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The political impacts of adaptation actions: Social contracts, a research agenda

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Managing climate and disaster risk is a deeply political act sitting at the interface of popular expectations, legal mandate, and political fiat. This article makes the case for an expanded research agenda on social contracts in climate and disasters scholarship as a mechanism to better reveal activity across this interface, identify the winners and losers of adaptation, and improve the equity outcomes of negotiated and imposed risk management settlements. Social contracts are defined as multiple and constructed (not singular or fixed), and three distinct yet intersecting forms of social contracts are identified: imagined, practiced, and legal-institutional. The article argues that mapping the disjunctures, overlaps and transitions between these concurrent social contracts can help reveal gaps between responsibilities held *de facto* and *de jure*. This makes a timely contribution to understanding tensions between need, obligation and entitlement that underlie contestations over "who" is responsible for "what" in risk governance. It also helps reveal the dynamic boundaries of social acceptances at the centre of debates around fair adaptation governance. Such work can provide insight on how development relations, including but reaching beyond risk management and climate change adaptation, can be transformed progressively and fairly in a changing climate.

This article is categorized under:
    Vulnerability and Adaptation to Climate Change > Institutions for Adaptation

KEYWORDS
Adaptation, fairness, politics, social contracts, transformation

1 | INTRODUCTION

This article argues that social contracts offer a rich lens for research on the politics and fairness of adaptation and its consequences. It is now well-established that the risks associated with climate change, and the effects of adaptive actions, have unequal social, spatial and temporal distributions. These inequities are mediated by and accentuate cultural and political differences (Adger, Barnett, Brown, Marshall, & O'Brien, 2012; Eriksen et al., 2011; Norgaard, 1988). Cultural norms and assumptions, legal frameworks and everyday practice constantly iterate in ways that produce and reflect dynamic but invariably asymmetric relations of power between development stakeholders and across scales. The same social-political relations through which power is exercised in development decision-making and action (interactions that might collectively be termed "development relations"), will also determine who carries the burden of impacts and the costs of absorbing losses, adapting or transforming in the face of escalating disaster risks (Pelling, 2011). The social reproduction of power through adaptation policy and action, and embedded questions of equity and representation, are increasingly recognized as important to

understanding shifting outcomes; yet to date the adaptation literature has fallen short of exploring the relevance of social theory lenses to this question (Fazey et al., 2017). This has implications for research and for policy framing, prioritization, and legitimacy.

In this article, we highlight the potential of social contracts as an emergent analytical lens on the politics of adaptation, and develop their conceptualization in an adaptation context. We draw on Campbell's (2010) definition of a social contract as recognition of the legitimizing force of citizen consent to the authorities which limit their freedoms, and the reciprocal duty of social institutions to uphold the equal rights of all. However, we prefer the term "social contracts" (multiple) over "the social contract" (singular), in order to capture diversity and multiplicity in the form of those co-dependent relationships.

The particular contribution of a social contracts lens to questions of climate change adaptation and its consequences lies in: (a) highlighting tensions between need, obligation, and entitlement that underlie contestations over "who" is responsible for "what" in risk governance; and (b) drawing attention to boundaries of social acceptance surrounding risk and risk management actions, and hence to the conditions under which legitimate adaptation pathways are negotiated and contested. Such concerns lie at the centre of debates around fair adaptation and just risk governance. These contributions allow for a lens that can be extended across other policy domains and practices to approach the cultural and political trade-offs between risk and development that often transcend economic rationality. Note the focus in this article on climate-driven adaptation is not to limit the application of a social contracts lens, when contestations over fairness may apply equally to other forms of risk management (economic, social, political, technological, reputational). This focus stems rather from the particularly complex questions of sociospatial and intergenerational equity that climate change raises, and its role as a risk amplifier (see Renn, 2011).

To get at the above dynamics, the article first reviews the existing application of social contracts in adaptation and disaster risk management thinking. Challenges are then identified that have inhibited fuller deployment of social contracts to date: the assumed homogeneity, fixedness and consensual qualities of the social contract in classical contractarian theory. In response, a proposal is made for an analytical application that recasts the social contract into three intersecting yet distinct forms: social contracts that are *imagined*, *practiced*, and *legal-institutional*. The article reflects on these forms and the research agenda this opens onto human rights and responsibilities upheld *de facto* and *de jure*. The conclusion further clarifies the research and policy implications of a social contracts approach, namely to help identify and explain cultural and political tensions arising from climate change and natural hazard impacts, and the consequences of adaptation for sustainable development.

2 | ADAPTATION AS POLITICAL: THE (RE)EMERGENCE OF SOCIAL CONTRACTS

It is widely recognized that the Anthropocene demands urgent critical reflection on the stability, equity, and future of currently dominant development trajectories (Folke et al., 2002; Steffen et al., 2011). Many now agree that transformational adaptations are necessary to achieve sustainable development (defined broadly to encompass social, ecological, and economic equity across generations) (Eriksen et al., 2011; O'Brien, 2012; O'Brien, Eriksen, Inderberg, & Sygna, 2015). However, amid the shifting goalposts of global environmental change, the roadmap toward those futures remains far from clear. Important questions remain, not only in clarifying precisely what adaptation futures are sought, but also in defining what constitutes fair governance of those adaptive transitions (Pelling, O'Brien, & Matyas, 2015). What level of risk is tolerable, what trade-offs between risk and development are acceptable, and—most importantly—who decides (Ziervogel et al., 2017)? Geographies of power and agency will ultimately determine the priorities that are embedded in adaptive pathways; hence addressing the above questions is of fundamental importance to defining precisely *whose* futures are protected and *how* costs are distributed. These are fundamentally political concerns with real-life implications, demanding heightened attention from critical scholarships.

The social contract has already emerged as a language to describe shifts in governing behaviors that are either necessary for, or act as a pathway of, transformational adaptation. The application in this literature has been heterodox, tending not to invoke classical contractarian theory and toward a symbolic rather than analytical application, used to demark a tension between differing communities of practice or epistemology. Lubchenco (1998) and Demeritt (2000) were early to invoke social contracts in sustainability research, observing an increasing pressure on environmental scientists to produce work with demonstrable societal value (what they call a new social contract for science). DeFries et al. (2012), Castree et al. (2014) and Castree (2016) have transposed this into calls for action on global environmental change, arguing for more plural, action-oriented scholarship that pays due attention to social science and humanities alongside physical sciences. Others in the policy and business sphere have invoked the social contract as an argument for altered and/or strengthened accountability chains in environmental management and regulation (Miliband, 2006; White, 2007; Zadek, 2006).

Alongside this, the language of the social contract has entered adaptation, disasters and development literatures as a broad analytical lens. Current applications invoke the social contract to highlight inequalities resulting from specific development failures which underlie unequal geographies of disaster risk reduction (DRR; Mitra et al., 2017) impact and recovery (Pelling & Dill, 2010), as a mechanism for adaptation (Adger et al., 2012; O'Brien, Hayward, & Berkes, 2009), as a lens on

the evolution or stability of state-society relations in post-disaster settings (Blackburn, 2018; Siddiqi, 2013; Siddiqi & Canuday, 2018), and as the building block for more accountable development pathways (Hickey & King, 2016). The social contract has been used to articulate those conditions causing risk governance to be seen as illegitimate or unacceptable (Christoplos, Ngoan, Hoa Sen, Thanh Huong, & Lindegaard, 2017; Pelling, 2011), and to help conceptualize and visualize what fairer governance might look like in the future (O'Brien et al., 2009).

Such literature does important work by situating adaptation squarely as a governance and development concern. It raises questions about the opportunities offered by the renegotiation of the social contract across multiple relationships as a mechanism for improved governance. This is part of a movement in the literature toward inviting critical reflection on what type of adaptation we need (or want), and the deeply political challenge of how we might get there. However, to date this literature remains vague about the precise definition of the social contract adopted, and tends to invoke it as a metaphor to describe the distribution of rights and responsibilities and/or citizen expectations and experiences of the state, rather than to interrogate the processes through which those relations are produced. This article argues that whilst existing literature does well to draw attention to the centrality of governance and state-society relations as a limiting factor to adaptation and resilience, social contracts can be made to work harder as an analytical frame.

3 | WHAT MORE CAN SOCIAL CONTRACTS OFFER?

Those working with the social contract have tried hard to balance received classical contractarian ideas with the empirical observation and contemporary interpretations of risk governance and its social context. Two logical problems arise from attempting an application of received theory in this way. These constraints are discussed below (this section), and stem from classical contractarian theory's starting point that a single social contract exists in the polity, and that this is controlled by individuals who collectively hold power over their (legitimate) ruler. Neither position is readily observable; but we argue a social contract lens does not need to assume the existence of a singular hold nor its direction of authority. Rather than attempting to find *the* social contract (as described by contractarian theory) in contemporary contexts, we argue for using this theory as a starting point to problematise development relations, and as a common meta-theory for the synthesis and communication for questions about representation, leverage, empowerment, risk perception, and citizen agency. The two received constraints on contractarian logic, and implications of moving beyond them from a social contract to a social contracts lens, are outlined below.

First is classical contractarianism's singular concern with the social contract between a sovereign ruler and the people over whom they rule (see Boucher & Kelly, 1994; Campbell, 2010; Lessnoff, 1990; Morris, 1999). This excludes other, asymmetric power relations: the family, household, workplace, community, and soforth. Particularly given the ever-more powerful global forces of neoliberalism that challenge and reform the role of the state, alongside the near-ubiquitous resilience discourse which emphasizes local capacities for adaptation, governing for adaptation demands an urgent rethinking of the governance structures, lines of accountability and power relations that will define how and in whose interest adaptation occurs (O'Brien et al., 2009). Intergovernmental agreements such as the Paris Agreement and UN Sendai Framework for DRR set out ambitious targets for cross-sector, multilateral cooperation and embedded national policies on climate adaptation and DRR—yet these continue to be undermined by what Pearson and Pelling (2015) term the "awkward politicization of intergovernmental negotiations" (p. 2).

In an increasingly complex governance landscape, new trade-offs, compromises and arrangements are inevitable. Understanding what sorts of protections individuals expect to receive from state and nonstate actors in a warming world, and the consequences for polities when these are not met, is an increasingly urgent issue, and one that may challenge current conceptions of citizenship and just governance. Social contracts describe the distribution of rights and responsibilities between parties, and thus provide a lens on conditions where previously assumed or stable geographies of right and responsibility can be visualized and questioned by researchers and policy actors alike. This has practical and policy value in the sense it is difficult to design/pre-empt more progressive governance landscapes without fully understanding how current ones stand and evolve. This connects to concerns with geographies of blame, accountability and responsibility in risk governance (Bulkeley, 2001; Butler & Pidgeon, 2011), by drawing attention to implications of institutional arrangements on democratic legitimacy and accountability. Social contracts add particular richness by placing greater emphasis on boundaries of social acceptability and perceived fairness (as called for by Paavola & Adger, 2006; Adger, Lorenzoni, & O'Brien, 2009).

The second constraint is classical theory's proposition that the social contract is an outcome of collective societal acquiescence or consent, which implies a comfortable exchange of rights and responsibility between ruler and ruled (in particular, Rousseau, 1762 [1987]). Contractarian theory is primarily interested in the shape of this relationship, rather than the mechanisms through which it is produced and the potential of the use of force to establish, maintain or resist, subvert or overthrow relationships culminating in (the) social contract(s). Many classical theorists including John Locke (amongst the famous of

contractarian philosophers) argued that when the legitimacy of the state is lost, then citizen resistance is justified (Lessnoff, 1990); we argue this aspect has been under-utilized analytically. In a disaster context, a social contract lens can emphasize the gap between formal civic rights or protections and on-the-ground realities of mutually constituted poverty and hazard vulnerability (Pelling, 2011). By drawing attention to instances where states fail to protect basic human rights (to life, to security, to essential services)—for example, through unacceptably slow response or exclusionary geographies of relief/rehabilitation which magnify pre-existing inadequacies or inequities in service provision—a social contract framing highlights the capacity for extreme events to reveal development and governance failures (what Pelling [2011, p. 95] describes as a "break" in the social contract; also Pelling & Dill, 2010). Social contracts provide a powerful lens for understanding crises of state legitimacy, and the ways in which these are captured (or not) by political and social actors as a moment for social-institutional change—highly pertinent to the burgeoning literature on transformation. This lens could be applied in post-disaster settings as well as to understand rationales of complicity or resistance to particular adaptation (or maladaptive) policies and practices.

4 | MOVING FORWARD: MULTIPLE RISK SOCIAL CONTRACTS

The above discussion demonstrates that, despite the constraints imposed by classical contractarian logic, certain principles of classical social contract thinking are strongly resonant for adaptation scholarship. We propose a framework which helps move beyond the conceptual challenges above in three ways.

First, we argue that the idea of social contracts need not necessarily be confined solely to state and society, inspired by Boucher and Kelly who challenge the assumption "that there is a single unified tradition or a single model or definition of the contract" (1994, p. 1). In light of the need to recognize nonstate actors as governance players (as called for by White, 2007), we advocate a view of *multiple* social contracts in the plural (as opposed to *the* social contract, singular), between individual(s), organizations, collectives or institutions either in- or outside the state infrastructure. At a subsocietal level this includes intra/inter familial and community relationships of codependency, which may or may not reflect meso- and macro scale power relations within society at large.

Second, by emphasizing mechanisms through which social contracts are (re)produced or contested (rather than taking their existence for granted), we argue a social contracts lens can draw attention to the multiple, ongoing, everyday scalar politics through which power is centralized, distorted, or otherwise stripped from the local in ways that undermine community resilience. This is facilitated by an acceptance of the multiple pathways through which social contracts are established, and their multiple social-political construction. For example, governments may claim to have decentralized decision-making and implementation plans, when in reality local agency is constrained by a lack of institutional support (Allen, 2006) or weak channels of cross-scale communication, trust and representation that isolate local communities from spaces of decision-making (Blackburn, 2014). A social contracts approach offers a pertinent framing to such challenges, since it is fundamentally concerned with politics of relative power and agency between stakeholders, both at and between scales. Its pertinence stems from the inherently scaled nature of risk and vulnerability; vulnerability stems from action (and inaction) at multiple scales, and both responding to crises as well as reducing risk meaningfully in the long term demands collaborative, complementary actions across and between all scales.

Third, responding to the constraint of classical contractarianism conceiving a social contract as inherently reciprocal, we propose drawing a separation between three intersecting yet differentiated social contracts: legal-institutional, imagined, and practiced. These represent three distinct realms in which rights and responsibilities are held in tension, which exist concurrently and may or may not overlap. Social contract analysis might either focus on one realm only, or on the relationships between them. Each form of social contract is explained below:

4.1 | Legal-institutional social contract

The legal-institutional social contract (LSC) exists in the formal, legally sanctioned distribution of rights and obligations between societal actors, which is defined by and through legal and constitutional frameworks—whether or not this distribution is deemed fair by the individuals it governs. The LSC may be fixed over multiple generations but can also evolve quickly, and is a product of dominant institutionalized cultures, values, and social relations; it is not inherent but constructed. As Angel and Loftus (in press) argue, the state (and its instruments) are not a "coherent thing" but rather a "form emerging out of a contradictory set of social relations and a process of struggle" (p. 3).

4.2 | Imagined social contract

The imagined social contract (ISC) constitutes individuals' own subjective vision of a just social order, which may or may not be reflected in policy or practice. It is imagined rather than material (although it likely informs, and is informed by, material struggles), and could be either perceptive ("this is what I believe it to be"), expectant ("this is how it should be") or hopeful ("this is how I wish it would be"). This social contract relates closely to Rousseau's assertion that the legitimacy of an authority is defined by those over whom it rules (1762 [1987]). Being sensitive to social relations, personal and collective history and culture, ISCs may associate in communities of shared experience or belief, but are also inevitably differentiated (between individuals, locales, social groups) and fluid over a lifetime. The ISC is independent of the law (although again, is likely influenced by it), the latter of which exists either in a state of compliance or breach of the fluid, heterogeneous ISC. The key challenge for the ISC, both theoretically and methodologically, is the diversity of societal values which exist within a single citizenry and, due to this subjectivity, the likely impossibility of unanimous agreement.

4.3 | Practiced social contract

Whilst the ISC is imagined, the extent to which it is reflected in practice is material. The practiced social contract (PSC) is the "real-life" balance of rights and responsibilities which are performed and claimed by individuals and state actors, and is observable in the everyday state–citizen and citizen–citizen relations. This is the social contract that is most frequently discussed in current literature—exemplified in Pelling's definition of the social contract as "the prevailing balance of rights and responsibilities in society and may be held in place by legitimate government or the rule of force" (2011, p. 172). The PSC is the product of negotiation between multiple conflicting ISCs (which coexist in society) and the LSC, and may sit closer to one, both or neither.

Analyzing the disjunctures, overlaps and transitions between these social contracts offers a research frontier in its own right, but also an organizing framework for burgeoning research on the political and justice implications and contexts for climate change adaptation and disaster risk management research and practice. The relative closeness between contracts from different stakeholders' perspectives (and how this changes over time) could indicate the degree to which climate change adaptation policy reflects, justifies or challenges dominant public priorities, experiences, and expectations, bringing climate change research into broader debates on the social acceptability of government in practice. This is a core requirement for research and practice that recognizes the need for transformation in moving toward sustainable and just futures. In a perfect democracy, the ISC would shape the PSC and LSC in its image through democratic channels. More likely, however, is a PSC which reflects inequities of power and influence within society, since the most powerful are best able to shape social relations in their favor. Gaps between ISC, PSC and LSCs may arise where inherited constitutional arrangements are (or become) inappropriate to local history and culture—observed, for example, in many post-colonial contexts. Furthermore, even within a single legal jurisdiction, each of these social contracts—and the gaps experienced between them—will not be the same for all people. Differences may exist, for example, between recognized citizens and illegal migrants, or between majority and minority groups.

The closeness between PSC and LSCs will also be a product of the strength and culture of enforcement, and may vary across scales. For example, there may be a disjuncture between the formal LSC because of corruption, which stipulates that corruption is illegal, and the PSC at the local scale, where corruption is locally accepted as a legitimate pathway for resource access. This is perhaps more likely to occur where the state is absent or perceived to be acting against the will of the citizenry. The distance between social values and existing legal-institutional settings has previously been explored by Pelling and Manuel-Navarrete (2011) as a possible indicator of impending transformation.

In addition to the differentiation of the three social contract forms, the reframing of social contracts as *multiple* (i.e.,between multiple social actors and groups) marks a shift from a focus on *the* social contract towards a framework that can take account of nonstate organizations (particularly NGOs and private organizations, both domestic and international), that increasingly deliver essential services historically provided by the state (including water, sanitation, energy), but sit outside the state infrastructure. This new geography of service provision may alter public perceptions about the appropriate distribution of rights and responsibilities (White, 2007). Questions include how respective responsibilities and obligations are negotiated between these actors (are we witnessing the emergence of multiparty social contracts?) and to what extent and how accountability is ensured.

5 | EVOLVING SOCIAL CONTRACTS: A RESEARCH AGENDA

The framework introduced above opens four specific research avenues, detailed below.

First, it offers a methodology to map **current or projected allocations of responsibility and rights** in adaptation governance, decision-making and action, and through this to highlight power/agency vacuums and areas of overlap and contestation. Such a project could be used in the policy sphere to focus resources and negotiation time on ensuring protective mechanisms for at-risk groups or sectors. It could also reveal mismatches between policy and practice—for example, to reveal the efficacy of decentralized governance frameworks, one might find that more and more risk management responsibilities are delegated to citizens (shifts in the LSC), yet lack of movement in citizens' capacities to enact those responsibilities (a static PSC) might only be revealed by a disaster event.

Second, mapping social contracts could shed light on **pathways of transition or acts of transformation,** by exploring the contextual events/factors which contour, stimulate or reflect their evolution, and paying attention to which specific social contracts evolve in response to what. Methods could include historical root cause analysis or qualitative field research into post-disaster recovery. One might find, for example, that the Legal Social Contract can act either as a constraint to, benchmark of, or a stimulus for change. By analyzing shifts over time, the framework could reveal the speed as well as direction of movement between the ISCs, PSCs, and LSCs, for example, whether gaps/overlaps emerge in a creeping or sudden way. This has implications for those seeking to manage social change processes unfolding with climate change impacts and adaptation consequences.

Third, the relative closeness of the PSC and ISC could indicate the **capacity for citizen-led action to leverage local priorities for adaptation**. ISCs describe boundaries of social acceptance, expectations and felt entitlements, and can thus help understand locally-specific logics of resistance, moments where new (or newly articulated) rights claims emerge, and the role of risk in crystallizing those claims, either in calls for or in response to particular adaptive strategies. Conversely, gaps between LSC and ISCs could also point to complacent citizenship, for example, denial or failure to claim rights (which may equally be due to passive dependency or political apathy, or to active political suppression or lack of visibility of rights). Through a clearer understanding of citizens' own perceived and enacted agency (within the Imagined and PSCs), this could help explain why state failures and/or crises of legitimacy get captured politically (or not), and the role of risk in driving a migration of previously-stable expectations, including the ISC—with implications for understanding post-disaster settings as transformative moments, building on Pelling and Dill (2010).

Fourth, mapping ISCs could reveal **social and cultural limits to adaptation.** This includes investigating different stakeholders' subjective conceptions of tolerable loss and damage, to identify boundaries of social acceptance within the ISC—a pursuit of critical importance in designing fair and liveable adaptive policies. Alongside, attention must be paid to the PSC as it relates to adaptation stakeholders' relative power and agency over others. Revealing stakeholders' subjective priorities, in combination with political-economic analysis of social reproduction, could reveal whose values are more or less likely to become embedded in adaptive pathways. Such work is of critical importance in identifying the projected (and existing) winners and losers of adaptation activity, with a view to improve the equity outcomes of negotiated and imposed risk management settlements.

6 | CONCLUSION

This article has highlighted the potential of a social contracts lens to address complex questions around the politics of adaptation. It has defined social contracts as fluid, multiple, and fundamentally political constructs, that are shaped concurrently by the expectations and aspirations of the citizenry, the degree and means of fulfillment of those expectations, and the conditions for the legitimacy of formal security provisions. As an analytical framework, social contracts can bring questions around responsibility and entitlement for citizen security to the fore, inviting interrogation of the social processes reproducing uneven geographies of vulnerability and exposure, critical reflection on the norms and expectations dictating "who" is responsible for "what" in risk governance, and the conditions under which the legitimacy and practice of current ways-of-governing are challenged and renegotiated. Understanding convergences and disjunctures among LSC, PSC, and ISCs offers a timely lens for unpacking how blame and perceived responsibility for adaptation are constructed and contested, and how more legitimate, fair or otherwise socially progressive governance landscapes are defined or negotiated.

These emphases open important analytical space, responding to mounting evidence that the possibilities, mechanics and limits of adaptation are as much social, political, and cultural as they are technical. It responds to the need—both academic and pragmatic—for a framework that emphasizes how (and with what implications) rights and responsibilities for adaptation are negotiated, and invites creative responses to this challenge across disciplinary divides (geography, philosophy, politics, and beyond).

However, more than analytical space, a social contracts lens also open reflective space for the contemplation of adaptation as a normative challenge. In a warming world beset by deep and growing social inequality and ecological crisis, it is insufficient for DRR and adaptation to focus narrowly on small-scale, incremental or localized improvements to infrastructures, livelihoods and emergency-response in isolation from mainstream development concerns. Doing so makes adaptation unable to address the underlying and systemic root causes of risk—including structural inequality, poverty, and social exclusion (Pelling, 2011). Business-as-usual development—and business-as-usual governance of development—is no longer tenable, and rather than viewing either DRR, adaptation or development in isolation, action is needed at what Solecki, Pelling, and Garschagen (2017) term the adaptation-development nexus. This is essential to meeting the Sustainable Development Goals' ambitious targets for climate action at the same time as building just, peaceful and inclusive societies (UN, 2018).

Transitioning toward sustainable development is undoubtedly a wicked problem. This article sets out a specific response: one that contributes to the visioning and analysis of social navigation across the ever-more complex terrain of adaptation governance.

CONFLICT OF INTEREST

The authors have declared no conflicts of interest for this article.

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