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Politics of Expectations: Nature, Culture & the Production of Space

Expectations are powerful things. Whether nested in economic forecasts, climate models, or the promise of personalised medicine, expectations, and those who engineer them, play a deeply political role in bringing into being one future over another. Writing editorials, giving press briefings, or developing roadmaps, are all ways of engineering change and enrolling support and resources for a marketplace that's been envisioned. Such practices are performative. They pre-emptively shape the social, political and economic context for innovations as well as influence people's thinking. Rather than dismiss such efforts as exaggerated or self-serving claims, a growing literature that has developed around the concept of the sociology of expectations (Borup et al 2006; Brown 2003; van Lente& Rip 1998) and takes seriously the constructive, performative and even destructive role expectations play in the world. Expectations, for these authors, inscribe subject positions, identities and interests; pit utopian or dystopian visions of the future against each other; and align various actors in different roles; all of which should prick the interest of geographers, and for this special issue, particularly those committed to understanding the contemporary and complex terrain of environmental issues, with their social, political, legal and commercial pressures. The expectations literature, we argue, has had a relatively limited engagement with geographical concepts of space and scale (see Milne 2012); a gap that this issue addresses to show why geography matters in how expectations are created, configured and stabilised; what, and whose, interests shape them, and in turn, whose interests do they shape; and why do some persist whilst others perish.

Too often expectations get conflated with Robert Merton's parable of a "self-fulfilling prophecy" (1943). That is, where a positive or negative imaginary – declared as truth when actually false – may sufficiently influence people so that their reaction matches that once-false prophecy. Merton points to a run on a fictitious bank – Last National Bank – where customers one day turn up on mass to withdraw their savings. Most of the bank's money is tied up in capital ventures with only a small amount readily available as cash. Customers seeing so many people at the bank start to worry. False rumours spread that something is wrong and customers rush to the bank to withdraw their money. As the number of customers increases rumours circulate about the bank's insolvency and bankruptcy. At the beginning of the day the bank was solvent, but the rumour of insolvency

caused a sudden withdrawal demand, which could not be met, causing the bank to fail. That expectation is realised. Neat as this reading might be, Pollock and Williams (2010) identify a problem with this reading. The "notion of a self-fulfilling prophecy… invites the interpretation that *any* vision, if handled and communicated by enough reliable and trusted actors, could become true" (ibid: 259). Such an interpretation ignores the 'content' or work involved in 'producing' expectations. As the papers in this special issue stress, the production of expectations deploys, requires and enacts a wide array of discursive, material and financial interests, which plays out differently across space and time.

Four themes, to date, have dominated expectation studies (see Borup et al 2006). First, the constitutive nature of expectations. They create legitimacy for a project, which once normalised by promise-builders, serves to enrol allies to support and materialise these futures. Second, expectations change over time. Initial enthusiasm produces hype, elevating expectations, before relapsing when that hype is revealed to be unjustified, with hope consequently recycled into new expectations or old expectations rebuilt in new ways (Brown & Michael 2003). Third, a spatiality and sociality surround expectations. Different groups construct the same expectation differently amongst themselves and to others. Scientists, for example, may acknowledge caveats behind closed doors but downplay them in front of investors (Porter et al 2012; Shackley& Wynne 1996). Lastly, expectations have material and discursive effects. They act on the world. Inscribed in texts, bodies, machines and actions they help steer present futures or take on a life of their own.

This special issue develops, and expands upon, these themes. Expectations research has, until recently, focused primarily on temporality (Pollock & Williams 2010; Tutton 2011). A storyline is often used to mobilise the future into the present where existing ways of doings things are to be replaced or improved upon (Geels & Smit 2000). Different actors – scientists, regulators, sufferers, and investors – are scripted into various roles with a plot that will attract attention and resonate widely (Brown 2003; Deuten & Rip 2003). Social, political and material realities are ignored in such deterministic accounts (Borup et al 2006; see Lehman this issue). "The newer or more familiar a research agenda is, the greater will be the need to use hype as a means of defining roles, responsibilities and duties" (Brown 2003: 13). But if not handled sensitively, hype can lead to accusations of exaggeration and questions about accountability if expectations fail to materialise.

Fallout from unfulfilled expectations can have wide-ranging effects. Enrolling the support of patients and health advocacy groups embodies a moral duty to avoid false hope or wasting their emotional energy, savings, or goodwill (van Lente& Rip 1998). If the present fails to live up to expectations of it, reputational damage can be felt by those associated with it and their wider field, making it harder to build trust and funding again as heroes are recast as villains (Porter et al 2012). Such concerns have led some professions to "promising pessimism" (Tutton 2011). Firms selling portfolios on the basis of spikes in share price must also explain to investors that share prices can plummet in value as well. Unlike promissory futures, the pessimistic ones imagined in these sales brochures are futures that companies do not want enacted. Accountability of expectations, then, points to the richly textured world of promise-builders where capitalist logics interact with moral obligations (see Randalls and Petrokofsky this issue).

Space and scale play a crucial yet often unsung role in expectations. Too often they are reduced to meaningless tautologies: different people interpret expectations differently (Borup et al 2006); or are relegated to explaining how visions are circulated and translated between entrepreneurs, specialists, policymakers and investors via press releases; and how distance from knowledge production affects how colourfully and loudly a vision is articulated (Brown 2003). These framings present an impoverished sense of space and scale that lacks geographical depth. Milne's contribution (2012) is one of the first to go beyond such narrow readings and acts as a catalyst for this special issue. For Milne (2012: 290), "expectations… bear the imprint of place, or rather of the places in which they are imagined, as well as those they imagine, and ultimately those they produce". Three geographical moments are realised. First, the place(s) for future production, and the scales of enactment – globalising biotechnology and re-localising agricultural practices – must be imagined to identify and remove any tensions (see McEwen et al. this issue). Second, imagined places involve transforming real spaces. Fields are turned into laboratories, workshops become assembly lines, and universities are made into corporate players, as one place is realised over another. Lastly, expectations are bound by present conditions and constraints; they cannot be divorced from the materialities through which they emerge (see Jonsson this issue). Political spaces, such as the European Union, influence how expectations emerge (or not) and circulate within/beyond its borders.

Moving beyond just these space-time dimensions, this special issue also examines the value of expectations within the traditions of political ecology and political economy. Are the interventions in ecosystem management, and resistance to them, different from those in biotechnology? Expectations in environmental arenas involve a wider array of actors, diverse definitions of successes (what is ecologically successful?), and challenges to biotechnology. Political ecology is perfectly-placed to explore how capitalist natures are (re)produced in line with entrepreneurs' abilities to realise new environmental visions – for example speeding up forestry harvesting and recovery (Prudham 2005; see Randalls and Petrokofsky this issue). As interconnected and open systems, environments pose a different challenge for promise-builders than certain kinds of closed-system technoscientific objects, which may be readily reducible to laboratory replication and control.

Even when expectations are enabled, innovations are costly. They require significant financial backing from corporations, governments, and universities as well as the professional capital of scientists. Very few spinoff companies turn a profit (Mirowski 2011). Venture capitalists instead serve to finance these research laboratories in order to maintain expectations of a future payday long enough to secure re-sale value to a larger corporation before the bubble bursts. How monies from these speculative ventures are stabilised in circuits of capital matters for how different futures are shaped and enacted (and those that are not). While these political-economic logics are often explored in biotechnology studies, they have only recently received attention from geographers interested in the commercialisation of nature (Castree 2010; Lave et al 2010).

Contributors tackle each of the special issue's themes differently. Using the example of wildflower harvesting in South Africa, McEwen et al (this issue) explore the power relations within expectations. Wildflowers are, by definition, grown and picked in the wild. Unaccustomed to the imperfections this entails, consumers are left unsatisfied. Fearing a drop in sales, retailers have sought to bring harvesting practices in line with consumer expectations – changing seeds, flowers, and picking criteria. Different ethical considerations are exposed in these competing expectations – how should nature be managed –and point to the disturbing conclusion that morality is yet another means for legitimating and enacting particular futures. How expectations are mobilised, McEwen et al (this issue) argue, opens up how conservation practitioners use of science and technology reflects broader social and cultural interests.

Developing that spatial thread, Randalls and Petrokofsky (this issue) use the case study of underwater logging to examine how the production and reproduction of expectations is contingent upon capitalist space-time activities. Archival sources are combined with state-of-the-art techniques to turn lost wood, submerged underwater for decades, into a resalable product. Value of the recovered wood is derived as much from the stories of the rare and exotic as the specific quantity/quality available. Realising that value involves turning a hidden resource into a calculable entity, economically speaking, and enrolling loggers, conservationists, regulators and consumers in a shared expectation for triple-bottom-line sustainability in forestry.

Jonsson, this issue, outlines how the politics, and materialities, of expectations become entwined. Looking at a contentious golf development in Scotland, he contrasts how the promise of future economic development clashes with the stability of a sand dune ecosystem and whether adverse impacts of development are manageable. Nature must be controlled to enable the exploitation of certain kinds of economic futures but at the same time these same expectations are reliant on affirming that nature has the potential to produce something new. Different ontological and epistemological concerns are revealed through the competition of expectations over the ecological effect the golf development. At once, these expectations are both strong – economic prosperity and employment – and weak – without support the whole endeavour will fail (van Lente& Rip 1998). For Jonsson, how these expectations are framed explicitly opens up, or closes-off, different questions and therefore highlights the deeply political nature of expectation building.

Developing the political ecology theme, Lave (this issue) explains how the rise of a charismatic figure in stream restoration, Rosgen, set entrain an economically efficient approach to restoration but with ecologically questionable results. Rosgen's methodology, developed in texts, training course and lectures, is simple and efficient for policymakers to deploy, but it also re-shapes the scientific field establishing the parameters of study and narrowing the options to intervene in policy by other researchers. The notion of expertise is reworked through the construction of expectations as populist rhetoric and simple efficient methods come to exert authority over more complicated, less immediately applicable studies. Expectations demarcate who has authority to speak about the field and thus become political interventions that include and exclude different actors.

To close, Lehman (this issue) explores the effect of the Sri Lankan tsunami on people's lives. She shows how the science of extreme events leaves citizens with perpetual uncertainty as they have little choice but to 'expect the sea'. This expectation materialises particular interventions in nature that affect how people live. Yet the ocean is not always an abiding actor, as imagined in human thinking, and points to the struggles in rolling out a set of expectations when the thing being acted upon has its own agency and resists control. It is the 'unexpected' that creates the conditions for living in a changing world as much as the expected. Expectations are thus tied to ontological and epistemological claims, held in tension between stabilization or resolution of an issue sufficient to protect that expectation economically and materially, and acceptance of radical instability and the productive power of the unexpected for life and nature.

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