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Cooperation, Domination and Colonisation: The Israeli-Palestinian Joint Water Committee

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ABSTRACT: Do there exist instances of international (water) policy coordination which are so unequal that they should not even be considered 'cooperation'? This article argues, on both theoretical and empirical grounds, that this is indeed so. Theoretically, it posits that 'cooperation' should be distinguished from 'policy coordination', and that situations of policy coordination without mutual adjustments or joint gains should instead be considered instances of 'domination'. And empirically, it illustrates the existence of such relations of domination through an analysis of the Israeli-Palestinian Joint Water Committee (JWC), using new evidence from JWC negotiation files, plus interviews with leading Israeli and Palestinian participants. Most startlingly, the article finds that under the constraints of JWC 'cooperation', the Palestinian Authority has been compelled to lend its formal approval to the large-scale expansion of Israeli settlement water infrastructures, activity which is both illegal under international law and one of the major impediments to Palestinian statehood. The article suggests the need for both the complete restructuring of Israeli-Palestinian water 'cooperation', and for further research on relations of domination, and the ideology of cooperation, within international (water) politics.

KEYWORDS: Cooperation; domination; Israel-Palestine; transboundary water politics

INTRODUCTION

One of the central themes of recent critical scholarship on water politics has been to point out that transboundary 'cooperation' is often conflict-laden and highly inequitable, and that the unquestioned promotion of 'cooperation of any sort' over water resources is thus deeply problematic (see especially Zeitoun and Warner, 2006; Zeitoun and Allan, 2008). This article seeks to add to, and refine, this nascent body of research, specifically by asking a question which has not yet received any sustained attention, either within International Relations (IR) at large, or within water politics research. Do there exist, the article asks, cases of international (water) 'cooperation' which are so inequitable and asymmetrical that they do not even merit this label?

In what follows, this question is explored both theoretically and empirically. Theoretically, the article asks whether there exist, or should exist, limits to the idea of international 'cooperation'. And empirically, it considers a single case study in depth, enquiring whether the Israeli-Palestinian Joint Water Committee (JWC) – established in 1995 as part of a five year interim arrangement, but still meeting 17 years later – should be considered a case of 'cooperation' or not. The JWC and Oslo II regime have already been subjects of extensive analysis and radically divergent assessments – some lauding them (e.g. Kliot and Shmueli, 1998; Feitelson, 2005; Wasserstein, 2008; Katz and Fischhendler, 2011), and others critiquing them as involving "domination dressed up as 'cooperation'" (Selby, 2003b), a "pretence of cooperation" (Amnesty International, 2009: 33), and even "water apartheid" (Glavany, 2012: 130-2). The current article goes beyond these and other earlier assessments, however, in being based both on theoretical reflection on the concept of 'cooperation', and also empirically on an analysis of (Palestinian) JWC negotiation files. These files – to which the author was given full, unrestricted

access – provide compelling evidence regarding the inner workings of the JWC, and indeed regarding Israeli-Palestinian relations more widely. The documentary data set used includes 142 JWC and subcommittee meeting protocols, plus meeting agendas, project application documents, draft and signed agreements, and written correspondence between Israeli and Palestinian officials for the period 1995-2008. This data set is supplemented with interviews with Israeli and Palestinian water policymakers, and representatives of international donor organisations.

The article proceeds through five steps. First, theoretically, it reflects on the notion of 'cooperation', and develops a framework for analysis centring on the distinction between 'cooperation' and 'domination'. Second, contextually, it describes the Israeli-Palestinian water regime operative since 1995, within which the JWC needs to be located and understood. Third, most empirically, it provides a quantitative analysis of the JWC's record for the period 1995-2008. Fourth and fifth, it offers an interpretation of this record and the regime underpinning it, and an overall evaluation of them. And in conclusion, the article considers the implications of the forgoing analysis, both for the existing literature on Israeli-Palestinian water politics, and for the wider study of international (water) cooperation.

'COOPERATION' AND ITS LIMITS

What is 'cooperation', and what are its limits and opposites? Within mainstream realist and liberal institutionalist accounts of transboundary water politics, 'cooperation' is invariably defined in opposition to 'conflict', the central questions within this literature regarding the relative likelihood of, and the central causes of, 'conflict' and 'cooperation' over transboundary water resources (e.g. Lowi, 1993; Dinar, 2008). While it is often acknowledged that there exist different degrees of water 'conflict' and 'cooperation' (e.g. Yoffe et al., 2001; Sadoff and Grey, 2005), this binary pair nonetheless provides the basic conceptual scaffolding for analysis. This framing mirrors that within mainstream International Relations (IR) theory, where 'conflict' and 'cooperation' are assumed to be the two basic or ideal types of international interaction (e.g. Keohane, 1984; Grieco, 1990). Both within such theoretical accounts, and within the water-specific literature, moreover, this analytical distinction carries with it a strong value judgement: put simply, that cooperation is good, and conflict bad. Across these literatures, 'cooperation' is always (either explicitly or implicitly) lauded and advocated as a normative and policy goal. As UNDP put it in its 2006 Human Development Report, "it makes sense to promote and support cooperation of any sort, no matter how slight" (UNDP, 2006: 228, emphasis added; also especially Sadoff and Grey, 2002).

Such mainstream analytical and normative framings have been the subject of extensive critique in recent years from 'hydro-hegemony' analysts of international water politics (see especially Zeitoun and Warner, 2006; Zeitoun and Allan, 2008). Within this work, the mainstream focus on conflict and cooperation is rejected in favour of a broader analysis of relations of power and hegemony within transboundary basins, and of the multiple and variable means through which international water inequalities are constructed and reproduced. With regard to 'cooperation' specifically, this research has advanced three main points. It has emphasised, first, that in the vast majority of hydro-political contexts, conflict and cooperation co-exist, and that the creation of transboundary water regimes does not thereby dissolve conflict (Zeitoun and Mirumachi, 2008). It has observed, second, that transboundary cooperation is always underpinned by power relations, which are often highly asymmetrical, especially between 'hydro-hegemons' and the hegemonised (Zeitoun and Warner, 2006). And it has stressed, thirdly, that "not all cooperation is pretty" and may indeed have detrimental consequences: "token cooperation", for instance, "may serve to veil or perpetuate conflict", while "[c]oercive cooperation may deepen it" (Zeitoun and Mirumachi, 2008: 305, 312). In line with this reasoning, the policy prescriptions of hydro-hegemony research have centred not on the advocacy of 'cooperation' as an end in itself, but rather on the importance of constructing 'positive' as against 'negative-dominative' forms of hegemony, irrespective of whether these involve cooperative mechanisms or not (Zeitoun and Warner, 2006).

These insights are important and well made, but in the view of this author, at least, are in need of further refinement. First and foremost, hydro-hegemony research has not yet engaged fully enough with the core arguments and assumptions behind the mainstream advocacy of transboundary 'cooperation'. The advocacy of 'cooperation of any sort, no matter how slight' within this literature is fundamentally rooted in the rational actor assumption that "states seek to pursue rational and legitimate self-interest" and thus that "cooperation will occur only if the anticipated benefits exceed the costs of noncooperation" (UNDP, 2006: 228, 218). Viewed thus, cooperation is by definition a good, since actors will only participate in it when it provides "benefits that add to the aggregate welfare of both sides" (UNDP, 2006: 224) and allows them each to realise 'absolute gains' (e.g. Powell, 1991; Snidal, 1991). Realists and neo-liberal institutionalists are well aware that cooperation is always underlain by ongoing conflicts of interest, plus usually also by power asymmetries (e.g. Keohane, 1984). From their perspective, however, that power asymmetries and conflict underlie cooperation, or that gains from cooperation are unevenly distributed, is not necessarily a problem – so long as each party receives at least some net absolute gains from cooperation (and in the absence of such gains, cooperation will not take place). Thus hydro-hegemony analysts' highlighting of the power and conflict underpinnings of cooperation does not by itself provide grounds for their normative critique of "the unquestioned promotion of cooperation 'of any sort'" (Zeitoun and Mirumachi, 2008: 306). To provide grounds for this, engagement with the 'rational actor' and 'absolute gains' assumptions of the mainstream literatures is required. No such engagement has yet been undertaken.

Second, for all their theoretical criticisms of water cooperation discourse and their empirical analyses of the darker sides of water 'cooperation' in practice, hydro-hegemony researchers have thus far been reluctant to problematise the concept of cooperation itself, or to identify limits to its appropriate use. Words like 'asymmetric', 'coercive' and 'dominative' have been prefixed to 'cooperation' (Zeitoun et al., 2011: 160), but the notion of 'cooperation' has nonetheless been retained as descriptor for even the most inequitable forms of policy coordination. Equally, there has thus far been little systematic consideration of the political foundations or effects of water cooperation discourse (but see Sneddon and Fox, 2006, for one important exception). A comparison with research on 'security' and 'securitisation' is instructive here. Analyses of the internal grammar of security discourse, of the interests it serves, and of the political realities that it can legitimise and help construct have been extensive, both within IR and security studies generally (especially Buzan et al., 1998) and within studies of water politics. However, there has been no equivalent analysis of cooperation discourse – or of what one might call, by analogy (and with apologies for the horrendous neologism), discursive processes of 'cooperationisation'. What and whose purposes, we need to ask, does the identification of particular interactions as 'cooperation' serve? And what are the impacts of cooperation discourse, and its attendant practices, on patterns of water inequality, insecurity and vulnerability? These questions remain to be considered.

Perhaps surprisingly, mainstream IR theory offers useful resources for identifying limits to the notion of 'cooperation'. Keohane, for instance, in the most widely used formulation, defines international cooperation as occurring "when actors adjust their behaviour to the actual or anticipated preferences of others, through a process of policy coordination", and as existing "when the policies actually followed by one government are regarded by its partners as facilitating realization of their own objectives, as the result of a process of policy coordination" (1984: 51-2). For Grieco, slightly differently, international cooperation involves "the voluntary adjustment by states of their policies so that they manage their differences and reach some mutually beneficially outcome" (1990: 22). And in Milner's pithy formulation, international cooperation involves "mutual policy coordination to realize joint gains" (1992: 470). Conceived thus, for an international institution or interaction to be considered an instance of 'cooperation' it must meet three conditions: first, there must exist processes of policy coordination,

for instance negotiations, agreements and formal or informal institutions; second, both (or all) parties must adjust their policies in response to this policy coordination; and third, there must be mutually beneficial outcomes or joint gains. Significantly, 'policy coordination' is distinguished here from 'cooperation', the former being viewed as a necessary but not sufficient condition for the latter.

What lies outside or beyond 'cooperation', so understood? One set of 'others to cooperation' arises from the absence of policy coordination, of which there are two possible variants, one involving purely conflictual interactions, the other non-interaction (and thus policies of unilateralism). But the above definitions also allow, at least theoretically, for situations in which policy coordination takes place, but without it being accompanied by mutual policy adjustments or mutual gains. To be sure, neo-realist and liberal institutionalist IR do not register the possibility of policy coordination without mutual gains – since, as already noted, they operate with rational actor, and also state-centric, assumptions about international politics, this making it understandably difficult for them to imagine polities voluntarily participating in processes of policy coordination that are detrimental to their interests. And yet by their own definitions, such situations of 'coordination short of cooperation' are theoretically conceivable. Such situations, moreover, are ones that, following common usage in social theory, might appropriately be described as involving 'domination'. 'Domination', in Lukes' terms, "is present wherever it furthers, or does not harm, the interests of the powerful and bears negatively upon the interests of those subject to it" (2005: 86); and in Miller's formulation, is "a mode of acting upon individuals or groups of individuals directly counter to their aspirations or demands" (1987: 2). Domination, so conceived, need not necessarily involve coordination in the terms outlined above – though as Foucault (1982) emphasised, domination always, to some degree, involves the active participation of those subject to it. Moreover, 'domination' can be defined either more broadly (e.g. Weber, 1968; Foucault, 1982) or more narrowly (e.g. Lovett, 2010) than done here. However, for the purposes of this article – which are not to theorise domination, but to explore the limits of 'cooperation' - the above definitions would seem adequate. So conceived, 'cooperation' involves three things – policy coordination, mutual adjustments and joint gains - and where the latter two conditions are not met then this constitutes 'coordination short of cooperation', or 'domination'.

One puzzle in the above may be why subordinate polities (or other institutions) would participate in structures of domination if these are indeed contrary to their interests. As already noted, the rational actor and state-centric assumptions of mainstream IR are such that they do not even consider this possibility. But if we dispense with these assumptions, then several types of reason can be identified. First, far from being autonomous or independent, a polity may be in a situation of extreme military, political or economic dependency, such that the costs of defecting from 'cooperation' are so high that it is prepared to participate in processes that are contrary to its interests. Second, far from being unitary, and with political elites who act in accordance with 'national interests', a subordinate polity may possess political elites who have been co-opted into support for, or tacit acceptance of, other states' preferences or interests. Or third, far from being rational or fully knowledgeable, a polity and its elites may be so beholden to established 'common sense' ideas that they are unaware of their true interests; or may be so lacking in information and expertise that they are unable to defend their interests, even if they are aware, in broad terms, of what these interests are. Any instance of 'coordination short of cooperation' must presumably be underpinned by at least one of these factors (see e.g. Tilly, 1991).

The above suggests four questions that might be asked of any particularly asymmetrical instance of (water) policy coordination. First, do processes of policy coordination take place within parameters that have been established jointly, or almost exclusively by one party? Second, have these processes of policy coordination led to policy adjustments by both (or all) parties, or by the subordinate party almost exclusively? Third and most crucially, have these policy coordination processes and policy adjustments led to mutually beneficial outcomes, or to outcomes that have instead benefited one party almost entirely, and that have been contrary to the other's interests, preferences or aspirations? And fourth, in the event of the political relations in question being identified as constituting 'domination', then what

explains how "willing compliance" to them is reproduced and secured (Lukes, 2005: 10)? Taken together, these four questions provide an orienting framework for the empirical analysis immediately below; they are revisited more systematically in the penultimate section of the paper. A fifth question – whose interests or agendas does the misrepresentation of domination as 'cooperation' serve, and with what consequences? – is considered in the conclusion.

THE OSLO II WATER REGIME

The water regime created in 1995 by the Israeli-Palestinian Oslo II Interim Agreement has four principal characteristics. Firstly, it is geographically limited. In terms of basic hydrology and hydrogeology, there exist three transboundary Israeli-Palestinian water resources (figure 1): the Jordan River, on which Lebanon, Syria and Israel are upstream riparians, Jordan and the West Bank downstream; the Coastal Aquifer, which is mainly located within Israel, but also serves Gaza, downstream (Egypt is also a riparian); and the Mountain Aquifer, in which groundwater flows from the heights of the West Bank, towards Israel or eastwards into the Jordan Valley (again Egypt is also a riparian). Of these three transboundary resources, Israel is the upstream riparian on two (the Jordan River and Coastal Aquifer), and the downstream riparian on the other (the Mountain Aquifer). In addition to these transboundary resources are various aquifers which are wholly internal to Israel; plus other small aquifers which are wholly internal to Israel; plus other small aquifers which are wholly internal to the West Bank, such as the Jordan Valley and Fari'a aquifers (though the existence of these is usually overlooked, thus making it appear that all West Bank aquifers are transboundary, and to be shared: see Messerschmid, 2010).

The pertinence of this is that the Oslo II water regime applies unevenly, to only part of one of the three resources to which Israel and the Palestinians are co-riparians. Utilisation of all three resources is highly asymmetrical, in Israel's favour. Moreover, the two resources where Israel is upstream and Palestinian territories downstream – the Jordan River, and Israeli sections of the Coastal Aquifer – are subject to unilateral Israeli management without Palestinian input, leaving the PA (Palestinian Authority) without any say in relation to the upstream exploitation or development of these resources. The Jordan River is heavily exploited by Israel (and also Jordan and Syria), to the extent that by the point it reaches the West Bank it is little more than a polluted stream: as a result, Palestinian utilisation is zero, compared with Israeli utilisation of 600-700 million cubic meters per year (Mm^3/y) (HSI, various). However, there is no Israeli-Palestinian policy coordination over the Jordan, and there are no institutional mechanisms for the PA to raise, let alone resolve, this issue. Equally, under the Oslo agreements, there is no policy coordination over the Coastal Aquifer, including those parts of it underlying the Gaza Strip. To the contrary, the PA holds unilateral responsibility for water resource management in those areas of the Gaza Strip under its control (Israel and PLO, 1994: Annex II, Art. 31), with the rest of the Coastal Aquifer being unilaterally managed by Israel. One consequence of this is that the PA has no right to limit increases in Israeli abstraction upstream of Gaza – something that Israel has recently been doing (Rinat, 2009). The even more significant consequence, however, is that the one Palestinian territory which is incapable of being water resource self-sufficient – because of its low resource base combined with dense refugee population – is effectively compelled to be just that. Current extraction in Gaza is more than two times the natural recharge accessible within its portion of the Coastal Aquifer, and as a result the aquifer is experiencing significant seawater intrusion and salinisation, and most water supplies within the Strip are unfit for human consumption (e.g. World Bank 2009: 27-32). Despite this critical situation, there is no Israeli-Palestinian coordination over Gaza's water sector (except in the very limited sense that the PA has to obtain approval for the import of water-related construction materials via Israel).



Figure 1. Transboundary Israeli-Palestinian water resources.

Source: Amnesty International, 2009.

Indeed, the only transboundary resource over which there is such policy coordination is the Mountain Aquifer. This aquifer is recharged by the relatively plentiful rains of the West Bank – Jerusalem receives annual precipitation similar to London – and thus has a high recharge and yield officially put at 679 Mm³/y (Israel and PLO, 1995: Annex III, Schedule 10; but see Selby 2003a: 119-31; Zeitoun et al., 2009). It is also the only transboundary resource on which a Palestinian territory is upstream and Israel downstream. The Oslo II water regime does not apply to the entirety of the Mountain Aquifer, however: it only applies to those parts of it lying within the West Bank. On the other side of the Green Line, the Mountain Aquifer is subject to unilateral Israeli management, and there are no limits on abstraction (Zeitoun et al., 2009). Moreover, the Oslo II regime even applies to local internal aquifers within the West Bank. 'Cooperation', in this regime, is highly limited, spatially.

A second feature of the Oslo II water regime – one that jars somewhat with its limited spatial reach – is that it is highly functionally intrusive and time-intensive. 'Cooperation' under Oslo II certainly does not involve 'light touch regulation'; to the contrary, it involves probably the most intensive form of

transboundary policy coordination anywhere in the world. All drilling of new and substitute wells, all rehabilitation of existing wells (including routine repair work), all increases in abstraction from wells, and all new or modified water supply and sewage infrastructures in the West Bank require prior approval from the JWC (Israel and PLO, 1995: Annex III, Schedule 8). Though never formally codified in JWC procedures, the working rule within the JWC has been that all pipelines of greater than 2" diameter or 200 metres in length, and all rural water cisterns, require JWC approval (Jaas, 1999; Bargouti, 2009). These highly intrusive regulations mirror those applied in the West Bank during the period of direct Israeli occupation (1967-95). Under a series of Military Orders laid down in the first two years after the Six Day War, all water resources in the West Bank were placed under the authority of an Israeli official within the military government (the 'Civil Administration' – CA), and were declared Israeli public property; moreover, all new water installations were required to have a licence prior to construction, which the CA had the power to approve, revoke or amend without justification (JMCC, 1994: 43-4). During this period, everyday management of Palestinian water systems was undertaken by Palestinian workers at the West Bank Water Department, but they reported to the CA and required its approval for any new pipeline of greater than 2" diameter or 200 metres length (Ayeesh, 2009). Thus on this specific issue, JWC regulatory procedures replicate rules first imposed within the West Bank by the Israeli military authorities (see also Selby, 2003a: 108-12).

Further complicating matters, under the Oslo II Agreement the JWC is required to operate by consensus (Israel and PLO, 1995: Annex III, Art. 40). It has often been observed that this effectively grants Israel veto powers over Palestinian water resource and infrastructural development within the West Bank (e.g. Zeitoun, 2008: 102; World Bank, 2009: 34) – and this is indeed the case. Moreover, given that the Oslo II regime only applies to the West Bank, this means that the PA enjoys no equivalent veto powers in relation to Israel. However, the PA does hold some theoretical veto powers within the JWC. Israel, as discussed further below, has an extensive settlement network across the West Bank with its own water infrastructure – any modification or expansion of which requires JWC approval. Thus theoretically, under the Oslo II water regime, the PA has the power to veto Israeli water development in the West Bank, just as Israel has means to veto Palestinian infrastructure building. In this regard, the Oslo II water regime differs decisively from that which preceded it, since during the direct occupation period, Palestinians had no theoretical veto powers over settlement water projects. What difference this has made in practice is examined below.

These requirements inevitably place a heavy burden on the JWC, with the result that JWC processes have been administratively complex and time-intensive. The overall JWC regime has come to comprise the JWC itself; below it a Joint Technical Committee (JTC); and below that, a number of subcommittees dealing with specific technical areas (wells, pipelines, sewage, and pricing). Making matters more complicated still, established practice is that subcommittee decisions are advisory only, and are not binding on final JWC decisions. Hence proposals for new supply pipelines, for instance, require consideration first by the Water Supply Subcommittee and then by the JTC, before being passed up for approval to the JWC; even when approved by the first two of these committees, they can be rejected within the JWC, and passed back down to the subcommittee or JTC for modification or further discussion.

The first meeting of the JWC was held in November 1995, six weeks after the signing of the Oslo II Agreement (JWC Protocol, 12.11.1995). Between then and 2008, there were at least 176 meetings of the JWC and its subcommittees, taking place every year of this 13-year period (Table 1). In addition to this, there has been regular telephone and written communication plus an unknown number of ad hoc meetings between leading JWC personnel. Meetings have been only half as frequent since the onset of the second Palestinian intifada in September 2000 (an average of 10 meetings per year), as they were prior to then (19 meetings per year). Nonetheless, policy coordination in the JWC has been continuous, reflecting the intrusive and time-intensive procedures of the Oslo II regime.

Year	No. of meetings	Political timeline
1995*	4	Oslo II Agreement
1996	11	Israeli elections; start of Netanyahu (Likud) coalition
1997	20	
1998	25	
1999	23	Israeli elections, start of Barak (Labour) coalition
2000	12	Camp David; start of second Palestinian intifada
2001	9	Israeli elections; start of Sharon (Likud) coalition
2002	5	
2003	8	
2004	18	
2005	15	
2006	9	PA elections; start of Fatah-Hamas cohabitation
		Israeli elections; start of Olmert (Kadima) coalition
2007	7	Fatah-Hamas armed conflict; West Bank-Gaza divide
2008	10	
Total	176	

Table 1. JWC and sub-committee meetings, 1995-2008.

Sources: JWC files; World Bank, 2009. * Partial year.

A third main feature of the Oslo II water regime is that it involves 'coordinated management', not fully 'joint' management (Art. 40: 3). The water regime involves joint decision-making, of course, this being the central role of the JWC; and it is also supposed to involve joint monitoring and enforcement, undertaken by Joint Supervision and Enforcement Teams (JSETs – in practice these have not been operational for most of the period since 1995, and even when they have been, their impacts have been quite limited). Alongside this joint action, however, Israel and the PA are separately responsible for the control and operation of water and sewage systems, and for the implementation of projects approved by the JWC. Under the Oslo II regime, there exist two separate water supply networks within the West Bank: an Israeli water network which services its own settlements and is integrated into its national water network, but which also draws water directly from wells drilled into the West Bank portion of the Mountain Aquifer; and a PA network which comprises a plethora of non-contiguous lines, some of which draw water from PA-controlled wells and springs, and others which receive water from the Israeli network (see e.g. Gvirtzman, 2012: 19-20). The PA is responsible for all systems serving Palestinians only, while Israel is responsible for all other systems, including those systems that serve both Israeli and Palestinian communities (Art. 40: 4). These two systems are managed separately by the two sides, in principle without limitation so long as they are in conformity with JWC (and planning) approval requirements. As a result, Israel has the right under the Oslo II Agreement to use its systems to unilaterally import water from its national water network to its settlements in the West Bank. By contrast, because its supply lines are localised, non-contiguous and wholly internal to the West Bank, the PA has no means of importing water, and not even any means of independently conveying water supplies between different regions of the West Bank.

Responsibility for project implementation – i.e. the actual development of water resources and systems – is also split between Israel and the PA. The Oslo II Agreement granted the PA the right to

develop 23.6 Mm³/y from the Mountain Aquifer for "immediate needs", and 70-80 Mm³/y for "future needs", this water to be developed from "the Eastern Aquifer and other agreed sources in the West Bank". Under the Agreement, Israel assumed responsibility for drilling one well (plus conveying an additional 3.1 Mm³/y to Palestinian towns from its networks) but other than this the development of water resources to meet Palestinian needs was to be a PA responsibility (Art. 40: 7). The Agreement did not specifically mention any planned Israeli projects or 'Israeli water needs' in the West Bank – but it did not prohibit such projects either.

In practice, since 1995 the development of Palestinian water resources and systems has been coordinated by the Palestinian Water Authority (PWA) together with international donors. These donors have played a pivotal role, providing the bulk of PWA running costs as well as project finance, and shaping institutional priorities through a constant stream of international consultants and planning documents. Crucially, international donors interpret their role as supporting the 'peace process', and hence, almost without exception, insist on abiding by the terms of the agreements signed between Israel and the PLO. Hence donors "will not give money to the Palestinians without JWC approval" (Naggar, 2009), such that they effectively function as enforcers of the Oslo II water regime, and that the option of unilateral development (i.e. development without JWC approval) is not open to the PA. Conversely on the Israeli side, projects are financed and implemented by the Israeli national water company, Mekorot, and in turn the Israeli state, without any direct dependence on international actors. The option of unilateral infrastructural development is thus available to the Israeli water authorities to an extent that is not available to the PA.

Finally, the wider terms of the Oslo II Agreement have significant consequences for the water regime, especially in regard to land use planning and enforcement. The Oslo II Agreement did not hand the whole of the West Bank over to the PA but, to the contrary, divided it into three different zones: Area A (currently 18% of the West Bank, including all major Palestinian towns), in which the PA has 'full autonomy'; Area B (22% of the West Bank, including most Palestinian villages), in which the PA has responsibility for civil affairs, but Israel retains security control; and Area C (60% of the West Bank, including all Israeli settlements), in which Israel retains full civil and security control (figure 2).

The significance of this is twofold. First, Israel holds exclusive land use planning powers in Area C – that is, 60% of the West Bank – the PA holding the same powers within Areas A and B, at least theoretically. It is this that has given Israel the 'right', under the terms of Oslo II, to construct new bypass roads, plus its 'security wall', across the West Bank, and to increase the size, number and population of its Jewish settlements. Moreover, under these same terms, any new or amended Palestinian water-related land use in Area C, including any new well, pipeline or wastewater treatment plant, requires prior planning approval from the Israeli CA, and specifically from its Higher Planning Council (HPC; Shalev, 2009a). As a result, all proposed Palestinian water infrastructures in Area C must first obtain JWC approval, and thereafter also HPC approval – either of which can be denied. There is no Palestinian representation on the HPC. Of course, any new Israeli water infrastructures in Areas A or B would require planning approval from the PA – but Israel has no settler population or infrastructural needs in these areas. Equally, all new Israeli water infrastructures in Area C require planning approval – but CA planning policy supports settlement development, whereas it is systematically "designed to restrict the development of Palestinian communities" (Bimkom, 2008: 5). As an illustration, the vast majority – 88% – of Palestinian villages in Area C are not recognised by the Israeli planning authorities (Bimkom, 2008: 160-64), rendering it impossible for them to obtain approval for water or any other infrastructures. Thus only Palestinian Area C applications are potentially subject to planning vetoes or delays. This is rendered all the more significant because the vast majority of the most important Palestinian water facilities need to be located in Area C: apart from in the North-Eastern Basin, almost all of the productive zones for well-drilling from the Mountain Aquifer are in Area C; and most wastewater treatment plants need likewise to be located in Area C (for environmental and land use reasons). The impacts of this are detailed below.

Figure 2. The West Bank under Oslo II.



Source: B'Tselem.

Secondly, Israel is ultimately responsible for security within Areas B and C – that is, 82% of the West Bank. In this area, the Israeli Defence Forces (IDF) can readily be deployed to halt unlicensed work or destroy unlicensed infrastructures, and to enforce Palestinian compliance with the Oslo II water regime and Israeli water policies. By contrast, because the PA has no security presence within Area C, it has no means of enforcing Israeli compliance with JWC decisions. Whereas the PA is prevented from unilaterally constructing new water facilities in Areas B and C (and sometimes also Area A) by a combination of Israeli coercive power and donor insistence on full JWC and HPC planning approval, neither of these constraints on unilateral action applies to Israel.

THE JWC RECORD, 1995-2008

While the above provides important contextual information, it tells us nothing in itself about the JWC's actual record: to consider this, we turn to the JWC archive. Of the 176 JWC meetings held between 1995 and 2008, protocols from 142 have been identified and analysed. By cross-referencing these protocols with project documents, it has been possible to construct a data set of JWC processes and outcomes. This data set includes information on meeting frequency, project components (for instance, the diameter and length of pipework applied for in each project), and application and approval processes (for instance, dates of submission and approval). There are many projects for which complete information has not been found, rendering exact figures uncertain; however, the size of the data set are complemented here with evidence from individual meeting protocols. Further details about this data set are available on request from the author.

Table 2 compares Palestinian and Israeli applications by type for the entire period 1995-2008. As this shows, the PA has applied for over four times as many projects as Israel. Most notably, it has applied for many more well projects than Israel. Nonetheless Israel has submitted a large number of applications – over 130 in total, including for at least 108 water supply projects.

Table 3 compares Palestinian and Israeli water supply applications by project component. As this shows, the PA has submitted many more supply applications to the JWC than Israel, for more pipelines, of greater total length, and for many more storage tanks/reservoirs. However, the PA has tended to apply for much smaller capacity infrastructures than Israel. The most regular feature of Palestinian pipeline applications has been 2" diameter lines, while the most regular features of Israeli applications have been 8" and 12" diameter lines. Israel has applied for more conveyance lines of 8" diameter or greater than the PA. Similarly, while the PA has applied for the construction of many more water storage facilities than Israel, the latter's applications have tended to be for larger facilities – almost five times larger, on average. As a result, Israel has applied for only slightly less total new storage capacity than the PA.

This pattern of water supply project proposals is not difficult to explain. The majority of PA applications have been for small distribution lines within and between Palestinian communities, many of which previously had no supply networks. By contrast, the majority of Israeli applications have been for large transmission networks between settlements, and to connect these settlements into Israel's national water network. None of Israel's applications have been for internal networks within the built-up area of settlements.

We now turn to the record of project approvals. Table 4 compares approval rates on Palestinian and Israeli projects. JWC data on approvals is potentially misleading because, even after JWC approval, Palestinian projects in Area C still require HPC planning approval. Hence this table combines information on JWC and planning approval. As it shows, approval rates for Palestinian projects have been significantly lower than for Israeli ones, across all three categories of projects. All Israeli well and water supply projects have been approved by the PA; only one wastewater project has been rejected (the proposed Wadi Nar/Kidron valley treatment plant, which Israel has as a result proceeded

constructing unilaterally). By contrast, a large though variable proportion of Palestinian applications have not received JWC and HPC approval.

Table 2. Applications by type, 1995-2008.

Project type	Palestinian	Israeli
Wells	188	3
Water supply network	394	108
Wastewater	20	24
Total	602	135

Source: JWC files.

Table 3. Water supply applications by project component, 1995-2008.

Project component	Palestinian	Israeli
Total applications, no.	394	108
Applications for which details known	353	100
Applications including some unknown components*	62	14
Total pipeline length, km	2078	469
Most common pipeline diameter, "	2	8, 12
Average pipeline diameter, "	4.7	13.8
Projects including pipelines of 8"+ diameter, no.	52	63
Pipelines of 8"+ diameter, % of known pipelines	14%	84%
Storage tanks/reservoirs, no.	174	28
Total storage tanks/reservoir capacity, cm	167,950	132,250
Average storage tank/reservoir capacity, cm	965	4723
Storage tanks/reservoirs of 1000 cm + capacity, % of tank/reservoir applications	21%	71%

Source: JWC files.

* There are a large number of Palestinian applications in the files which include some components for which details are incomplete or unclear. The large majority are for 'internal water networks', for which no further details are given in the files. Hence, this table probably overstates the average size of PA pipeline applications. The same is not true of Israeli applications: all of the 'unknown components' in Israeli applications are for connections to existing water distribution lines.

Table 4. Approval rate by type, 1995-2008, %.

Project type	Palestinian	Israeli
Wells	30-66*	100
Water supply network	50-80 (estimate)	100
Wastewater	58**	96

Source: JWC files.

* Includes approvals on projects that were submitted before 2008 up to end 2009.

** Includes approvals up to end 2011.

This aggregated data on approval rates for Palestinian projects conceals some important differences. Thus Table 5 disaggregates approval of Palestinian wells by well type and basin. It shows significant differences by type: almost all monitoring wells have been approved while, at the other extreme, according to PWA documentation, all well rehabilitation applications have been rejected. Around two-thirds of new production wells and one-third of proposed substitute wells have been approved (approvals on the latter stipulate that 'no additional water' shall be abstracted). The table also shows significant variability by basin, especially for new production wells. All Palestinian applications for production wells in the Western Basin have been rejected; by contrast, 85% of applications for the Eastern Basin have been approved. Altogether, the approval rate for Palestinian well applications appears to have been in the range of 30-66% (the former ratio being averaged from all the data in Table 5, with the latter ratio excluding well rehabilitation projects).

There are considerable uncertainties over the proportion of Palestinian water supply projects approved. These uncertainties arise from the large number of applications, gaps in project documentation and JWC minutes, the frequent use of conditional 'approvals' (usually, approval of new infrastructure but with 'no additional water'), follow-up decision-making outside of formal JWC meetings, and uncertainties over HPC approval rates. An illustrative analysis of JTC minutes from 1997, however, shows that in that year, less than 70% of Palestinian applications were (conditionally or unconditionally) approved (Table 6).

It is not known what proportion of these projects was subsequently approved. However, on the basis of this data alone it appears that, in 1997, the non-approval rate for Palestinian projects was in the range 13-32%. In line with this, at a July 1997 JTC meeting, the Palestinian team charged that 21 projects submitted since May 1996-June 1997 had not been approved, out of 100 projects submitted to that point (JTC Protocol, 13.07.1997). The period 1996-7 was one of relatively good 'cooperation' in the JWC; thus if anything these illustrative figures may overstate the approval rate for Palestinian supply projects.

Many of these supply projects have also faced planning obstacles. According to the World Bank, in 2009, 82 Palestinian supply projects that had been approved by the JWC were still awaiting planning approval (2009: 48). The CA disputes this, but even by its own analysis, of an indicative 28 supply applications approved by the JWC, seven were rejected, another seven took over two years to process, and in two cases approval was forthcoming only after six years (Shalev, 2009b). This counter-claim is also contradicted by additional CA material documenting its delay of 130 water projects (Fischhendler et al., 2011: 46). Combining this JWC and planning data suggests that the approval rate for Palestinian supply projects lies somewhere in the range 50-80%.

In addition to these findings on approval rates, the JWC files also provide valuable data on approval times (of projects ultimately approved). Table 7 compares the approval times for Palestinian and Israeli water supply projects. It shows that Palestinian projects have faced much longer approval waits than Israeli projects. On average, it has taken over eleven months for PA supply projects to obtain final JWC approval, but only a little over two months for Israeli projects to do the same. This disparity would be even greater if planning approval times were also considered.

Palestinian wells have faced even longer approval delays, especially new production wells. Of the 32 such wells to have been approved, at least half have been subject to delays of several years. Eight USAID-funded production wells submitted in 1996 were not approved until 1999 – a delay of 25 months that USAID attributed to 'long and tortuous' Israeli government approval processes (USAID, 1999). A further eight wells approved by the JWC in 2001 did not receive planning approval until 2009 – and even this approval was partial, excluding permission for well facilities and pipelines (Jarrar, 2009; also Amnesty International, 2009: 35-8).

	Production wells		Substitute wells		Rehabilitation*			Monitoring wells				
	Appl. Approvals		Appl.	Appl. Approvals		Appl.	Appl. Approvals		Appl. Approvals		ovals	
	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%
Western basin	7	0	0	9	2	22.2				0	-	-
North-East basin	15	8	53.3	6	4	66.7				5	5	100
Eastern basin	28	24	85.7	1	0	0				15	14	93.3
Total	50	32	64.0	16	6	37.5	102	0	0	20	19	95

Table 5. Approval of Palestinian well projects, 1995-2009.

Source: JWC files.

* The data for rehabilitation applications and approvals are drawn from uncorroborated PWA documentation, and thus need treating with some caution.

Table 6. JTC approval of Palestinia	n water supply projects, 1997.
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Meeting date	Applications	Approved	Approved without extra supply	Not approved (rejected)	To be discussed further	Decision unknown
07.04.1997	20	6	5	4	4	1
08.06.1997	13	6	3	0	4	0
13.11.1997	6	4	1	1	0	0
24.12.1997	7	4	2	1	0	0
Total (no.)	46	20	11	6	8	1
Total (%)	100	43	24	13	17	2

Source: JWC files.

Table 7. Water supply project approval times, 1995-2008.

Annroval times	Palestinian	Israeli
Approval times	Talestinian	151 4 C II
Applications for which SC approval time known, no.	253	69
Average SC approval time, days	109.4	40.5
Applications for which JWC approval time known, no.	85	20
Average JWC approval time, days	347	68.2

Source: JWC files.

The longest delays, however, have been faced by Palestinian wastewater treatment plants. Between 1996 and 1999, the PA submitted proposals for eight new treatment plants. Of these, only three have obtained final JWC and planning approval. A plant for Hebron was proposed in 1999, initially approved in 2004, and is only now being implemented by the World Bank (Udasin, 2011). A Nablus West plant was proposed in 1997, but received final approval from the CA only in 2010. A third plant in Salfit was

initially approved in 1997. In 1998, however, the IDF halted construction on the project, the Israeli government subsequently paying compensation to the (German government) donors. A new location for the plant has since been agreed, but the Israeli authorities have been unwilling to give guarantees about the new location – specifically the potential for further expansion of the nearby settlement of Ariel – and the PA is unwilling to implement the project until a solution for Ariel's sewage problems is implemented (Amnesty International, 2009: 38). In consequence, not a single new Palestinian wastewater treatment plant has passed through the full process from approval to becoming operational since 1995. Only one plant has been implemented during this period – at El Bireh – but this was approved by the CA in 1992, prior to the establishment of the JWC (World Bank, 2009: 112).

INTERPRETATION

How should we explain this record? To do so, we need first to examine the interests and power relations underpinning the overall water regime.

As previous research has shown, the Oslo II water agreement was drafted by Israel and thus predominantly reflected Israeli preferences. Of the six-person Palestinian team to the Oslo II water negotiations, only one was invited to the final crucial round – not the nominal head of the team, and not even a water expert, but a Tunis-based associate of Yasser Arafat who had limited knowledge of local water issues. This, in turn, was a consequence of Israeli pressure within a context where water was in danger of holding up the entire Agreement, combined with Arafat's tendencies for making limited use of expertise and for switching around his negotiators ad hoc (Selby, 2003a: 144-5). Hence it is to Israeli interests and policies that we must principally attend if we are to explain the structure of the Oslo II water regime.

These interests and policies were essentially threefold. Firstly, Israel sought, as much as possible, to maintain the status quo ante in the control and utilisation of key transboundary water resources – this status quo being very much in Israel's favour. The exclusion of the Jordan River, Coastal Aquifer and Israeli portions of the Mountain Aquifer from the Oslo II regime enabled the continuation of the status quo over these resources. Equally, the construction of a highly intrusive approval process for the West Bank – an approval process that reproduced elements of the former direct occupation water regime – ensured that Israel would continue to hold veto powers over Palestinian water development. During the direct occupation era, Israel had purposefully restricted Palestinian development of the Mountain Aquifer, in particular its plentiful Western Basin, such that by 1995 Israel was accounting for 94% of Western Basin consumption (Israel and PLO, 1995: Schedule 10). West Bank Palestinians, on the other hand, were experiencing a water supply crisis: most towns had intermittent summer supplies; many villages would go upwards of three months without piped supplies each summer; still other communities were not even networked (Selby 2003a: 171-81). The functionally intrusive structure of Oslo II water 'cooperation' provided Israel with a means of continuing to restrict Palestinian consumption, and of maintaining its hegemony over the Mountain Aquifer.

While these interests have been widely recognised in the existing water literature, two other interests have been much less so – despite being extensively discussed within critical scholarship on Israel's occupation and the 'peace process'. Thus second, the other side of the coin to Israel's interest in maintaining control of key resources was its simultaneous interest in 'subcontracting' the major civil and policing burdens of occupation to the PA (Chomsky, 1999: 533-65; Gordon, 2008: 169-96). Israel's willingness to allow the PA unilateral responsibility for the Palestinian water sector in Gaza was a function of this: Gaza was downstream and resource-poor, and could not imperil any Israeli-controlled resources. Equally, the 'coordinated management' structure of the Oslo II water regime effectively transferred the costs of rehabilitating local Palestinian water systems following years of occupation and under-investment to the PA and international donors, whilst allowing Israel to retain overall decision-making control. As in the peace process more broadly, the Oslo water regime effected a disarticulation

of power and responsibility – enshrining Israeli power over decision-making and key resources, whilst delegating to the PA responsibility for local water supplies and lesser value resources.

In addition, thirdly, the Oslo II regime reflected and facilitated Israeli territorial ambitions within the West Bank. These ambitions centred on the ongoing colonisation of strategically important regions of the West Bank through settlement building (especially its western rim, the Jordan Valley and the Greater Jerusalem area); the integration of these settlements into Israel (especially through construction of a parallel settlement road network); the separation and encirclement of major Palestinian population centres by strategically located settlement blocs; and the restricted development and forced displacement of Palestinians living within areas of strategic value (see e.g. Halper, 2000; Weizman, 2007). These territorial ambitions are reflected in Oslo II's A-B-C division of the West Bank, this zoning, in turn, having had a significant impact on approval patterns, as discussed below.

The pattern of applications to the JWC has clearly been shaped by these three interests and the regime to which they gave rise. It is important to emphasise this: the pattern of Palestinian JWC applications, in particular, should not be read as a free representation of Palestinian interests, but rather as a circumscribed response to the rules and realities of the Oslo II regime. For instance, while the PLO claims rights to the Jordan River, no applications have been submitted for conveying water from it to the West Bank for the simple reason that they would be dismissed out of hand by Israel as falling outside the JWC's mandate (plus Israel does not recognise Palestinian rights to the Jordan). Similarly, that the PA has submitted only seven applications for new production wells in the Western Basin is not because of any lack of Palestinian interest in this resource, but because it knows that such applications will be met with an Israeli veto. The PA has applied for so many small diameter pipelines essentially because of donor insistence on JWC approval, and because of the risk of CA demolition orders for unlicensed construction. Conversely, Israel has not felt obliged to apply for any internal settlement networks because it is not dependent on international donors, and because the PA wields no enforcement powers within settlements.

If the Oslo II regime and the interests underlying it have shaped the pattern of JWC applications, they also, more importantly, explain its pattern of approvals. Indeed, approval rates and times reveal much about the interests and powers of the two parties. The pattern of Palestinian well approvals (Table 5) clearly demonstrates that maintaining the status quo ante on the Western Basin has been an Israeli priority, much more so than maintaining the status quo on the North-Eastern and Eastern basins - this difference reflecting the far greater contribution of the Western Basin to Israeli water supplies. Israel's apparent veto of well rehabilitation projects likewise indicates that limiting Palestinian water use in irrigation has been an additional Israeli priority. The pattern of Israeli approvals and nonapprovals has not been driven by hydrological considerations alone, however. To the contrary, most of the delays discussed above in the approval of production wells and wastewater plants have resulted from HPC planning objections, after JWC hydrological approval, these objections reflecting Israeli territorial interests in the West Bank. For example, Israel's two major demands over proposed Palestinian treatment plants have regarded their relocation in or away from Area C, and their connection to settlements, which the PA refuses to consider (B'Tselem, 2009: 19-23). The overall record of Israeli non-approvals and delays of Palestinian projects, combined with its large number of applications for settlement infrastructure, indicates that territorial-settlement considerations have been at least as important to Israel as its interest in maintaining hegemony over the Mountain Aquifer.

None of the above explains, however, why the PA has consented to the construction of such extensive settlement water infrastructure. Settlements, including the infrastructures serving them, violate the Fourth Geneva Convention's prohibition on the transfer of a state's civilian population into occupied territory (Art. 49); have "no legal validity" according to the UN Security Council (Resolution 446 of 1979); and "have been established in breach of international law" according to the International Court of Justice (2004: Para. 120). They are also regarded internationally as one of the major

impediments to Palestinian statehood. Moreover, the Oslo II Agreement granted the PA theoretical veto powers over settlement water infrastructural development – this being one of the major respects in which the Oslo II water regime differs from the direct occupation regime that preceded it. Indeed, to the best knowledge of the author, the JWC provides the PA with the only legal-institutional means of restricting Israeli settlement expansion within all the Oslo agreements. And yet settlement water infrastructures have been approved by the PA at a rate close to 100%. Why?

The main reason: Israel has made approval of major Palestinian projects, especially wells, conditional upon PA approval of settlements facilities. The first applications for settlement infrastructure were submitted to the JWC in late 1996 (JTC Protocol, 12.09.1996). Probably because of their small size, these initial Israeli projects did not cause great controversy and were approved by the Palestinian side. Subsequently, however, Israel proposed a series of larger projects, which met resistance from Palestinian JTC officials, with the result that the "Israeli side refused to discuss any new [Palestinian] projects" unless their own applications were approved (JTC Protocol, 16.02.1998). This included the eight USAID-funded wells discussed above, which had still not been approved by the HPC. In summer 1998, Israel submitted further applications for five major transmissions lines to settlements with a combined capacity of 25 Mm³/y (JTC Protocol, 16.08.1998; Ayeesh, 2009). The ensuing stalemate was only resolved when it was passed up to the joint Israeli-Palestinian Civil Affairs Committee - which in a single short agreement approved both Israel's five large supply lines, and the USAID wells (CAC Protocol, 02.02.1999). This agreement established the modus vivendi which has subsequently prevailed, wherein major Palestinian projects are linked to, and dependent upon, approval of major Israeli projects. On occasion, the linkage has been explicit: the approval of three Palestinian production wells in 2003, and a further three in 2008, was directly linked to PA approval of two of the Israeli wells listed in Table 2 (Jarrar, 2009). Beyond such examples, however, the linkage is implicit in the fact that JTC and JWC meetings since 1997 have almost always considered Israeli and Palestinian projects alternately. Reflecting on this, one Palestinian official asserts that "the Palestinian side was obliged to approve Israeli projects, or we'd get no approvals" (Anon, 2009). In the rather more neutral – or euphemistic – words of Israeli JWC Coordinator Baruch Naggar, PA approval of settlement is simply "a product of negotiations" (Naggar, 2009).

It is important to emphasise, finally, that numerous projects have been implemented in the West Bank without the formally required JWC (or planning) approval. Palestinian villagers and farmers often construct unlicensed water facilities, resorting to this because of the difficulty – often impossibility – of obtaining the requisite approvals and permits. Many unlicensed wells have been drilled in the Jenin area, in particular – an area with shallow groundwater resources under PA civil and security control (Gvirtzman (2012: 10-11) claims that annual abstraction from these amounts to 10 Mm³; the actual amount is no higher than this, and may be considerably lower). JWC protocols regularly record Israeli complaints about such 'illegal' activity (e.g. JWC Protocol, 10.12.1995). Beyond this, the IDF routinely demolishes unlicensed wells and cisterns: in 2010-11, the Israeli military destroyed a total of 50 rainwater collection cisterns, and 40 wells (EWASH Advocacy Task Force, 2012). However, Israel has also not fully complied with the JWC regime. As already noted, Israel has not submitted a single application for internal settlement networks. Israel unilaterally connected two settlements to the Palestinian wastewater treatment plant in El Bireh, over the objections of the PWA and its German government donors (World Bank, 2009: 112). And the one Israeli project rejected by the Palestinian side within the JWC – the Wadi Nar wastewater treatment plant – has been constructed regardless. In addition, JWC protocols often record Palestinian complaints about pipelines being laid without approval (e.g. JWC Protocols 24.03.1998; 14.07.1998). Indeed, a letter from Israeli Water Commissioner Shimon Tal to PWA Head Nabil Sharif seems to suggest a view of JWC approval as optional rather than mandatory: "I wish to inform you", Tal wrote, that "a 3 kilometres pipeline from Adeysa to Kiryat Arba requires immediate implementation, which will commence in the coming days" (13.05.01). (Revealingly, this letter was penned on the same day as a second letter, in which Tal informed Sharif of his appointment as JWC Co-Chair, before observing "It is my sincere hope that we can continue the special relationship that has existed in this most important sphere of common interest to our people. I look forward to constructive and fruitful discussions with you concerning all pending issues between the sides"). Crucially, while there have been unilateral actions on both sides, the Israeli actions have been government-implemented and sanctioned, whilst the Palestinian unilateralism has been non-governmental, and often in Area C, beyond PA control.

COOPERATION OR DOMINATION?

In light of the above, we can now pose our five questions of the JWC and Oslo II water regime. So first, have processes of policy coordination taken place within parameters established jointly, or almost exclusively by Israel? Clearly, the latter. It was Israel which produced the text of the Oslo II water accord. Israel has hosted, minuted and chaired most JWC meetings. Israel has also defined the structure and procedures of the JWC (it was at Israel's insistence, for instance, that subcommittee decisions were made non-binding – JTC Protocol, 02.08.2000). There has been no policy coordination over the territory that needs it most, Gaza, or over the Jordan River, to which the Palestinians claim a rightful share. Conversely, there has been continuous and truly Kafkaesque micro-coordination over West Bank water resources and supplies, reflecting Israel's interests in limiting Palestinian abstraction from the Mountain Aquifer and extending its territorial presence within the West Bank, whilst 'subcontracting' responsibility for local water management.

Second, has JWC coordination led to mutual policy adjustments, or by the PA almost exclusively? The latter. Implementation of the Oslo II Agreement did not require Israel to adjust any of its water supply policies, either within Israel itself, or in relation to settlements. Israel's settlement expansion policies have not needed any adjustment, since not a single settlement water supply project has been vetoed by the PA. Conversely, the PA has been compelled to adjust numerous water policies and practices in response to Israeli vetoes over the approval and location of wells, pipelines and treatment plants. Moreover, the PA has also felt compelled to adjust its approach to water supply infrastructure for settlements, from initial resistance to the full formal approval of major supply infrastructures that are facilitating settlement expansion. In the one area where the PA has not felt compelled to adjust its policy towards settlements – on the issue of whether Palestinian treatment plants should simultaneously serve settlements, or not - the result has not been negotiated policy adjustment by Israel, but instead non-approval and stalemate within the JWC, combined with unilateral Israeli construction of treatment plants on the other side of the Green Line (Fischhendler et al., 2011). This is not to deny that Israel has adjusted some of its policies and practices: it has constructed treatment plants in Israel, as noted above; it has increased supplies into the West Bank, discussed further below; and indeed the entire Oslo II Agreement may be considered an adjustment within the occupation. However, none of these adjustments has been a negotiated outcome of JWC coordination.

Third and most crucially, have these coordination processes and adjustments led to mutually beneficial outcomes, or to outcomes that have instead benefited one party almost entirely, and that have been contrary to the other's interests, preferences or aspirations? Here the evidence is similarly incontrovertible. Israel has clearly benefited from the Oslo water regime. It either exerts unilateral control over, or can veto development of, all major shared Israeli-Palestinian water resources. It has been free to pursue its territorial ambitions within the West Bank. Simultaneously, it has been able, under the cover of the 'peace process', to transfer costs (and responsibility) for the reconstruction and development of the Palestinian water sector, following years of under-investment, to the PA and especially international donors – who, as the Red Cross observed when it withdrew from the West Bank in 2003, are effectively "substitut[ing] for the responsibility of the occupying power which is Israel" (Shearer and Meyer, 2005: 170). Israel charges the PA for the treatment of sewage flowing untreated from the West Bank (Fischhendler et al., 2011) – a striking inversion of the neo-liberal institutionalist

advocacy of 'side payments' from richer to poorer riparians (Dinar, 2008). Israel also charges the PWA around \$2 million annually for water-related CA expenses – that is, for the administrative costs of Israel's occupation government within the West Bank. Internally, Israel has been able to pursue its own water policies unilaterally, most importantly by constructing desalination plants along the Mediterranean. As a result, Israel has, in recent years, achieved large absolute and per capita increases in water supply, including large increases for both domestic and agricultural use, and increases in the allocation of water for 'nature' (Globes, 2012; Rinat, 2012). The only costs borne by Israel under the Oslo II water regime have been "trivial" quantities promised in the Oslo II Agreement (Feitelson, 2005: 327) plus additional supplies the PA purchases (at full cost price) from Israel.

Palestinians, by contrast, have experienced mostly losses (Table 8). Owing to JWC and CA demands, not only have fewer wells been drilled than anticipated, but many of them have been in hydrogeologically suboptimal locations, including locations where they compete with existing Palestinian wells and where water-table levels are already in sharp decline (especially in the Herodian area to the south of Bethlehem; Aliewi and Jarrar, 2000). Seventeen years on from the Oslo II Agreement, new PA wells are providing only 13 Mm^3/y – much less than the 20.5 Mm^3/y from wells promised for the fiveyear interim period, let alone the 70-80 Mm³/y additional supplies defined in the Agreement as Palestinian 'future needs' (Art. 40: 7). Supplies from springs and older wells have also dropped – in the case of springs, mainly because of relatively poor recent rains and over-abstraction from adjacent Israeli and Palestinian wells; in the case of wells, primarily because of vetoes on rehabilitation, repair and maintenance. Thus, since 1995, Palestinian water production within the West Bank has dropped overall by 20 Mm³/y. This absolute decline in internal water production has been partially compensated for by an increase in water purchases from Israel of over 100%. Altogether, therefore, there has been a slight net increase in water supplies, but a significant decline in supplies drawn by Palestinians directly from within the West Bank itself, combined with increased dependency on supplies from Israel. Moreover, this slight net increase translates into a per capita decline in water availability of over 30%. Unlicensed abstraction probably means that this ratio slightly overstates the decline, but even allowing for this, and using Gvitzman's (2012) high-end estimates, there appears to have been a per capita decline in water availability of at least 25%.

Source	1995	2010	change	% change
Wells drilled since 1995 (Mm ³ /y)	-	13.3	13.3	-
Wells drilled pre-1995 (Mm ³ /y)	69	58.3	-10.7	-15.5%
Springs (Mm ³ /y)	49	26.8	-22.2	-45.3%
Total internal production (Mm ³ /γ)	118	98.3	-19.7	-16.7%
Imported from Israel (Mm ³ /y)	27.9	55.4	27.5	98.6%
Total supply (Mm³/y)	145.9	153.7	7.8	5.3%
Population (million)*	1.386	2.131	0.745	53.8%
Gross per capita supply (m3/y)	105.3	72.1	-33.2	-31.5%

Table 8. Palestinian West Bank water supplies, 1995 and 2010 compared.

Sources: Oslo II; IWA, 2009: 34; PWA Data Bank, 2011; author's calculations from PCBS, 2012.

* These figures are for the Palestinian population of the West Bank excluding East Jerusalem – because, while East Jerusalem is internationally recognised as an integral part of the West Bank, the PA and JWC do not have powers there, and the above hydrological data do not include East Jerusalem. In the absence of firmer data, the figure for 1995 is extrapolated from PCBS census data for 1997, using the PCBS population growth rate for 1997-98 of 2.87%.

Serious household water shortages remain throughout the West Bank, but especially within Palestinian communities in Area C: in some villages, consumption is as low as 20 I/c/d (B'Tselem, 2011: 38; OCHA,

2011: 13). 84 Palestinian villages remain unconnected to water networks (PWA Data Bank, 2011). No new Palestinian wastewater treatment plants have been completed through to construction and operation (the first, Nablus West, is due to become operational in early 2013). Add to this the fact that PA consent to Israeli projects has facilitated the consolidation and expansion of Jewish settlements – directly contrary to the PLO's ambition of statehood over the whole of the West Bank and Gaza – and it is hard to avoid the conclusion that overall gains have been made by one side only (see also Messerschmid, 2011 for an analysis to this effect).

Fourth, given that the Oslo II-JWC regime has involved neither mutual adjustments nor gains, what explains how Palestinian compliance has been reproduced and secured? The central reason clearly lies in the fact that the PA is not independent or autonomous, but encircled and highly dependent. Territorially, the PA comprises but small islands of West Bank land in a sea of Israeli control, with Israel's military occupation continuing across 82% of its area; fiscally, Israeli-collected tax returns plus international donor aid account for over 75% of PA revenues; whilst institutionally, the PA is a dependent construction of the Oslo agreements and international support for them. Under these circumstances, although the PA could theoretically withdraw from the JWC and pursue a unilateral water development policy, it is hard to imagine such a course of action bearing fruit. While the Oslo II water regime has been contrary to Palestinian interests, unilateral defection would probably have served them much worse.

To explain PA participation in this regime simply as a product of dependency and occupation would be incomplete, however. In addition, it is evident that the PA has rarely contested Israel's hydropolitical domination as forcefully as it might have done. The PA has generally attended JWC meetings without legal support. It has never developed procedures for evaluating settlement water projects. Moreover, sensitive issues have often been negotiated during private 'coordination meetings' between senior Israeli and Palestinian representatives, in which most Palestinian representatives are left waiting outside until the important business is complete (Bargouti, 2009). Many leading PA and Israeli JWC representatives have also developed close personal relationships: "he is a very good friend of mine, we meet very often, not only because of negotiation, I like to talk to him", observed Israel's JWC coordinator of his Palestinian counterpart in 1998, at a time when the PA was already approving major settlement infrastructures (Kantor, 1998). The Palestinian leadership, including former PA President Yasser Arafat and current President Mahmoud Abbas, were made aware of PWA approval of settlement water infrastructure, but raised no objections (Kawash, 2012). Given such evidence, it is hard to avoid the conclusion that PA compliance with the JWC regime, while primarily a consequence of encirclement, occupation and dependency, is also something for which it holds a degree of responsibility.

Since 2010, the PWA has been endeavouring to challenge and restructure these entrenched patterns somewhat. A dedicated JWC unit has been established within the PWA, with international donor support, to provide technical and legal support for JWC planning and negotiations. In turn, a hardening of the Palestinian position on approval of Israeli settlement infrastructure has recently led to stalemate within the JWC. PWA Head Shaddad Attili has publicly condemned as "blackmail" Israel's policy of making approval of Palestinian projects conditional on PA approval of settlement water infrastructure (WAFA, 2010). Yet both Israel and international donors appear committed to the continuation of the JWC in its present form. Given this, a fundamental transformation of the JWC and Oslo II water regime does not appear imminent.

CONCLUSIONS

These findings have both case study-specific and broader implications. In the first case, they provide a series of refutations of existing positive (and largely Israeli-Zionist) interpretations of Israeli-Palestinian water 'cooperation'. Thus contra Wasserstein, this 'cooperation' has not been driven by mutual interests in "sharing a vital resource" (2008: 97): if this had been the case, coordination would have

been over the Jordan River, Coastal Aquifer and entirety of the Mountain Aquifer, not just the West Bank. Pace Katz and Fischhendler (2011), the most important linkage within JWC negotiations has been between Israeli approval of Palestinian wells and PA approval of illegal settlement infrastructure, this linkage being one that they somehow overlook, despite their access to JWC negotiation files. Indeed, judging from the JWC record, Israel's territorial and settlement interests in the West Bank have been as important to it as its hydrological interests there – something that is entirely ignored within Israeli accounts of Israeli-Palestinian water relations (e.g. Kliot and Shmueli, 1998; Feitelson, 2005; Katz and Fischhendler, 2011; Gvirtzman, 2012). For example, the record of Israeli non-approvals and delays of Palestinian wastewater treatment plants suggests that Israel's "primary interest" in the JWC has not been to prevent the pollution of the Mountain Aquifer, as Fischhendler et al. (2011: 43) claim. More broadly, such accounts mistake the existence of 'policy coordination' for 'cooperation', in the process obscuring the really existing relations of Israeli domination within the West Bank that continue to this day. This is not the place to outline a possible alternative Israeli-Palestinian water regime. But the above analysis clearly demonstrates that the JWC is not "working well", as Israeli officials claim (Naggar, 2009); and that there is urgent need for a complete restructuring of Israeli-Palestinian water relations.

Whilst the above findings broadly confirm existing critiques of the Oslo II-JWC regime, they suggest that if anything these have not gone far enough. Thus far, critiques have generally understood the JWC as an instrument of "containment" – as a status quo institution through which Israel has sought to restrict and contain Palestinian demands, and maintain its hegemony over resources captured in 1967 (Zeitoun and Warner, 2006: 445). But the Oslo II-JWC regime is not just this; it has also facilitated Israel's expansionist territorial and settlement interests within the West Bank, including through the conferral of formal PA approval on the expansion of settlement infrastructure. Even the most damning assessments of the JWC (e.g. Amnesty International, 2009; Glavany, 2012) have failed to discuss this, in keeping with the broader 'conspiracy of silence' maintained by Israel, the PA and international donors on the question of PA approval of settlement water infrastructures. Many water sector donors are aware that approval of their own projects through the JWC has been linked to, and dependent on, PA approval of settlement infrastructure (Anon., 2009, 2012) – yet have preferred to remain silent on this issue. Once acknowledged, however, the charge sheet against the JWC looks even worse than previously. It becomes evident that the JWC has not only been an instrument of containment: it has also enabled Israel to compel the PA to assent to its own colonisation.

The broader implications of these findings are twofold. First, they demonstrate that there are indeed instances of international (water) policy coordination which are so asymmetrical that they do not qualify as 'cooperation', even by mainstream definitions. Under such circumstances, policy coordination can function as a means not only of maintaining hegemony and containing subaltern demands, but also of absolute emiseration, increased dependency and even colonisation. The Israeli-Palestinian case is of course an especially extreme and asymmetrical one: most international (water) policy coordination does not involve 'domination' in the narrow sense used here. Nonetheless, there is no reason to think that the Israeli-Palestinian case is in this sense unique. The extent to which instances of so-called 'asymmetric cooperation' are really 'relations of domination' is a theme that would merit further research, both in IR generally and critical hydro-politics specifically.

This is so, secondly, because cooperation discourse serves particular interests and agendas, and can have regressive political consequences. The promotion of 'cooperation' in contexts of extreme asymmetry is – just like the identification of 'security' threats – not a neutral activity, but a deeply ideological one that can distort policy priorities, and obscure and legitimise injustices and inequities. In the Israeli-Palestinian context, 'cooperationisation' – the invocation and extolling of 'cooperation' by Israeli-Zionist scholars, and its promotion by Israel, international donors, and dependent Palestinian NGOs and PA officials (Zeitoun, 2008: 79-83) – has variously obscured and reinforced Israel's domination and encirclement of the West Bank water sector. Cooperation discourse, viewed thus, can

be part of the ideological apparatus of domination. In such contexts, analysts and practitioners alike would do well to resist and reject the language of 'cooperation' altogether.

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