawater from the Mediterranean.

On the ground, by early 2011, Israel had built three of six planned Mediterranean desalination plants. It is also moving towards greater output and production per plant\(^4\). In 2008, Israel had envisaged production of 503.7MCM/yr of desalinated Mediterranean seawater by 2013 (GWI, 2008), more than its total withdrawal from the Mountain Aquifer. In 2011, this strategy was expanded to nearly 700MCM/yr (JPOST Water Website). In 2010, Israel let it be known that it plans to phase out purely natural water in favour of a ‘natural/desalinated water blend’ for drinking purposes.

Israel is currently considering the possibility of jointly producing water with other countries and/or of selling this water. Most prominently, the RSDSC, a joint project involving Israel, Jordan and the PA for both the production of drinking water and to stabilise the Dead Sea is currently being evaluated for feasibility. The RSDSC anticipates annual freshwater production to reach 750-850MCM/yr in some 12 years. This massive influx of ‘produced’ water in a water stressed region raises a number of questions regarding the conflictual and peaceable significance of its production, ownership, distribution, costing and management.

Over the last few years, studies addressing overall water development,

\(^4\) Currently, Israel’s desalination plants are located at Ashkelon, Palmachim and Hadera. The Ashkelon plant is designed to produce 127MCM/yr at US$0.57/CM (Cubic Metre). Part of an intensive energy consuming industry, this plant alone requires 450 gigaWatts of electricity annually (Desalination Hadera Website).
environmental impact, economic and social implications, as well as conflict and peace effects have been undertaken to assess the implications of such new waters, given their salience, abundance, complexities and costs.

**Additional Non-Conventional Considerations**

A number of proposals have been advanced over the years for decreasing water stress and advancing cooperation between Israel and its neighbours. Water supply and technological approaches have included the possibility of instituting either water imports or water conveyance networks from Turkey, as in the form of a multinational water pipeline. Water demand management approaches have taken aim at social and institutional practices for increasing the productivity of currently available water supplies. Perhaps most significantly, this has been aimed at discouraging inefficient uses of water, e.g. transforming the region’s agricultural sector to favour low-water, high-value crops destined for export\(^45\).

In a related vein, important economic solutions have suggested expanding the use of globally integrated virtual water resources (Allan, 2002; Allan, 1999). Water that is embedded in agricultural and other essential foodstuffs and products has been termed “virtual”. Allan (2002: 266) has argued that water relations in the Middle East have become less tense since the 1970s due to the growing availability of virtual water in the region, notably in the form of imported grain. Grain imports to Israel, Palestine and Jordan by 2000 amounted to some five million tons annually, equivalent in water to some 5BCM/yr (Allan, 2002: 45).

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\(^{45}\) In Israel, the agricultural sector consumed 1.126BCM in 2005, of which 543MCM was freshwater (Water Commission, 2006 in Tagar, 2007: 3).
Other studies have argued that eighty-one percent of Israeli caloric intake stems from imported foodstuffs (Buchwald, 2000 in Tagar, 2007: 11). Seen in this light, virtual water appears to quantitatively dwarf Jordan Basin and desalinated seawater resources.\(^{46}\)

Often under the radar, cistern water is an important source for Palestinians. In the West Bank, it is believed that cisterns are used to capture, harvest, store and ultimately provide some 6.6MCM/yr (Abu Zahra, 2001: 96). Such water, although quantitatively relatively small, plays into the Israel-Palestinian conflict in significant ways. This will be touched upon later in the study.

Evidently, water resources of direct relevance to the Israel-Palestinian conflict are many. While it is fundamental to become familiar with specifics of the resources themselves, of greater relevance to this study are the discursive approaches to water management and development pursued by Israel and the Palestinians. Yet more specifically, the current study endeavours to discursively analyse, in historical perspective, Israel’s approach to water resources management and development, with reference to the Arab states and to the Palestinians. In this vein, the next section situates and articulates the origins and evolving justificatory narrative of what later becomes Israel’s hydrohegemony.

\(^{46}\) There is a ceiling to the quantity of virtual water that actually replaces natural or produced water, considered in terms of population growth, energy costs, trade consideration, social and ideological factors, and regional relations to name the most salient.
Originating Israel’s Hydrohegemony

Rooted in theoretical appreciation of the water, conflict and peace nexus, informed about the water resources of the Israel-Palestinian region, it is now possible to situate and examine water as a relational location of the Israel-Palestinian conflict. Specifically, the remaining bulk of this chapter will articulate and analyse the evolving, historical and discursive construction of Israel’s hydrohegemony and its corollary justificatory narrative. As shall become clear through this chapter (pre-1967) and the next (post-1967), these are deeply entwined processes, rooted historically, developed relationally, and then pursued with intentionality.

Israel’s contemporary hydrohegemonic dominance over the Palestinians may be understood in terms of several specific, historically-rooted hydropolitical objectives and practices. First, intent on national self-determination, the Zionist movement and then Israel identified and secured adequate quantities of the immediate region’s surface and groundwater resources from about 1919 to 1967. Second, Israel took control of water resources as part of its occupation of the West Bank and Gaza Strip, from 1967 onwards to the present. Then, from the early 1980s, Israel actively integrated West Bank water resources into its water management and distribution system, through its national water company Mekorot.

Continuing with the Oslo process of the 1990s, Israel negotiated its institutional dominance over the Palestinians, while pursuing the containment of a water rights-based discourse in favour of water needs provision. Finally, and most
recently, with the advent of affordable seawater desalination, Israel has been producing an Israel-as-provider/Palestine-as-client (or consumer) hydrohegemonic relationship. In so doing, Israel has privileged a technical rather than a political approach for managing and developing the region’s water resources and for coming to agreement on water issues with the Palestinians. Overall, Israel’s contemporary hydrohegemony largely, though never entirely, contains the possibility that water-related issues of the Israel-Palestinian conflict will be addressed in hydropolitical congruence with positive peace.

Informed both ideationally and through practical experience, Israel's once-nascent and since the mid-1960s intentionally-pursued hydrohegemony has been anchored in, and been co-constitutive of a self-legitimating justificatory narrative. This narrative of necessity has itself been framed, expanded and expounded upon with every passing historical period. It articulates a powerful belief that Israel’s national existence as a secure, culturally-specific Jewish haven requires that it maintain its hydrohegemony today. Israel’s hydrohegemonic justificatory narrative is constructed herein specifically of eight elements, identified as follows:

1) A Jewish manifest destiny in redemption of biblical Zion;
2) A universal Jewish historical victimisation;
3) Jewish historical use as a premise of Israel’s water rights and equitable use;
4) Israel’s hydropolitical imperative as a national state;
5) Israel's strategic pursuit of integrated water resources management;
6) Israel’s benevolence towards the Palestinians, conceived as ensuring the satisfaction of Palestinian water (and other basic and development) needs;
7) The exclusive Zionist/Israeli prerogative of environmental sustainability, as compared with the relative unsustainability of the Palestinians; and
The construction and perpetuation of a Palestinian subject that continues to be a threat to Jews and the Jewish self-determination project, both generally and hydropolitically.

The historically constructed and continued relational dominance of Israel and the subjugation of the Palestinians are discursively framed as justified by this multi-faceted narrative. Over this chapter and the next, the constructed and evolving relation of Israeli dominance and Palestinian subjugation will be discussed together with the layering of justificatory elements. Doing so reflects a recognition of their intimate historical and discursive co-constitution, as incrementally fundamental to the contemporary, asymmetric Israel-Palestinian conflict relation. The next step then takes us back to the mid-19th century, to the modern roots of Zionism.

**Zionism and Early Hydropolitical Ideation**

Water has figured as a constitutive element of the Zionist discourse of Jewish national self-determination in biblical Zion. A multi-faceted movement that celebrated a return to the Land of Israel, both as an idea and in practice, Zionism (and its cultural variant in particular) was built upon widespread imagery of a barren land awaiting Jewish communal redemption. Seeking to construct a refuge for victimised Jews, the materially-inclined political Zionists also appreciated the need to secure adequate resources for the self-determination project, notably in terms of land and water. A brief review of water-related, Zionist discursive framings is insightful in these respects.
Towards Redeeming Biblical Zion

Inspired by nationalist movements emerging in the Balkans, Rabbi Yehudah Alkalai (1798-1878) wrote in *Third Redemption* (Alkalai, 1843 in Hertzberg, 1976: 105), “…our land is waste and desolate, and we shall have to build houses, dig wells, and plant vines and olive trees.” The intimate fusion of redemption, land, water, labour and a “future… very great” (Alkalai, 1843 in Hertzberg, 1976: 107) was vividly imagined and projected in Alkalai’s writings and political efforts. Where and as wells would be sunk, so would the nation set down its roots. An inspiration to Simon Loeb Herzl, Zionist founding father Theodor Herzl’s grandfather, Alkalai sought to generate religious and political interest in his vision of meaningful individual and collective Jewish redemption in Palestine.47

The creation of agricultural settlements is a constant among early Zionists. In this vein, Rabbi Zvi Hirsch Kalischer (1795-1874) was inspired by nationalist movements, notably in his native Poland against Imperial Russia. Through his writings, he contributed to the foundational Zionist idea that the Jewish people carried a duty to redeem the land of its Jewish ancestors, a Zion having become “so barren and forsaken.” (Kalischer, 1862 in Hertzberg, 1976: 114) Novelist, essayist and teacher, also from Russia, Peretz Smolenskin (1842-1885) wrote of the need for Jews to settle in agricultural settlements in Zion, and to work this land purchased with the assistance of Jewish philanthropists (Smolenskin, 1881 in Hertzberg, 1976: 151).

47 As religious service and political activism, he sought to generate the interest and involvement of eminent local and international figures in supporting Zionist movement. These included prominent English financier Moses Montefiore and French lawyer and politician Adolph Crémieux (Hertzberg, 1976: 104).
The idea of a barren land awaiting Jewish redemption survived into the 20th century. This despite growing incontrovertible evidence of a vibrant society of Arabs living in Palestine under Ottoman rule. Among other things, the Arabs of Palestine actively engaged in a traditional management of available and accessible surface and underground water resources. Despite this growing knowledge, eminent political Zionist Max Nordau framed the Zionist “ambition to save the ancient people for a long, long future” (Nordau, 1902 in Hertzberg, 1976: 242) as a nationally productive desire to work and reclaim barren land and water in Palestine (Nordau, 1902 in Hertzberg, 1976: 245):

[The Zionists] wish to make the Jews, who are nowadays reproached with being parasites, into an undeniably productive people. They desire to irrigate with their sweat and to till with their hands a country that is today a desert, until it again becomes the blooming garden it once was.

Evidently, the Zionist idea was never meant to remain in the realm of hope. Debates ensued between the different strands of Zionist leadership about how both to inscribe the idea meaningfully and produce it materially (Shlaim, 2001: 3).

The practical cultural (as well as philanthropic and religious) Zionists, stemming back to 1881, had been supporting a piecemeal movement of settlement in Zion, biblical Jerusalem and surrounding territories. Political Zionism, on the other hand, as advocated by Theodor Herzl, Max Nordau and their colleagues, sought a politically-recognised Jewish national home, believing it was

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49 Here, I borrow the title of Hertzberg’s excellent 1976 anthology, The Zionist Idea.
necessary, desirable, legitimate and eventually institutionally effective as a means of ensuring secure, productive and thriving refuge. A fusion of the two, the synthetic Zionism of chemist and diplomat Chaim Weizmann carried the day and shaped the movement from 1907 onwards (Shlaim, 2001: 6). A good portion of the land and water of Palestine would be targeted for continued Jewish settlement in pursuit of the broader ambition of Jewish self-determination in biblical Zion.

Rooting Jewish Historical Victimisation

The experience of Jews, historically, both in and out of the Middle East, has coalesced into a perennial and catalytic narrative of persecution and victimisation. Originating in Pharaonic Egypt and nourished over millennia, it informs the contemporary narrative of hydrohegemonic necessity.

The Jewish people believe that around the 12th century BCE, Israelites were enslaved in Egypt and then liberated from bondage with Divine assistance before going on to build an independent nation in Zion. This foundational story brings to light two central and entwined Jewish themes that have prevailed ever since: the importance of cultural freedom and of political independence. A third foundational theme, that of perpetual insecurity, is made evident in the demise of the original Jewish kingdoms and the ensuing centuries-long exile. With the original expulsions from Judea and Samaria in the 6th century BCE and then again in the 1st century AD, the Jews were scattered across the planet, from Central Asia to Europe. But for a brief Golden Era in 11th century Cordoba,
Spain, Jews were vilified by Muslim and Christian Crusaders throughout the Middle Ages.

Centuries later, 18\textsuperscript{th} and 19\textsuperscript{th} century pogroms against Eastern European, Russian and even German Jews challenged the once-held premise that limited assimilation would pre-empt, even eliminate, anti-Semitic organisation and violence. Notably, the 19\textsuperscript{th} century Haskalah Jewish enlightenment movement of Western Europe failed to inoculate and protect the community against such anti-Semitism. This was deeply dismaying to German and other European Jews who imagined themselves as belonging to a Western, European intelligentsia as insiders.

In France, the Dreyfus Affair of 1894, and subsequent attacks by the newly formed French Anti-Semitic League, deeply threatened the Jewish community’s French and European identity. It had until then imagined itself as belonging to the French nation, having been emancipated in 1791 as part of the French Revolution’s cascading logic of rights (Hunt, 2007: 28, 186) Across the Mediterranean in Palestine, the Jews were considered \textit{dhimmi}, non-Muslim subjects of the Ottoman empire, tolerated and protected, though not masters of their domain. It certainly seemed to the Jews themselves that they were everywhere outsiders, a story made politically salient with the emerging Zionist movement.

Rooted in, and offering counterpoint to the operation of such direct, cultural and structural violence against Jews, Zionism emerged as a movement seeking to
secure the Jewish people through the establishment and continued operation of
a Jewish state, first imagined, then materialised and (re-) produced. The
principal subject and beneficiary of the state has fundamentally been imagined
to be the Jewish community, as a whole and in its component parts, whether
originating in the Middle East or elsewhere.

Eminent Zionist political leader, Theodor Herzl, argued convincingly in his
address to delegates of the first Zionist Congress, at Basel, Switzerland in
1897, that the Jews should create a condition of “rights, and not of
toleration…[nor] ‘protection’.” (Herzl, 1897 in Hertzberg, 1976: 228) His address
articulated a perceived desire for the establishment of a legal and recognised
structure, constructed with vision, intention and organisation, to respond to the
articulated needs of the Jewish people as a collectivity.

Grounded in late-19th and early-20th century political historicity, all resources
found within the territory of modern, Westphalian sovereign states were
deemed available for national designation, legislation, use and development
(Mayall, 2000; Mayall, 1992; Mayall, 1984). In 1882, Leo Pinsker, Russian
territorial Zionist, argued that land for the Jews must be considered inalienable
national property, in Jewish equality with other nations (Pinsker, 1882 in
Hertzberg, 1976: 197) Herzl surely appreciated the implications of his
arguments within historical context, leading as they did to the creation of the
Jewish State50.

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50 Herzl had imagined the creation of a Jewish state in the form of a novel, *Altneuland*,
published in 1902.
This vision, built upon an idea of “guaranteed autonomy” (Herzl, 1896 in Hertzberg, 1976: 222) would finally win the day under the thick and deadly cloud of World War II. At the 1942 Biltmore Hotel Extraordinary Zionist Conference, as the attempted annihilation of European Jewry was underway (as foretold by Hitler; see Hitler Speech, 1939), a majority of Jewish delegates voted in favour of transforming Palestine into a Jewish Commonwealth (Shlaim, 2001: 23). In pragmatic terms, the Jews would go on to express their favour towards the 1947 UN Partition Plan (UNGA Resolution 181), which would create the political legitimacy of Israel as a state, on some 55 percent of Mandate Palestine.

In projecting a ‘return’ to Zion for the Jewish world, the Zionist movement sought to create political power that was closely tied to the productivity of its land and water, cognisant that human settlement required both. Water informed the national idea in its quality as a basic human need and as an essential input for agriculture, industry and thus productivity. Without significant water resources, land could not support extensive human settlement and development. The early Zionists recognised and acted upon this knowledge, determined to create a secure Jewish national home in a redeemed biblical Zion. What is today recognisable as a justificatory narrative of hydrohegemony is fundamentally rooted in such foundational ideas and practices of the Zionist movement.
Hydropolitical Origins of the Israel-Palestinian Conflict

The discursive and political struggle between Zionists and Palestinian Arabs over the control, management and development of water resources was really launched in the wake of World War I. During this period, the Zionist movement used and developed water resources in ways that would later establish Israel’s historical rights to the region’s surface and ground waters. Such historical rights would be anchored not only in Zionist (and then Israeli) use and reliance upon specific water resources, but also in building infrastructures for their management.

As the Zionist movement endeavoured to promote the construction of a Jewish national home, i.e. a modern Westphalian state in Palestine, local Palestinian populations and Arab leadership from across the Middle East increasingly resisted its cultural, political and hydropolitical implications. An anti-Zionist and nascent pro-Palestinian independence movement organised itself in vocal opposition; organising conferences, establishing alliances\(^{51}\), writing letters and other forms of appeal to regional and great powers, and engaging in popular activities.

\(^{51}\) In 1919, the Palestinians held a first National Congress, issuing their demand for an independent Palestinian state to be federated with Syria. Heading the Congress, Pasha Aref Dajani would also lead the ‘Palestine for the Palestinians’ movement which emerged that same year. In subsequent years, a central Palestinian leader of pan-Arabism in the 1920s and 1930s, the Grand Mufti of Jerusalem (1921-1937), Hajj Amin Al-Husseini, advocated for, and mobilised his resources in construction of an Arab Palestine (affiliated with Syria), and in opposition to Zionist and Jewish aspirations (Shlaim, 2001: 10). He established mutually supportive relationships with the Society of Muslim Brothers (for whom he provided political connections) and with the German Nazi Party (offering Islamic support for its programme). As president of the Arab Higher Committee, he forcefully stated in 1936 that the “Arab nation” would “not agree… to the establishment of a National Home for the Jews in this Moslem Arab Holy Land.” (USHMM Website)
rioting and rebellion against the enabling British power. During this time, several publications espoused an anti-Zionist editorial line, including al-Karmil (1908) and Filastin (1911). From this period onwards throughout much of the 20th century, Israel’s national self-determination programme and its corollary hydropolitical imperative have been a source of Arab and Palestinian contention and contestation. This relational dynamic has fundamentally shaped the Israel-Arab and the Israel-Palestinian conflicts.

**Establishing Israel’s Historical Water Rights**

In the era before British Mandate Palestine, Palestinians were generally reliant on spring and well water for their needs, using traditional infrastructures for water delivery and irrigation. Until Israel’s 1967 occupation of the West Bank, Palestinians drew water from the Jordan River as well. With an estimated 150 pumps, they extracted some 30MCM from the river annually. Up until and including the Jordanian period, water was predominantly managed at the local level. Thus, rules and practices of water management varied across Palestine, reflecting clan and family priorities and values (Trottier, 2007: 116). Water was perhaps most generally sold on the basis of time at the well, rather than by volume. This practice persists as one dimension of the diverse water management arrangements of the West Bank and Gaza Strip today.

In the early decades of Zionist settlement, water flowed adequately to the Yishuv (the pioneering, Jewish settler community). The Jewish population was

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52 “Between 1886 and 1914 at least eight of the forty or so Jewish colonies were attacked by local peasants.” (McDowell, 1995: 11). Subsequently, anti-Jewish and anti-Zionist sentiment was expressed as follows: 1920 Palestine Riots – attacks on Jewish settlements, 1921 Palestine Riots – attacks in Jaffa, 1929 Palestine Riots – massacres of Jews in Jerusalem, Safed and Hebron, and 1936-1939 Palestinian Revolt.
relatively small, though growing, and natural water was seemingly abundant. Zionist farmers identified springs and developed wells for their own use throughout Palestine. Notably, early Zionist farmers were using significant waters from the Rosh Ha’Ayin springs which discharged water from the Western Mountain Aquifer into what is today ‘Israel proper’. In the northern Jezreel Valley, also in Israel proper, Jewish pioneers developed the Ma’ayan Harod Springs of the North-Eastern Aquifer in the 1930s. Early use of these waters continues to be a foundational basis upon which Israel claims historical rights to water of the Mountain Aquifer, contesting the claim that these are exclusively Palestinian waters. The development of Israel’s narrative of historical rights to the region’s water builds from here.

The political vision of a Jewish Palestine claimed and sought abundant resources, for domestic, agricultural and industrial use. As such, from the early Zionist period through to 1947 partition, significant Jewish national activity aimed at accessing, securing and managing water as a national right of the Jewish people. Hydropolitical claims-making, engagement and institution-building became the order of the day. With this in mind, in the aftermath of World War I, at the 1919 Paris Peace Conference, the World Zionist Organisation (WZO) submitted a Memorandum to the conference’s Supreme Council in which it argued the case for what it imagined to be the ideal physical, political and productive contours of an eventual Palestine Mandate (Lowi, 1993: 40):

The economic life of Palestine, like that of every other semi-arid country depends on the available water supply. It is, therefore, of vital importance not only to secure all water resources already feeding the
country, but also to be able to conserve and control them at their sources…

Its submission continued, “Palestine must have its natural outlets to the seas and the control of its rivers and their headwaters.” (Lowi, 1993: 40) The borders of Mandate Palestine were imagined, in significant ways, through a lens of both centralised control and expanded productivity of water resources. Though unheeded in its entirety, the Zionist conception of Palestine would inform the British Mandate’s hydropolitical boundaries. These would include much of the Jordan River, Lake Tiberias, a narrow territory east of the lake known as the Adasiye/Yarmouk triangle, and the Dead Sea. They would also contain the high quality freshwaters of the Mountain Aquifer.

Assuming its leadership role, the WZO pursued the creation of hydropolitically productive institutions with the help and leadership of distinguished Jews from around the world. These institutions included the Jewish Colonization Association (1891); the Jewish Colonial Trust (1899) and its subsidiary, the Anglo-Palestine Bank; the Jewish National Fund – Keren Kayemet Le Israel (1901); the Palestine Land Development Company (1908); Keren Hayesod – the United Israel Appeal (1920); and others. These bodies were committed to making financial arrangements for the purchase of land by Jews in Palestine. They served also to ensure that water was available to grow the land of Israel productively.

Water concessions were secured by the Zionist movement from the British Mandatory Government. In 1920, Jewish engineer Pinhas Rutenberg secured
exclusive access to the Yarkon River (Shuval, 1993: 41). This water enabled the development of Jewish agriculture through irrigation in the Tel Aviv and Petah Tikva areas. Numerous wells were also drilled for exclusive Jewish use in the Hadera area, accessing water from the Western Mountain Aquifer.

In 1926, the Zionist movement secured “exclusive rights for seventy years to harness the Jordan and Yarmouk waters, whether from the Palestinian or the Transjordanian side, for the generation of hydro-electric power” through the Palestine Electric Corporation, itself founded by Pinhas Rutenberg (Lowi, 1993: 42; see also Isaac, 2000: 18-19). Transjordan and its farmers were permitted to harness excess water from the Yarmouk, beyond the claimed needs of the Zionist-governed corporation. By 1944, the Palestine Electric Company had dammed Lake Tiberias, diverted water to a power station, and was producing 173 million kiloWatt-hours (kWh) of electricity annually (Sosland, 2007: 21-24).

In 1917, the Balfour Declaration stated that the British government viewed with favour the establishment of a Jewish national home within the territory of Palestine. Two decades later, in 1937, in a move that fundamentally shifted the region’s political imaginaire, the British Peel Commission (1936-37) recommended partitioning Palestine (Ben-Porat, 2006: 100-102; Shlaim, 2001: 21). Shortly thereafter, this recommendation was rescinded by the British Government following the Woodhouse Commission’s (1938) conclusion that the territory and resources of Palestine could not support two national communities.
With the Peel Commission and subsequent Woodhouse Commission, the British Government commissioned a hydrographic survey of Transjordan from Michael Ionides, an irrigation engineer who was Director of Development in the Transjordan Administration. A central finding of his 1939 *Report on the Water Resources of Transjordan and their Development* concluded that land development in Transjordan required extensive irrigation in the form of massive water infrastructural development on the Jordan and Yarmouk Rivers, with extensions right down to the Dead Sea (Lowi, 1993: 43-46). Though his recommendations focused on the East Bank of the Jordan River, they would prove pivotal and far-reaching in terms of the political significance of integrated water development in the region. The report recommended hydropolitical cooperation between the political bodies in the region on multiple levels.

Several other hydropolitical reports about the Jordan River Basin would be commissioned by various regional and international actors, with implications for Israel’s claim to regional water resources and rights. In 1944, American soil conservationist Walter Clay Lowdermilk published a book entitled *Palestine Land of Promise*. Solicited by the Jewish Agency for Palestine, Lowdermilk proposed the creation of a Jordan Valley Authority to oversee irrigation on both sides of the Jordan River, to divert water from the Upper Jordan to the coast and Negev regions, and to create a Mediterranean-Dead Sea canal for the generation of hydroelectricity (Lowi, 1993: 45). Lowdermilk’s vision incorporated the headwaters of the Jordan River as well as the Yarmouk River for managed integration.
The vision advanced by Lowdermilk was further developed and operationalised by American irrigation engineer James Hays, also a consultant for the Jewish Agency. His report, *TVA on the Jordan: Proposals for Irrigation and Hydro-Electric Development in Palestine*, published in 1948, mapped out the vision’s technical details. It advanced an eight-stage plan, which included the following principles (adapted from Sosland, 2007: 31):

- Use of Jordan River water outside the catchment basin;
- Increased use of the Coastal Aquifer;
- Hydropower generation on the Hasbani River;
- Equal sharing of Yarmouk River waters between Israel and Jordan;
- Building a Mediterranean-Dead Sea conveyance for the generation of hydroelectricity; and
- Reclaiming the marshy Huleh valley.

The report was well received by the Jewish Agency. It would eventually form the basis both of Israel’s 1952 seven-year water plan, the country’s first, as well as its NWC system. The Arabs largely rejected both its premises and proposed developments.

On the international scene, the US and Britain established a joint Anglo-American Committee of Inquiry on Palestine (AACI) in 1945 (See AACI Website). It was the immediate aftermath of the Holocaust, and the future of Palestine had not yet been determined. The Zionist movement lobbied the US and British Governments on water and other issues, managing to gain political favour but little financial support (at least, not until after Israeli independence). On the other hand, “there is no record of Arab parties lobbying the United States or even presenting their own water plans before the Anglo-American Committee of Inquiry” (Sosland, 2007: 24).
In its 1946 report (AACI Website), the Committee advanced recommendations that recognised Palestine as a legitimate safe haven for world Jewry, which they fallaciously believed would be acceptable to regional Arab and Palestinian leaders. The report called for Palestine to become a bi-national state where neither Arab nor Jew dominated, a proposition acceptable to a small minority of Jews that included the philosopher Martin Buber and Hebrew University President Dr. Judah L. Magnes (Caplan, 2010: 106-107). The Committee also advanced a hydropolitical vision of Palestine rooted in regionally-integrated water development. In the end, the Arabs and Palestinians rejected the notion that Jewish self-determination in Palestine should stem directly from the ashes of the Holocaust. And, the Jews were largely opposed to the prospect of sharing power with the Arabs and Palestinians. A power struggle was clearly in the making, if not already underway between the Jews and Arabs on the fate of their relations in Palestine.

As during the British Mandate period, water would remain a central domain of political contestation between the newly-independent State of Israel and the Palestinians (and the Arabs more broadly) in the Middle East. Developments in water would shape, at least in part, broader political relations between them. Thus, the forthcoming section considers the co-constitution of nationally-specific water developments and broader political relations between Israel and its neighbours, from 1948 through the regional water negotiations of the US-mediated Johnston process. It does so in acknowledgement of the historical fact that integrated water development (which was proposed by the AACI) has
frequently been advanced and supported by global powers. Integrated water resources management would also be explored meaningfully and expeditiously by the newly-independent State of Israel. It is to Israel’s national hydropolitical imperative and its strategic pursuit of transboundary integrated water resources management that this study now turns.
Israeli Independence and Aftermath

Now you have this little river called the Jordan, which is part of our ancient history, and which is one of the historic and geographic symbols of our country. You know what kind of stream it is, very limited. Every drop of its water is precious, every drop of it is part of our future.

– Israeli Prime Minister Moshe Sharett, 1955 speech during third round negotiations under the mediation of US envoy Eric Johnston

After the unilateral British pullout from Palestine, the region became engulfed in a multi-staged conflict between Zionists and Arabs, between those that recognised the UN Partition Plan and those that opposed it. Israel declared independence on May 14, 1948 and then fought to protect and shape its future. Throughout 1949, the new State of Israel signed US-brokered and UN-guaranteed armistice agreements with surrounding Arab states. It would take much longer for peace agreements to be signed, and then only with two of its immediate neighbours (Egypt in 1979, Jordan in 1994).

As predicted by Michael Ionides, water would be a central factor in the new state of Israel’s relations with the Arabs. Most water resources in the region either formed or crossed international borders, becoming the subject of ownership and control disputes among riparians. Symbolically and institutionally, water became a domain for the establishment and/or contestation of recognition and legitimacy, encapsulating the political culture of Israel-Arab relations.

It was also during this time that Israel established two central narrative and discursive elements that would inform its eventual hydrohegemony over the
Palestinians. The first maintained that Israel should always rely first on itself, thus pursuing a national hydropolitical imperative on the matter of water resources management and development. The second saw Israel investigating and pursuing opportunities for the strategic integration of water resources management wherever it seemed strategically wise to do so. A discussion of each of these points is pursued below.

Israel’s National Hydropolitical Imperative

The outcome of the 1948 Israel-Arab War (i.e. Israel’s War of Independence, the Palestinian Nakba/Catastrophe) saw Israel gain significant territorial and hydrological control throughout much of post-Mandate Palestine. Yet, control of these resources did not go undisputed. The 1949 armistice agreements included provisions on water resources. These (and other) provisions were subject to the divergent interpretations of Israel and the Arab states, shaping relations between them for decades to come.

Israel interpreted the armistice agreements as granting it full sovereignty over territory and water resources either allocated by the 29 November 1947 UN Partition Plan (UNGA Resolution 181) or secured during the recent war, pending final peace agreements (Shlaim, 2001: 57). These water resources included the Dan River (one headwater of the Jordan), Lake Huleh, Lake Tiberias, and important segments of the Lower Jordan River and the Dead Sea. Israel planned to use and develop secured water resources throughout its national territory, whether in or out of basin. Israel’s first 7-year national water program (1952), based on the Lowdermilk-Hays recommendations, outlined an
adaptive, nationally integrated vision of Israeli water management and development. Under the leadership of its Prime Minister, David Ben-Gurion, Israel advanced the position that sovereignty over water resources were intimately entwined with national territorial arrangements. It is understood that Ben-Gurion believed in Israel’s exclusive right to the Jordan River and Lake Tiberias, and that these water sources would enable Israel’s development (Shlaim, 2001: 74). As early as 1949, the US government of Harry S. Truman guaranteed a US$100 million loan with the Export-Import Bank to support Israel’s water development and population settlement efforts (Sosland, 2007: 26).

Drawing on these hydropolitical resources, Israel intended to provide water to the Galilee in the north, to the coastal plain in the west, and to the Negev in the south. All of these regions were targeted for continued population settlement, a priority now possible given that water was secured. Arab states took issue with this position, noting that final status arrangements were still unresolved. They argued that water resources could not be taken or used out of basin, especially where the needs of in-basin populations were not being met. This debate was understood in zero-sum terms at the time. To an important extent, it hinged on interpretations of the just use of water resources, as related to the individual and national needs and rights of population groups. It also played to symbolic and existential concerns, related to both the legitimacy of Israel and to

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53 Israel’s 7-year plan rejected the assumption of Ionides’ conclusions (reiterated in a 1951 MacDonald Report for Transjordan) that Jordan River water be maintained in-basin (Sosland, 2007: 28).
recognition of the human and political rights of local and displaced Palestinian Arabs.

In hydropolitical terms, Israel maintained a perspective that prioritised the Jewish population throughout its national territory, both in and out of basin. The Arabs argued that water should first satisfy the needs of populations in-basin, notably East and West Bank Arabs, raising concerns about the legitimacy of ever moving water out of basin. This debate would later find its head in negotiations over the future of regional water resources under the mediation of US envoy Eric Johnston. As hydropolitical tension mounted, Israel moved forward with developing its water poor regions, with conflictual implications.

**Early Unilateral Hydropolitical Developments**

During its earliest years of independence, Israel launched three significant water development initiatives. The first involved developing a water pipeline from the Yarkon River to the Negev. Completed in 1954, it conveyed some 200MCM/yr of water drawn from the Rosh Ha’Ayin Springs (Shuval, 1993: 42).

Israel's second project set its sights on the drainage of Lake Huleh and the Huleh Marshes in the north. Doing so, it would tackle the problem of malaria and reclaim 15,000 acres of what it perceived as arable land for cultivation. This lake bordered the Israel-Syria Demilitarised Zone (DMZ), a territory whose status had yet to be finalised. At first, Israel embarked on drainage works within Israeli-owned land. When Israel also undertook work on Arab-owned land in 1951, Syria protested to the Syrian-Israeli Mixed Armistice Commission (MAC).
In this dispute, Israel appeared aggressively to assert its sovereignty over territory and water development in the DMZ, leading to a military confrontation and a diplomatic scuffle that persisted between the countries for years.

Thirdly, in Fall 1953, Israel launched a hydro-electric initiative at the B’not Ya’acov Bridge, with works undertaken in the DMZ. Jordan protested to the United Nations Security Council (UNSC), without immediate political traction. Syria followed suit through the MAC and eventually received a UN Truce Supervision Organisation (UNTSO) ruling demanding that Israel cease its construction. It took a subsequent US threat to withhold its Mutual Security Act (MSA) support for Israel, as well as a US-initiated UNSC Resolution for Israel to comply with the ruling (Sosland, 2007: 37).

During negotiations over the fate of the DMZ with Syria in 1953, Ben-Gurion consulted Simha Blass, Head of Israel’s Water Planning Authority. Blass gave his opinion that final territorial arrangements needed to reflect Israel’s water management and development plans, and thus ensure its control and sovereignty over the Jordan River basin. Blass sought specifically to ensure Israel’s control of the Banias River. Negotiations over the DMZ failed on this very point (Shlaim, 2001: 76), and an opportunity to move forward on Israeli-Syrian peace negotiations was lost. In this case, unresolved water issues, reflecting Israel’s hydropolitical imperative, prevented agreement on wider conflict dynamics and possible peacemaking.
Considering Integration of Water Resources Management

As early as 1949, Jordan and Israel assumed they would need to both recognise, and then adapt to each other’s sovereign right to water. Such recognition translated into the pursuit of different though in many ways parallel priorities. Both Israel and Jordan declared unilateral plans to develop the Jordan Basin in 1951.

Jordan sought a national water development plan (along the lines of the ‘Ionides’ scheme), open to the idea of an eventual Israel/Jordan integration, premised on Jordan River water remaining in-basin. The Jordanians were concerned with meeting the needs of Arab populations on the East and West Banks of the Jordan. Towards this end, the Jordanians hired the services of British engineers, Sir Murdoch MacDonald and Partners, who outlined their irrigation plan in a 1951 report entitled Report on the Proposed Extension of Irrigation in the Jordan Valley.

Israel sought to integrate its water resources nationally for collection and distribution anywhere within the state (the Lowdermilk-Hays plan), as per the priorities of national self-determination. Israel’s 7-Year Plan was crafted by a special water department within the Ministry of Agriculture, setting the stage for five decades of agriculturally-directed water management within Israel.

Simultaneously, Israel went about investigating regional water arrangements that might allow it to access greater quantities of water. In so doing, Israel investigated the limited integration of water resources management with neighbouring states as a strategy for securing greater water as a resource as
well as regionally-legitimated political recognition. In this sense, peaceful relations might be rooted in the benefit-sharing stemming from a collectively and cooperatively managed expansion of irrigable land, both of the Jewish state and of regional states.

On the ground, an elaborate series of internationally supported plans and negotiations ensued, first with the 1952 work of US engineer Charles Bunger, and then with the mediation of the 1953-55 Johnston Mission. Commissioned by both the US and the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), Engineer Charles Bunger with the US Technical Cooperation Agency (TCA) in Amman proposed a joint Syria-Jordanian dam on the Yarmouk at Maqarin to then feed an East Ghor canal in the Jordan Valley while producing hydroelectricity. It was premised on the need for Jordan to develop a water storage facility other than Lake Tiberias. In March 1953, UNRWA formally moved the plan forward, signing an agreement with Jordan. In June 1953, Syria and Jordan signed an agreement for its implementation. However, Israel claimed riparian status to the Yarmouk and expressed reservations about the initiative. In so doing, it sought to initiate political dialogue with neighbouring Arab states, while investigating the possibilities for a regional integration and management of water resources (Sosland, 2007: 29).

As early as 1953, the US recognised water as a core issue between Israel and the Arabs. In a May 1953 position paper, the Department of State expressed the following (See ftnt 8, Lowi, 1993: 82):
It appears equally clear [to the US] that along with other outstanding issues of the Palestine dispute – compensation, repatriation, Jerusalem, boundaries – there is a fifth element, water, which must be considered as we approach a final settlement.

Shortly thereafter, in August 1953 the engineering firm Charles T. Main Inc. of Boston, commissioned by the Tennessee Valley Authority (TVA), submitted its Unified Main Plan to UNRWA and the US government. It proposed the following (adapted from Lowi 1993: 83):

1. Prioritising in-basin use of water resources;
2. Constructing diversionary canals from Jordan headwaters to irrigate land areas of the Upper Jordan;
3. Using Lake Tiberias as a regional floodwater storage reservoir;
4. East and West Ghor canals for Jordan Valley irrigation; and
5. Developing the Maqarin Dam for hydro-electric purposes only, generating some 210 million kWh.

The Unified Main Plan was premised on disregarding the constraining power of political boundaries in an effort to ensure an efficient use of limited water and hydroelectric resources.\footnote{54} Funding for this scheme, at a total cost of about US$121 million, was to come mostly from the US. These plans set the stage for the negotiations pursued by the Johnston Mission.

\textit{The Johnston Process}

The regional political context was tense in the early 1950s. Israel and Syria were at loggerheads over the DMZ, with numerous ‘border clashes’ and hydropolitical confrontations like the 1953 B’not Ya’acov incident. Just a few years earlier, Zionists and Arabs had fought a bloody war that had profoundly

\footnote{54} As an interesting note, it was understood back then that removal of water from the Jordan River system in its upper regions would deprive water from the Dead Sea, with effects that would demand attention at a later time (Scherr, 2007: 28).
altered the socio-political map of the Middle East. The recently established State of Israel both fought for its existence while appearing as a foreign implant to Middle Eastern Arab society. And hydropolitical values and priorities were not necessarily easy to reconcile between the now-recognised riparians.

Against such an imposing context, the US attempted to broker a comprehensive surface water agreement between Israel and the Arab states, as a form of “tactical functional cooperation” (Sosland, 2007: 35). The US empowered its envoy, now-ambassador Eric Johnston, chairman of the Advisory Board for International Development, to mediate the hydropolitical dispute, involving Israel, Syria, Jordan and Lebanon.

Israel agreed to external intervention on Middle Eastern water issues for two principal reasons. First, it would provide a US-supported opportunity for comprehensive hydropolitical negotiation, given that Israel set its sights on water resources throughout the region. These included waters of the Upper Jordan River, the Yarmouk, some groundwater, and also the Litani of Lebanon. Next, Israel sought strategic opportunities for regional cooperation with willing neighbouring states. Strategically integrating the management of water resources might provide the context for extended and expanded cooperation, and thus recognition and legitimacy.

During water negotiations, Israel’s Foreign Minister Moshe Sharett, also head of delegation to the Johnston Mission and later Prime Minister, articulated that "regional co-operation was desirable, both for the optimal use of limited water
and as a possible breakthrough to a peace settlement…” (Lowi, 1993: 87) During this time, US Secretary of State, John Foster Dulles, was pushing for settlement between Israel and the Arabs. He did so fully conscious of the link established between acceptance of the proposed Johnston Plan and recognition of Israel (See fn, 5, Ma’oz, 2006: 12). While distancing himself from Dulles’ overt political agenda, Johnston himself felt that a water and development plan for the Jordan Valley, acceptable to all relevant regional actors, “may open the way to eventual rapprochement between the parties to the Palestine dispute.” (Sosland, 2007: 40) The technical and political dimensions of Israel-Arab water management and development would remain interwoven.

The US attempted to situate itself as an even-handed broker between the riparians, also taking into consideration the concerns of displaced Palestinians. While seeking to ensure that Middle Eastern parties made full and efficient use of water resources through sound technical development, it also sought an “equitable” plan, “accepted by all the countries having an interest in or now using the waters of the River system.” (Sosland, 2007: 39) It also saw an opportunity to improve Palestinian refugees’ “social and economic status without impairing their rights either to repatriation or compensation.” (Sosland, 2007: 39)

Syria had consistently been skeptical, even critical of efforts to integrate Arab water and resource governance with Israel. It saw in the Johnston process an attempt to secure Arab recognition of Israel without adequately addressing
underlying conflict issues, including borders and refugees. According to General Edson Burns, chairman of the Syrian-Israeli MAC: “Syria also opposed anything implying recognition of Israel’s right to exist.” (See ftnt 7, Ma’oz, 2006: 12) On the other hand, Jordan was discretely favourable to integrating Arab water resource management with Israel. As a seriously water stressed country with a recently established Palestinian refugee population, it was prepared to explore opportunities for meeting its national challenges in collaboration with a discrete Zionist ally. It would not, however, break ranks with the Arab world’s refusal to accept the Johnston Plan politically.

Over more than two years and four trips to the Middle East, Eric Johnston shuttled across the region, enabling negotiations over possible water allocations acceptable to all parties. The range of possibilities that were entertained was vast, as encapsulated by the different proposals\textsuperscript{55}. The original 1953 Johnston (Unified Main) Plan allocated 394MCM to Israel, from a total of 1.213BCM, integrating neither Lebanon nor the Litani into this proposed arrangement. At the end of his mission, in 1955, Johnston presented his Revised Unified Plan, allocating some 425MCM to Israel from a total of 1.089BCM in an intricate and detailed arrangement with the other parties (known as the Gardiner Formula; see Lowi, 1993: 98 and Table 4.4 in Lowi, 1993: 99). Jordan’s allocation amounted to about 500MCM and Syria’s

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\textsuperscript{55} Israel favoured the 1954 Cotton Plan for the Development and Utilization of the Water Resources of the Jordan and Litani River Basins. It envisaged the allocation of 1.29BCM to Israel, including 400MCM of Litani river water, based on an annual total of 2.3457BCM of managed water (with a 300MCM Litani River allocation to Lebanon). The Arabs countered with their own 1954 Plan for Development of Water Resources in the Jordan Valley. It allocated 270 MCM to Israel, based on a total of 1.333BCM that did not include Litani River water. The Arab Plan argued for water to remain in-basin while the Cotton Plan allowed for out of basin use in Israel.
132MCM. In the end, Johnston proposed the integration of Lebanon to the order of 32MCM, this water coming solely from the Hasbani River, a Jordan River headwater.

Though never politically ratified by any of the parties, the Johnston Revised Unified Plan saw its technical provisions largely accepted by Jordan and Israel, as per their own interpretations. In late September 1955, the recently formed Arab League Technical Committee approved the Revised Unified Plan based on the “US-Arab Memorandum of Understanding” (as distinct from the US-Israel “Draft Memorandum of Understanding”\(^6\)), recommending it to the Arab League Political Committee. The Political Committee neither rejected nor accepted it out of hand, having “decided to instruct the Experts’ Committee to continue their task until a decision is reached which would safeguard Arab interests.” (Lowi, 1993: 103) Such a decision was never politically forthcoming.

At an 11 October 1955 meeting of the Arab League Council, Lebanon and Syria reportedly advocated diverting the Upper Jordan away from Israel and towards either the Yarmouk or simply into the Mediterranean (Sosland, 2007: 61). Finally, on 26 October 1955, the Arab Higher Committee condemned the Johnston Plan (Sosland, 2007: 45). While regional integration had for the most part failed, strategic limited integration between Israel and Jordan had been initiated successfully, with long-term positive repercussions on their bilateral relations.

\(^6\) In fact, the Johnston Plan actually comprises two slightly different documents as interpreted by the US, Israel and the Arabs. For instance, the ‘Israeli’ version of the Johnston Plan, the “Draft Memorandum of Understanding” between Israel and the US, does not specifically commit water resources management to UN supervision as does the “US-Arab Memorandum of Understanding”. Also, discrepancies in water allocations from the Jordan and Yarmouk rivers to both Israel and Jordan were evident, though deemed “insignificant” by Eric Johnston on 13 October 1955 (Sosland, 2007: 49; see also fn 160, Sosland, 2007: 227).
Pursuing National Hydropolitics and Strategic Integration

While the decade from the 1956 Suez War to the 1967 Six-Day War was one of escalated conflict, both Israel and Jordan generally respected the terms of the Johnston Revised Unified Plan. Israel and Jordan recognised each other’s sovereignty over their water resources, as per their shared understanding, and the two states established tacit, even covert cooperation that would effectively build progressively for decades.

Conversely, throughout this period and notably during the years of the United Arab Republic (UAR, 1958-1961), Israeli-Syrian relations remained tense. Hundreds of skirmishes over fishing rights in Lake Tiberias, over DMZ developments and over Israel’s north-south water conveyance project were recorded (Ma’oz, 2006: 19). Of note, massive Israeli raids at Twafiq (1960) and Nuqaib (1962) have been associated with Syrian attacks on water works undertaken in the northwestern quadrant of Lake Tiberias, an area under Israeli sovereignty (Ma’oz, 2006: 17).

Amidst this tension, Israel moved to make water national public property through its 1959 Water Law. The Water Law’s foundational elements were the following (Trottier, 2007: 116):

• Law 5715-1955 (1955): on drilling
• Law 5716-1955 (1955): on metering
• Law 5718-1959 (1957): on drainage and flood control

Notwithstanding eventual Jordanian, Syrian and Israeli violations of its terms (Haddadin, 2006: 41-44), in 1964, Israeli Prime Minister Levi Eshkol stated: “Israel would pump from Lake Tiberias within the limits of quantities allotted to it under the Johnston Plan.” (see ftnt 16, Haddadin, 2006: 38).
Brought together in 1959, these enabled the state’s governing bodies to allocate water as per national priorities. Institutions created as a product of the Water Law included the Israeli Water Commission (renamed the Israeli National Authority for Water and Sewage in 2007, or more succinctly, the Israel Water Authority (IWA)) with water allocation and enforcement powers. Removed from the private and communal domains, water was thus constituted into national political fact.

At the same time, cognisant of the political distance between Israel and its neighbours in the wake of Johnston negotiations, the US pursued and supported an integrative tripartite hydropolitical strategy for the Jordan Basin. First, the US pursued a strategy in “support of the development of segments of the Jordan River system” along the lines of the Johnston Plan (Sosland, 2007: 65). Second, it sought to dissociate the water and refugee issues, intent on transforming water into a principally technical matter. This strategy would fail, primarily because the Palestinians and their regional allies and sponsors sought to maintain water as a central political fact. The third component of the US strategy was to promote an “equitable division” of Jordan Basin water resources (Sosland, 2007: 65). In so doing, the US was implicitly recognising that Jordan Basin water remained a political matter requiring careful navigation. US mediation efforts on several water-related conflagrations as well as support for both the Israeli NWC and Jordanian East Ghor Canal reflect this concern. The same is true of its efforts to create balance in its financial support of the water development initiatives of Israel and Jordan (Sosland, 2007: 82).
In 1964, Israel’s NWC came online after about 6 years in development. It was designed to convey some 320-350MCM/yr from Lake Tiberias, where an extraction pipe was now sited entirely within Israel, to locations throughout Israel’s northern Galilee, its western coastal regions and its Negev in the south. Areas for agricultural cultivation expanded from 1,600 km$^2$ in 1946 to more than 4,000 km$^2$ by 1980 (Amro, 2006: 26).

In 1967, the Jordanian East Ghor Canal$^{58}$ came online in its entirety nine years after being launched, as the centerpiece of an intended Greater Yarmouk project. It conveyed water on the East Bank of the Jordan River, throughout the Jordan Valley. With the 155MCM East Ghor Canal, funded largely by the US, Jordan would be able to provide adequate quantities of quality water for agriculture and human settlement. This played an important part in expanding Jordan’s absorptive capacity, given the sizeable and growing Palestinian refugee population it now hosted. At the time, Jordan refused to publicly acknowledge its growing covert water cooperation with Israel$^{59}$.

$^{58}$ It was later renamed the King Abdallah Canal (KAC).
$^{59}$ The East Ghor Canal was developed, in official Jordanian terms, to accomplish the following (Hashemite Kingdom of Jordan, 1962: 5-8):

a) Establish Jordanian presence and precedence in Jordan River development;
b) Prevent the ‘loss’ of fresh water and the establishment of a right to water;
c) Develop, innovate and expand the agricultural sector;
d) Decrease food imports and increase food security;
e) Increase water security for farming sector predominantly [sic];
f) Promote employment;
g) Support land redistribution agenda; and
h) Promote the Jordanian and Arab economy more generally.

Interestingly, in the official document issued by the Hashemite Kingdom of Jordan (Hashemite Kingdom of Jordan, 1962), designed to address questions and concerns of Jordanians about the implications of water development in the region, there is no reference to Israel or Israelis. Reference is made to “Jews” and to “occupied Palestine”.

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Israel’s NWC was financed by the US through the Development Loan Fund to the tune of US$15 million. To receive this financial backing, in 1958, Israel agreed to move the uptake diversion from the controversial B’not Ya’acov Bridge location. The US also provided a US$24.2 million loan guarantee from the Export-Import Bank in 1958, for water development outside the Jordan Valley. Additionally, US funding went towards developing a Beit Shean pipeline from Lake Tiberias. Overall, the US had insisted that its funding for Israeli water development remain unpublicised (Sosland, 2007: 70).

The early 1960s saw much hydro-insecurity in Israel and Jordan, both in terms of regional relations and amidst the directly affected populations of both countries. Throughout, the US played a key role in facilitating a progressively functional atmosphere, given that both Israel and Jordan had confirmed US support for their water development plans. Between 1955 and 1963, the US would provide Israel with about US$50 million and Jordan about US$13 million to develop and implement such plans (Sosland, 2007: 82). Throughout, the US helped broker cooperative arrangements between the parties.

In the summer of 1962, in the wake of the first phase of the Jordanian East Ghor Canal, a hydropolitical event at the Yarmouk/Adasiye Triangle resulted in Israel and Jordan both seeking external assistance towards resolving the issue. The following year, Wayne Criddle, chief technical expert from the earlier Johnston effort, was sent to the Middle East by the US State Department to
assist in ensuring that Jordan, at the behest of Israel, received its rightful share of Yarmouk River water\textsuperscript{60}.

Among its several, concrete and lasting accomplishments, this initiative enabled the release of greater quantities of Jordan River water to Jordan as per the Johnston allocations. It also resulted in a secret sharing of the Yarmouk River between Israel and Jordan during summer months from 1964 onwards, despite wider Arab world opposition. The following year, Jordan’s King Hussein and Israeli Foreign Minister (and later Prime Minister) Golda Meir held secret talks, reiterating both their respective commitments to the Johnston Plan and the shared objective of maintaining Yarmouk cooperation, as components of a wider commitment to each other’s security (See Meir, 1978).

\textsuperscript{60} Towards this end, the Criddle Formula was developed with Israel’s National Water Planning Authority (TAHAL) and its director, Ahron Wiener.
Constructing a Hydropolitical Struggle

Stemming from this broad range of unilateral and strategically integrated hydropolitical developments, Israel would serve a predominantly Jewish population as well as a minority population of “Arabs of Israel” (as per Israel’s Declaration of Independence), with municipal, industrial and agricultural water. The NWC could meet the supply requirements for 3 million people as well as some 170MCM/yr for agriculture. Israel took no direct responsibility for West Bank Palestinians, as they were under Jordanian jurisdiction. Further, Israel refused to acknowledge any direct responsibility for Palestinian marginalisation, unwilling to acknowledge that Palestinians were a national people with rights to self-determination. Such rights would have included national rights to water resources.

An Emerging Palestinian Threat to Israel

Within Israel, the NWC was celebrated as an achievement enabled by a broad range of Jewish institutions, building on Zionist ideation, produced by a Jewish state, further securing a Zionist inscribed future. In the Palestinian world, this was understood to mean that threat of ethnocide and politicide would be ever present and in motion. Palestine was literally being dissolved in Israel’s water, and the Palestinians were without a significant endogenous voice (Said, 1980).

A joint Arab-Palestinian resistance emerged in 1964 with the creation of the PLO. Under the tutelage of Egypt, the PLO was rooted in land while birthed hydropolitically. It was created in recognition of Israel’s ongoing transformation of Palestine through water-related infrastructural developments. Every drop of
water Israel secured would further structure the state’s presence and legitimacy over pre-1948 Palestine. As one of its earliest strategies, the PLO sought to arrest the hydrological reach of the Jewish state. Thus, the Palestinians emerged into a perceived threat to Israel, constitutive of a wider Arab threat to Jews and the Jewish self-determination project, both in general and hydropolitically.

To appreciate the hydropolitical motivations and practices of the PLO, it is necessary to look to the early 1960s, shortly after Israel’s NWC was described by Arab leaders in a BBC broadcast as “no less dangerous than the establishment of Israel in 1948” (Lowi, 1993: 133). Concerned by this latest development, the Arab League revived the water Technical Committee which had been created to engage with the Johnston Mission. Informed by this technical work, the Arab League perceived the NWC with grave concern, framing it as (adapted from Lowi, 1993: 119):

1) A violation of international law given its extra-basin diversion and use of water;
2) Undermining the human needs and political rights of basin Arabs, notably Palestinians;
3) Increasing the salinity of the Lower Jordan River, thereby increasing water stress in Jordan and its Palestinian areas; and
4) Having the net effect of increasing Israeli economic and industrial power through the Negev, enabling further Israeli settlement and human absorption overall in Israel.

Regional Arab leaders attempted to formulate a coherent political, notably hydropolitical, and defence strategy to respond to the perceived threat posed by this new development.
From 1961 to 1964, Arab League summit conferences of the Arab Kings and Heads of State were held intent on the formulation of a pan-Arab agenda for furthering the “struggle” to liberate Palestine from Israel. These meetings were primarily focused on the twin concerns of water development and the Palestine Question. Israeli hydropolitical developments were perceived as aggressive threats to the integrity of Palestine and of the wider Arab world. Thus, the Arab aim was to counter Israel’s perceived pillaging of so-called Arab water brought on by the NWC at Lake Tiberias.

The January 1964 Cairo Summit of the Arab League expressed grave concern over Israel’s diversionary intentions, moving to develop a muscled response. Arab leaders planned a diversion of Jordan River headwaters so that Arab states may control and exploit them. A US$30 million fund was set up for the Arab diversion effort. Arab leaders decided on a militarised response as well, in a strategy that was further developed and concretised at the September 1964 Alexandria Summit of the Arab League. At Alexandria, the PLO was formed, along with a Palestine Liberation Army (PLA) that was placed under joint Arab command. The preamble to the Arab League’s decisions is revealing (Shlaim, 2001: 230):

The establishment of Israel is the basic threat that the Arab nation in its entirety has agreed to forestall. And since the existence of Israel is a danger that threatens the Arab nation, the diversion of the Jordan waters by it multiplies the dangers to Arab existence. Accordingly, the Arab states have to prepare the plans necessary for dealing with the political, economic, and social aspects, so that if the necessary results are not achieved, collective Arab military preparations, when they are completed, will constitute the ultimate practical means for the final liquidation of Israel.
The PLO’s 1964 National Covenant unequivocally conveys this aspiration for the “liquidation” of Israel, rejecting the 1947 partition of Palestine as having been imposed against the majority will of the Palestinian Arab people. The Covenant situates Zionism as having been conceived in colonialism, practicing aggression and territorial expansion. It decries the establishment of Israel as illegal. Moreover, it calls for a recognition of the Palestinians’ right to self-determination as per recognised international law.

Situated in 1964 Middle Eastern politics, the PLO National Covenant rejects the legitimacy of Jewish self-determination in Palestine as well as its continued hydropolitical productivity (PNC 1964 Website). Interestingly, the Hashemite and Saudi monarchies boycotted the PLO, the Authority for the Jordan Headwaters, and the Unified Military Command by 1967 (Lowi, 1993: 130). Indeed, a cleavage existed within the Arab world with respect to the State of Israel and how relations with it might be cultivated.

Strategically and operationally, from its inception, the organised Palestinian national movement sought to deprive Israel of water, threatening the state’s sovereign right to water and Jewish self-determination more broadly. Over the years 1964-1967, up to the buildup of the 1967 Six-Day War, militarised hydropolitical skirmishes occurred between Israel and its Arab neighbours, including the PLO. The PLO was using Jordanian territory, against the will of Jordan’s King Hussein, to launch frequent attacks against Israel, sometimes targeting its water installations.
Israel radio and BBC reports identified the PLO’s al-Fatah as responsible for attempted sabotage of Israel’s NWC on several occasions (Lowi, 1993: 127). On 1 January 1965, Fatah attempted to blow up NWC pipes at Ain Bone on the western bank of the Jordan River (Shlaim, 2001: 232). In April 1967, a water pumping station in northern Israel was destroyed in an attack attributed to Palestinian fedayeen. The PLO claimed this last attack was in retaliation to months of escalated Israeli-Syrian conflict and of Israel’s downing of six Syrian MiG fighter jets in July 1966.

On the other side of the political landscape, Israel perceived Arab hydropolitical machinations and organising as existential and material threats. Israeli Prime Minister Levi Eshkol, founder and former director of Israel’s water company Mekorot, was quoted as saying (Lowi, 1993: 125):

Water is a question of life for Israel…Israel would act to ensure that the waters would continue to flow… [Israel would] rely on the strength of its defence forces.

Eshkol came from an agricultural family. He was a lead water negotiator during the Johnston process and had served on the executive of the Jewish Agency’s agricultural planning section. He was very close to water, both personally and politically, a fact which had implications for Israeli policy.

In keeping with PM Eshkol’s assertions, in 1964, a number of ‘border’ clashes took place between Israel and Syria. Notably, Israel attacked water installations associated with Arab diversion of the Hasbani headwaters towards the Banias in Syria. In April 1965, Israel hit Syrian water diversion equipment in the Dan
and Doka areas. On 13 May 1965, Israel conducted another attack on Syrian diversionary works. On 14 July 1966, Israel’s Air Force hit the diversion works near Almagor on the Banias-Yarmouk Canal in Syria, declaring that this was in retaliation to fedayeen attacks emanating from Syria. On 9 January 1967, Israel hit the US-supported Mukheibeh Dam site in Jordan, but this was deemed an accident. Sosland (2007: 88) convincingly argues that Israel was predominantly intent on isolating Syria while maintaining good relations with Jordan.

Israel emerged victorious from the confrontations, effectively exhausting Syria’s (and the wider Arab world’s) resolve to pursue the Arab diversion scheme of the Jordan’s headwaters. During this period, the US failed to manage an effective conflict de-escalation process over Jordan River water. As multilateral resolution of hydropolitical issues failed, the more militant and rejectionist Arab world became further resolved to escalate other dimensions of the conflict.

Some, notably the New Ba’athists of Syria, sought full-scale military confrontation against Israel. In response to a Syrian call to action, and disinfomed by Soviet intelligence reports, Egypt escalated regional tensions through a number of political and militarised actions. Israel then moved to implement a lightening military strike that crippled the Egyptian air force and pre-determined the war’s outcome. While built of bravado, political posturing, disinformation, genuine fears and deep-rooted claims and counter-claims, the road to the June 1967 Six-Day War was in part constructed of hydropolitical materials, symbols and practices over nearly three (and as many as fifteen) years. The aftermath of this war would prove decisive for Israel-Palestinian
relations, as Israel would become an occupying power, hydropolitically and otherwise.
Concluding Thoughts

Drawing on an expansive body of hydropolitical theory, this chapter has critically examined the significance of water to the Israel-Palestinian conflict, materially, ideationally and politically. Water has been discussed as a relational location of the conflict, from the first encounters of Zionist Jews and Palestinian Arabs right through to the Six Day War of 1967. In so doing, it has made clear that water is one of several key domains of the wider conflict, constitutive of the Israel-Arab/Palestinian relational order. In many ways, hydropolitical relations between the parties both reflect and produce the wider conflict.

This research study has been framed to reflect an epistemological choice to specifically and discursively analyse Zionist and then Israeli hydropolitical water relations with the Arabs and Palestinians. The current chapter does so from the late-19th century through to 1967. It is in this period that Israel’s later hydrohegemonic relations with the Palestinians originate. Examining this historical period, the study has rendered several narrative elements underpinning this later discursive hydrohegemony. For example, the Jewish people sought to redeem the biblical Zion through their labour, both in land and in water. The Jewish people also pursued a politics that was imagined to arrest their victimisation and prevent the likelihood of a renewed persecution at the hands of others. A national Jewish state in biblical Zion, i.e. Palestine, was thereby constructed with the assistance of the international community. Most of the Arabs, including the Palestinians, rejected this creation.
The study undertaken thus far also supports the argument that hydrohegemony was not an inevitable relational order between Israel and the Palestinians. Drawing on two narrative elements to articulate this point, Israel pursued both a national imperative of hydropolitical development as well as multiple opportunities for strategically integrating water resources management with its neighbours. Doing so arguably reflects Israel’s overarching desire to be a national state like other national states, secure in being recognised as legitimate and sovereign, while also pursuing bilateral and multilateral relations with others like itself. During the period analysed in this chapter, Israel would succeed only partially in producing these aims, for multiple and diverse reasons.

Among these, from the late 19th century through to 1967, the Palestinian question was never properly, i.e. justly and peacefully resolved by the Jewish leadership, and certainly not in practical relationship with the Palestinians. Despite important debates first in Zionist and later in Israeli circles, some of which involved the great powers of the time, the Palestinian question was generally perceived as a secondary concern (and this notably in the aftermath of the Holocaust). The Palestinians themselves were never politically recognised or discursively pursued as equal partners.

Over this period, the Palestinians continued to grow into, and were then perceived to be a threat to Jews, to the Jewish self-determination project and to the State of Israel. The creation of the PLO became the linchpin, both generally and hydropolitically, in the Israeli perception and construction of a threatening
Palestinian subject at the near total exclusion of other relational and discursive possibilities. Anchored in a half-century of hydropolitical dispute between Zionist Jews and Arabs and Palestinians, water became catalytic as a fundamental and conflictual domain of the Israel-Palestinian relation.

The 1967 Israeli occupation of the West Bank land, population and water (and other) resources, while unintentional at first, quickly became an important opportunity for Israel to manage the Palestinian threat, hydropolitically and otherwise. As shall be discussed in the next chapter, the movement to actively construct Israel’s hydrohegemony in relation to the Palestinians was initiated and dynamically developed in the immediate aftermath of the 1967 War. Israel leveraged a newly acquired relational power in cultivating and securing its hydrohegemonic dominance over a subjugated Palestinian people. The next chapter specifically addresses these matters from 1967 into the present, making visible the remaining components of Israel’s justificatory narrative in support of its now-intentional hydrohegemonic relational pursuits.
CHAPTER 4:
ISRAEL’S HYDROPOLITICAL OCCUPATION AND HYDROHEGEMONY

Introduction

The current chapter takes as its point of departure the immediate aftermath of the 1967 Six-Day War. Israel emerged from this war as an occupying power over Palestinian West Bank populations, territories and resources that included water. This newly-acquired status dramatically shifted Israel’s overall power, as well as its hydropolitical relations with the Arab world and the Palestinians more specifically.

The mid-to-late 1960s proved pivotal as the period during which Israel acknowledged and actively responded to its perception of mounting Palestinian threat. Israel did so by leveraging its favourable comparative power after the war in active pursuit of relational power over the Palestinians. In keeping with a broader occupation, Israel specifically pursued a hydropolitical one, through the discursive production of an asymmetric water management and development regime over more than 40 years. This chapter examines Israel’s rising and consolidated hydrohegemony in relation to the Palestinian from 1967 to 2011.

Analysis herein focuses on Israel’s 1967 occupation of West Bank water resources, touching also on territory and populations. Israel’s continued and imposed integration of West Bank water resources are discussed, with specific reference to the period from 1982 onwards. The hydropolitical dimensions of

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61 Where appropriate, the situation in the Gaza Strip is discussed.
peacemaking efforts are analysed, notably from Camp David through to the Madrid and Oslo peace processes. The implications of the Oslo process are discussed hydropolitically, with specific reference to the Israel-Palestinian water agreements, the Israel-Palestinian Joint Water Committee (JWC) and the IDF’s Civil Administration. The demise of Oslo is considered and the post-Oslo emphasis on water production is discussed, with specific reference to the continued and layered construction of Israel’s hydrohegemony in recent years.

Israel’s occupation and evolving hydrohegemony have effectively pre-empted the Palestinians’ ability to collectively organise hydropolitically and otherwise for the purposes of national development into the Madrid/Oslo period. Since then, Palestinian water management and development have been politically and institutionally curtailed by Israel’s hydrohegemonic power. Israel’s post-Oslo strategy of peace has been to establish Palestinian agreement for their own and continued subjugation, both in general and hydropolitically. Indeed, hydrohegemony has become a key pillar of the dominant Israeli discourse of ‘necessary’, even ‘legitimate’ Israel-Palestinian relations.

By extension, in the 1967-2011 period, Israel’s hydrohegemonic justificatory narrative saw further ideational development. In addition to the first five narrative elements discussed in the previous chapter, the post-1967 period would see the development of the latter three, recapped overall as follows:

1) A Jewish manifest destiny in redemption of biblical Zion;
2) A universal Jewish historical victimisation;
3) Jewish historical use as a premise of Israel’s water rights and equitable use;
4) Israel’s hydropolitical imperative as a national state;
5) Israel’s strategic pursuit of integrated water resources management;
6) Israel’s benevolence towards the Palestinians, conceived as ensuring the satisfaction of Palestinian water (and other basic and development) needs;
7) The exclusive Zionist/Israeli prerogative of environmental sustainability, as compared with the relative unsustainability of the Palestinians; and
8) The construction and perpetuation of a Palestinian subject that continues to be a threat to Jews and the Jewish self-determination project, both generally and hydropolitically.

In total, the eight components of Israel’s justificatory narrative have underpinned Israel’s rising and consolidated hydrohegemony since 1967. Israel’s overall dominance and subjugation of the Palestinians, generally and hydropolitically, have been framed as a foreclosed necessity into the conceivable future. A few introductory words about the added elements is warranted.

With their growing national movement supported at different times by Egypt, Syria, Lebanon, Libya, Iran and others, the Palestinians have been perceived as a growing and real threat to the Jewish people and self-determination project that is Israel. While responding to this political threat appropriately, by the terms of the justificatory narrative, Israel has improved the lives of ordinary Palestinian Arabs wanting to live quiescently under the Israeli regime of occupation. Notably, the Palestinians have seen their access to water resources for basic human needs met by Israel, with real prospects for far greater quantities of water than ever before. Laudable on the one hand, this comes rooted in an Israeli discourse of benevolence and assistance towards Palestinian populations, themselves marginalised in no small part by Israel itself.
Similarly, in the era of sustainable development, Israel’s justificatory narrative has been rooted in a discourse of environmental sustainability. This has been articulated as a means of ensuring that the environment and water more specifically are protected and conserved for the benefit of both Israelis and Palestinians, in the present and into the future. Again, laudable objectives, this discursively constructs the Palestinians into environmentally irresponsible and unsustainable subjects as compared to environmentally sustainable Israelis. Indeed, Israel’s continued occupation and hydrohegemony is today represented as a strategy of environmental sustainability.

Finally, the Middle East has aggressively entered the era of water production, pursuing seawater desalination as well as wastewater purification and reuse. That water has recently shifted from a finite natural resources to one that can be produced (with worrying economic, energetic and ecological repercussions) has had implications for relations between Israel and the Palestinians. While many believed this would likely result in the end of water as a conflict factor between them (e.g. Fisher, 2006; Personal interview, IG6 2010; Personal interview, IX4 2010; Personal interview, PW7 2010), to date the production of water has enabled the perpetuation of Israel’s hydrohegemony over natural water resources, and by extension Palestinian land and populations.

Overall, this chapter makes visible an historically immanent and then consolidated Israeli hydrohegemony in relation to the intentionally subjugated Palestinians. Building on the previous chapter’s pre-1967 analysis, the current one discursively focuses on the changing relational practices and ideations of
Israel in the Middle Eastern conflict environment. It develops key areas of the justificatory narrative underpinning Israel’s continued commitment to a discourse of hydrohegemony, itself even leveraged in pursuit of some kind of peace. Yet, hydrohegemony violates more than a few key principles of positive peace and hydropolitical peacebuilding, as theorised in this study. Indeed, hydrohegemony is likely to remain a recipe for continued, violent and asymmetric conflict, begging for transformative engagement.
Hydropolitical Occupation and Containment – 1967-1982

Occupying People, Territory and Water

In the wake of the Six-Day War, the region’s hydropolitical map changed dramatically in Israel’s favour. The war’s outcome provided important opportunities for Israel to powerfully advance primary national objectives, at the intersection of territory, water, security and identity. Israel established its hydropolitical parameters at the Jordan River, a watercourse referred to as Israel’s ‘natural border’ by both Moshe Dayan and Yitzhak Rabin (Gilboa, 1969: 229 in Shlaim, 2001: 246). It occupied the Golan Heights, the location of an important Jordan River headwater, the Baniyas. Israel established full control over the entire western coast of the Dead Sea, where it had maintained a profitable chemical industry since the 1920s. The war also precipitated Israel’s capture of biblical, strategic and water-rich Judea and Samaria, i.e. the West Bank (as well as other territories, notably the Gaza Strip).

Occupation of the West Bank and the Golan Heights provided a welcome opportunity for Israel to access and secure greater quantities of water resources, given the country’s rising water stress. From 1950 to 1970, Israeli water resource use as a proportion of availability had risen from 17 to 95 percent, with agriculturally developed areas increasing six-fold (Lowi, 1993: 150). Israel clearly needed to secure ‘new’ water, which it found in the West Bank (the Mountain Aquifer) and in Syrian territory (Jordan River headwaters).

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62 This may be understood as one of the principal reasons for which Israel did not immediately pull out of recently occupied territories in exchange for peace, despite the timely opportunity to do so.
In the period before the 1967 War, Israel had been using about 455MCM/yr of Mountain Aquifer water, as follows: 340MCM of Western, 115MCM of North-Eastern, and no Eastern Mountain Aquifer water. During the same period, the West Bank Palestinians used about 20MCM of Western, 25MCM of North-Eastern and 58MCM of Eastern Aquifer water, amounting to a total of about 103MCM/yr. After the War, Israel would control major quantities of surface and groundwater resources originating in the West Bank, amounting to some 632MCM/yr (Shuval, 1993: 47) and up to 650-900MCM/yr (Lowi, 1993: 185).

Though it had modestly done so since the 1930s, after 1967 Israel would more comprehensively and securely account in its plans and management structures Mountain Aquifer waters. It would allow the Palestinians a share not exceeding 14-18 percent of West Bank groundwater resources, 125MCM/yr, throughout the decades leading up to the Oslo process. Into the early 1990s, 40 percent of groundwater upon which Israel became reliant would originate in the West Bank.

**Israel's Hydropolitical Occupation**

Immediately after the war, Israel moved to transform water governance arrangements and laws in the West Bank, in construction of a hydropolitical occupation. Authority over water was transferred to the Israeli military on the strength of several military orders. Uzi Narkis, Aluf of Central Command/Commander of the IDF in the West Bank Area, signed Israeli Military

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63 In the years preceding the 1967 War, Jordan had only just launched an effort to develop the Western Mountain Aquifer (Sosland, 2007: 146).

64 Interestingly, a leading Israeli water practitioner has estimated that by 2022, Palestinians in the West Bank and Gaza would require about 625MCM/yr of water, roughly what is safely yielded by the entire Mountain Aquifer (Shuval, 1993: 69).
Order No. 92. The first and most decisive of such Military Orders, it transferred authority of West Bank water to the Israeli military. Key military orders included the following:

<table>
<thead>
<tr>
<th>Military Order</th>
<th>Date</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 92</td>
<td>15 August 1967</td>
<td>All authority over West Bank water is transferred to the Israeli military</td>
</tr>
<tr>
<td>No. 158</td>
<td>19 November 1967</td>
<td>Establishment of a permit system for the development of water by Palestinians</td>
</tr>
<tr>
<td>No. 291</td>
<td>19 December 1968</td>
<td>Annulment of all land and most water arrangements existing prior to Israel’s occupation of the West Bank</td>
</tr>
</tbody>
</table>

Table 4.1: Israel’s Early Water-Related Military Orders in the West Bank (Adapted from both Amnesty, 2009a: 12 and ILRC Water Website)

Overall, Israel established militarised administrative control over all West Bank water resources. The military orders reflect the establishment of a permit system for most water use and development in the West Bank. While similar to what was in operation in Israel, such a system was in no way endogenous to West Bank Palestinians.

In practice, Israel may not have imposed its authority to the extent allowed by these military orders (Trottier, 2007: 117). Notably, Israel interfered hardly at all with the traditional, communal water practices of Palestinians in the West Bank during this period (Trottier, 1999 in Weinthal and Marei, 2002: 461).

Nonetheless, on the ground, Palestinians were severely restricted in their ability to plan, dig and rehabilitate wells. This effectively prevented long-term Palestinian collective development planning and implementation, thereby containing perceived threats to Jewish self-determination and to Israel.
Statistics on the matter of well management from 1967 into the 1990s vary in their specifics, but overall the picture and implications are the same.

- According to Amnesty International (2009a: 12): Palestinians were permitted to sink 13 wells for domestic use only from 1967 to 1996 (when the Palestinian Water Authority (PWA) was empowered as a product of Oslo).
- According to Rouyer (2000 in Weinthal and Marei, 2002: 461): The digging, development and even repairing of agricultural wells was severely restricted. From 1967 to 1994, some 38 permits for drilling new wells or rehabilitating old ones were permitted.
- According to Sosland (2007: 151): Between 1967 and 1990, Israel issued 46 permits to Palestinians for drilling, with 7 of them in the Eastern Aquifer. Further, 8 were for agricultural wells and 28 for domestic wells, while 10 resulted in unsuccessful drilling efforts. During the same period, 17 permits were issued to Israeli settlers in the West Bank, who regularly overused their quotas.

By December 2002, a total of 359 wells were established in the West Bank, most of which were drilled before 1967, extracting 60MCM/yr for Palestinian use (Weinthal and Marei, 2002: 461). The remainder of water consumed by Palestinians into the 1990s, up to 125MCM/yr, was supplied by Mekorot, Israel’s national water company.

Over time, only ‘existing’ uses of water were recognised for Palestinian agriculture, established at the 1967-68 standard of use. Sharing in drilling technology between Israelis and Palestinians was very limited, such that Israelis could exploit deeper sources of water to the detriment of Palestinians reliant on simpler technologies. Israel had established annual limits on the quantity of water that could be extracted per well by Palestinian Arabs, monitored through the use of meters. Finally, water subsidies that were made

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65 Specifically, Israel had also established deep wells that enabled it to access 42MCM/yr of freshwater from the Eastern Aquifer. This was destined for use by Jewish settlements before the water became increasingly saline and was primarily tapped by Palestinians (Shuval, 1993: 44; Sosland, 2007: 148).
available to Israeli settlers were not available to Palestinian Arabs (Sosland, 2007: 152) such that the cost of water to the latter in 1990 was up to six times higher (Lowi, 1993: 188).66

**Introducing Israel's Hydropolitical Benevolence**

From the mid-1960s onwards to the late-1980s, the Palestinians (as spearheaded by the PLO) rejected Israel's legitimacy and very existence. They persistently called for Israel's dismantlement and for recognition and respect of their own rights, including their individual and collective right to water. While the Palestinians struggled for self-determination, Israel used the tools at its disposal to construct itself into a secure state, hydropolitically and otherwise. Israel diversely denied, circumvented and contained Palestinian demands for human rights and self-determination. Israel rejected the idea of Palestine or Palestinian nationhood as no longer relevant. Over the next two and half decades, Israel would focus on preventing claims of Palestinian rights to self-determination from altering its political (and hydropolitical) course.

While denying, marginalising and attempting to contain the Palestinians as a political movement, Israel also perceived itself as acting with benevolence towards the Palestinians. The narrative of Israel’s benevolence towards the Palestinians emerged in the 1960s and has since entered the Israeli imaginaire

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66 In the Gaza Strip, formerly under Egyptian authority, Israel moved to exploit water resources for provision to Jewish settlements. From 1967 to 2002, Israel drilled some 40 wells, supplying about 5MCM/yr to these settlements (Camp Dress and McKee, 2000 in Weinthal and Marei, 2002: 461). In 1986, Israeli settlers in Gaza were consuming 2,240CM/pppy while Palestinians consumed 142CM/pppy. Palestinians have relied largely on their own wells, where water quality issues continue to be a major problem due to ongoing salinisation resulting from seawater incursion and over-exploitation. Overall, more than 2,000 wells in the Gaza Strip extract some 110MCM/yr while the recharge is estimated at 55-70MCM/yr (Sosland, 2007: 153). Israel officially finalised its withdrawal from the Gaza Strip in 2005, having removed its settlers and dismantled its settlements.
with ideational force. According to this narrative, Israel introduced modernity and its benefits to the region’s Arabs, as made evident by the relative well-being of ‘Israeli Arabs’. It has brought technological progress and efficiencies into their ways of life. Israel has also contributed to their cultural pacification, slowly transforming the Arabs from a people ‘who only understand the way of the gun’ to one that has come to appreciate the values and merits of human rights, including the rights of women and children. Finally, this narrative of general and more specifically hydropolitical benevolence is also propped up in denial of the deleterious effects of occupation. According to this narrative, Israel’s occupation of the Palestinians has really not been as bad as all that.

For instance, the Israeli military’s Department of Civil Administration of the West Bank played a pivotal role in increasing agricultural production and trade, as well as irrigation efficiencies for Palestinians from 1967 to the mid-1980s (Sosland, 2007: 149). Also, Moshe Dayan’s Defense Ministry adopted an “Open Bridges” policy that enabled trade and family contacts between West Bank and Gaza Palestinians and the rest of the Arab world (Sosland, 2007: 148). During these years, relationships between individual Israeli Jews and Palestinian Arabs flourished, bringing economic well-being to the Palestinians. This narrative would evolve to later include significant water dimensions, based in the Israeli belief that the Palestinians received higher quality water and with greater regularity from Israel than through any previous arrangements (Personal interview, IW1 2010). The evolving narrative, persistent to the present day, is however silent on the parallel process of related territorial and hydropolitical appropriation.
Water and Settlement Practice

With the 1967 occupation, Israel settled land claimed by the Palestinians in the West Bank, in violation of international laws (notably, the Fourth Geneva Convention, Art. 49). Israel’s first West Bank settlements, established under Yitzhak Rabin in the period 1968-1977 were located in areas of low Palestinian population density and were premised on security concerns. About 5,000 Israelis settled the West Bank and Gaza Strip during this period (Sosland, 2007: 150), a process which prepared the terrain for about 100,000 Israeli West Bank settlers by 1992 and nearly 500,000 Israeli settlers in the West Bank and East Jerusalem today.

Occupation and settlement became technologies through which to disaggregate Palestinian populations, territories and resources (including water). Israel’s move into the West Bank would appropriate land for Jewish settlement while carving up territories claimed by Palestinians. It would create constraints on Palestinian mobility and on the expansion of an endogenous Palestinian economy. Finally, it would create additional demands on West Bank water resources, violently imposing a kind of ‘reasonable’ Israeli claim to these resources. The entire settlement enterprise has contributed to the fragmentation of the Palestinians on these (and other) fronts.

Hydropolitically, Israel’s settlement practices in the West Bank have been construed to demonstrate the state’s immediate concern over West Bank water

Labor’s settlement policy after 1967 followed specific guidelines that would insure Israel’s total control over water resources in the West Bank. The map of the settlements looked like a hydraulic map of the territories.

Any peace process that sought to trade land for peace would have to confront the biopolitical, geopolitical and also hydropolitical challenges that were being constructed as ‘facts on the ground’. Like many others before and since, water expert Shuval (1993: 52) depicted water originating in the West Bank as constitutive of “Israel’s viability”. This is a historical, quantitative and hydropolitical assessment, reflecting and perpetuating Israel’s justificatory narrative.

With avowed Jabotinskyite and Likudnik Menachem Begin’s 1977 electoral victory, Israel would increase settlement activity in the West Bank (Shlaim, 2001: 379). In December 1977, Prime Minister Begin and Foreign Minister Moshe Dayan, in consultation within various ministries and the Defence Forces, developed a Palestinian Autonomy Plan, which offered limited autonomy to the Palestinians, granting them either Israeli or Jordanian citizenship. Under the Plan, territorial and hydrological resources were designed to remain under Israeli sovereignty (Shlaim, 2001: 365). West Bank land, water and people were again disaggregated from one another through this proposal.

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67 A leading Israeli authority on water, with strong and long-standing government ties and responsibilities, categorically rejects this association (Personal interview, IG6 2010).
68 Vladimir/Ze'ev Jabotinsky, hard-line Zionist activist in the early- to mid-20th century, founded Revisionist Zionism. He argued the merits and organised along the lines of Jewish self-reliance, unilateral development and militarised power in Palestine.
Such an approach would become the Israeli approach to peacemaking with the Palestinians for the coming decades. Palestinians have come to understood this as a denial of both livelihood and homeland, *watan* (Lowi, 1993: 52). Going back to the pre-Zionist period, Palestinian Arabs understood water to be an extension of land, and land to be an extension of people. Israel’s objectives and practices of disaggregation, generally and under the guise of peacemaking, have therefore been perceived in existentially violent terms by the Palestinian Arabs.

The period following on from the 1977 Likud election victory in Israel resulted in a major Jewish settlement push in the West Bank, biblical Judea and Samaria, encouraged by Gush Emunim (Bloc of the Faithful) and politically influential religious parties. While previous Labour governments had secured West Bank water in the wake of the Six Day War, the Likud governments of Begin, and later of Shamir, Netanyahu and Sharon, would settle West Bank land through and through with Jewish people. What remained of Palestine, in West Bank land and water would become parceled off in the interest of Jewish sovereignty, security and perceived right. Israel’s management and development practices related to West Bank water resources went hand-in-hand with its settlement practices.

**Hydropolitical Containment of Palestinian Agency**

Some seven years after Israel occupied the West Bank, the PLO was endorsed by the Arab League as the sole legitimate representative of the Palestinian
people with the right to set up a regime on any part of Palestine that might become liberated. One month later, in November 1974, the UNGA passed a resolution affirming the right of the Palestinian people to self-determination. Despite increasing global legitimacy of the Palestinian liberation struggle and recognition of its political organisation, the State of Israel under both Labour and Likud evidently had other intentions for Palestine and the Palestinians. A hydropolitical examination of peace processes from Camp David onwards to Madrid/Oslo demonstrates Israel’s effective hydropolitical curtailment of collective Palestinian rights and agency.

The Camp David process of the late-1970s and early-1980s marks the first time that an Israeli leader, namely Prime Minister Begin, officially acknowledged the reality of a Palestinian collectivity with related rights. The final Accords did not however reflect a trajectory that recognised Palestinian self-determination leading to statehood (Carter, 2007: 48-50). And this, despite the fact that the Accords were premised on UNSC Resolutions 242 and 338 in all their parts, on the UN Charter and accepted norms of international law and legitimacy, aiming to promote regional coexistence and cooperation.

Structured in two parts, Camp David (section A. West Bank and Gaza) recognised the Palestinians as a “people” with legitimate rights, towards establishing a self-governing Palestinian authority in the West Bank and Gaza

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69 In 1969, Israel’s Prime Minister Golda Meir denied the existence of the Palestinians as a national people.
Strip with “full autonomy” (Carter, 2007). Camp David (section B. Egypt-Israel) established a good faith process between Egypt and Israel towards securing a bilateral treaty of peace and a comprehensive regional peace. Israel and Egypt signed and moved to implement their bilateral 1979 peace treaty (section B.) on the premise that Camp David (section A.) would follow shortly afterwards. Over subsequent years, the Begin government and those who came after him (up to 1993) either refused (e.g. Shamir) or were incapable (e.g. Peres) of seriously engaging with a generous interpretation of the intentions and implications of Camp David (section A.). On the ground, it not only became a dead letter, but the situation worsened for the Palestinians and their struggle for self-determination, in terms of both land and water.

Against the background of Camp David and the Israel-Egypt peace, Israeli settlement activities in the West Bank were seriously stepped up. With settlement came additional water legislation and provision that further erected a hydropolitical barrier between Israel and the Palestinians. In keeping with its historically-ingrained approach, Israel operated on the assumption that West Bank occupation bestowed upon it the rights of sovereignty and resource exploitation.

While Israel’s national water company Mekorot (established in 1936) drilled its first well in the southern West Bank in 1971, the move to integrate West Bank

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Note: A relevant sidebar to these negotiations came as an offer from Sadat to pump water from the Nile to Israel via the Sinai desert, in recognition of Israel’s water stress and continued attempts (e.g. during the Johnston negotiations) to integrate water planning at a regional level (Lowi, 1993: 153-155). Some several years later, the Armand Hammer Fund for Economic Cooperation in the Middle East would evaluate the merits of this proposal, again in the context of a regional hydropolitical arrangement that would consider massive water transfers between all states in the area, drawing also on the Nile River (Kally, 1986).
water resources into the Israeli management system was accelerated in the wake of the 1977/78 Drobless Plan (World Bank, 2009: 5). According to the Jerusalem Post’s then-economics editor Meir Merhav in a March 1980 Time Magazine reference, the West Bank as envisaged by the Drobless Plan would look as follows (P4PD Website):

>[It] is to be carved up by a grid of roads, settlements and strongholds into a score of little bantustans so that [the West Bank] shall never coalesce again into a contiguous area that can support autonomous, let alone independent, existence.

In 1982, the West Bank military regime over water was transferred to Mekorot. This further integrated West Bank water into the sovereign Israeli water management system while structuring Palestinian dependency on the occupying power (Scarpa, 2006: 86). Operating 42 wells in the West Bank, Mekorot then proceeded to sell West Bank water to Palestinian water utilities as well as to Jewish settlements (Amnesty, 2009a: 12). This was an important historical moment in the development of Israel’s hydrohegemony over the subjugated Palestinian people.

Water is an important vector of power and opportunity through which sovereignty and agency are enacted. Thus, developments over the course of this entire period meant that West Bank Palestinians as a collectivity were contained in their ability to participate in constructing their future meaningfully. As Israel acquired ever greater water resources in a water stressed region, so did Palestinians experience continued curtailment of their ability to plan for a dynamic future. It did not however quash a collective Palestinian imaginaire of
self-determination, however much this was perceived as a threat to Jewish people and the state of Israel.

With limited water, a dwindling territorial base, and contained agency and authority, Palestinian aspirations for self-determination sought expression elsewhere. During these years, the Palestinians were notoriously recognised for their dual strategy of international diplomacy and anti-Jewish terror tactics (including plane hijackings, bus bombings, assassinations, etc). Also and in private, the PLO made several unpublicised, fruitless attempts at engaging Israel in political dialogue rooted in recognition, self-determination and security from the early 1980s onwards. In the wake of the first Palestinian Intifada, as well as Jordan’s 13 July 1988 relinquishment of claims and responsibilities for the West Bank, this dialogue would eventually find some traction with important hydropolitical dimensions. This would translate into the promise, and disappointments, of the Madrid and Oslo processes.

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71 Diplomatic efforts of the Palestinian leadership were left unpublicised before 1988.
**The Hydropolitics of Peacemaking**

The Madrid process and Oslo breakthrough seemed a light at the end of a very long tunnel (Carter, 2007). The years preceding it under the Israeli premiership of Yitzhak Shamir had seemed to offer little prospect of political settlement. While the PLO recognised Israel’s legitimacy in November 1988 at the Algiers Palestine National Council (PNC) meeting, Shamir rejected dialogue with the PLO as well as the ‘land for peace’ formula rooted in UN Resolution 242.

On 11 June 1990, in an address to the Knesset (Israel’s parliament), he stated that his new government was “united by the concept that the Land of Israel is an idea, not merely an area.” (Shlaim, 2001: 472) This idea had some very practical dimensions to it, as demonstrated by the oft-quoted 10 August 1990 ad placed in the *Jerusalem Post* by Israeli Minister of Agriculture, General (Reserves) Raphael Eitan. As explained by water expert Shuval (1993: 52), the ad suggested the following:

> [B]ecause of the water issue alone, Israel can never give up the physical control of any of the occupied territories since they are absolutely essential for the preservation of the country’s vital water resources.

The idea of Israel that had been cultivated over a century also sought to keep the Palestinian national imaginaire, its political aspirations and its multiplying institutions contained. Further bolstering Shamir’s hard-line approach, early in 1991, during the Gulf War, the Palestinians and the PLO leadership cheered Saddam Hussein’s SCUD missile attacks on Israel. In Israel, the Palestinians were perceived as a longstanding and now renewed threat to Israel and to Jews everywhere.
The idea of Israel and the idea of Palestine remained at odds. Yet, that very same year, against a backdrop of Soviet glasnost (and nascent demise), and the emergence of the US as the world’s leading real global power, Israel participated in the October-November 1991 Madrid talks, accepting a joint Jordanian-Palestinian delegation as interlocutor. Through Dr. Haider Abdel Shafi, head of the Palestinian delegation to the Madrid Conference, the Palestinians invited Israel to accept Palestinian sovereignty, to share hope, to join in partnership, to live nationally as equals, to pursue a strategy of interdependent security, to make and build peace (Shlaim, 2001: 488). Several rounds of negotiations took place along bilateral and multilateral tracks. It was believed that difficult bilateral negotiations could be carried along by multilateral efforts on the issues of water, refugees, environment, arms control and economic development\textsuperscript{72}.

Without much concrete success to show for all their effort, the Palestinians retained the impression that Israel sought to perpetuate Israeli control over the land and water resources of the West Bank through “interim self-government.” The Israelis under Shamir were concerned that the Palestinians were indeed intent on building a state seeking international recognition, in spite of Israel’s firm opposition (Shlaim, 2001: 493-494). Here was a supposed peacemaking process where the parties did not share even the semblance of an idea of peace. The Palestinians sought equality and partnership, the Israelis security through dominance.

\textsuperscript{72} This matter is discussed at length in the next chapter.
Of interest, two key hydropolitical studies were conducted that provided the backdrop and counterpoint to Israel’s negotiating position on water and territory. A 1977 study on water requested of Israel’s water commissioner by Israeli Prime Minister Begin concluded that Israel would need to retain about 1/3 of the West Bank to ensure its hydropolitical security (Sosland, 2007: 155).

Subsequently, in a 1991 hydropolitical study conducted by TAHAL and Tel Aviv University’s Jaffee Center for Strategies Studies, *The Water Problem in the Context of Israel-Arab Agreements*, it was argued that Israeli withdrawal from much of the West Bank was possible if premised on the creation of a cooperative water management arrangement secured with the Palestinians (Sosland, 2007: 156). In other words, either continued and strategic occupation, the cultivation of hydrohegemonic power or the pursuit of partnership could ensure Israel’s hydropolitical security. Of these, only partnership could contribute meaningfully to positive as distinguished from negative peace.

Interestingly, the latter report recognised that concessions on water could lead both to regional political gain and international support from donor countries for a desalination program. However, it was recalled by Shamir’s Ministry of Agriculture with the support of Israel’s military censor, given that it ran counter to official government policy. Here was an idea of peace and peacemaking whose premises had not yet been accepted by the Israeli Likud establishment. The Labor Party would eventually leak sections and maps of the Jaffee Center report (Sosland, 2007: 156), informing the Oslo process with its ideas.
Israel’s hard-line, expansionist position under Shamir was firmly defeated in the 1992 general election which brought Labour’s Yitzhak Rabin to the Prime Minister’s Office. It was a firm vote of confidence in support of negotiating a settlement with the Palestinians. With Israel accepting to recognise the PLO, a secret channel of direct talks was pursued in Oslo with the assistance and facilitation of Norwegian Foreign Minister Johan Joergen Holst and academic Terge Rød Larsen. Launched in January 1993, the Oslo channel was comprised of 14 secret sessions between representatives of Israel and the PLO. Following an exchange of letters between Rabin and Arafat, on 13 September 1993 Israel and the PLO signed a Declaration of Principles on Interim Self-Government Arrangements (Oslo I), thereby launching the public phase of the Israel-Palestinian peace process.

With Oslo, here was a political peacemaking process seemingly premised on mutual recognition, concrete proposals stemming from multiple (bilateral, multilateral and working group) fora for dialogue and negotiation, and a timetable for peaceably transforming the Israel-Palestinian conflict and the wider Middle East. It appeared as though the underlying idea being circulated was one of sovereignty with integration, of equal and equitable recognition of the needs and rights of both peoples, of a future built with both distinct national considerations and through selective political partnerships. These are all fundamental principles of positive peace. In specific terms, the PLO and the State of Israel agreed to the following (Carter, 2007: 134-135):

1) PLO recognition of Israel’s right to exist with security;
2) Acceptance of UNSC Resolutions 242 and 338 as the basis of agreement and political process;
3) PLO commitment to peaceful resolution of the Israel-Palestinian conflict;
4) PLO renunciation of terrorism;
5) PLO commitment to formally change elements of its charter that violated the spirit of the Oslo Declaration of Principles;
6) Israeli recognition of the PLO as the sole legitimate representative of the Palestinian people;
7) An Israeli commitment to five years of progress on Israeli withdrawal, which led to the 1995 Interim Agreement and specific plans for phased Israeli withdrawals; and
8) Israeli assurance of support for the formation and organisation of a Palestinian government.

Over 9 years, Madrid-then-Oslo peacemaking was pursued through internationally facilitated processes between Israel and the PLO/PA. During the early years of this work, Israel and Jordan also signed a treaty of peace in 1994, bolstered by important hydropolitical considerations, building on the momentum generated through the Oslo process.\(^3\)

This was a period of euphoria and great hope for both Israelis and Palestinians who allowed themselves to imagine a future of peace and security, to engage in joint project development, to entertain a life which considered the other in terms of partnership and equality. Joint Israeli-Palestinian initiatives flourished during this period, from grassroots people-to-people dialogues, through to shared economic activities, across academic initiatives and into inter-governmental planning. Such planning was frequently undertaken with the assistance of the international community, notably the EU, the US, the World Bank, the North

\(^3\) Detailing the Jordan-Israel peace agreement and its water components is beyond the scope of the current study. It has been undertaken insightfully elsewhere. On linking water resources management to political normalisation, see Sosland, 2007: 174-175; on the water treaty’s adaptive institutional components see Fischhendler, 2008a: 92; on water quality issues, see Fischhendler, 2008b: 125; on the importance of language to successful agreements, see Fischhendler, 2008a and Fischhendler, 2008b. Compared with Israel and Jordan, Israel and Syria were not able to capitalise on Oslo’s momentum and finalise a bilateral agreement, in part because of water issues (Sosland, 2007: 187).
Atlantic Treaty Organisation (NATO), Japan, Canada and Scandinavian countries.

**A Hydrohegemonic Peace**

As much as the peacemaking process of the 1990s generated hope, it has also been targeted for much warranted critique. A hydropolitical examination of the Oslo process and agreements supports the argument that this peace initiative served to empower Israel’s hydrohegemony and its wider dominance over the Palestinians. It also brings further clarity and details to Israel’s narrative justification of this asymmetric relational construction.

**The Promise of Water**

A so-called Final Status issue, water seemed important to tackle early on. Water issues were terribly pressing, given water stress experienced by West Bank Palestinians and the rising water demands of West Bank Jewish settlers. Water was also perceived as an issue with the greatest likelihood of successful agreement between the parties (Allan, 1999). Indeed, progress evolved rapidly on the hydropolitical peacemaking front. Annex III of Oslo I, a *Protocol on Israeli-Palestinian Cooperation in Economic and Development Programs*, called on the parties to establish a Continuing Committee for Economic Cooperation that would undertake the following (quoted from El-Hindi, 2000: 118; emphasis in El-Hindi):

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74 Statistically, sixty percent of Israeli water came in the form of groundwater, with forty percent of this originating in West Bank aquifers (Lowi, 1993: 191). Some 75MCM/yr is supplied by Mekorot to the West Bank settlers, 44MCM/yr of which is produced by Israeli-controlled wells inside the West Bank (World Bank, 2009: iv).
Cooperation in the field of water, including a Water Development Program prepared by experts from both sides, which will also specify the mode of cooperation in the management of water resources in the West Bank and Gaza Strip, and will include proposals for studies and plans on water rights of each party, as well as on the *equitable utilization of joint water resources for implementation in and beyond the interim period.*

Building upon this, Israel and the PA signed the *Gaza-Jericho Agreement* on 4 May 1994 with significant hydropolitical implications. The Agreement granted the PA control of Gaza Strip and Jericho water resources, with the power to “operate, manage and develop” them (Gray and Hilal, 2007: 102-103), excluding those providing for existing Israeli settlements. The following year, the PWA was created by Presidential Decree No.90 on 26 April 1995. Palestinian Law No.2 (1996) empowered the PWA to proceed with a mandate to manage and develop the water resources of Palestine, including surface, ground and waste water (EUWI Website). Palestinian Water Law (2002) would eventually declare the PWA as the water regulator for the PA.

On 28 September 1995, Israel and the PA signed the *Israeli-Palestinian Interim Agreement on the West Bank and Gaza Strip* (Oslo II). Article 40.1 of Oslo II recognised that Palestinians had rights to West Bank water, while deferring a water agreement to final status negotiations. The document reads as follows (See ftnt 51, Amnesty, 2009a: 24):

> Israel recognizes the Palestinian water rights in the West Bank. These will be negotiated in the permanent status negotiations and settled in the Permanent Status Agreement relating to the various water resources.

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75 While nationally promising for the Palestinians, this move also centralised water governance in the region at the expense of Palestinian traditional and communal water practices.
Recognition of Palestinian water rights is understood as the breakthrough without which the Oslo II agreement would not have been possible (Sosland, 2007: 166). As Abu Ala, Palestinian water negotiator indicated, “[t]he main obstacle that hindered negotiations over practical issues has been removed.” (Sosland, 2007: 166) The interim arrangement agreed upon comprised the following elements:

1) Coordinated management of water resources and sewage in the West Bank;
2) The JWC: an Israel-Palestinian institution for joint water management and for dispute resolution;
3) Palestinian responsibility for management of water and sewage infrastructure in the Gaza Strip, except for those serving Israeli settlements;
4) Israeli extraction of West Bank water resources to be maintained at levels existing prior to the Agreement;
5) No sharing of Jordan River water: no change in Israeli sovereignty over the Jordan River, notwithstanding the other recognised riparians;
6) Strict rules of water development: allowing for limited increases in Palestinian water use and over which the PWA would have authority; and
7) Joint Supervision and Enforcement Teams (JSETs): in principle, five teams with full mobility and responsibilities.

The following year, in February 1996, Israel, Jordan and the PA penned a joint Declaration on Cooperation on Water-Related Matters and New and Additional Water Resources. It reflected a commitment of the parties to jointly develop new water resources (Kliot and Shmueli, 1998: 220). It certainly appeared to many observers as though Israel and the PA had become long-awaited partners for peace.

**Institutionalising Hydrohegemony**

Upon closer examination, the Oslo agreements constructed and produced a nuanced, asymmetric, hydrohegemonic relation between Israel and the
Palestinians which was termed ‘coordination’. It was deemed a temporary arrangement, reflecting the need to build trust between these parties over time, constitutive of a process intended to make peace between Israel and the Palestinians. However, the agreements and the political processes that were generated reflect the parties’ asymmetric comparative and relational power, institutionally captured and powerfully perpetuated.

**Institutional Asymmetry**

The central water-related institutional structure of the Oslo agreements is the JWC. It is intended to function as a joint water management structure for the implementation of Article 40 (Oslo II). The JWC is meant to serve as a forum for the resolution of technical disputes. The JWC has also been designated as the point of sustained contact between Israel and the PA during heightened escalations. Between 1995 and 2007, the JWC met over 60 times. The frequency of meetings dropped markedly between 2002 and about 2007, though the institution has continued to function with remarkable efficiency.

While work at the JWC involves both the IWA and the PWA, the institution has been marred by significant asymmetries that pre-empt it from operating as a joint institution for something akin to the cooperative production of equity between equal partners. The asymmetries may be perceived comparatively, in terms of status, resources, institutional base, support and ability to discriminate (Suleiman, 2000; World Bank, 2009: 51). The IWA is part of the State of Israel, and therefore benefits from the status and resource base it affords. In institutional terms, the IWA has a staff of about 200 people, 50-60 of which are
engaged in research (World Bank, 2009: 58). By comparison, the PWA is part of the beleaguered PA, with a very small staff that cannot always expect a paycheck on time, despite international community support (Personal interview, PW4 2010).

Israel and the PA agreed that all water development issues and initiatives in the West Bank would be brought before the JWC. Any water development initiatives in the West Bank, whether Israeli or Palestinian, would require the approval of the JWC before implementation. Yet, Israel has retained effective veto power on Palestinian water development initiatives while the opposite is largely not the case. This has been asymmetrically institutionalised in a number of ways. First, Israel’s approval is required for Palestinian water developments in the West Bank, where the Palestinians live, work and produce. Second, Palestinian approval is not required for Israeli water developments outside the West Bank, though they may draw on Mountain Aquifer water. Third, Israeli settlements inside the West Bank can pipe increasing quantities of water through Mekorot without Palestinian approval. Israeli settlements do not need to go through the JWC to increase access to water resources. Institutional asymmetry is evident on multiple fronts.

Well Development

A major dispute exists between Israeli and Palestinian water institutions about Israel’s alleged hydrohegemonic practices in terms of the issuance of well development permits in the West Bank. As the theory of hydrohegemony goes, it is possible for hydrohegemons to act as leaders or else as bullies. The
Palestinians claim that Israel has used its hydrohegemony to undermine Palestinian water development, as examples below demonstrate. Israel denies this claim, flipping it on its head. It says the Palestinians continue to be a threat to the state of Israel by pursuing a dual discourse: one within the context of JWC discussions and another with the international community, thereby seeking to undermine Israel’s credibility and legitimacy (Personal interview, IW1 2010; Personal interview, IG6 2010). An examination of these claims is insightful to the current analysis.

The Palestinians claim that Israel has consistently held back or delayed well related approvals, undermining their ability to pursue water development, institutional development and generally the human development of Palestinians. They often point to the World Bank (2009) and Amnesty International (2009a) reports to bolster their arguments. Both the World Bank and Amnesty International have variously claimed to have documented skewed JWC practices and decisions in Israel’s favour, particularly for the drilling of new wells. The World Bank also claims that JWC approval has been withheld for the development of most if not all agricultural water development projects (World Bank, 2009: 48).

Specifically, the World Bank (2009) states that between 2001 and 2008, 50 percent of Palestinian water and sanitation projects, by value, presented to the JWC were approved, amounting to some US$60.4 million. About one third have moved towards implementation. Of 102 applications for wells, 3 have been approved and are being developed (but not yet operational), 17 have been
approved, and 82 have been delayed and/or are awaiting processing. The World Bank (2009: 48) study summarises the operations of the JWC with reference to Palestinian projects as follows:

The above facts show that: (1) the process is in general slow; (2) the rate of rejection of PA projects is high; (3) the PWA has almost never sought to reject Israeli projects (only one has not been approved); and (4) well drilling projects and – until very recently – wastewater projects have had very low rates of approval.

These World Bank findings are reflected in other studies that reference leading Palestinian sources. For example, Deputy Chairman of the PWA has been quoted as stating that Israel refused to give permission to more than 130 projects worth about US$200 million, including 42 wells, 62 distribution lines and 14 sewage networks (Sosland, 2007: 171).

On the other hand, Israel claims that these sources have been misinformed and almost certainly misled, notably on the matters of well development and sewage infrastructure project approvals. It argues that the same people who have misinformed these sources are then also citing them as references (Personal interview, IW1 2010). The Israeli government emphatically denies that it has actively sought to limit or prevent Palestinian water development. In an official IWA response to the Amnesty International report, the following was stated (Shani, 3 December 2009: 5):

…there are more than 20 wells and other infrastructure projects that have received the necessary permits from the Israeli-Palestinian Joint Water Committee (JWC), but have yet to be implemented by the Palestinians.

76 The details of this claim are however vague.
The bottleneck to implementation is thus argued to be the Palestinians, not the Israelis involved in the JWC.

In addition to the JWC, water management and development projects undertaken by the PWA (with JWC approval) sometimes confront additional institutionalised hurdles. Specifically, the Israeli military’s Department of Civil Administration is believed to often pose obstacles before granting its own security approvals. Obstacles have taken the form of additional requirements for water development, in terms of studies, of requests for siting changes, or as simple denials on the premise of security concerns. In particular, this has been cited as a frequent problem where any infrastructure requires siting in Area C of the West Bank.

Again, the IWA denies the truth of these claims. In a personal interview, a leading IWA representative to the JWC indicated that each one of the wells listed in the World Bank report as having been intentionally denied or delayed by the Israeli Civil Administration was then specifically investigated to ascertain the accuracy of the information. In 2010, on the 82 permit requests received by the JWC for Palestinian water projects and then submitted to the Israeli Civil Administration for approval, the IWA representative to the JWC conducted a study with the following results (quoted directly from Personal interview, IW1 2010):

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77 The West Bank has been divided into designated Areas A, B and C. Area C is fully-controlled by Israel. Water infrastructure in Palestinian Area A sometimes requires infrastructural siting in Israeli Area C. Also, materials destined for use by the Palestinians in Areas A or B often require movement through Area C, with requisite permits.
a) 43 of the 82 are located in Area B or A. They do not need permits from the civil administration…
b) 20 of the remaining ones, have already received permission from the civil administration…
c) 5 are being checked, and the process is not yet complete.
d) The rest have not been the subject of a submission or request to the civil administration.

According to the IWA, if the Palestinians are not developing their wells, it is because they do not want or do not have the capacity to do so. According to the PWA, Israeli practices are primarily responsible for preventing the Palestinians from developing their wells. This specific dispute, and others listed below, feed directly into Israel’s justificatory narrative of hydrohegemony. In the simplest terms, this narrative emphasises that far from being partners for peace, the Palestinians cannot be trusted to represent Israeli and joint Israeli-Palestinian practices with accuracy. Instead, the Palestinians continue to seek out opportunities to delegitimate Israel in the eyes of the international community. It is therefore justified that Israel ensure its upper hand, rejecting as it does the accusation that it is specifically undermining Palestinian human rights or needs to water. Somewhat to the contrary, Israel has actively contributed to guaranteeing and expanding water delivery to the Palestinians, a matter considered in the discussion on ‘water quantities’ below.

Water Quantities and Inequity
Examining hydrohegemony, one may also consider the Oslo agreements in terms of the inequity of quantitative water allocations. Of the Mountain Aquifer’s 679MCM of water recognised under Oslo, Israel was allocated 483MCM/yr (71 percent) and the PA 118MCM/yr (17 percent) plus another 78/70-80MCM (12 percent) to be developed. This 78/70-80MCM would be found largely in the
Eastern Aquifer and potentially other sources for “future needs” (Amnesty, 2009a: 20). Thus, 71 percent of Mountain Aquifer water was allocated to Israel and 29 percent to the PA. Yet, the vast majority of the aquifer’s recharge area is in the West Bank (about 80-85 percent), while the waters discharge in both the West Bank (about 20-30 percent) and Israel (about 70-80 percent).

Taking this into consideration, the agreement itself is perceived as inequitable by the Palestinians based on the disparity between recharge and use. It is also believed that an agreement signed between asymmetrically powerful actors cannot be equitable, as demonstrated by the terms of the agreement. The Palestinians would like to see the agreement reopened and renegotiated under different conditions, addressing this very issue (among others). From Israel’s perspective, the agreement stands until and if a new agreement is negotiated. For the time being, Israel considers the agreement to be fair and is not prepared to renegotiate outside the context of final status negotiations pursued without preconditions. Indeed, Israel perceives the Palestinian desire to reopen the water agreement as illegitimate. This is concisely expressed as follows (Personal interview, IW1 2010):

The Palestinians want something that is beyond the agreement. They want to break the agreement... If the agreement outlines something, they want a lot above the agreement... Essentially, they want to take our water.

The Israeli narrative conveying the Palestinians as a hydropolitical threat to Israel is very clearly stated and reaffirmed.
According to the World Bank (2009), Amnesty International (2009a) and others, the Palestinian water situation has deteriorated since the signing of the Oslo accords. According to the Israeli government, the situation is well on its way to improving. Here also, the Israeli government does not accept responsibility for significant delays in Palestinian water developments.

Looking at Palestinian water abstractions in the wake of the Oslo water agreement as compared to allocations brings clarity to this situation, reflecting the reality of Palestinian water stress and hydropolitical insecurity. In 1999, Palestinian abstractions in the West Bank amounted to about 138.5MCM/yr (World Bank, 2009: 11). This was a significant improvement over pre-1967 abstractions of 103MCM/yr (Sosland, 2007: 146) and beyond the immediate PA Oslo allocation of 118MCM/yr. In 2007, Palestinian abstractions in the West Bank amounted to 113MCM/yr, a net deterioration in water quantity drawn by the Palestinians. Yet, during this time, the Palestinian population grew by some 50 percent. Overall, the Palestinians argue that their water stress has increased between 1999 and 2007, during the years of the second Palestinian Intifada.

On a per capita basis, Amnesty International (2009a) and the World Bank (2009) both depict a Palestinian decline in water availability during this time. Relative quantities of water abstractions per person and per day are revealing, as compared to those of Israelis and Israeli settlers. According to the World Bank, in 1999, West Bank Palestinians withdrew about 190 lpcd (litres per capita per day). Israelis averaged about 1,000 lpcd and settlers about 870 lpcd. By 2007, West Bank Palestinian water withdrawals were 123 lpcd while Israelis...
averaged about 544 lpcd (World Bank, 2009: 13). Further, given that water provided and water consumed differ in terms of actual quantities because of network issues, West Bank Palestinians were actually averaging about 50 lpcd of water for domestic use by 2007 (World Bank, 2009: 16, 33). Population centres like Ramallah average around 150 lpcd. Palestinians not on the network average a meagre 10-20 lpcd, a quantity far below the minimum requirements for human consumption by international standards. In relative terms, inequitable consumption is glaringly evident between Israelis and Palestinians.

Israel argues that the figures above do not reflect the fact that Palestinian per capita water consumption has and will continue to increase markedly as compared to pre-1967 consumption, as stated earlier (Shani, 3 December 2009). Further, once the Oslo allocations and developments are fully completed (118MCM+78/70-80MCM), amounting to nearly 200MCM, the Palestinians will meet and then surpass World Health Organisation (WHO) standards. For the time being, of the additional 78/70-80MCM, Palestinians have received approval for 16.7MCM (17 wells) and have submitted applications for another 31.5MCM (82 wells) with some 3.2MCM actually being developed in 3 wells (none of which were yet in operation; World Bank, 2009: 36). Overall, the Palestinians argue that actual consumption must be evaluated. Israel argues that negotiated trajectories, development potential and planning must be factored in for a full picture. In pointing out the different ways of representing the situation, Israel highlights that the Palestinian narrative is rooted in inaccurately depicting Israel in a negative light.
In recent years, Israeli water consumption has been intentionally decreased as part of a wider effort to create greater comparative equity in Israeli and Palestinian consumption patterns (Personal interview, IW1 2010). The Israeli government has made it policy to ensure that Israelis and Palestinians are provided with comparable and equitable quantities of water both in the short-term and as part of its planning for 2050, according to one government-aligned Israeli water/peace practitioner (Personal interview, IW2 2010; See also Council of the Government Water and Sewage Authority, 2011). With this in mind, Israel argues that the Palestinians fail to recognise Israel’s benevolent and equitable approach to overall water needs, instead seeking to delegitimate and thereby threaten Israel and the Jewish people. In this context, hydrohegemony is both intentionally pursued and justified by Israel on the premise that the Palestinians cannot be trusted as equal partners.

**Deteriorating Peace, Expanding Asymmetry**

Subsequent to Israeli PM Rabin’s 4 November 1995 assassination and Shimon Peres’ short-lived interim government, whatever the peaceful potentialities existed of the Oslo process appear to have dissolved. It became quickly evident that newly-elected Israeli PM Netanyahu carried significant reservations about the land-for-peace premise of Oslo (Bishara, 2002). Indeed, his vision of ‘peace’ entailed the intentional perpetuation of Israel’s hydrohegemony.

Of particular interest was PM Netanyahu’s 1997 plan, referred to as ‘Allon Plus’, which he presented to his inner cabinet. Netanyahu proposed a fragmented 40
percent of the West Bank to the Palestinians. Israel would keep the remaining 60 percent, including a ring of Israeli settlements, strategic lands, the road network and controlling involvement in water resources management. The PM was quoted as having said that Palestinians should not have “control of airspace or control of underground water resources…” (Sosland, 2007: 170). This is further evidence of an Israeli peacemaking strategy of disaggregation, of Palestinian land, water and people.

The Netanyahu government’s water negotiator was Ariel Sharon78. In his vision, many West Bank settlements were to be annexed to Israel, notably those sitting strategically above Mountain Aquifer water resources. Sharon also called for increasing the quantity of water available to Palestinians, in an effort to bring them to parity with Israelis (Sosland, 2007: 170). The source of this additional water was not clarified at the time. Curiously, Sharon had persistently obstructed Palestinian efforts to construct three wells at Herodian, despite their being included as provisions of Oslo and having been earmarked with US$46 million in US funds (Sosland, 2007: 170)79. When clarified, Israel’s quantitative approach was to be implemented through the provision of desalinated seawater rather than Palestinian control over West Bank natural water resources. The significance of this, as part of a wider Israeli strategy, is explained below.

78 Ariel ‘Arik’ Sharon was notoriously known for enabling the 1982 Sabra and Shatilla refugee camp massacre of Palestinians by Christian Phalangists in South Lebanon before later going into Israeli national politics.

79 Shlaim’s interpretation of Netanyahu’s approach is telling: “While Netanyahu’s plan conformed to the Oslo equation of land for peace, his policies on the ground worked in reverse. Everyday the Palestinians had less land and the Israelis less peace. His vision of the future was taking physical shape on the hills of the West Bank.” (Shlaim, 2001: 584)
Even much lauded Israeli PM Ehud Barak’s verbal offer to the PLO at Camp David fell significantly short of sovereign equality and relational equity as the premise of peacemaking. According to Reinhart (2003: 25), Barak’s offer amounted to little more than the institutionalisation of the status quo in terms of land and resources, including water, notably with respect to asymmetric governance. Also, final status arrangements would be determined over a further 10-20 years, some 60-70 years after the Palestinian Nakba. Thus, from Netanyahu, to Barak and then to Sharon, Reinhart argues, the War of 1948 for Israeli independence, and therefore also against Palestinian self-determination rooted in equality and equity, continues without hope of resolution. Israel asserts its power to ensure national security in all realms, including water, undermining the prospect of peacemaking rooted in principles of positive peace.

The multiplicity of efforts, memoranda and agreements that were pursued over subsequent years seemed to produce an ever weaker PA with ever less likelihood of governing an independent and coherent Palestinian state. Israeli recognition of the PLO and the creation of the PA had become a process of legitimating Palestinian assistance in the fragmentation of Palestinian territory and the reorganisation of a water regime that promised equality and equity but produced asymmetry. The production of asymmetry through inequality and inequity (in the hydropolitical and other realms under the guise of a peace process) may be understood as the underlying cause of the second Palestinian Intifada (though not its proximate cause or trigger), the BDS movement (BDS
Website) and the renewed interest in the single binational state (Lappin, 2004; Bahiri and Siniora, 1999).

Interestingly, as the second Intifada gained momentum, the JWC continued to hold meetings, doing so right through to the present time. It is one of two Oslo-era joint committees that survived the uprising (World Bank, 2009: 8; the other being the Joint Economic Committee)\(^8\). Indeed, the JWC sought to disassociate water management and development from the conflict’s most recent escalation. Memorably, the heads of the Israeli and Palestinian water institutions, as well as their water negotiators, notably Noah Kinarty and Nabil al-Sharif, issued statements calling on all parties to refrain from attacking and damaging water and sewage infrastructure in the area (Sosland, 2007: 172; Allan, 2002: 286). At a 31 January 2001 meeting, these JWC partners signed a Joint Declaration for Keeping Water Infrastructure out of the Cycle of Violence at the Erez Crossing on the Gaza-Israel border (Hamright et al., 2006: 5; Rouyer, 2003: 5), stating:

> The Israeli and Palestinian sides view the water and wastewater sphere as a most important matter and strongly oppose any damage to water and wastewater infrastructure.

The delivery of water resources to all populations was considered by the parties to be a fundamental human need that should not be compromised as a result of escalated conflict. Examples of water cooperation during the Intifada are many, and they include coordination efforts, wastewater purification and reuse.

\(^8\) The already dwarfed JSETs ceased to include Palestinian participation onwards from the second Intifada. Palestinians cite that they have been excluded from monitoring water use in Israeli settlements, and constrained in their access to Area C, where important water infrastructure is located (Feitelson and Haddad, 1998: 235). The Israelis believe that JSET Palestinians were afraid of being identified as collaborators (World Bank, 2009: 52).
This may be juxtaposed against the fact that in the year following the above statement, it is estimated that Israeli military attacks caused about US$7.4 million in damages against Palestinian water infrastructure in the West Bank and Gaza Strip (Amnesty, 2009a: 64). In fact, from the second Palestinian Intifada until the present time, there is growing documentation of Israel (Amnesty, 2009a: 2), the IDF (Amnesty, 2009a: 28; PHG, 2002 in Rouyer, 2003: 5) and Israeli settlers (Rouyer, 2003: 6; Oxfam, 2002 in Rouyer, 2003: 6) damaging and destroying Palestinian water infrastructures. Such infrastructures have included traditional water harvesting and storage facilities (Amnesty, 2009a: 71-72; Krinis, 2007; Settlers YNET 2007; WAFA Website), municipal infrastructures including electricity, as well as internationally-funded waterworks and wastewater systems (Donor Support Group in Amnesty, 2009a: 66).

This has caused heightened water stress and insecurity for Palestinians, undermining Palestinian self-determination pursuits and causing greater Palestinian hydropolitical dependency on Israel. In most cases, Israel has claimed that water technologies and infrastructure were erected without required permits. The evidence demonstrates that this is the case, though only some of the time. Further, the building of Israel’s security barrier has had some significant deleterious implications on water management at a local and national level (Amnesty, 2009a: 54; Trottier, 2007). Palestinian farmers across the West Bank have lost farmland, seen their access to water curtailed and suffered important crop losses (World Bank, 2009: 25-26). It has been estimated that 8,920 dunums of irrigated land of a total 708,000 dunums of irrigable land had been lost to the separation barrier by 2009 (World Bank,
2009: 26). In other cases, as with the Palestinian villages of the Alfei Menashe enclave\textsuperscript{81}, the route of the security barrier is such that villagers were cut off from their water sources to the east (Amnesty, 2009a: 57). To partially remedy the situation, the Israeli authorities have issued permits for laying down pipes across the route of the Wall.

Overall, the average cost of water to Palestinians throughout the West Bank and Gaza Strip has increased. An OXFAM report concluded that the cost in 2001 had risen by 82 percent in eleven West Bank localities as compared to the previous summer (Oxfam, 2002 in Rouyer, 2003: 7). This is partially due to the increased reliance on private tanker trucks which sell water at several times the cost of public water. There was also evidence in 2002 and 2003 of Palestinians drilling wells without permits to meet their water needs in a condition of acute water stress. Today, it is believed that Palestinians are illegally withdrawing some 10MCM/yr of water from Mekorot operations in the West Bank.

\textsuperscript{81} These are the villages of Ras Al’Tira, Dan’A, Wadi Al-Rasha and Ramadin South.
Hydropolitics of Non-Conventional Water

The Israel-Palestinian conflict has come to include what is generally referred to in the literature as *non-conventional* or *unconventional* water, denoting reused and recycled wastewaters, water that is produced through seawater desalination, even water transfers between basins and countries. Such sources of water have increasingly figured in conflict and peace dynamics given their rising quantities, their significance to shared ecosystems, their effects on the relationship between parties, and the fact they are intentionally leveraged to impact conflict and peace processes.

The current section will specifically consider the hydrohegemonic practices and ideations of non-conventional waters. The argument will be made that Israel has pursued, (re-) produced and perpetuated its hydrohegemony through the management and production of non-conventional waters. In so doing, it has actively sought to discursively distinguish itself as an environmentally-sustainable subject as compared to an environmentally-irresponsible and unsustainable Palestinian subject. Israel's hydrohegemony has been further justified and expanded based on this very premise as well as on its perception of continued Palestinian threat.

Hydrohegemony of Wastewater Recycling and Reuse

Wastewater management has been an area of particular tension between Israel and the Palestinians, in terms of relational treatment and reuse practices. A brief historical and quantitative review of such practices is helpful in situating the politics of discord between them.
From the mid-1960s onwards, Israel developed its technological capacity to purify and recycle wastewater. In the early 1970s, this was considered a budding priority, given that Israel’s natural water resources were being withdrawn at near-recharge capacity and water demand was continuously rising. In the decades since, recycled wastewater has developed into a significant resource, largely used for agricultural purposes, though with some municipal uses as well. In 1994, Israel generated 365MCM of sewage water, of which 309MCM was treated, generating 254MCM of usable water, with 136MCM sufficiently treated for irrigation (Klein, 1999 in Issar, 2000). In 1997-1998, according to the Hydrological Survey (1998 in Issar, 2000), Israel dumped 110MCM of treated water for recharge into the Coastal Plain Aquifer, with additional treated waters being dumped into the Mediterranean. Today, Israel captures and treats some 70 percent of its municipal wastewater. It plans to expand this system so that by 2020, at least 20 percent of water supply and 50 percent of irrigation water will find their sources in treated wastewater (Arlosoroff, 2007 in Brooks and Trottier, 2010).

The Palestinians are relative latecomers to the practice of wastewater recycling. Most Palestinian wastewater within the West Bank is dumped untreated into open and unlined cesspits. According to the World Bank (2009: v), some 31 percent of Palestinians are connected to a sewerage network. Some 69 percent rely on septic tanks, the disposal of which has become highly problematic, both for Palestinians and for Israelis (World Bank, 2009: 20). Between 25MCM (according to the World Bank), 46MCM (Tagar et al., 2004: 6) and 56MCM
(according to Israeli authorities; Amnesty, 2009a: 78) of untreated sewage is discharged into the environment throughout the West Bank in some 350 locations every year. Given this fact, municipal wastewater treatment was placed on the bilateral Israel-Palestinian agenda during the 1990s.

On 18 September 1995, Israel and the PA signed an Agreement on Water and Sewage as a component of Oslo II. The Agreement stipulated that Palestinians were entitled to 28MCM/yr of reclaimed sewage water on the grounds that Israelis and Palestinians both recognise that “treated and re-used… wastewater is the most readily available source of additional water.” (Feitelson and Abdul-Jaber, 1997: 1). The Palestinians were also obligated to ensure that their efforts in this domain would not cause harm to water sources and the surrounding environment, particularly in ways that would impact Israel and Israelis.

The obligation not to cause harm to water sources and the environment is a particular area of tension between Israel and the Palestinians. The sewage of most Palestinian towns and cities (and some Israeli settlements) has flowed with inadequate or no treatment through the West Bank (Feitelson and Abdul-Jaber, 1997; Tagar et al., 2005). This amounts to the sewage of more than 2 million people. Seeping into the Mountain Aquifer, untreated wastewater and sewage practices are threatening the most important source of natural water in the region (Tagar et al., 2004). In the context of the current study focused on Israel’s hydrohegemony, it bears examining the disputed reasons behind the Palestinian failure to pursue adequate wastewater treatment and reuse.
Israel maintains that Palestinians are not pursuing wastewater treatment for political reasons. It claims the Palestinians have deprioritised environmental concerns. Thus, an Israeli hydrohegemony is perceived as the best contemporary path for ensuring that the environment is not further devastated. Also, accelerated wastewater treatment would increase Palestinian access to usable water, thereby relieving strain on the Mountain Aquifer, which is in everybody's interest. The Palestinians maintain that Israel is responsible for preventing the Palestinians from pursuing effective wastewater management, also for political reasons. They reject being labeled as environmentally irresponsible, represented as incapable of managing their wastewater affairs. The Palestinians argue that occupation and subjugation have disempowered them politically and economically. The Palestinians blame Israel for any environmental devastation caused by lacunae in West Bank wastewater mismanagement.

**Wastewater Management and Palestinian Subjecthood**

Israel consistently argues and acts on the premise that the PA has failed to meet its responsibilities for ensuring that water resources are not damaged by human activity, with notable respect for the proper disposal of wastewater. Indisputably, little practical progress has taken place on Palestinian wastewater treatment since Oslo II and by late-2010\(^\text{82}\).

This is not for a shortage of intentions, plans and resources. The Palestinians have designed plans for sewage facilities in the cities of Hebron, Ramallah, Ramleh.
Nablus, Tulkarem, Jenin and Salfit. Support for Palestinian sewage treatment, reclamation and reuse has been forthcoming from the international community. The US and German governments have committed some US$230 million for sewage infrastructure in the West Bank. Yet, between the start of the Oslo process and 2005, only one treatment plant was built at El-bireh in 1993, and another was rehabilitated in Tulkarem in 2005 (Tagar et al., 2005: 1). As of 2009, wastewater treatment plants were functional in Hebron, Jenin, Tulkarem and Ramallah, with efficiency at 10-30 percent (World Bank, 2009: 20). The PA frequently claims that the JWC and the Israeli military’s Civil Administration have created obstacles to the development of sewage and wastewater treatment facilities in the Palestinian-controlled areas of the West Bank (Personal interview, PW7 2010; Personal interview, PW5 2010). These are framed as political obstacles diversely manifesting as administrative, process-oriented and technical hurdles.

Israelis on the JWC and in the Civil Administration take issue with the Palestinian claim that Israel is undermining Palestinian efforts, indicating that on the contrary, Israel makes every effort to assist Palestinian development in the wastewater sector (Shalev, 2011). Notably, Israel argues that the Palestinians often fail to develop facilities for which they have permits. In the process, the Palestinians are damaging the environment through inadequate wastewater disposal while at the same time using high quality freshwater for agricultural purposes when they could instead be using recycled effluent (Shalev, 2011) 83. Perhaps most poignantly, Israeli officials claim that Palestinians, both in

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83 According to this source, Palestinians are not using any recycled effluent for agriculture in PA territories.
officialdom and in civil society, are responsible for misleading the international community about Israeli practices in an effort to garner underserved partisan support (Personal interview, IW1 2010). As shall be made evident through the various examples below, Israel’s hydrohegemony is thus pursued and justified on environmental and political grounds.

**Palestinian Wastewater Plants**

The current section provides a review of selected wastewater treatment systems and facilities in the Palestinian West Bank that have been the subject of political disputes as framed above. These are selected from efforts in the Ramallah Region, Jenin, Hebron\(^8\), Nablus (East and West)\(^8\), Salfit, and Tulkarem\(^8\). A subsequent section will examine the charge of Israeli manipulation of technical criteria meant to undermine an endogenous Palestinian wastewater treatment capacity.

Wastewater treatment has been fraught with controversy and challenges in the Hebron region. It is a region that has been identified as a site of significant nitrate and broader environmental pollution (Shalev, March 2011; Tagar et al., 2004: 6). In the Nablus region, there is evidence of nitrate pollution of the North-Eastern (Nablus-Gilboa) Aquifer, considered vital to both Palestinians and to Israel. Also, pollution from Nablus enters Wadi Zeimar/Alexander River basin to the west, impacting first Palestinian and then Israeli communities. This stems from untreated or inadequately treated sewage being dumped into the environment by Palestinians. In an effort to deal with this situation, Israel and the PA took steps to cooperate, with the support of the international community and notably the German Development Bank KFW (see World Bank, 2009: 40; Municipality of Nablus, 2009; Lahmeyer SPNW Website; Shalev, 2011). This case demonstrates Israel’s hydrohegemonic power in being able to ensure that projects move forward when its approvals, commitments and efforts are clearly articulated and invested.

The situation in Gaza has not been elaborated upon in this study, although it is summarised herein. There are three wastewater treatment facilities in the Gaza Strip; Gaza City, Beit Lahia and Rafah. Overall, these facilities have been inadequate, and plans to further develop the infrastructure have been frustrated. It has been difficult to perform repairs on degraded wastewater infrastructure where it exists. This has notably been the case throughout the Israeli and Egyptian 2007-2010 blockade of Gaza. Most sewage in the Gaza Strip is dumped untreated into wadis and lagoons on the Mediterranean coast. Many houses that are unconnected to sewage systems dump their sewage into cesspits, which are insufficiently emptied, given the poor economic situation in Gaza (World Bank, 2009: vi). The Coastal Aquifer continues to be severely damaged by both wastewater and seawater incursion.
Ramallah Region

Ramallah’s sewage treatment system has been inadequate for decades, resulting in untreated sewage flowing to the valleys west of the city (Feitelson and Abdul-Jaber, 1997: 12). While seven wastewater treatment plants were approved in the immediate wake of Oslo, the plant at El-bireh is the only one to have been built and to be properly operational (World Bank, 2009: 40). By 1997, the eastern part of Ramallah was connected to the El-bireh sewage treatment plant, as well as the Israeli settlement of Psagot (Feitelson and Abdul-Jaber, 1997: 12). A whole series of such joint plans were outlined in the 1990s though hardly any ever came to fruition.

In 2004 and 2005, the JWC issued its approval for the following sewage treatment plants in the Ramallah region: Bir Zeit, Jifna and Gilazoon; Ramallah-Bitunia; and Ramallah-North (Tagar et al., 2005: 2). In 2004-2005, the German government funded the rehabilitation of sewage ponds in Ramallah. After receiving JWC approval for Ramallah-Beitunia, the PWA then sought approval from the Israeli Civil Administration in June 2008. In an October 28, 2008 response from the Israeli head of the Civil Administration, a number of requests were issued that reflect Israel’s hydrohegemony vis-à-vis the Palestinians (Response from Head of Civil Administration to the PWA, quoted in the World Bank, 2009: 54, adapted herein):

- Submission of detailed plans, for Civil Administration approval;
- Inclusion of a full environmental assessment report;
- Assurance that the project would not impinge on three archaeological sites; and
- Connection to Israeli settlements: “The plans should take into account the possibility of connecting the community of Beit Horon to the plant”.

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Clearly, the Israeli Department of Civil Administration was requesting of the PA/PWA that it investigate and evaluate the possibility of connecting an Israeli settlement to the Ramallah-Betunia wastewater treatment initiative. As noted above, this would not be the first case of a settlement and Palestinian municipality sharing sewage infrastructure. However, with the demise of Oslo and in the wake of the second Intifada, the Palestinians have been adamant in their refusal to legitimize Israeli settlements through shared infrastructural development. Palestinians perceive wastewater management in political terms, first and foremost, resisting offers of technical support that undermine Palestinian self-determination. This reflects a wider Palestinian hydropolitical discourse as compared to an Israeli, hydrohegemonic technical discourse on transboundary water issues.

Israel is highly critical of the discursively-informed Palestinian position, which it says demonstrates that the Palestinians prioritise dogmatic politics above human needs and environmental sustainability (Personal interview, IG6 2010; Personal interview, IX3 2010). The outline of demands from the Civil Administration above, far from being unacceptable from Israel’s perspective, is meant to ensure that both natural and cultural environments are protected. The Palestinians in turn respond that such a hierarchical system of authority perpetuates their own subjugation and Israel’s dominance. The Palestinians aspire to manage the environment themselves, according to their own as well as shared priorities (Personal interview, PW4 2010; Personal interview, PW5 2010; Personal interview, PW7 2010). Hydrohegemony is thus framed by Israel
as a necessity, and by Palestinians as a system of dominance to be resisted in all spheres, including wastewater management.

Jenin

The wastewater treatment system in Jenin is relatively old, having been built in 1972. It suffers from extensive design and technical flaws, and there is no complete map of the system. By 2005, about 40 percent of the urban population and 100 percent of the refugee camp population were connected to the sewage treatment system. The rest rely on cesspits which are inadequately managed. In the Jenin area, there is evidence of nitrate pollution in the North-Eastern Mountain Aquifer, which also provides for Israel’s Jezreel Valley and Gilboa region (Tagar et al., 2004: 6). In an effort to improve treatment, the system was partly rehabilitated in 1993.

Nearly a decade later, in 2000, the Israeli Civil Administration funded and upgraded the wastewater management system to the order of 750,000NIS (about US$215,000). This wastewater treatment facility was meant to serve the Jenin municipality, the Jenin Refugee Camp, the Jenin industrial zone, thirteen surrounding villages and the Israeli Gilboa region (PWEH, 2005: 16). During the second Palestinian Intifada, most of the equipment for this important upgrade was stolen. The system remained poorly inadequate for a few more years and then inoperational, as the site became a dump for solid waste. During this time, wastewater was flowing westward, polluting Wadi Al Muqatta’ and groundwater in the area.
Moving wastewater treatment forward, funding from the German Development Cooperation was committed to the Jenin area. In 2003, the JWC gave its provisional approval to the Jenin Wastewater Treatment Plant (WWTP) project. The JWC also approved a temporary solution for the industrial park, insisting that the treated water only be used locally. In 2004-2005, a pre-feasibility study of the Jenin WWTP was undertaken by the Palestinian Wastewater Engineers Group (PWEG) in collaboration with the Jenin Municipality and support of the PA (PWEG, 2005).

Since then, the Jenin Plant became operational though again, in 2010 it was having “operational difficulties” (Nagar, 8 June 2010: 1). Nonetheless, when prioritised by Israel, Palestinian wastewater treatment facilities move forward with relatively few political obstacles. This supports the argument that Israel’s power is central to the development, progress and pace of Palestinian wastewater treatment practices. Theft of wastewater treatment supplies further informs Israel’s narrative of irresponsible Palestinian subjectivity. To secure itself and its people, Israel has committed itself to ensuring Palestinian wastewater development.

*Tulkarem*

In the Tulkarem region, as elsewhere, Palestinian activities have direct socio-environmental effects on Jewish communities. Where the Palestinians have been slow to respond, Israel has been keen to move swiftly with hydrohegemonically imposed solutions. The Palestinians sometimes perceive
themselves as having been deceived by Israel in the process, as in this case, further undermining their power and pursuit of hydropolitical self-determination.

Historically, Israelis have complained about Palestinians dumping sewage into the Alexander River/Wadi Zeimar, which flows from the West Bank through the Israeli Regional Council of Emek Hefer. Groundwater in the area around Tulkarem and neighbouring Qalqilya has been identified as containing relatively high concentrations of nitrate pollution (Tagar et al., 2004: 6). There is also evidence of chloride pollution emanating from industrial and municipal activities in the Palestinian West Bank (Personal interview, IE4 2010).

To deal with a difficult situation, an agreement for local level cooperation between the Israeli municipality of Emek Hefer and the Palestinian municipality of Tulkarem on wastewater treatment was reached in the mid-1990s (Feitelson and Abdul-Jaber, 1997: 1). In an emergency move, Emek Hefer built a plant to treat Tulkarem wastewater. This wastewater was collected in PA areas and then piped across the Green Line to Israel for treatment at Kibbutz Yad Hanna. Recycled wastewater stemming from this arrangement was then incorporated into the Israeli water management system. Building on this effort, the Tulkarem rehabilitation project saw the opening of its West Bank plant in February 2005 with major funding from the German government. This initiative is inscribed in a wider effort of Israelis and Palestinians on both sides of the Green Line to implement the joint management of sewage and wastewater.87

87 Close working relations were developed between Israeli and Palestinian stakeholders. The initiative drew in the involvement of the Israeli military, the Israeli Water Commission and the Israeli Foreign Ministry. The Palestinian Cabinet has also taken a keen interest in sewage and
Once perceived as satisfactory by the Palestinians, this arrangement would become an important source of concern. Problems with the cooperative relationship arose when costs of the arrangement were scrutinised. First, the PWA claimed that Israel deducted the costs of sewage treatment from VAT funds Israel owed to the PA, without the PWA’s knowledge. Noting that water produced through the ‘cooperative’ arrangement was then being piped back across the border and paid for by the PWA, the Palestinians reframed their understanding of the arrangement to perceive that Israel was charging them “twice”: first for a service (wastewater treatment) and then for a resource (purified wastewater) which they themselves could be managing at a fraction of the cost and with greater economic and political benefits (Personal interview, PW5 2010).

In November 2008, Israel’s Ministry of National Infrastructure advised the PWA that the Yad Hanna wastewater treatment plant in Israel, serving Tulkarem as well as Israeli communities, needed upgrading and expanding. In a unilateral move, Israel advised the Palestinians that the cost of the expansion and upgrade amounted to some US$13 million and that this could be billed to the PA through VAT deductions (World Bank, 2009: 53). Similarly, in 2002, the PA had already paid some US$4.5 million for rehabilitating the Yad Hanna plant, also then charged in the form of VAT deductions.

Overall, this arrangement reflects a hydrohegemonic relationship where the Palestinians are being imposed a series of solutions to a highly problematic treated wastewater management issues. In 2004-2005, the Israeli Association of Regional Councils sought to promote the transboundary management of sewage and wastewater.
environmental situation. Israel argues that the Palestinians simply do not take responsibility for the environment, to the detriment of downstream Israeli communities. Israel must then impose solutions in promotion of sustainable environmental considerations and human security within Israel. While environmentally and perhaps socially positive, the structure of these arrangements is such that the Palestinians have not been treated as equal partners but as irresponsible, dependent and even suzerain subjects (on contemporary suzerainty, see Cairo, 2006). This is justified by Israel as being in the interest of both Palestinians and of Israelis.

**Technical Criteria**

In recent years, Palestinians have argued that Israeli members of the JWC have demanded standards for wastewater treatment that are far beyond what the Palestinians would choose for themselves in the short-term. Without meeting these standards, it is claimed that Israel has been unwilling to provide Palestinians with the necessary permits for the development of facilities, even those for which international funding has been secured (Personal interview, PW5 2010).}

IWA officials reject the accusation, describing a quite different situation, indicating that the Palestinians continue to use the trope of ‘technical criteria’ as a means of delegitimizing Israel. While IWA officials agree that high technical standards are desirable, they point to documentation that conveys Israel-PA

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88 Political insecurity has had important repercussions on the support international donors have been willing to provide for wastewater treatment facilities and infrastructure. Between 2001 and 2004, international donors suspended much of their support on wastewater treatment facilities in the West Bank and Gaza Strip. Support has again been forthcoming since about 2005 for this sector.
agreement on a phased approach for the implementation of such standards (Personal interview, IW1 2010). Notably, a key IWA person on such matters points to minutes of meetings and letters exchanged between Israel and the PWA to support this position (Personal interview, IW1 2010).

Minutes of a JWC meeting held in Tel-Aviv on 31 December 2003 refer to a mutually-agreed upon *Memorandum of Understanding on Guidelines and Technical Criteria for Sewerage Projects (MOUGTCSP)*, signed at a Joint Technical Committee (JTC) of the JWC meeting on 21 December 2003. The said MOUGTCSP indicates that each party to the JWC is responsible for collecting and treating "all wastewater produced in areas under its control… to a level that will not adversely affect the water quality in the various water resources and the environment." (MOUGTCSP, 2003: pt.3) Further, the MOUGTCSP reflects JWC agreement that "[t]he wastewater treatment plants shall be planned and constructed according to current western standards." (MOUGTCSP, 2003: pt.11.a.)

The parties agree to build the plants in a “modular design” (emphasis in original), such that the first phase would involve at least a secondary treatment while a third phase would involve upgrading the plant to be capable of providing tertiary treatment.\(^{89}\)

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\(^{89}\) Effluent values for phase one are indicated as follows:

\[
\begin{align*}
    \text{BOD}_5 &= 20 \text{mg/L} \\
    \text{TSS} &= 30 \text{mg/L} \\
    \text{TN} &= 25 \text{mg/L}
\end{align*}
\]

though with Maximum Values listed in Schedule 2 as follows:

\[
\begin{align*}
    \text{BOD}_5 &= 40 \text{mg/L} \\
    \text{TSS} &= 60 \text{mg/L} \\
    \text{TN} &= 40 \text{mg/L}
\end{align*}
\]

Extensive values for phase 2 are agreed upon in Schedule 2, noting that "[t]he quality of the effluent shall be in accordance with its end-use…” (MOUGTCSP, 2003: pt.11.c.). Schedules 1
The parties have clearly agreed to create a phased process for the meeting of high, western standards for wastewater treatment, recycling and discharge. The phased approach is meant to enable the development of an endogenous wastewater treatment capacity for the PA while minimising technical obstacles. This paints quite a different picture from that portrayed by Palestinians arguing that Israel is holding the PA to high technical standards as an obstacle to the implementation of wastewater treatment facilities in PA-controlled areas (Personal interview, IW1 2010).

Further, on 8 June 2010, the IWA sent a letter to Palestinian water specialist Eng. Jehad Bashir. In this letter, the IWA highlights both “the critical need to promote the establishment of Palestinian WWTPs“ and “the lack of sufficient progress in this field” (Nagar, 8 June 2010: 1). In this letter, the IWA outlined three Palestinian claims against Israel regarding difficulties in the establishment of Palestinian WWTPs, as follows (Nagar, 8 June 2010: 2):

a. Requirement for high standards treatment [sic];
b. Demand to connect to Israeli settlements to Palestinian WWTPs;
c. Prohibition of the construction of treatment plants in area C.

and 2 reflect agreement on the standards of wastewater treatment for waters meant for “irrigation in areas of high hydrological sensitivity”, for “[d]ischarge into wadis/streams/rivers (include. All their tributaries (sic))”, for “[u]nrestricted crops, including public parks, gardens and sports grounds” as follows:

BOD5 (Average)=10mg/L with BOD5(Maximum)=15mg/L; TSS(Average)=10mg/L with TSS(Maximum)=15mg/L; TN(Average)=10(for discharge into wadis/streams/rivers, including tributaries), 25(for irrigation in areas of high hydrological sensitivity) with TN(Maximum)=15(for discharge into wadis/streams/rivers, including tributaries), 40(for irrigation in areas of high hydrological sensitivity).
On all three points, the IWA states that “we wish to clarify again, officially and in writing, that these above motioned [sic] claims are not true.” (emphasis in original; Nagar, 8 June 2010: 2)

The first point was already discussed above. Regarding the second point, Palestinians have frequently claimed that Israel demands that Israeli and Palestinian WWTPs are jointly established. The IWA states that Israel does not demand that Israeli settlements are connected to Palestinian WWTPs while recognising the merits of doing so. As discussed in previous sections, there is evidence to indicate the following:

• Israel has made it a condition that Palestinians investigate and evaluate the possibility of connecting Israeli settlements and Palestinians areas to WWTPs in the West Bank (Isaac, 2000: 27);
• Since the end of the first Netanyahu government in 1999, requests for Israeli connections to Palestinian WWTPs have dropped markedly (Tagar et al., 2004: 18).
• There was at least one case of an Israeli settlement connected to a Palestinian WWTP, in the case of Psagot and Ramallah during the period of the current study. Additionally, a WWTP for Hebron has been agreed upon between the World Bank, Israel and the PA in May 2011, which would serve the settlement of Kiryat Arba as well as Hebron City;
• There are cases where transboundary cooperation is willingly practiced in the field of wastewater treatment, notably in the case of Tulkarem and Emek Hefer (in Israel proper); and
• In at least one case, Israel has provided significant funding for the rehabilitation of a WWTP located in a Palestinian city, in the case of Jenin. Here, the WWTP has been planned to service both areas within the PA and in Israel.

In other words, there are clear indications that Israel prefers joint wastewater treatment facilities with the Palestinians. However, the record also appears to indicate that Israel prioritises implementation of wastewater treatment facilities over demands for such joint facilities and developments.

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90 The case of Salfit and Ariel has been specifically identified.
Finally, on the third of the points raised above, the IWA indicates that (Nagar, 8 June 2010: 2):

[T]ens of Palestinian projects (in the fields of water and wastewater) in area C were approved by the JWC throughout the years. We will take this opportunity to once again assure, that the Israeli side will, in principle, approve WWTP projects proposed in area, C [sic] as long as they meet the necessary professional standards.

In this same letter, the IWA officially claims that the Palestinians represent a distorted picture of agreements between Israel and the PA to garner international support while delegitimizing Israel in the international arena. Contrarily, Israel describes itself as deeply committed to wastewater treatment, as one component of environmental sustainability and human security in the region. According to Israel, the Palestinians continue to leverage wastewater treatment issues for political gain through the misrepresentation and delegitimization of Israel, thereby feeding into Israel’s hydrohegemonic narrative justification.
Producing Water: Resituating Hydrohegemony

The simple but potent argument often made is that water wars can be averted between countries and peoples through increases in water supply that specifically alleviate their water stress and the water-related conflictual competition between them (Allan, 1997; Allan, 2002). Building on a similar logic, Israel has moved to increase its national water supply, and also the region’s water supply, through extensive desalination efforts. In so doing, it has sought to neutralise and prevent further water-related conflict, by essentially ‘taking water out of conflict’ (as is often stated among water practitioners in the region).

In actuality, national Israeli and joint Israel-Palestinian and Israel-Jordan-Palestinian desalination efforts have heightened awareness of Israel’s hydrohegemony in the region, creating a relatively recent location for the operation of Israeli hydrohegemony. These have also revealed Israel’s political intentions for the region’s management and development of natural water resources; to prevent and/or limit Palestinian autonomous control over Mountain Aquifer water resources (Personal interview, IG6 2010). Such a hydrohegemonic approach is likely to prevent the equitable resolution of the Israel-Palestinian conflict. A review of Israel’s approach to, and practices of seawater desalination sheds light on this argument.

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91 Tony Allan of the London Water Research Group has claimed there have been no water wars in the Jordan Basin in part because of the massive quantity of “virtual” water imported into the region through the international trading system (Allan, 1997; Allan, 2002). Allan has argued that relatively massive quantities of such virtual water has significantly lessened the burden and stress experienced by states and peoples, despite the region’s limited natural water resources. Thus, wars over water resources have been averted.
Desalination for Peace?

In the mid-1990s, Israel started desalinating seawater at the Mediterranean on a large-scale, as noted earlier in this study. Suffice it to add that Israel is moving towards desalinating enough water which, combined with some of the region’s natural water resources, would adequately meet the needs of Israelis, Palestinians and peace agreement-related water of the Jordanians into 2050. By then, Israel intends to supply the Palestinians with 400MCM of water (largely desalinated seawater) and the Jordanians with another 100MCM, as part of its most recent water management and development strategy (Personal interview, IW2 2010). The political economy of these arrangements remains to be finalised. They are however premised on Israel becoming a producer and net supplier of desalinated water resources to the Palestinians, while ensuring the environmentally-sustainable management and development of Jordan River and Mountain Aquifer water. In other words, Palestinian hydropolitical, even cooperative self-determination has been hydrohegemonically taken off the agenda. Israel’s offer of a desalination plant to the Palestinians offers insight into these political developments.

Within the emerging context of Israel’s strategic move away from reliance on natural water in favour of produced water, in 1999, Israel made what seemed a dramatic hydropolitical offer to the PA (Personal interview, IG6 2010). It proposed siting a Palestinian desalination plant on the Mediterranean, at Hadera in Israel. Institutionalised extraterritorially, it was surmised that the desalination facility would be owned and operated by the PA. It would be situated on land, for its entire length, that would be relinquished by Israel.
according to an extraterritorial arrangement with the PA and with international security guarantees. Water infrastructure would be built from the coast across to Nablus, in the West Bank, with Palestinian infrastructure delivering water throughout Palestinian territories. Within a short couple of years, the PA would have expanded its available water supply by at least 40MCM and probably closer to 100MCM, comparable to or surpassing quantities of water the Palestinians extracted from the Western and North-Eastern Mountain Aquifer before Israel’s 1967 occupation. This initiative might also have served to launch a new, innovative and cooperative Israel-Palestinian approach to the production and management of water resources. Thus was Israel’s hydrohegemonic peace being framed.

The PA’s rejection of this offer came as a surprise to many within the Israeli water establishment (Personal interview, IG6 2010). Palestinians asserted that desalination should provide water to Israelis, while adequate and equitable quantities of West Bank water should once again become nationally managed by, and accessible to West Bank Palestinians (Personal interview, PW2 2010; Personal interview, PW8 2010). The Palestinians sought to leverage the international water principle of use as close as possible to source on this matter92. In the unresolved debate that ensued, Israel argued that the Palestinian leadership was unwilling to improve the lives of its own people unless they could also secure land and finalise broader issues in the process. Israel also interpreted in this initiative an offer to expand its relationship of

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92 As a matter of interest, the most significant expense related to natural water is infrastructure, especially piping (Personal interview, IF2 2010).
benevolence towards the Palestinians, a move that was clearly rebuffed by the Palestinians.

Since then, Israel has been steadily expanding its desalination capacity and facilities, intending to both sell and deliver water to the Palestinians, through an Israeli-supplier/Palestinian-client relationship. Such an arrangement would resituate but nonetheless perpetuate the structural relationship of Palestinian dependency that emerged and has evolved since 1967. The Palestinians resent this dependency, despite it coming with increased quantities of water. Israel frames this dependency (as a component of its hydrohegemony) as an arrangement of benevolence, assuming the responsibility of providing ever greater quantities of water to the Palestinians.

Disaggregating the dependency depicted above is a central component underpinning any form of equitable water management. Far from moving in this direction, Israel is planning for Israel's provision of water to the Palestinians into 2050 as part of its most recent water development strategy. While being critiqued for doing so, Israel is adamant that it has a responsibility to the Palestinians and that it has been meeting such obligations with hydrohegemonic benevolence. This also implicitly recognises that Palestinians need more water than that which has been allocated through the Oslo agreement (World Bank, 2009: 39).

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93 The situation in the Gaza Strip is completely different and will not be tackled in the context of the current study given that the territory has been governed by a HAMAS administration that does not recognise the legitimacy of agreements between Israel and the Palestinians.
While Israel is actively working to increase the quantity of water available to meet Palestinian human needs and requirements, it is also endeavouring to contain Palestinian hydropolitical efforts. In other words, Israel’s hydrohegemony is pursued through a concerted effort to deliver greater quantities of water to the Palestinians while preventing a significant shift in the relational balance of power. This satisfies Israel’s culture and self-perception of humanitarianism generally and of benevolence as it specifically relates to the Palestinians. In political terms, for Israel this has meant the end of the era of “water rights”, on the premise that Palestinian water rights agreed to with Oslo have been met through Palestinian control of the Eastern Mountain Aquifer.\(^9^4\)

In recent years, the production of water has made it possible to quantify the value of ‘conflictual’ water between Israel and the Palestinians. Contested Mountain Aquifer water has been valued at as little as US$20-40 million (Shuval, 2000: 57) and not more than several hundred million dollars (Fisher, 2006) if valued in terms of desalinated water’s production costs. Today, the production cost of desalinated water is approximately US$0.56-0.60/CM. To this cost must be added the external and social costs of water production which include: air pollution, greenhouse gas emissions, dumping of brines into the Mediterranean Sea, and land use for desalination plants. Such additional costs have been estimated between US$0.04/CM (Becker, 2004 in Tagar, 2007: 5) and US$0.15/CM (Shimon Tal, 2007 in Tagar, 2007: 5). Nonetheless, if viewed from an economic perspective, the water-related dimensions of the Israel-

\(^{94}\text{ This is water that does not significantly impact Israel hydrologically or hydrohegemonically.}\)
Palestinian conflict could rather simply be resolved at the cost of produced (and then distributed) water.

The PWA is not blind to the merits of ‘taking water out of conflict’ in this way. It is also aware that the cost of buying such water at cost-recovery or full cost-recovery would be disproportionately borne by the Palestinians, given their relatively weaker economy. For the time being, the PWA has even been laying the technical foundations for the eventual pursuit of such an approach (Personal interview, PW5 2010), actively quantifying all water under its jurisdiction (Personal interview, PW1 2010). Nonetheless and politically, the PWA is adamant that incorporating produced water into its water budget can only be done within a long-term perspective that is preceded by a negotiated expansion of Palestinian water rights to Mountain Aquifer water as part of a final status agreement with Israel.
Concluding Thoughts

Israel’s hydrohegemony and its corollary justificatory narrative have been discursively constructed through the current as well as the previous chapter. In doing so, an important (though porous) temporal demarcation has been drawn to reflect Israel’s hydropolitical discourse before and after it became an occupying power. The period immediately following on from the 1967 Six-Day War has been discussed as the beginning of Israel’s intentional pursuit and development of a hydrohegemonic relation with the Palestinians. Building on earlier hydropolitical ideas and practices going back to 19th century Zionism, Israel’s hydrohegemony was actively initiated with an occupation of water and other resources. It has been consolidated both through and in the aftermath of the peacemaking processes of the 1990s and into the 2000s.

With the Madrid and then Oslo peace processes and agreements, Israel’s hydrohegemony became firmly entrenched as an order of relation with the Palestinians. Notably, the primary water institution of Oslo, the JWC, reflects Israel’s comparative power over the Palestinians, such that Israel is asymmetrically relationally involved in much Palestinian hydropolitical decision-making. The opposite is certainly not the case. In the post-Oslo phase, this hydrohegemony persists on many fronts, notably in the areas of desalinated seawater production and wastewater management, among longstanding others.

On the first point, Israel’s hydrohegemony is premised on the continued development of an Israeli-provider/Palestinian-client (and consumer) relationship. On the second point, Israel-Palestinian wastewater management
has become an important location for the circulation of Israel’s narrative of hydrohegemonic necessity, an important source of ideational power. Overall, Israel insists on the necessity of pursuing a hydrohegemonic discourse in relation to the Palestinians. Conversely, the Palestinians contest such hydrohegemony as violent and prohibitive of their aspirations for self-determination. In these and so many other important ways, the struggle for Palestinian self-determination, and for Israel’s legitimacy and security, continues to be waged hydropolitically. This remains as true today as in the 1960s, though the specifics have somewhat changed.

The importance of the last two chapters to the overall study cannot be overemphasised. They articulate and examine Israel’s hydrohegemony as an evolving discourse through time in relation to the Arab world and to the Palestinians specifically. They make visible Israel’s justificatory narrative, itself underpinning the Jewish state’s now-intentional hydrohegemony. Far from being a veiled practice, hydrohegemony has been an intentional Israeli state pursuit. Hydrohegemony has also been closely associated with Israel’s efforts to make peace with the Palestinians. As a relational construct, it essentially demands of the Palestinians that they accept Israel’s hydrohegemony as a legitimate relational order, as a regime of peace. Understandably, the Palestinians have largely rejected this relational offering as one of (hydropolitical) violence.

In concluding this (and the previous) chapter on Israel’s hydrohegemony and its justificatory narrative, an important set of questions are raised, drawing on the
theoretical discussion pursued in an earlier chapter. If the State of Israel’s
dominant hydropolitical discourse is one of relational hydrohegemony with the
Palestinians, what can be said about the relational discourse of Israeli,
transboundary water-domain practitioners? Are these practitioners contained
and constrained by, (re-) producing and circulating a discourse of
hydrohegemony? Alternatively, are they discursively practicing hydropolitical
peacebuilding, as theoretically constructed in this study? The next two chapters
are thereby devoted to an examination and discursive analysis of their
transboundary water-domain practices, from the early 1990s onwards.