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## Agency, affect, and the immunological politics of disaster resilience

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**Abstract.** Resilience has become a foundational component within disaster management policy frameworks concerned with building ‘cultures of safety’ among vulnerable populations. These attempts at social engineering are justified through a discourse of agency and empowerment, in which resilience programming is said to enable marginalized groups to become self-sufficient and manage their own vulnerabilities. This paper seeks to destabilize this political imaginary through a critical analysis of participatory disaster resilience programming in Jamaica. Drawing on ethnographic fieldwork conducted with Jamaica’s national disaster management agency, I argue that resilience operates through an affective economy of fear, hope, and confidence that enacts an immunitary biopolitics. The object of this biopolitics is excess adaptive capacity that results from affective relations between participants and their socioecological milieu. Participatory techniques such as transect walks, focus groups, and education programs attempt to encode and manipulate these affective relations in order to construct an artificial and depoliticized form of adaptive capacity that does not threaten neoliberal order. Recognizing the immunological logic at the heart of disaster resilience opens up new ethical and political imperatives in disaster management that value adaptive capacity as the vital force of new socioecological futures, rather than as an object of governmental intervention and control.

**Keywords:** resilience, affect, agency, assemblage, adaptive capacity, biopolitics, immunization

### Introduction

The 2005 passage of the United Nation’s *Hyogo Framework for Action* made “build[ing] the resilience of nations and peoples” the overarching aim of disaster management policy and practice (UN, 2005). Resilience ushered in new approaches to community-based disaster management programming based on adaptive comanagement strategies (Tompkins and Adger, 2004). Proponents maintain that inclusive governance structures and adaptive learning devices such as project monitoring tools and scenarios can give voice to those silenced by technocratic approaches to vulnerability reduction (Berkes, 2007; Djalante et al, 2011; Walker et al, 2004). The turn to resilience, we are told, opens a new fold in disaster politics: participatory programming now empowers marginalized people by recognizing their agency (Brown and Westaway, 2011; Eakin and Leurs, 2006).

However, I want to suggest here that the politics of resilience are more complicated than prevailing narratives suggest. A brief example from one of the more trying days of my fieldwork with Jamaica’s national disaster management agency, the Office of Disaster Preparedness and Emergency Management (ODPEM), will help illustrate the complexities. From June to December 2009, I conducted a participatory institutional ethnography with ODPEM, in which I provided social science support for community-based programming run through its Projects Division. My tasks consisted of assisting with transect walks, interviews, and focus groups in order to assess the effectiveness of its initiatives. On this particular day (7 August 2009), I was running a focus group in Hector’s River, a village along Jamaica’s

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eastern coast, to monitor the Tropical Storm Gustav Recovery Project. The project, funded by the UK's Department for International Development (DFID), provided residents with roofing materials for houses damaged in 2008's Tropical Storm Gustav. A team of ODPEM carpenters would select recipients in each town by assessing the damage the storm had done to their roofs. Prior to receiving supplies, recipients had to arrange a team of volunteer construction workers, who would then receive training in resilient roofing practices. After work had been completed I came to conduct focus groups with participants in each village, in order to identify any immediate issues that could be addressed before work started in the next town and also assess the project's impact on community relations and sustainable development. In total, I conducted focus groups in four villages; most consisted of five to seven participants. Hector's River was the exception.

Word had spread that ODPEM representatives would be visiting, so when I arrived at the local school to set up, I found standing room only, with a crowd of forty in attendance, only a handful of whom had participated in the program. Most people there expressed frustration at not receiving a new roof. My stock reply was to reiterate that ODPEM carpenters had selected recipients based on objective criteria and assessments. However, a few participants began suggesting that political party affiliation determined who received supplies and who did not. Jamaica has a long history of clientelist politics, in which political leaders distribute resources to party faithful (Meeks, 2000). The bitter political violence of the 1970s and 1980s largely segregated poor communities on the basis of party affiliation; today most neighborhoods and villages are loyal either to the center-right Jamaica Labour Party (JLP) or to the left-wing People's National Party (PNP) (Meeks, 2000). Hector's River is a PNP town in a PNP parish, but at the time of the focus group, the JLP controlled the national government. In spite of my protestations, some attendees insisted that party affiliation had resulted in their lack of a new roof. They accused ODPEM of dispensing recovery supplies to their JLP neighbors but not to them. Things eventually settled down, but not before a handful of heated exchanges, both with other participants and with me.

It would be tempting to read their frustrations as a product of misinformation. Contrary to their accusations, the project was not influenced by party decisions. However, I want to suggest that these exchanges, and the affective work performed by my repeated explanations of how carpenters selected participants, express a variant of what Roberto Esposito (2008; 2011) calls the enigma of biopolitics. Building on Michel Foucault's understanding of biopower as a form of power that takes as its object the security and development of individual and collective life, Esposito suggests that Foucault fails to address how a politics of life becomes a politics of death. The most extreme example here is Nazi biopolitics, which made the preservation of the Aryan race contingent on sacrificing the Jewish population (Esposito, 2008). Esposito reads Nazi biopolitics not as the fulfillment of modern politics, as Agamben (1998) does, but rather as a thanatopolitical outgrowth of modernity's immunitary *dispositif*. By this is meant a dense assemblage of institutions, knowledges, bodies, and practices that structures social life around the imperative of self-preservation against a threatening other (Campbell, 2006; Esposito, 2011). However, self-preservation does not involve a straightforward negation. Instead, immunization introjects the other into the self, making the other more like the self in order to negate its otherness (Doma, 2006; Esposito, 2011). This inclusive exclusion blurs the distinction between self and other, in the process negating the qualified life it seeks to preserve.

At first glance, this immunological politics bears little resemblance to the events in Hector's River. And yet, I want to suggest that Hector's River offers a window onto *ongoing reconfigurations* of the immunitary *dispositif* that connects politics and life in the contemporary neoliberal order. To unpack the immunological politics of disaster resilience,

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I ask two interrelated questions: what techniques and rationalities do practitioners deploy in the name of building resilience to natural hazards; and what are their biopolitical effects? Bringing literatures on biopolitical security and the politics of affect to bear on my participatory ethnographic fieldwork with ODPEM, I advance two arguments.

First, disaster resilience reconfigures modernity's immunitary biopolitics on an *affective level* in response to new experiences of life as emergent, complex, and interconnected. I use the term *affect* here in a Deleuzian sense to signal the transpersonal, preindividual capacity of bodies to affect and be affected (Massumi, 2002). It can be productively thought of as an immanent and intensive atmosphere that surrounds bodies and charges their appetites, endowing them with certain capacities, some of which are actualized and some of which are not (Anderson, 2009; Seigworth, 2000). Affect gestures towards a 'more than', a 'something else' to life beyond the apparent reality of extensively determined individual bodies. Some of the affects targeted by disaster resilience were evident in Hector's River, where there was tension in the air not because of an incorrect understanding of political influence on ODPEM, but as a real effect of those beliefs—a manifestation of the frustration, anger, confusion, and resentment residents felt at their marginalization within Jamaica's neoliberal political economy. For a brief moment, the charged atmosphere in Hector's River gave a sense of the potential these affects could have, as participants began to argue over the inequalities and injustices of Jamaica's dominant political order. But this was quickly extinguished by my own interest in moving the discussion back to more palpable terrain. Hector's River thus allows us to restate Esposito's enigma of biopolitics in affective terms: our efforts to build disaster resilience, and to better preserve emergent life against surprise, required immunizing communities against their own excess adaptive capacity, the constituent power to construct *other* forms of life that call into question the present political and economic order of things.

Second, disaster resilience works on affective relations through articulating techniques of disaster preparedness and mitigation with the anticipatory logic of resilience and the problematization of vulnerable people's agency. The problematization of agency sets disaster resilience apart from other forms of anticipatory action such as preparedness and preemption and also enables resilience to operationalize affect as sociocognitive and psychological factors of adaptation to environmental change. Resilience reconfigures techniques such as education and training activities and simulation software in order to strategically calibrate affective relations within communities and between people and their environments. These techniques transform an alien, 'other' adaptive capacity that results from immeasurable affective relations between people and their environments into a form of adaptability appropriate to neoliberal order: the agency of resilient subjects empowered to take responsibility for their own adaptations. Far from empowering vulnerable peoples by recognizing their agency, the agential subject of resilience in need of empowerment is an effect of resilience assemblages that immunize neoliberal order against adaptive capacity through depotentializing socioecological life.

To develop these arguments, I first situate resilience within recent research on anticipatory action and affect theory in order to avoid essentialized accounts of agency in resilience programming. Next, I analyze the politics of affect at work in disaster resilience, and detail the techniques that ODPEM's community-based programming deploys to work on the confidence and self-sufficiency of vulnerable individuals. I then situate these techniques within disaster management's recent problematization of adaptive capacity, in order to draw out their immunological effects. An extended conclusion considers the ethical and political implications of this argument for future research on disaster resilience.

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**Resilience, agency, and assemblage**

Resilience is one of a number of what Ben Anderson (2010a) calls *anticipatory logics*: more or less coherent explanations about the nature of future threats and disorder that render uncertain futures governable. Anticipatory logics such as preemption, precaution, preparedness, and resilience arose in the face of new experiences of insecurity derived from phenomena such as nuclear warfare, global terrorism, and global environmental change. These threats introduced a fundamentally new understanding of life defined in terms of socioecological interconnection and emergence (Cooper, 2008). The problem is no longer that borders may be transgressed, but that emergent life may spiral out of control. For example, the interconnections spawned by the physical and cybernetic infrastructure of global capitalism act as conduits for the international drug trade and terrorist financing, as well as supporting legal flows of financial capital and cheaply manufactured goods (Duffield, 2010; Reid, 2007). Likewise, the environmental transformations these flows produce have created a radically unstable global climatic system that threatens all manner of socioecological disruption, including more intense hurricanes and tropical cyclones (Dalby, 2009). Set against these new insecurities, techniques such as scenarios, vulnerability mapping, simulations, and education and training exercises enable people to visualize potential futures, develop response and risk-mitigating capacities, and ultimately change their action in the present in order to ward off future calamities.

Exactly how these techniques govern uncertain futures is determined by their time-specific and place-specific articulation with anticipatory logics (Anderson, 2010a). What sets resilience apart from other anticipatory logics is how it positions the subject in relation to uncertainty. While preparedness, precaution, and preemption all in some way seek to *prevent* uncertain futures from being realized, resilience seeks to enhance an individual's or system's capacity to live with, and indeed prosper from, uncertainty (O'Malley, 2010). Resilience has a unique genealogy that lies in both psychology (O'Malley, 2010) and ecology and complex systems theory (Walker and Cooper, 2011). These divergent roots share a common concern with creating what Lentzos and Rose (2009, page 243) call a "subjective and systematic state to enable each and all to live freely and with confidence in a world of potential risks". For example, psychology deploys resilience to study how children exposed to traumatic events could nonetheless develop into 'normal', psychologically sound adults. This work focuses on the inherent capacities of research subjects to adapt to adverse situations and cope with otherwise debilitating stresses. Similarly, ecology is concerned with the conditions that enable social and ecological systems to adapt to external shocks. Key here is a system's adaptive capacity, which is determined by the density and quality of relations among a system's component parts.

Proponents distinguish disaster resilience from other approaches such as hazard and vulnerability studies with reference to the former's emphasis on the *agency* of people who suffer catastrophes (Brown and Westaway, 2011; Eakin and Leurs, 2006). However, themes of agency are not new to disaster studies. Foundational vulnerability studies drawing on Marxist political economy and Freirian pedagogy emphasized that local people possessed their own knowledge on hazards and vulnerability reduction that technocentric approaches to hazard studies silenced and delegitimized (eg, Hewitt, 1983; Wisner et al, 1977). Here, the 'agency' of local peoples became the foundation for participatory disaster mitigation programs that made vulnerability reduction a matter of changing uneven political economic relations that caused vulnerability in the first place (Maskrey, 1989). This is, of course, not the kind of agency that circulates within resilience programming (Gaillard, 2010). Resilience recognizes disaster victims as active agents with inherent self-help capacities that can be

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strengthened through proper resilience programming, rather than passive victims who require external aid to overcome structural constraints. Proponents define agency as,

“the capacity of an individual to act independently and to make one’s own free choices.

One’s agency is one’s independent capability or ability to act on one’s will” (Brown and Westaway 2011, page 325).

In turn, this capability is determined

“not only by the physical capacity of an individual but also by the extent to which that is supported by relationships with others and their own perceptions of the extent to which they can exercise agency, in other words, self-efficacy” (Brown and Westaway, 2011, pages 330–331).

Accordingly, a growing body of research now maintains that adaptation to climate change and more frequent hazards can be improved by a better understanding of the psychological and sociocultural aspects of adaptive capacity (Grothmann and Patt, 2005). Adaptive capacity is no longer something limited by structural constraints such as race, class, or gender inequalities, it now depends on individuals’ psychological dispositions and the wider cultural belief systems that affect their perceptions of self-efficacy (Aitken et al, 2011; Blennow and Persson, 2009; Frank et al, 2011).

Even though resilience downplays, or often ignores, the role political economic relations play in creating vulnerability and constraining adaptability, proponents argue that resilience does not depoliticize vulnerability analysis. Instead, they argue that resilience is a progressive development in research and policy on hazard and vulnerability reduction that seeks to foster self-organizing adaptive capacities in individuals and complex social and ecological systems, and thus to break dependencies on centralized forms of mitigation and relief provision. For example, a recent review of resilience in disaster management asserts that, “a focus on the perceptual and relational is inherently political, as it is about agency” (Brown and Westaway, 2011, pages 331–332). In short, resilience is inherently political and progressive because it seeks to empower people to be agents of their own vulnerability reduction in order to make the proper choices and avoid maladaptations in an emergent environment.

My concern is with the limited vision of politics that underpins such assertions. This work relies on an understanding of power in terms of oppression: the action of an external will or force on another will. Empowerment is a matter of freeing this oppressed will through participatory resilience programming, enabling subjects to make their own adaptation decisions and then realize these goals. Politics here becomes little more than a technical pursuit to design and implement the most effective capacity-building initiatives (Grove, forthcoming). However, as Foucault famously demonstrates, empowerment and freedom from oppression constitute their own power relations and systems of subjection (Foucault, 1990). Indeed, critical scholars have begun unpacking the biopolitical effects of techniques of anticipatory action such as resilience. For example, Julian Reid (2012) has argued that resilience creates depoliticized subjects that see their vulnerability and insecurity not as the result of uneven political economic relations that can and should be changed, but rather as unavoidable consequences of living in an emergent and interconnected world. In Mark Duffield’s (2011) provocative phrasing, it is the “official policy response” to the “fabricated uncertainty” of neoliberal development. This work gives us good reason to be sceptical of blanket claims about the inherently empowering nature of resilience programming. While practitioners’ *intentions* may indeed be sincere, in practice the *effect* of resilience is often to depoliticize and individualize adaptation, to turn it into a way of merely “surviving the after-effects of industrial modernization, the green revolution, and the Washington consensus” (Walker and Cooper, 2011, page 155).

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At issue here is how the categories of modernist political thought that infuse resilience thinking—such as agency, will, oppression, and the (sovereign) individual—are unable to account for the complex ways in which life enters into power in contemporary liberal societies (cf Esposito, 2012a). To ground biopolitical critiques of resilience and work towards an alternative imaginary of resilience politics, in the remainder of this paper I explore how resilience initiatives designed to empower participants in practice fabricate depoliticized subjects of neoliberal development. I analyze Jamaican disaster resilience as an *assemblage*, or a heterogeneous and unstable configuration of bodies, actions, passions, and various enunciative elements such as plans, laws, or codes that attempt to intervene in these material contents (Deleuze and Guattari, 1987, pages 87–91). An analytics of assemblage offers a radical reconceptualization of agency. Rather than locating agency in the will of a preformed individual subject, agency is an effect of ontologically prior *affective relations* between components within an assemblage. In Spinozist terms, the capacity to act is a relational effect, a property that is not possessed by a single being. Instead, this capacity is determined by the quality of relation between individual bodies, which modulates how each body strives to preserve its being (Malabou, 2012). Agency is diffused throughout assemblages, a product of the affective atmospheres that charge some bodies rather than others with the capacity to act and make a difference on other elements within an assemblage. It is a vital force, the power to enter into new combinations and expand the scope and quality of being (Bennett, 2004).<sup>(1)</sup>

Rethinking agency in relational and nonlinear terms highlights a constitutive political process within assemblages. Because causality is not located in a sovereign agent, but rather in “interactive processes of assembly through which causality operates as a non-linear process” (Anderson et al 2012, page 180), the resilient subject can be seen as an effect of ontologically prior practices of assembling. This directs analytical attention not to the resilient subject’s more or less constrained agency, but rather to the practices, strategies, and techniques that manipulate affective relations in ways that produce agential subjects (Anderson, 2010b). The next section explores techniques Jamaican disaster resilience deploys to manipulate affect and assemble disempowered agents of resilience.

### **Agency and the politics of affect**

Elements of resilience have circulated within disaster management since the mid-1980s, when US disaster response began incorporating adaptive management techniques after the failed response to the Mt St Helens eruption (see Grove, 2013). However, these were not formalized into a coherent policy framework until the 2005 adoption of the Hyogo Framework referenced above. Since Hyogo, policy initiatives to build disaster resilience within Jamaica and the Caribbean include governance reform at both the national and the community scale, risk reduction initiatives, and participatory, community-focused programming (Jones, 2011). A 2007 UN review of Hyogo’s implementation recognizes that productive risk reduction and resilience programming involve a three-pronged process of raising awareness, engaging the total society (including children and the elderly), and translating assessments of local risks into protective measures (UN, 2007). Of these three, education has become the most important, since “education provides the knowledge and fosters the attitudes and behaviors needed to combat natural hazards” (2007, page 55). Emergency management has utilized education and training activities since Cold War-era civil defense programs in the 1950s (Collier and Lakoff, 2007). Schoolchildren in the US were taught to ‘duck and cover’ under their desks to survive a nuclear attack, school curricula adopted civil defense material, and mass media campaigns and leaflets sought to prepare the population for a

<sup>(1)</sup>A focus on affect as the intensive force of change distinguishes assemblage theory from complex systems theory and resilience thinking (Ruddick, 2010). The last two envision change as driven by exogenous shocks that originate outside the self-contained system (Anderson et al, 2012).

surprise nuclear attack. Here, education does not seek to convey or change knowledge about potential hazards, but instead disciplines individual response capacities. It teaches people how to act during an emergency: where to go for shelter, how to protect themselves and their families, and so forth. In biopolitical terms, education produces a particular form of what Reid (2007) calls “logistical life”, a form of collective life organized around the imperative to protect liberal order from surprise (Grove, 2013).

However, logics of resilience deploy education techniques in new ways. Because resilience sees vulnerability as a dynamic and ontological affliction of life enmeshed within emergent social and ecological processes (Eakin and Leurs, 2006), education is less concerned with protecting societies against emergent shocks than with developing capacities to live in an unstable world. For example, discussing the limits of local knowledge on climate change, a Jamaican Red Cross official suggested to me that

“I wouldn’t say there’s a lack of knowledge, I would say *there’s a need to make the connection with the changes that they’re identifying and what do you call it*. We created a video for sensitizing persons about climate change, and on the video we have local community persons speaking to us about changes they’ve seen. ... So I would say it’s not that they don’t have the info; they have the info but *it’s a matter of making a connection with climate change*. They know something is happening, but it’s a matter of asking how is this happening, why is this happening, what is it really” (interview with author, 13 October 2009).

Instruments like this video try to compel subjects to reflect on qualitatively new experiences of social and environmental vulnerability through the categories of disaster management and climate change science. In other words, these techniques attempt to deterritorialize local knowledge on hazards, and reterritorialize it within global disaster management assemblages.

Coding environmental change in terms of expert knowledge also operates on an affective level. A program manager for the Jamaica Social Investment Fund, a state-affiliated organization that occasionally partners with ODPEM, noted the strategic importance of encouraging community members to rethink how their surroundings make them vulnerable:

“I think even though we assume they know [about local hazards and vulnerabilities], I think telling them is important, it’s the first step. They need to hear that this is so, and understand why, because in our training we don’t go in depth into the geology and science, and yet we give them some info to understand some of those things. One of the things we want to deliver through the training, we have hazard simulation software that we’re developing which is really supposed to be an interactive and visual tool, because sometimes communities may hear things happen and know they happen, but when they see it and see all the elements that come together as a result, maybe when they’re planning, their planning will start a little earlier than when they hear a hurricane is coming” (interview with author, 21 October 2009).

This simulation relies on ocularcentric explanation (Ó Tuathail, 1996) to disconnect past and present experiences of vulnerability from lay forms of local knowledge and recode them through the categories of, in this case, geology and science. But it also attempts to alter how individuals *relate* to their environment: to see the hillside as a potential landslide, or the riverbank as something that can be washed away in a flood. In short, it attempts to inscribe the environment as a source of everyday dangers. Liberal rule has, since its inception, operated through governmental techniques that render the world full of danger, in order to fabricate risk-averse subjects that prudently avoid danger (Foucault, 2008; O’Malley, 2004). However, danger performs a different role in resilience initiatives. Since the goal is not to avoid risks, but rather to develop capacities to live with them, inscribing the environment as danger-filled strategically provokes fear that will motivate individuals to translate knowledge into

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action and better prepare for inevitable disasters. This simulation transmits expert scientific knowledge on hazards and the local environment, and also shades this knowledge with affective hues of danger in order to compel individuals to behave in desired ways. Education operates on both cognitive and affective levels in order to give people the knowledge and motivation necessary to adapt to new insecurities.

Recent research on the politics of affect helps us understand how these deterritorializations and reterritorializations occur. The manipulation and engineering of affect is central to the operation of new forms of liberal order, what Deleuze (1995) calls control societies (Thrift, 2004). In contrast to disciplinary societies that operate on the capacities and desires of individual bodies, control societies attempt to harness the transmission of affect through techniques that alter how bodies can relate to one another in an emergent milieu (Anderson, 2010b). Mechanisms of control enact a specific form of biopower: environmental power, the power not simply to govern life but to produce entire life-worlds so as to govern the possibilities for emergent life (Anderson, 2012; Massumi, 2009). Environmental power attempts to influence how the complex of people and things that form a milieu relate to one another. Two examples here include the US government's color-coded terror alert system (Massumi, 2005) and the design and architecture of airports (Adey, 2008). Each attempts to influence information that circulates within a milieu and its affective tone in order to shape how bodies *can* relate to one another. As environmental power instantiates specific relations between the people and things that make up a milieu, these elements become endowed with novel capacities for thought and action. From this perspective, a system's resilience is an emergent effect of environmental techniques that strategically activate desirable adaptive capacities and deactivate (or indifferently ignore) other, less desirable ones.

Other participatory techniques such as transect walks and focus groups also work on individuals' affective relation with their environments. My collaborative fieldwork with ODPEM's Projects Division is illustrative here. I worked on two donor-funded participatory resilience projects: the DFID project described in the introduction, and the CIDA (Canadian International Development Agency)-funded Building Disaster Resilient Communities Project. In the former, I ran focus groups with project recipients, as described above. In the latter, I conducted transect walks throughout the community of Trinity Ville, on the southern edge of Jamaica's Blue Mountains. Through interviews conducted with community members along these walks I gathered local knowledge that contributed to the community disaster plan that ODPEM's Project Division was designing.

To ensure uniformity, I followed the design of the participatory instruments other ODPEM staff were using. Upon analysis following my fieldwork, I recognized that focus groups and transect walks had a similar structure for engaging with community members. In the CIDA project, we would begin our transect walk interviews by asking community members to identify the major hazards in the area, the source of the hazard, and the most vulnerable areas in their community. We would then ask them to identify the critical infrastructure in the community and discuss its vulnerability. Critical infrastructure here involved schools, churches, community centers, police offices, and other such vital services that supported everyday life. Similarly, I would begin DFID focus groups by asking people to list what they thought of when they heard the word disaster, and to describe the disasters that had affected their community. These included discussions on what might have caused the disaster and how they were impacted by the event.

In both cases, as a member of ODPEM's staff, my initial interaction with community members got them thinking about the catastrophes and hardships they had experienced. Respondents frequently signaled an element of fear, as one respondent from St Mary's indicated:

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“Certain amount of fear, yes, yes, and if you are having leak or if you are living near to the river and all that, you know, we fear about it and others really, yes, ’cause you know it can be very dangerous and deadly” (focus group in St Mary’s, June 2009).

Starting off with questions designed to get participants to reflect on past disaster events brings a calamitous past into the present in order to code the environment as a potentially catastrophic threat. In effect, we were attempting to fold memories of life-altering events that destroyed crops, ruined homes, or even killed neighbors into everyday socioecological relations (cf Das, 2007). We were activating memories of past events in order to code the environment in ways that would provoke a sense of fear in everyday life. Another respondent described how banal events can be a trigger of fear: “What I was going to say, you think of fear. I live near the river and as I see likkle rain mi head start hurt mi because it always flood ova night” (focus group in St Mary’s, June 2009).

Like simulation software, folding together the exceptional past with the everyday present attempts to use the capacities generated by relating to the environment through fear to compel proactive risk mitigation. However, fear can often be paralyzing. The absence of movement and change is precisely what resilience seeks to avoid. The fear calibrated by participatory techniques works in concert with additional affects, including relief, confidence, and hope. After engaging in discussions on past disaster events, the focus group then turned to the way the DFID program had affected peoples’ lives and sense of vulnerability. Many participants expressed frustration with the selection process, and criticized the way ODPEM publicized the program within the community, but they also expressed relief and gratitude for a new roof, and the hope that the program was a sign of better things to come. For example, one participant remarked that

“This is the first I have ever been seeing this opportunity to us in this area of St Mary ... I [was] only hoping and trusting that all that have been said it will come true because I would be most grateful, because I am in need, not wants, I am in need of it, so I am grateful for this project that is going on because it is the first I had ever seen one like this and I am serious about it” (focus group in St Mary’s, June 2009).

Hope signals the possibility of change, of moving to a different and better state of affairs (Anderson, 2006). In this case, hope takes two forms: first, hope that the government may be responding to those in need in new and better ways; second, hope for a future in which one survives impending catastrophes because of the government’s participation in disaster mitigation activities.

Affects are a vital part of security assemblages that deploy anticipatory logics and techniques. They make uncertain futures present through feelings of, for example, fear or hope, and are thus a necessary component of how anticipatory practices function (Anderson, 2007). Writing on the politics of affect, Nigel Thrift (2004, page 68) suggests that

“Affective response can be designed into spaces, often out of what seems like very little at all. Though affective response can clearly never be guaranteed, the fact is that this is no longer a random process either. It is a form of landscape engineering that is gradually pulling itself into existence, producing new forms of power as it goes.”

Environmental techniques such as simulations and focus groups enact a particular form of landscape engineering that attempts to, first, deterritorialize past experiences and knowledge on disasters from alternative understandings, such as fatalist oral histories or political–economic explanations; and second, recode environmental phenomena in scientific terms that generate feelings of uncertainty and unease. At issue is not simply participants’ ability to recognize their vulnerability. Indeed, radical disaster research has long recognized that marginalized peoples are acutely aware of their political–economic and environmental vulnerabilities and engage in mitigation activities as part of their daily lives (Maskrey, 1989).

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Instead, ODPEM's programming strives to create a *certain type* of vulnerable subject—a subject who is vulnerable because of the dangerous surrounding environment in which they live—through manipulating affective socioecological relations. For example, the relation between people and rain becomes one of potential flooding, or the relation between people and hillside becomes one of potential landslide. But this subject also engages in proper disaster preparedness and risk reduction activities as a way of minimizing, *but not eliminating*, their insecurities (Reid, 2012). Thus, the engineered relation between people and ODPEM's programs is one of hope and potential safety. Participants' feelings of fear, uncertainty, hope, trust, and gratitude express the affective relations that ODPEM's programming seeks to manufacture in order to increase peoples' motivation to participate in ODPEM's activities, activate the preparedness-training tips they learn therein, and thus *become* active agents in their own survival.<sup>(2)</sup>

This affective engineering also targets interpersonal relations within communities. Transect walk interviews followed up discussions of past events with a series of questions on local resources, such as which persons in the village had medical training, who had access to chainsaws to clear blocked roads, and whose house could be used as a makeshift shelter. If the respondents did not know, we would inform them of responses previous interviewees gave us. The goal here, according to a member of ODPEM's Education and Training Division, is to make people resilient and self-sufficient by recalibrating their relations with other community members:

“The main thing we are doing is teaching people to be self-sufficient. People must be self-sufficient; the country on a whole doesn't have resources to cater to every individual, so how is it that a community can be self-sufficient? How does the individual become self-sufficient? Through the community planning process we encourage persons to identify the resources within the community—who is the person in the community with the tractor, who can swim, who can build, all of these various things—and then utilizing the resources that they have, so that they can be as self-sufficient as possible” (interview with author, 8 October 2009).

Self-sufficiency here does not involve increasing the resources that state and donor agencies make available to community members. Instead, the Yokohama Strategy for a Safer World, Hyogo's precursor, recognized that,

“there is a strong need to strengthen the resilience and self-confidence of local communities to cope with natural disasters through recognition and propagation of their traditional knowledge, practices, and values as part of development activities” (UN, 1994, page 8).

This is an immaterial, therapeutic disaster management strategy that requires people to use what is around them—environmental conditions, social relations, and so forth—in new and creative ways (Pupavac, 2001). ODPEM's participatory programs engineer affective relations such as sustenance by encouraging people to work out arrangements with local shopkeepers that will allow them to get food and water on credit until government relief arrives. It engineers mobility and circulation by identifying people with chainsaws and encouraging them to volunteer to help clear roads blocked by felled trees. It also engineers health and well-being by identifying community members with medical training or search-and-rescue training. In essence, ODPEM's community resilience programming strategically encodes community relations as resources people can utilize to ensure health, mobility, and sustenance

<sup>(2)</sup>The methods I utilized, both in fieldwork and in subsequent analyses, were not suited for unpacking how community members took up and engaged with the various subject positions that resilience programming seeks to create. This is a vitally important question for future research on resilience politics. See Scheper-Hughes (2008) and Bottrell (2009) for examples of this line of questioning in terms of psychological resilience, and Grove (forthcoming) for an example of how Jamaican state officials creatively engage with neoliberal disaster resilience and development assemblages.

during a disaster. It attempts to create affective atmospheres that set in motion an ‘adaptation machine’, the resilient community that automatically responds to environmental insecurities without external intervention.

The production of self-sufficient individuals within resilient communities brings us back to the problem of agency and adaptive capacity in resilience programming. Here, the resilient subject is a product of participatory programming that mobilizes environmental techniques to charge bodies with certain capacities. Its agency is not found in a restrained will or cogito in need of empowerment, but rather in a politics of affect that assembles individuals and their environments into resilient communities. This is a form of agency proper to neoliberal subjects capable of living with risk: the capacity to engage in in situ adaptations to environmental surprise, to adapt in ways consistent with the norms and techniques of disaster management. The next section analyzes the biopolitical effects of disaster resilience’s affective engineering.

### **Immunizing against adaptive capacity**

Writing in the preface to Jamaica’s first National Disaster Plan, Franklin McDonald, ODPEM’s first director-general, argued that

“the degree to which any emergency is contained and the price paid in loss of life and property will be governed by the readiness and capacity of Local Government to effectively employ the considerable self-help potential found in any community” (ODIPERC, 1983, page vi).

His remarks presciently highlight disaster management’s paradoxical relation to adaptive capacity. On the one hand, adaptive capacity is an essential component of successful risk-mitigating and resilience-building initiatives. On the other hand, it is also an external, vital force of life that potentially exceeds the regulatory capacities of modern institutions such as the state or science. In recent years, practitioners and policy makers have become increasingly concerned with existing neoliberal ‘maladaptations’ to social and environmental vulnerabilities, as well as the possibility that disasters *may* trigger adaptations that destabilize the current order of things (Chandler, 2012; Duffield, 2010). Additionally, the potential for social upheaval in the wake of a disaster is quickly becoming a new object of state security and capital accumulation (Grove, 2012; Mullings et al, 2010).

Esposito’s work on modernity’s immunitary dispositif can help us unpack this paradoxical relation. In Esposito’s reading, the immunological pursuit of self-preservation against the other links life and power in modern societies. Self-preservation involves an aporetic relation between the individual and community. Community has a specific sense in Esposito’s thought. He identifies the etymological root of community in the *munus*, a reciprocal duty, obligation, or more precisely, gift, between individuals. This ‘gift’ turns the individual towards the other and away from itself: ‘what predominates in the *munus* is ... reciprocity or ‘mutuality’ of giving that assigns one to the other in an obligation’ (Esposito, 2010, page 5). The *munus* is the foundation of being together—*communitas*—it is ultimately empty: its void is the lack of wholeness, the absence of any transcendental determinants of subjectivity in the moment of encounter. It signals the immeasurable openness of being-together that precedes and exceeds qualified life, the immanent *potential* for other forms of life that negate socially determined identities (Esposito, 2010; 2012b). The *munus* is thus a general condition of sociality that nonetheless contains an implicit threat:

“the idea of community is felt as a risk, a threat to the individual identity of the subject precisely because it loosens, or breaks, the boundaries that ensure stability and subsistence of individual identity” (Esposito, 2012c, page 49).

The threat posed by *communitas* to individual identity provokes an immunitary reaction in the modern subject (Neyrat, 2010). Immunization exonerates the individual from the reciprocal duties of the *munus*. In its crudest form, it involves purification and negation: exclusion of

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the other from the self through constructing impermeable boundaries or blockades (Esposito, 2012c). However, it also operates through more complex processes of what Esposito calls inclusive exclusion [or, alternatively, exclusive inclusion: Doma (2006); Esposito (2011)]. Here, immunization is a violent process of introjecting the other into the self, transforming both the self and other in the name of “negating, at least in part, its constitutive ‘otherness’” (Doma, 2006, page 58).

Immunization takes on contextually specific forms that are topologically indistinct at the level of their biopolitical effects: immunization constructs relations of inclusive exclusion in relation to specific expressions of the *munus* that threatens qualified life. While Esposito explores the distinct thanatopolitical tendencies that transform a politics of life into a politics of death in both Nazi and liberal biopolitics (Esposito 2008; 2012a; 2012c), we can identify a distinct immunitary dispositif in the postemancipation Caribbean. As Caribbean subaltern studies scholars have shown, colonial governmental techniques targeted the excessive freedom of racially subaltern groups (Scott, 1999; Bogue, 2002). Emancipation created what Mark Duffield (2007) calls a politically surplus population of former slaves that doubled the economic surplus population of the industrial reserve army created by nascent capitalist production. This surplus population contains an excess of freedom: their race-based exclusion from liberal order, which places them beyond the normative rule of modern law, prevents their newfound freedom from becoming circumscribed within the series of rights and responsibilities of this order. At the same time, since their existence in the colonial order of things is outside liberal norms that restrict state violence, subaltern races live a constant emergency in which they are always potentially subject to the colonial state’s total violence. Emancipated populations thus embody the freedom and equality of life beyond measure that challenges modes of social order and forms of domination sustained by colonial rule. The techniques of colonial and postcolonial rule are reactions to the threat this surplus life poses to liberal order and its constitutive series of inclusive exclusions (Duffield, 2007; Meeks, 2000). In Jamaica, postemancipation development supplemented colonial violence with programs of cultural reform and moral guidance that cultivated European and Protestant values of thriftiness, willingness to labor, economy, and bourgeois sensibilities and moralities (Bogue, 2002). The goal here is not to discipline recalcitrant bodies but to create a mode of individual and collective life that can be governed by liberal governmental technologies. Colonial development immunizes liberal order against excessive freedom by creating an artificial form of surplus life—the underdeveloped black population—that is not yet capable of assuming the rights and responsibilities of self-government, and thus requires continued tutelage.

Disaster resilience extends this immunizing project to a virtual and immaterial level: the banal affective relations that power marginalized peoples’ freedom. Key here is a subtle but important shift in the nature of otherness that disaster resilience introjects into neoliberal order. For Esposito (2010), the other emerges as such out of the immeasurable encounter between extensive bodies; it is an effect of naming that divides life against itself. In disaster resilience, the other is not a foreign body; it is rather the alien and externally granted adaptive capacity. According to the authors of ODPEM’s 1999 ‘National Hazard Mitigation Policy’,

“repeated hazard impacts have fostered a wealth of experiences, resilience and coping mechanisms that have allowed these communities to rebound with minimal intervention from government and other external resources” (ODPEM, 1999, page 14).

This adaptive capacity is wholly foreign to centralized disaster management agencies: traditional expertise and knowledge derives from “a history of *autonomously adapting* to hazard events and changing environmental conditions” (ODPEM, 1999, page 5, emphasis added). This other is not an extensive body, but is rather an intensive force—the open-ended

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capacity of people and things living together to adapt to surprise in any number of ways, which may or may not heed established norms and values.

Faced with excessive adaptive capacity freed by qualitatively new experiences of environmental insecurity, disaster resilience programming attempts to immunize neoliberal order against unchecked adaptations by engineering artificial forms of adaptive capacity. Techniques of environmental power manipulate affective relations in order to create certain kinds of adaptive capacity—the self-sufficient agency of the resilient subject—that are governable through disaster management. In essence, participatory disaster resilience introjects into neoliberal order, in controlled and artificial form, the agency that already exists as an effect of affective relations that precede and exceed governmental control. This engineered agency is a form proper to neoliberal rule; it is the agency of responsible, risk-bearing, resilient citizens empowered to make acceptable adaptation decisions in an emergent and socioecological milieu. The politics of affect that disaster resilience enacts thus operates on a virtual level to intensively immunize Jamaica's neoliberal order against the *potential* for unchecked adaptations. It turns the constituent power of Jamaica's most vulnerable populations into a recognizable and governable substance, the disempowered agency of vulnerable peoples.

The depoliticizing effects of resilience result from this process of virtual immunization. Disaster resilience programming does not negate an extensive other, but rather turns life against its own vital force: it makes affective life and its inherent adaptive capacities a threatening other and transforms this other into a depotentialized and governable force, the agency of resilient subjects in need of empowerment. As the opening case of Hector's River succinctly illustrates, it is the *possible* irruption of novelty that institutionalized resilience programming attempts to negate. Disaster resilience dulls affective relations that could fuel alternative forms of life and strengthens those that sustain neoliberal order. Psychological and cultural interventions that visualize, operationalize, and attempt to improve vulnerable peoples' agency manufacture a depotentialized form of agency that merely empowers them to take responsibility for their own nonthreatening adaptations to neoliberalism's social and ecological insecurities.

### Conclusions

This paper has drawn attention to the politics of affect that circulates within and through disaster resilience assemblages through an analysis of participatory resilience programming in Jamaica. Resilience relies on anticipatory techniques that manipulate affective relations between people and things in order to create resilient subjects in need of empowerment. These techniques operate not on the preformed agency of participants, but rather on the preindividual affective relations that endow bodies with the capacity to act, and thus become agents. Disaster resilience thus reconfigures an immunitary biopolitics on an intensive level: resilience attempts to restrict the possibilities for adaptation to those that maintain, rather than challenge, neoliberal political economic order. A politics of affect thus precedes any form of empowerment promised by disaster resilience; for it constructs the very subjects in need of empowerment it purports to assist.

Analyzing resilience programming through the categories of affect and immunological biopolitics works at a crosscurrent to the dominant thrust in resilience research. It does not depart from a preformed subject with constrained agency, but instead unpacks the techniques that create subjects endowed with a reductive and depoliticized form of agency that empowers vulnerable people to provide for their own survival. Thus, it demonstrates how resilience may be complicit in the ongoing neoliberalization of socioecological rule (see Walker and Cooper, 2011). At the same time, it also offers a more nuanced critique of resilience that recognizes how its depoliticizing effects hinge on nothing more or less than the operation of

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environmental techniques. Resilience is thus potentially more open than many critiques allow. It functions as a norm of sorts that imposes meaning on life in the wake (and anticipation) of unexpected events, and thus structures socioecological existence around categories of agency, adaptive capacity, responsibility, and self-sufficiency (cf Esposito, 2012a). As with any other norm, it is a product of life's constituent power to create a meaningful world. Thus, there is nothing inherently depoliticizing about resilience. Instead, at issue is how, in its current neoliberal manifestation, resilience carves out a series of extensive beings such as the resilient community made up of resilient, empowered subjects, whose existence is threatened by a virtual other; affective life's immeasurable adaptability.

The possibilities for a radical and revitalized resilience depend on decoupling the norm of resilience from the construction of identities that provoke an immunitary and depotentializing response against life's own vital force. Esposito's notion of an immanent norm offers one potential route. For Esposito (2011), the norms and laws that structure liberal order have an anticipatory relation to their object; they posit the preservation of life outside living beings. They refer to an ahistoric, disembodied, and transcendent notion of 'life itself' as the object of security practice. In disaster resilience this transcendent norm leads to well-intentioned resilience programs that attempt to sustain life, as an impersonal form of subsistence existence, through environmental techniques that produce depoliticized subjects of resilience. In contrast, an immanent norm does not operate through this anticipatory temporality that sustains immunitary violence both against extensive bodies and against intensive forces marked as threatening others. It does not reject immunity in a millennial moment of exodus, but rather establishes a qualitatively different relation between self and other. Specifically, it opens life towards the void of the *munus*, the possibilities of and for indeterminate and immeasurable life, and recognizes the violence and suffering enacted in the name of preserving qualified life. An immanent norm positions affective life not as a threat that must be continuously introjected into neoliberal order, but rather as the source of socioecological novelty that can combat rather than reinforce inequality. As such, it is an ethic attuned to multiplicity and difference in the present. The only norm here is to change norms, to reflect on the sources of violence, suffering, and vulnerability, and allow life to adapt in whatever direction it might unexpectedly take.

An immanent norm of resilience thus points to the possibility for subversive forms of resilience that use the categories, rationalities, and techniques of resilience to advance alternative forms of life to the responsible, empowered, resilient subjects of neoliberal development (see Grove forthcoming). At heart lies the political and ethical question of how resilience programming relates to adaptive capacity: is it something to be technocratically managed, an object of disaster management's liberal will to truth (see Grove, 2013), or can it be allowed to flourish in whatever direction it may take? There is a small but growing body of provocative research within disaster studies and environmental management that is beginning to raise these questions. This work advocates research that focuses on sites where so-called 'mutant rules' of resilience are possible, where resilience can be more than simply a process to avoid disturbance (eg, Cannon and Mueller-Mann, 2010; Davidson, 2010; Wilson, 2012). But it is not always able to avoid the lure of neoliberal transcendence, as is evident in calls for attention to the responsabilization of community members. Furthering these aims may require a more sustained conceptual revolution in environmental thinking explicitly grounded on an immanent norm that positively values adaptive capacity as the vital force of new socioecological futures.

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