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Water Security in Times of Climate Change and Intractability: Reconciling Conflict by Transforming Security Concerns into Equity Concerns

Neil Powell [1,2,*], Rasmus Kløcker Larsen [3], Annemarieke de Bruin [4], Stina Powell [5] and Carmen Elrick-Barr [1]

1 Sustainability Research Centre, University of the Sunshine Coast, 4558 Sippy Downs, Australia; celrick@usc.edu.au
2 Swedish Centre of Education for Sustainable Development, Uppsala University, 75237 Uppsala, Sweden
3 Stockholm Environment Institute (SEI), 11523 Stockholm, Sweden; rasmus.klocker.larsen@sei-international.org
4 Stockholm Environment Institute, University of York, York YO10 5NG, UK; annemarieke.debruin@york.ac.uk
5 Department of Urban and Rural Development, Swedish University of Agricultural Sciences, 75007 Uppsala, Sweden; stina.powell@slu.se
* Correspondence: npowell@usc.edu.au

Received: 30 August 2017; Accepted: 25 November 2017; Published: 1 December 2017

Abstract: This paper considers how to achieve equitable water governance and the flow-on effects it has in terms of supporting sustainable development, drawing on case studies from the international climate change adaptation and governance project (CADWAGO). Water governance, like many other global issues, is becoming increasingly intractable (wicked) with climate change and is, by the international community, being linked to instances of threats to human security, the war in the Sudanese Darfur and more recently the acts of terrorism perpetuated by ISIS. In this paper, we ask the question: how can situations characterized by water controversy (exacerbated by the uncertainties posed by climate change) be reconciled? The main argument is based on a critique of the way the water security discourse appropriates expert (normal) claims about human-biophysical relationships. When water challenges become increasingly securitized by the climate change discourse it becomes permissible to enact processes that legitimately transgress normative positions through post-normal actions. In contrast, the water equity discourse offers an alternative reading of wicked and post-normal water governance situations. We contend that by infusing norm critical considerations into the process of securitization, new sub-national constellations of agents will be empowered to enact changes; thereby bypassing vicious cycles of power brokering that characterize contemporary processes intended to address controversies.

Keywords: water equity; water conflict; securitization; climate change; governance; wicked problems

1. Introduction: The Advent of the Water Security Narrative

Economic disparities and deeply entrenched post-colonial power differentials have effectively sheltered the global North from the impact of so-called global challenges. However, this situation dramatically changed midway through 2015, when Europeans experienced two significant global challenges first-hand: mass migration and terrorism. The atrocities and violent conflict perpetuated by the Islamic State of Iraq and Syria (ISIS) within the larger Tigris and Euphrates basin, has displaced millions of people. Hundreds of thousands of refugees have made their way to Europe, only to be met by great reticence. Most EU member states are abandoning deeply held societal values and a

so called European identity, founded on solidarity and equity, by closing their borders under the pretext that they are safeguarding the welfare of the State. In countries with more open-door policies, such as Sweden, the public sector is being crippled under the weight of guaranteeing the welfare of the massive influx of newcomers. The interconnected, tragic acts of terrorism, such as in Paris in November 2015, brought international terrorism to Europe's doorstep. As a response, this has unleashed an unprecedented process of reforms that are curbing civil liberties and transparency, legitimized under the pretext of safeguarding national security.

Climate change has loomed as another challenge taking center stage in global discourse in the latter part of 2015. During the last decade, the debate on climate change has ramped up, coinciding with increasing consensus within the scientific community that climate change is real and predominantly driven by humans [1]. In order to awaken the political domain to the threats posed by climate change, several narratives have been crafted such as the Anthropocene: an earth system that has flipped from a regime governed by natural drivers to one governed by human agency [2]. Along similar lines, Rockström et al. speak of Planetary Boundaries; a narrative founded on the claim that humans have transgressed a set of natural boundaries in terms of historical green-house gas emissions and exited out of the "safe operating space for humanity" [3].

These narratives from science have, however, generally failed to gain political traction, mostly on account of the controversy in reconciling geo-centered planetary stability, as advocated by the climate scientists, with the development agenda of discrete nation states and/or economic interests of large multi-nationals. Moreover, the climate discourse is characterized by sharp power differentials; whereby many of the proposed actions to mitigate climate change incur the greatest costs on the global South and development agendas designed to address poverty alleviation and human well-being [4]. The presence of these multilayered inequities has constrained processes designed to secure a universal agreement to combat climate change, instanced by a series of failed United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties (COP) meetings.

In the latter part of 2015, as Europeans and the global community struggled to make sense of mass migration and terrorism, climate change was evoked as a "convenient truth" to fill the void created by the tumultuous European Autumn: An insecure world, characterized by terrorism and mass migration, driven by climate change. This repackaged narrative was no longer communicated as a future warning but rather as a contemporaneous state of emergency, a systemically interconnected trilogy of self-reinforcing global challenges, affecting the development agendas of the global North and South. In all likelihood, it was the recasting of climate change mitigation as an act to safeguard human security that helped push COP 21, the 2015 Paris Climate Conference, over the finishing line, bringing about political consensus; a universal agreement between 196 nations to curb global warming at 1.5 °C above pre-industrial levels. COP 21 became the peace summit that author and journalist Naomi Klein [5] said she had hoped for only two weeks earlier when interviewed by Fredrik Skavlan during a Swedish talk show. Yet, while COP 21 was heralded as a major break-through and offered some limited wins for stakeholders in the global South, it did not radically shift the unequal terrain or relinquish authority from main power-holders such as the US, China, EU and India [6].

2. The Water Securitization Discourse

Underpinning the climate change discourse, as it came to fruition during and post COP 21, are neo-Malthusian assumptions that increased scarcity of resources will exacerbate insecurity and inevitably propel society towards violent conflict [7]. In this regard, the impact on the water cycle is considered particularly significant. The Intergovernmental Panel on Climate Change (IPCC) projections suggest the impact on water resources will manifest as sea level rise, shifts in weather patterns with an increase in the occurrence of extreme weather events and increased water stress [8,9].

Following this reasoning, climate change will not only exacerbate water scarcity but also impact upon human and material resources that have a systemic interconnection with water. Thus, we see the neo-Malthusian storyline gaining strength when it mingles with the larger concerns linked to

water, by claiming that amplified scarcities will increase the likelihood of conflict. This phenomenon is also referred to as a "threat multiplier" [10]. A turning point in the securitization of global climate change was in 2007 when the IPCC released its fourth annual report calling for "extraordinary policy responses" [8].

One way to view such responses is as "post normal", i.e., actions that overstep the normative boundary set by accepted rules and regulation, such as international environmental conventions or human rights law. Post normal situations are generally referred to as situations in which "facts are uncertain, values in dispute, stakes high and decisions urgent" [11]. Under such conditions traditional approaches, shaped by pre-existing norms and structures to bring about change have proven dysfunctional.

Simultaneously with the IPCC developments, three EU countries included climate change as a security threat on their international agenda, the UK introduced climate change as a topic of the UN Security Council and climate change featured in the G-8 meeting agenda. In this regard, the much-cited Darfur conflict has been used as an example of the interconnection between climate change and violent conflict. This situation has been reported as the first modern climate change conflict, growing out of famine and displacement; a claim that the international community has widely embraced [12]. More recently and as noted earlier, the international community now, in part, also attributes the violent conflict arising from the actions of ISIS within the larger Tigris and Euphrates basin to climate change. Among others, Box and Klein [13] have articulated such links between climate change, water and the rise of ISIS (18:2015) (Box 1).

Box 1. Climate change, water and the rise of ISIS.

Box 1. Box and Klein maintain that the link is now uncontroversial, arguing that even the former U.S. state secretary, John Kerry is making the claim; suggesting that Syria's worst drought on record occurred just before Syrian Civil war; a drought leading to migration of 1.5 million Syrian farmers and thus intensifying political unrest. Box and Klein also argue that Iraq was invaded because of its oil wealth, oil that is driving the carbon emitting economic system. On a concluding note in the New Yorker, Box and Klein write that "ISIS found fertile ground in this volatile context of too much oil and too little water".

Freshwater is considered to have the greatest conflict potential, lending weight to the view that river basins are particularly prone to so-called "water wars". Most of the cited studies are from the Middle East and are situated within regions such as Jordan, Indus and Euphrates basins, which have a long history of insecurity [14–16]. In a report prepared by the International Institute for Sustainable Development (IISD) it is argued that the number one climate change security threat comprises of increased competition for scarce water resources, which will complicate peace agreements [17].

Cited studies suggest that there is overwhelming incidence of conflict resolution occurring at transnational level, mostly linked to transboundary waters [9,18–20]. Drawing on such reasoning, Wolf et al. [21] mapped basins with the potential for political stresses or conflicting interests in the coming 5–10 years. The cited basins include, the Kunene, Okavango, Orange, Limpopo and Incomati in southern Africa; Lake Chad and the Sengal in west Africa; The Ganges, Brahmaphutra and Meghna in South Asia; The Mekong and Saleen in southeast Asia and the Ob in central Asia. It is now 14 years after this study was conducted and no violent conflict has occurred in those basins (pers. com. Ashok Swain, 2015). Swain (2015) reiterates that the only transboundary violent conflict that has occurred in a basin is in Euphrates-Tigris. This is a relatively new conflict and precipitated by the havoc wreaked by ISIS. The water security discourse principally maintains its reified storylines at transnational level—by default legitimizing those country representatives participating in the negotiations that already tend to be the dominant power-holders (e.g., armed groups, political units and nation states). Yet, the overwhelming incidence of violent conflict occurs at subnational level, with a marked increase in civil war [22,23].

What we have been witnessing in the water and climate change discourse is a pathway to securitization, i.e., the transformation of an issue through a process of scientification, politicization

and extreme politicization (securitization). Securitization here refers to "active processes of invoking security and setting in motion policies and actions on the basis of presenting matters as threatening" [24]. According to the so-called Copenhagen School, a school of thought with its roots in international relations, an issue becomes securitized when the enactment of "extraordinary" (emergency) actions by states are motivated; actions that can legitimately transgress existing rules and norms for the sake of security [25].

As we have observed in the case of concerns with water resource in the context of impending climatic change, once the issue is transposed into this post-normal positioning, the need for rigorous scientific evidence to support a claim becomes less important. It casts the spotlight away from "objective" threats or threats that are experienced first-hand in the problem context. This, in turn, redirects attention to the political domain where protection of the values and interests of nation states and other power holders becomes the primary focus [25].

Thus, proponents of the Copenhagen school with their distinctive state centered ontology, at least prior to the Paris COP, considered that global warming had not been successfully securitized; owing to the absence of a collective agreement that legitimized the enactment of extraordinary measures. Indeed, even now with the Paris agreement in place, Bo [26] concludes, drawing on the securitization theory deployed by the Copenhagen school suggests, that in spite of the divergent views between China and EU, the conditions for the international securitization of climate change have not been met. Reflecting further on the Copenhagen's school ontological boundary conditions and in particular what Julia Trombetta [27] refers to as the "logic of war", the indirect and non-intentional threats to human security invoked by environmental threats are diminutive in comparison to the unambiguity of violent conflict.

In contrast to the Copenhagen School's claim that climate change is a weaker form of de-territorialized securitization, a diverse group of scholars have applied a broader "sociological" framework to examine what Michael Mason [28] refers to as diverse performative spaces of both state and non-state actors. Mason applies these two strands of securitization theory to understand how state and non-state actors have portrayed climate change as a threat multiplier in terms of the Israeli-Palestinian conflict and thereby the larger middle east, particularly in terms of projected water scarcities. His examination reveals how power-holders have exploited the discursive openings within a larger process of climate change securitization to legitimize the enactment of extraordinary or post normal climate change actions: Palestine, he argues, intent on achieving statehood, has aligned itself to the international communities' discourse, of "climate change as a threat multiplier" to common sub-artesian water resources in order to motivate its extraordinary action against Israel's occupation. Israel on the other hand, intent on re-territorializing, articulates the issue as a "domestic" concern and applies an expert scientific narrative as grounds for implementing the response: a discriminatory territorial water sharing regime.

Cognizant of the above, this paper considers how the inequities that are often associated with actions directed at climate change and water governance can be reconciled.

3. Safeguarding Equity in Times of Post Normal Climate Actions

Insights from a recently concluded European and Global Challenges research project, Climate Adaptation and Water Governance (CADWAGO), suggest that many actions designed to mitigate and adapt to climate change thus far have led to serious conflicts of interest and the reproduction of societal inequities [29–31]. Drawing together these lessons offers an alternative reading of how to approach wicked and post-normal water management situations. In contrast to the mainstream security discourse outlined above, this equity based narrative articulates a way to attend not only to the material and/or biophysical stakes on which basis stake-holders make their claims but to who actually should have agency in the enactment of governance.

The CADWAGO project was specifically conceived to support governance transformations that address the intractable hazards and risks underpinning water security. In its original conceptualization,

the project viewed intractable hazards and risks to be both overdetermined and irreducibly uncertain. Overdetermined problems are differentiated from "normal" risks where an explanatory relationship can be established between cause and effect. In contrast, over-determined problems are defined by non-linear relationships in which causes are causative but not explanatory [32]. Irreducible uncertainty arises when there are contested versions of the "public good(s)" derived from water. Under such conditions prescriptive approaches, shaped by pre-existing norms and institutional structures to bring about change have proven dysfunctional [11].

By conceptualizing intractability in such a way, the project's aim was to support a transformation towards both systemic and adaptive water governance. CADWAGO considered itself to be uniquely placed to do this on account of having a set of partners who approached water governance from a systemic perspective, from a perspective of socio-ecological resilience and adaptive capacity from a deliberative perspective. Cognizant of this conceptualization, the problem context was introduced in the original project application with an explicit recognition of water security as characterized by resource (or water) dilemmas (Box 2) [33].

Box 2. Water Security in the CADWAGO project application.

Box 2. Water security, like many other global challenges, is characterized by complexity, uncertainty and high decision stakes. Water resource issues are nested in complex systems that are dynamic and exhibit non-linear properties, as demonstrated by the extremes of droughts and floods. Similarly, issues in water resource contexts are often systemic, reflecting broader system contexts and complex interdependencies between the biophysical and socio-economic domains. Interdependency compounds and moves problems between: upstream and downstream, green and blue waters, sectors, gender, class, ethnicity, nationality, etc. Consequently, this is a global challenge where there is often uncertainty over cause and effect. Moreover, this global challenge also has high decision stakes, which relates to the potential catastrophic risk of climate change (combined with other existing pressures) to water security with flow-on effects to other global challenges such as food security, renewable energy and the provision of other essential ecosystem services. All of the above lead to widely differing accounts of what can or should be done to improve the problem contexts. These contexts, in which multiple stakeholders with different interests make competing claims over the same resources, lead to controversy.

Flowing from this vantage point, CADWAGO aimed to examine the emerging issues underpinning dilemmas associated with water security. These dilemmas were seen to lead to a conflict of interest between "stakeholders" (those who hold different interests, i.e., stakes, in the issue) that magnify a set of fundamental and often competing global challenges. CADWAGO implemented a comparative case study analysis across a diverse set of country contexts (Europe, Australia, North America, North Africa and Southeast Asia). This allowed for a transnational comparison of lessons pertaining to the governance of water dilemmas, in a changing climate, with the aim of supporting governance learning in Europe. After the first research iteration, the lessons from a synthesis of case study insights suggested that a crucial element was missing in the original conceptualization of the project.

The norm critical gender researchers within the consortium first stirred the CADWAGO "pot" by challenging CADWAGO's original conceptualization of a water dilemma. Their findings suggested that even if systemic, adaptive and deliberative processes were used to reconcile conflicting water interests, emergent governance actions would ultimately be shaped by the agenda of those who had most agency within water governance organizations [31]. This "agency landscape" could be attributed to the inherent power differentials within these organizations, which in turn were given more or less traction by the pre-existing norms and structures associated with water governance. Devoid of such consideration, claims of systemic and adaptive governance being implemented would, at best, be cosmetic, imbibing pale color into the prevailing status quo. At worst, it could be used by power-holders as a decoy to strengthen their position and magnify prevailing inequities. This crucial finding led to the notion that enabling water security requires more than being attentive to conflicts of interests between *stake*-holders; it requires recognizing that different *position*-holders make competing claims, not over divergences in interests but rather over who should have agency in the enactment of governance.

Equipped with the above insights, CADWAGO's conceptual framework was revised. In order to communicate the governance status, the analysis of the project's case study contexts was operationalized in the idiom "Robbing Peter to Pay Paul" (RP3) (Table 1). The purpose of this idiom was to help unpack the way water governance depends on both conflicts of interest and conflicts of positions. That is, the idiom served as an analytical device to nuance the understanding of water conflicts, as one of the approaches by which CADWAGO undertook its cross-case synthesis. Here case studies organized their empirical insights under the RP3 storyline and thereafter the RP3 situation (governance status) was explained by addressing the 3 key CADWAGO research themes (see themes in Table 1). This idiom also served as a norm critical heuristic device to foster critical reflection in several stakeholder meetings intended to support governance learning [34]. A multiplicity of conceptions of learning exist; we here understood learning in line with the social learning tradition within research on water resources, i.e., as a potential policy instrument to foster novel interaction between resource users to support improved awareness of each other's perspectives and, ultimately, reconstruction of such perspectives with implication for action [35].

Table 1. The RP3S idiom.

Category	Interest Dilemma	Position Dilemma
Robbing (*R*):	The water governance action/policy under scrutiny	
Peter (P^1):	*The victims*; those whose interests are compromised	*The disempowered*; those whose agency is being constrained
To pay (P^2):	*The entitlement*; those harms/gains emerging from complying to the governance action, transferring material value from one system of interest to another	*The claim*; those discourses/framings that determines—through institutionalization and enactment—who has legitimacy/authority to exert agency and (re)construct the dilemma
Paul (P^3):	*The beneficiaries*, those whose interests are being served	*The empowered*; those who experience a gain in agency

The origins of the RP3 idiom can be traced back to the period before the reformation and it refers to the dilemma faced by the Catholic Church during the 16th century. As the church of St Paul grew stronger in England it demanded taxes from its English constituency, the same taxes that were previously paid to the church of St Peter in Rome. Hence the notion of RP3 and thus its use thereafter as a verb in CADWAGO: "to take away from or cause harm to one person in order to pay or confer something on another; to discharge one debt by incurring another" (Oxford dictionary). The harm inflicted or debt incurred was for the purposes of the CADWAGO project interpreted to be either linked to an interest in a material asset/condition or to claims as to who has agency in the enactment of water governance (i.e., clarifying that water dilemmas must be viewed with attention to its qualities as an interest dilemma as well as a position dilemma) (Table 1).

In order exemplify the utility of RP3 framework in fostering a systemic awareness of the consequence of governance actions from both an interests and position perspective, we here share the analysis from two of the case studies from the CADWAGO project, namely the implementation of two European policy directives. In so doing, we also position the novel arguments of this paper in relation to past research on water governance and resource conflicts.

3.1. Case 1: Gender and the EU Water Framework Directive

The enactment of environmental directives within the EU has historically grown from a notion that the ideal state of any system can be identified and bounded by expert scientific knowledge. In recognition of the multiple and conflicting interests associated with water governance, EU's Water Framework Directive (WFD) recognized that an ideal system state was negotiable and reflective of a post-normal scientific tradition. Moreover, the WFD can be perceived as expression of the (instrumentalist)

'participatory turn' within water governance, seeking to render governance actions more legitimate and implementable [36]. Thus, the WFD stipulates that the chemical and ecological status of water shall be defined by context-specific and stakeholder defined targets, thereby calling for the enactment of participatory approaches in water governance, notably in the development and enactment of river basin management plans (RBMP) [36].

As part of the CADWAGO project, Westberg and Powell [31] applied a gender theoretical lens in order to contribute to research on why participatory approaches within environmental management have had limited traction. Previous research has focused on the institutional misfit between hierarchical organizations and participatory approaches [37,38] and the lack of competence amongst civil servants with the task to facilitate participatory approaches [39–41] resulting in pseudo-involvement where power relations has been left untouched and it has been business as usual [42]. At the same time, research on both government and non-government organizations have revealed strong masculine norms associated with top-down bureaucracy [43,44].

The study undertaken in CADWAGO has drawn upon interviews undertaken in five Swedish County Administrative Boards (CABs), those organizations responsible for developing and implementing RBMPs, with the aim of investigating who was given what tasks and why within the organization. The findings showed that projects organized around participatory approaches were mainly led by young and newly employed female officers. Furthermore, the interviews revealed that the rationale for appointing these women as project leaders (PL's) was related to their perceived characteristics as women (being good at listening, being humble, good at coordinating and emphatic), rather than their qualifications within the natural sciences. The choice of PL's (new and young employees), individuals with very limited agency within the organizational setting, also suggest that the participatory projects were not prioritized within the CABs. The learning from the projects was never shared within the organizations and nor did PL's have the support required to enable organizational learning. Thus, the projects promoting the participation of stakeholders in the RBMP processes became decoupled from the "normal" activities undertaken by the CAB's.

The Gender and WFD case suggests that participatory approaches have a lower status than normal scientific approaches. This has led to the reproduction of prevailing inequities within CABs, whereby the pre-existing power-holders, most often men, have retained the agency in terms of enacting high-level policy actions, such RBMP (see Table 2). The analysis, enabled by the RP3 idiom, helps shed light on both the interest and position dilemma underlying the water governance. In so doing, it complements structural theories that ascribe inertia and implementation failure to path-dependencies and institutional misfit [45]. By attending to the position dilemma in particular, the framework opens for an appreciation of dynamics of everyday practices, performances and agency which otherwise may be overlooked [30].

Table 2. Application of the RP3 idiom to the Water Framework Directive case.

Category	Interest Dilemma	Position Dilemma
Robbing (*R*):	Water Framework Directive implementation	
Peter (P^1):	Those stakeholders at risk of reduced access to good quality water resources on account of participatory planning processes in the river basin (i.e., those with high interest in changing the status quo)	Female civil servants in the authorities involved in WFD implementation, specifically facilitation of stakeholder collaboration
To pay (P^2)	The access to water resources (incl. quality and quantity) in situations of increased climate risks	WFD implementation is shaped by and, in turn, exacerbates gendered 'inequality regimes' within government authorities.
Paul (P^3):	Those stakeholders benefiting from maintaining or reproducing the status quo.	Male civil servants in the authorities involved in WFD implementation

3.2. Case 2: EU's Renewable Energy Directive and North South Inequities

In this second case, we shall consider the European biofuels market and its demand for vegetable oil contributing to the rapid expansion of oil palm plantations in Indonesia, the world's largest producer [46]. These developments have been partly driven by the incentives created through the EU's Renewable Energy Directive (EU-RED). From the outset, the EU-RED set a target that 10% of the energy used in the transport sector across the EU should be generated from renewable sources by 2020. Member states generally chose to prioritize liquid biofuels, which are thought to represent the most cost-competitive option in the short term. To be eligible for government support or to count towards mandatory national renewable energy targets, biofuels used in the EU—whether produced locally or imported—must comply with the so-called sustainability criteria set out in articles 17, 18 and 19 of the EU-RED. The sustainability criteria, which has been in effect since December 2010, stipulated a minimum level of direct greenhouse gas (GHG) emission savings (35% in 2009, rising to 50% in 2017) and imposed restrictions on cultivating land with high biodiversity and high carbon stocks (such as peatland and wetlands). The criteria prohibited conversion of such areas from the baseline date of January 2008 (Art. 17).

The mode of implementation was—just as in the WFD—partly supposedly participatory, aimed at addressing interest dilemmas: National authorities, companies and non-governmental organizations (NGOs) were encouraged to implement voluntary biofuel sustainability certification schemes and the Commission indicated which criteria these schemes must meet in order to achieve EU-wide recognition. Moreover, several of these certification schemes espouse, themselves, participatory ambitions, involving stakeholders in production countries such as Indonesia in the negotiation and implementation of their sustainability standard. One case in point is the Roundtable for Sustainable Palm Oil (RSPO), the leading voluntary sustainability standard for palm oil products (in terms of total market coverage for food and fuel) [47].

The work in CADWAGO was carried out in an action research process covering one and a half years of collaboration between an international research institute, a national Indonesian human rights NGO and a local environmental NGO with a permanent presence in the field sites [29]. The primary methodology comprised of interviews and focus groups in villages of in Central Kalimantan, Indonesian Borneo, in Sampit, the district capital of Kotawaringin Timur; in Palangkaraya, the capital of Central Kalimantan Province; and in Jakarta.

The study documented how this governance action provoked an "exporting" of water dilemmas to Indonesian oil palm contexts, wherein the ambitions of stakeholder participation to reconcile interest dilemmas was defeated, largely due to an inability to address position dilemmas (see Table 3). First and foremost, the governance action did not address the legacy of a poorly performing institutional environment, including a weakness as concerns traceability in the supply chains, accountability of core companies and due diligence requirements [48]. Second, the "sustainability criteria" in the EU-RED encompassed only land use changes (connected to concerns with GHG emissions) while altogether disregarding water resource exploitation in the actual process of cultivation and production and excluding socio-economic criteria regarding impacts on local livelihoods. This disregard for water-related ecosystem services derived from Borneo's peatland forests served as a reflection on the "water blindness" that characterizes the current international debate on biofuel feedstock production [49].

More importantly and this is where the main contribution from the proposed framework lies, the analysis shows how this implementation failure can be attributed to lack of cognizance of the underlying position dilemma (Table 3). The implementation of the EU-RED allowed the energy and climate sectors to appropriate mandate and resources to stimulate market demand without attending to policy coherence with the EU's development and water objectives. It has allowed energy security priorities of affluent nations to put local livelihoods in peril and benefit already privileged market actors [50]. As a consequence, the EU's renewable energy policy was developed under the auspices of climate change but ended up ignoring underlying position dilemmas that benefit already privileged power holders while reproducing inequities in Indonesia. The framework creates a meeting place

between water governance research that tends to be blind to position dilemmas and critical perspectives from inter alia political ecology on discursive strategies, power and agency, that nonetheless tend to pay limited attention to conflicts in the context of water resources e.g., [51].

Table 3. Application of the RP3 idiom to the Renewable Energy Directive Case.

Category	Interest Dilemma	Position Dilemma
Robbing (*R*):	EU's renewable energy policy, intended to reduce GHG emissions	
Peter (P^1):	Local communities, Indonesian government and its public agencies.	The informal "guardians" of Indonesian local communities, e.g., social CSOs and human rights advocates.
To pay (P^2):	The EU demand increases palm oil imports more than 6-fold and stimulate expansion of plantations, resulting in water pollution in Indonesia.	The climate change discourse and EU-RED frames the issue to be solvable by positivist natural science and market actors while disqualifying norms about rights and responsibilities as irrelevant to the governance situation.
Paul (P^3):	EU member states, European biofuel companies.	Financial market actors, corporate lobby groups.

3.3. Summary Reflections on the Case Studies

The two case studies have shown how understanding stakeholding in the context of water governance requires more than being attentive to conflicts of interests between stakeholders; it also requires recognizing that there are competing claims over whom should have agency in the enactment of governance that determines the system state. A stakeholder, who holds a position or capability to transform the resource or situation at stake, can be referred to as a position-holder. Equally well, a stakeholder's interest in a situation or resource can solely be driven by a quest for agency; independent of any material or biophysical stake. The endowed agency of position-holders can magnify the wickedness of these types of situations on account of a potential decoupling between the power to transform and the inherent stakes. It is the position-holders who define the limits of the context or risk and thereby determine who is being rational in the process.

In the CADWAGO cases presented in this paper, the position-holder's rationality was legitimized by the presence of a particular epistemic culture that has perpetuated a misfit, which tends to exclude deliberate policy considerations, non-measurable concepts or moral dimensions such as fairness, equity and rightness [52]. This in turn tends to lead to a reproduction of a maladapted status quo (business as usual), which can be proactively orchestrated by position-holders as a means to retain high levels of agency.

4. Conclusions

There is a logical convergence between the water and climate change discourses owing to the intrinsic biophysical links between climate and the water cycles. The convergence of these discourses makes the neo-Malthusian reasoning compelling; as a crystal ball, whose clairvoyance foresees the role that anthropogenic climate change will play in amplifying preexisting water scarcity. In so doing, it is assumed that conflicts of interest will be exacerbated to a point where violent conflict is an inevitable outcome.

Whilst we acknowledge the worthiness of specially designed actions and universal agreements to curb global warming and its associated threats, we also recognize that there are significant risks associated with orchestrating such a substantial transformation conditioned by a securitized political context. Notably, the post normal positioning of a securitized climate change discourse, combined with the forthcoming unleashing of an expected torrent of actions post COP21 (e.g., so-called green financing to multi-nationals and large infrastructure projects), are no longer directly accountable to or centered

on the moral authority defined by otherwise accepted societal norms (e.g., water rights of locally affected populations). It will then, in all likelihood, exacerbate pre-existing societal inequities.

Indeed, to some extent, the security narrative (as articulated in the international community) and the equity narrative (as articulated by the CADWAGO project) share the view that traditional governance approaches are dysfunctional under post normal conditions; yet they go on to very different conclusions. While the security narrative motivates so-called "extraordinary" actions of already privileged power-holders the equity narrative advocates a more deliberative and inclusive invitation to stakeholders otherwise ignored in the negotiations over water. By means of the RP3 heuristic we saw how a focus on stake-holders or position-holders results in very different conclusions regarding governance responses, helping to nuance the singular focus on (neo-Malthusian) material interests and the extraordinary responses that may be evoked on this basis.

In the literature, it is commonly assumed that post-normal spaces offer promises of more desirable and innovative governance constellations and or climate adaptation actions [52–56]. Building on such claims, the water security discourse and its underlying scientific narratives on various types of leadership in the Anthropocene go on to suggest the need for a "[f]undamental reorientation and restructuring of national and international institutions" (Biermann [57] citing the 2012 State of the Planet Declaration). While we support such arguments, in principle, we have in this paper offered a more critical reading of the risks s associated with "extraordinary" responses driven by the securitization narrative and the importance of reorienting the discursive terrain to equity concerns instead.

Nations and power-holders have had an interest in appropriating and reframing governance situations based on the securitized explanations to promote their own interests, often by co-opting the myopic international community. By applying this reasoning to the case of COP21, it could be argued that power-holders—through reifying climate change as a threat to global order and sidelining the interest and position dilemmas that underlie security—have managed to both co-opt the international community and hoodwink the general public in a single sweep. As reviewed above, this concerns a particular post-normal governmentality founded on a human security paradigm that attributes conflict to changes in environmental degradation and bio-physical variables rather than the institutional structures that are maintained to reproduce inequities and which are frequently the real roots of conflict [23,58]. Governmentality here refers to the orchestration of practices (in this case the rationalities espoused by the security discourse) by which global citizens are governed [59].

By drawing on findings from the CADWAGO project we have argued that most water governance narrative processes are defined and mediated by a security narrative; an interest centered narrative that is devoid of equity considerations and explicit acknowledgment of the real issues that mediate the underlying power brokering processes. The governance actions emerging from this securitized discourse will tend to reproduce pre-existing norms and structures, amplify inequities and thereby nurture truly fertile ground for the exacerbation of controversy. We argue that by actively facilitating the reframing of water issues from a security narrative to an equity narrative, for instance via enacting a RP3 lens, both interests (bio-physical material stakes) and positions (space for human agency) will be deliberated upon. In so doing, different constellations of stakeholders, who operate outside the pre-existing structures, will become visible and ultimately may be empowered in the process.

We contend that adopting an equity narrative could pave the way for water governance transformations that lead to new modes of climate change adaptation that support the real victims of climate change. It would embody a shift from the one dimensional political voices in standardized transnational/national negotiations, which tend to reflect perspectives that accord with the norms of the pre-existing power holders. Instead, it would pay attention to the multiplicity of voices and perspectives manifest at subnational levels—those who understand the complexities that underpin the conflicts that they experience.

Author Contributions: Neil Powell, Rasmus Kløcker Larsen and Annemarieke de Bruin conceived the paper. Carmen Elrick-Barr undertook the literature review for the paper; Neil Powell together with Rasmus Kløcker Larsen and Stina Powell wrote the paper.

Conflicts of Interest: The authors declare no conflict of interest.

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