

ORIGINAL ARTICLE

The New, Green, Urbanization in China: Between Authoritarian Environmentalism and Decentralization

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Abstract Orthodox Western environmental practice and its associated discourse posits a positive causal link between levels of participation and effective environmental governance and regards participatory practices as a normatively desirable element in the building of a more sustainable society. However, recent discussions around theories of authoritarian environmentalism have challenged some basic assumptions of orthodox environmentalism. However, these discussions still lack sufficient discussion of real-world policy making and implementation and this article addresses that gap by exploring China's policy of green urbanization, deemed a top priority by Chinese policy elites. We argue that the shifting strategies of governance associated with green urbanization are evidence of the emergence of a distinct paradigm of authoritarian environmentalism, characterized by a re-centralization of state power and a reduction of local autonomy, in environmental policy making in China.

Keywords China · Environmentalism · Urbanization · Sustainable infrastructure

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1 Introduction

The rise of Western environmentalism coincided with the growth of the anti-nuclear movement, the anti-war movement, and other emancipatory strands of state-social conflict in Western societies. What is now the orthodox environmental political discourse and practice emerged from this congruence and posits a positive causal link between participation and effective environmental governance as well as regarding participatory practices as a normatively desirable element in the building of a more sustainable society. However, recent discussions around theories of authoritarian environmentalism (Moore 2014; Beeson 2010, 2016) have challenged these assumptions at the same time as commentators have begun to focus on concerns about the potential chaos and security threats that may arise from acute environmental emergencies (Hartmann 2010; Detraz 2011; Nyman 2018).

Given increasing doubts about the orthodox model of environmental governance (Blühdorn 2016; Howes et al. 2017), researchers' discussions have turned to China as a possible alternative non-participatory model of environmental policy-making (Gilley 2012; Mol 2015). However, these discussions still lack sufficient discussion of actual real-world policy making and implementation. This article addresses that gap by exploring the policy of 'green urbanization', which has been deemed a top priority by Chinese policy elites, to understand authoritarian environmentalism as a possible alternative path to addressing China's growing environmental emergency.

The emergence of China as a major player in the politics of climate change has reawakened academic interest in non-democratic approaches to environmentalism as an alternative environmental policy model. By-and-large this scholarship has stopped short of outright advocacy of authoritarian environmentalism but it has breathed new life into the unresolved academic debate, dating back to the late 1970s, which pitted market liberalism against authoritarian command economies.¹ These debates have re-emerged because of the limited progress made by orthodox Western approaches as well as China's growing influence in global climate politics. Authoritarian environmentalism is the antithesis of emancipatory, decentralized environmentalism (Blühdorn 2011b, 4-5): tackling the environmental emergency using a non-participatory and top-down mode of governance. This approach is documented in Wainwright and Mann's 'Climate Mao' (2013, 9-10), which conceives the Chinese state as an alternative to a neoliberal capitalist bloc led by the USA, and with the potential to 'achieve political feats unimaginable in liberal democracy'. Similarly, Bigger (2012) argues that centralized state responses may be needed to address the fragmented state of global carbon governance. However, most of the new discussions around authoritarian environmentalism tend to portray China as a fixed, single entity and fail to understand the changing nature of environmental policy model(s) within China's authoritarian system (Shen and Xie 2017). These debates have not

¹ For further discussion and debate of authoritarian environmentalism, see, for instance, Heilbroner (1991), Doherty and De Geus (1996), Lafferty and Meadowcroft (1996), Midlarsky (1998), Barry and Wissenburg (2001), Shearman and Smith (2008), Humphrey (2009), Ophuls (1977, 2011), Blühdorn (2013, 23–29) and Chen (2016, 223–245).

taken into account the shift and evolution of the institutions and practices of policy making in China. By contrast, through our case study of green urbanization and the related policy initiatives, this article aims to understand the changing institutional configurations that have emerged over the last decade and, in doing so, enhance the empirical basis of what still remains primarily an intertextual and theoretically driven debate.

Our research questions are as follows:

- 1. What are the institutions and policy instruments used by policy elites in China to implement their policy of 'green urbanization'?
- 2. To what extent is the relevance and utility of the concept of Authoritarian Environmentalism capable of analyzing the mode of governance in this policy area?

We use the concept of environmental authoritarianism as a theoretical lens to focus on these questions. Using the policy area of green urbanisation as a case study, we seek to grasp a more comprehensive understanding of the trajectory of China's recent environmental policy development. The reason for selecting this policy area for analysis is that empirically, green urbanization has become a high salience political agenda for policy elites (Zhang 2015, 163–164; Xinhua News Agency 2017). The policy document Opinions on Accelerating the Construction of Ecological Civilization (*Guanyu jiakuai tuijin shengtai wenning jianshe de yijian*, 关于加快推进 生态文明建设的意见) co-introduced by the Party and the State Council, emphasizes the relationship between China's environmental carrying capacity and the need for coordinated development. This indicates an intellectual shift towards a political economy that eschews high consumption, high emissions, high expansion and inefficient output, and which reflects Chinese policy elites' awareness of the urgency of the climate issue. But in recognizing the urgency of the issue, we also see a new emphasis on environmental authoritarianism.

The rest of the article is structured as follows. Next, we assess the debate around non-democratic approaches to environmental policy that have emerged in the recent literature. In section three, we focus on green urbanization in China, examining how China's top-down approach has worked in practice. In particular, we look at the trade-off between notions of sustainability and equality in the policy design of green urbanization. We seek to identify the practical challenges and the policy shifts, as well as the thinking behind them that drove the implementation of green urbanization initiatives. In section four, we discuss our findings, and argue that the emerging strategies of governance associated with green urbanization can be characterised as part of the emerging paradigm of authoritarian environmentalism. This mode of authoritarian environmentalism not only diverges from the global consensus mode of environmental governance, but is in effect a new mode of policy making that emphasizes an explicitly result-oriented policy style that seeks to integrate environmental imperatives into economic policy planning.

1.1 The Paradigm of Participatory Environmental Governance

Much has been written about the importance of widening civil society participation in environmental politics and policy. In the West, there is now an established orthodoxy that stretches from radical environmentalists, through mainstream politicians to business practitioners, in which actors at all levels of governance assumes a positive link between popular participation and environmental protection (Smith 2003; Hobson 2012). This orthodoxy was forged in the ongoing debate amongst academics, activists, and practitioners that dates back to the emergence of eco-politics in the 1960s and came to global prominence with the presentation of the Brundtland Report in 1987 (Blühdorn 2011a). Although the environmentalist orthodoxy emerged within the New Social Movements, from the mid-1980s onwards it became increasingly mainstream and unconstrained by social location (Bäckstrand and Lövbrand 2006). In its purest form, environmental actors have sought a radical, decentralized, and civil-society focused mode of organization that fundamentally challenged the capitalist materialism of the established economic system, advocating and seeking a new way of life (Scott 1990; Blühdorn 2009). This particular strand of environmentalism was closely associated with the anti-nuclear movements that were particularly active at the time (Kitschelt 1986) and the non-traditional techniques of mass mobilization associated with them achieved public and political attention and established the key issues in the wider public discourse in Western democracies (Price et al. 2014). Such movements, rooted in the tradition of emancipation, are explicitly opposed to hierarchical bureaucracy (Dobson 2007). In short, the Green politics that emerged through the new Social Movements saw defense of the environment and the extension of citizens' autonomy as linked concepts with a close, positive relationship between them.

However, from the 1980s onwards the radical edge of Green politics was subsumed into the more mainstream discourse of 'sustainable development', which has become the dominant framework for the discussion of international environmental politics (Hajer 1995; Huber 2000). Such an apparently depoliticized policy paradigm was in fact highly political in that its more formalized and structured model of stakeholder participation excluded the informal and often deliberately unstructured participation practices associated with New Social Movements (Blühdorn 2000a, b, 2013; Bäckstrand 2004, 696). This shift away from more radical practices of participation saw a shift from notions of open and deliberative practice to a more constrained contractual mode of cooperation between the public and private sectors (Joss 2010; Baker 2015). Although this more constrained notion of participation downplayed the radicalism of the New Social Movements it nevertheless still presented a challenge to existing practices in liberal democratic states. Not only does this conventional model of environmental governance contain nebulous strands of neo-liberal thinking but, in its emphasis on stakeholder participation policy paradigms, its narrative outsources the responsibilities of elected policy makers (who are supposed to be responsible for dealing with this vexing issue) to mass consumers (Blühdorn 2016) and eschews the state's capacity to solve climate problems with large-scale global solutions. This paradigm embedded in the sustainable development agenda has, for some, been considered an exhausted or even 'failed paradigm' (Bulkeley et al. 2013, 962–963; Blühdorn 2013, 260–264). As Blühdorn put it:

This discourse presents consumer-citizens—rather than economic or political elites—as real center of power, demands that every individual *contribute their bit*, and suggests that the sum of individualized consumer choices and small scale behavior changes (for example, recycling household waste, not printing every email, using public transport more regularly, changing light bulbs) will deliver what neither the globalized economy nor the decapacitated state are able to achieve (2016, 269).

In such paradigmatic decadence, in which the established model of environmental governance seems to have lost its effectiveness in dealing with climate urgency, Beeson echoed this argument, stating that 'many democracies have great difficulty either overcoming powerful, entrenched domestic interests and generally following through on policy commitments, no matter how well intentioned they may be' (Beeson 2017, 3). In this context, environmental authoritarianism offers new means to solve environmental problems on a large scale. In the next section, we focus on the empirical discussion of emerging non-democratic approaches to environmental policy making.

1.2 Authoritarian Environmentalism and the Case of China

Authoritarian environmentalism dates back to the nineteenth century and the romantic movement's critique of industrial revolution and the subsequent criticism in the twentieth Century of the anthropocentric nature of liberal democracy. In their own ways, Heilbroner (1974), Ophuls (1977), and Ophuls and Boyan (1992) all pointed to the inherent dilemma faced by contemporary market democratic states when confronted with the potential measures required to tackle the global environmental emergency. The core of this dilemma was what they saw as the inevitable tradeoff between the needs of the planet and individual rights; in this case the right to unlimitedly exploit the earth's resources. These writers' skepticism about the ability of democratic states to address the environmental emergency led to them being labelled proponents of authoritarian environmentalism (Blühdorn 2013). In particular, authoritarian environmentalism questioned the default principle of market liberalism that placed economic and political individualism as a priority value. For instance, Ophuls (1977, 223) pessimistically points out that 'current political value and institutions are the products of the age of abnormal abundance now drawing to a close, so that solutions predicated on scarcity would necessarily conflict with them'. He believes that, to move toward a more stable environmentally benign society, 'we must determine its basic principles and then put them into effect in a planned or a designed fashion' (1977, 227). Authoritarian environmentalism generated a lively academic debate in the 1970s but, as Dryzek and Dunleavy (2009, 262-263) later observed, this academic discussion of authoritarian environmentalism ran into the sand simply because there had not yet been a substantial example of such a regime in the real world.

That being said, the criticism of political systems legitimized on the basis of a priori individualistic freedom and the pursuit of selfish consumerism has continued and many commentators have attempted to apply the principles of authoritarian environmentalism to the empirical world, building model nondemocratic approaches to climate policy. One of the more controversial works in this direction of enquiry is Shearman and Smith's (2008) contribution that argues that liberal democracy itself may be an insurmountable obstacle to tackling the environmental emergency. For Shearman and Smith, the East Asian model of economic development, with its emphasis on technocratic management and a more collective ethos, may provide a more promising way forward than liberal democracy in general and its Anglo-Saxon variant in particular. Drawing on the earlier work of Ophuls (1977), Giddens (2011) also argues for a more active 'interventionist' role for the state and for the reversal of the neo-liberal deregulation of the past 30 years that has failed to mitigate or compensate for the externalities of economic activity (Giddens 2011, 96).² This recent scholarship has reawakened interest in the potentialities of authoritarian environmentalism but as Blühdorn (2013, 24) points out, none of the models proposed succeed in illustrating exactly how and to what extent the institutional mechanisms of government ought to be arranged. Moreover, although academic debates accept the premise of the embedded tendency towards environmental and resource exploitation under market liberalism (Eckersley 2004, 87), authoritarian environmentalism is still tainted empirically by the experience of the totalitarian dead end and environmental catastrophe associated with the Soviet and East European model of planned economy in the twentieth century (Baker and Jehlička 1998; Foster 2015). At the same time, however, commentators continue to criticize the current environmental laggards in high-carbon-reliance countries like the US, Canada, and Australia.

The emergence of the Chinese case in this conversation is in many ways unexpected, given that China is generally considered an environmental laggard and has been criticized by many researchers as a major cause of global warming (Schreurs 2011; Bulkeley and Newell 2015, 50). However, for some scholars, this criticism is not always justified. For instance, Beeson (2010) used the lively academic discussion around the rise of China as a means of raising the possibility of effective environmental governance under authoritarian rule. For Beeson, the rise of China is not only an unprecedented economic phenomenon in empirical terms, but he believes that it can even be conceived as an alternative environmental policy-making model due to urgent need to tackle the global environmental emergency. If one accepts that the environmental emergency has potential existential consequences, then it is possible to conceive of China's interventionist state model as a template for rethinking and perhaps trying to reasonably replicate the same degree of state capacity to protect human civilization under the threat of global warming (Beeson 2010, 289). Beeson invited readers to take a different perspective to the normal critical position on China, and consider the fact that if the strong political control and one child policy had not existed in China, the sustainable carrying capacity of our planet could already have been exceeded.

² And also to break the locked-in situation to resolve the obstacle resulted from the lobby groups' long effort in denying the proposed climate policies in industrial states (Giddens 2011; Klein 2015).

Gilley (2012) attempts to extend this argument and build an environmental policy-making model that does not a priori emphasize the principle of participation. He defines authoritarian environmentalism as 'a policy process that is dominated by a relatively autonomous central state, affording little or no role for social actors or their representatives' (Gilley 2012, 288). Gilley points out that China's active state intervention in environmental policy making can be explained by this theoretical framework, and the domination of scientific technocrats in managing and controlling the process conforms to the prototype of authoritarian environmentalism. However, Gilley remains doubtful that the model is even *potentially* superior to the orthodox Western model of participatory environmental policy making. In particular, Gilley points to the pathologies of administrative decentralization in China: the fact that managing and coordinating policy across such a large and geographically diverse territory often leads to a lack of coordination between central and local government that hinders the central state's ability to implement effective environmental policies. Gilley concludes that while the policy elites have been able to generate high levels of environmental policy output, they have struggled to solve their long-term problems of implementation deficit (Gilley 2012, 298; also Economy 2010; Shapiro 2012). Eaton and Kostka (2014) also echo these accounts of implementation deficit and argue that one of the defining problems of environmental policy in Western democratic states, that of short-termism, also exists in China's authoritarian system (see also Westra 1998, 86). These scholars argue that the Chinese Communist Party's cadre turnover system means that key officials are often only in situ in a particular locality for 4 years. As a result, there are limits to the extent to which officials can cultivate local networks and this tends to scale up into an emphasis on quick but limited environmental gains. Furthermore, Eaton and Kostka (2017) posed an empirical challenge to an over-optimistic focus on environmental authoritarianism. In a recent article on the state-led protection of central enterprises, they indicated a long-standing environmental problem embedded in fragmented authoritarianism: central stateowned enterprises (SOEs) have long defied environmental laws, and the 'National Champions' rely on their superiority, which constrains the local governments' capability to enforce environmental regulations. Under the protection of the central government (that is, the State-owned Assets Supervision and Administration Commission, the chief governing body of the central SOEs) and incentivised by industrial policies introduced by both central and local governments, they became chronic polluters, and non-compliance with local environmental regulations became the norm (Eaton and Kostka 2017, 694). After all, SOE managers seem to be motivated by appraisal systems that gauge their commercial performance rather than environmental compliance. In addition, the absence of stable institutional mechanisms for environmental governance in China has led many to believe that the state has long been part of the problem in terms of the shortcomings of environmental governance in China (Economy 2010, 110–117; Lo and Fryxell 2014), as Toke indicates:

[T]he modes of environmental governance that are now dominant in China are slow to respond to these changes ... At a local level there is a basic contradiction between officials that are incentivized for their ability to pursue economic development and the need to protect the environment (2017, 97).

This also means that there have been variegated responses within the localities in terms of implementing green development policy, depending on the degree of local autonomy (Lo and Fryxell 2014, 113). Such institutional contradictions inherently skew the outcomes of environmental governance and fuel the failure of the governance practices (Balula and Bina 2015, 119). From this perspective, it seems that the concept of authoritarian environmentalism is problematic in discussing empirical aspects in China, in which, given the still-insufficient discussion of actual real-world policy making, it remains ambiguous whether a potential new mode of governance can emerge. This is also reflected in the research report published by the Development Research Center of the State Council, which voiced concerns about China's fragmented approach to green development policy (Lv 2015, 11–39).

2 A Top-Down Mode of 'New Urbanization'

For 4 years, New Urbanization (*Xinxing chengzhenhua*, 新型城镇化) has been an influential phrase noticeable in official media, reflecting its championing by the current Xi-Li administration. Urbanization in China has long been a policy issue for the current policy elites. However, this has become a more complex challenge in the years that preceded them taking power. Rapid environmental degradation, as well as the uneven distribution of resources accompanied by the change of land conversion (Gaubatz 1999; Ma 2002), has compelled the new leaders to advocate the introduction of new explicitly 'green' policies in the now well-established urbanization program.³ This new Green Urbanization marks a break from the past in that the design of the policy emphasizes the possibility of a cohesive, controlling but integrative institutionalization processes rather than encouraging the autonomy of third parties in the sector. In this sense, it is very different from the Western orthodoxy of sustainable development and reflects Chinese elites recognition of the need for top-level policy making to tackle China's environmental crisis.

2.1 Crises and Unreconciled Remediation

Official recognition of the environmental problems associated with China's rapid development can be seen in the Chinese government's 5-year guidelines (Hu and Liang 2011). The "Twelfth Five-Year Guideline" (*Shi er wu guihua*, 十二五规划), introduced in 2010 by the previous Hu-Wen administration, explicitly linked the issues of large-scale population mobility and environmental challenges and acknowledged the tension between the imperatives of economic growth and environmental

³ The bureaucratic system of the PRC has long been defined as a model of "Fragmented Authoritarianism": the policy-making process in China, as argued by Lieberthal and Lampton (1988, 3) is "disjointed, protracted, and incremental", which leads to competition for interests among provinces and key bureaucracies where policy coordination is difficult to reach. The extensive bargaining politics has therefore deeply involved in the process of policy implementation among territorial and hierarchical elites (Lampton 1987).

protection (China Development Research Foundation 2013; Darido et al. 2014). The document focused on the changes and challenges resulting from the early process of urbanization, particularly in eastern coastal areas. The "Twelfth Five-Year Guide-line' of National Population Development" (*Guojia renkou fazhan "shi er wu" gui-hua*, 国家人口发展"十二五"规划) referred to the associated problem of uneven population distribution and a large-scale floating population drawn from the countryside to the cities (State Council 2012). This problem, despite being acknowledged by Hu-Wen administration, has not been resolved due to the insufficient degree of social security and provision of public services for China's increasingly expanding urban migrants. As Director of the National Development and Reform Commission (NDRC) Xu Shaoshi observed:

Over 200 million migrant workers and their families have been unable to enjoy equal access to basic public services of education, employment, health care, retirement, and affordable housing as urban residents. New structural dual contradictions within urban areas have emerged, which constrains the positive effect of urbanization that could have pushed forward domestic demand and structural upgrading of the economy. There are also potential risks to the security of the society (Xu 2013).

The imbalanced distribution of the population and resources was accompanied by an overload on environmental resources. China's rapid economic development was grounded on the unrestricted use of carbon energy, particularly coal, and resulted in an increasingly obvious negative environmental impact all over the country (Liu and Diamond 2005; OECD 2013). The unprecedented levels of environmental degradation were to a large extent linked to the business-as-usual energy structure. By 2010, China had become the world's largest energy consumer and its energy consumption accounted for one-fifth of the world's consumption (Leggett 2011).

China's poor environmental record also challenged the central state's ability to maintain its high economic performance. Water scarcity, soil contamination, and air pollution not only created environmental overload (Liu and Diamond 2005; Kahn and Yardley 2007) but also began to exact a monetary cost, estimated to be around 13.5% of GDP in 2005 (Deutsche Welle 2015). In addition, a number of writers have indicated that 'environmental mass incidents' have increased dramatically year by year after the economic reform (Shapiro 2012, 131). As Wang stated:

The number of legal petitioners has grown astronomically as pollution has worsened throughout the country and more than 40 new specialized courts or tribunals dedicated to hearing environmental lawsuits are now hearing cases, many of them brought by public interest plaintiffs including NGOs, private citizens, and environmental protection bureaus (2011; as cited in Shapiro 2012, 128).

The overloading of environmental capacity is now firmly on the political agenda, attracting the criticism from a number of commentators and policy makers. Significant warnings raised by both domestic and international media seem to have pushed China's political elites into a recognition that a crisis is emerging and that the current political-economic regime is unsustainable.

2.2 The Partial Return of Centralized Planning

Official recognition of the extent of the crisis was made clear during the National People's Congress and Chinese People's Political Consultative Congress in 2015, in which Li Keqiang spoke bluntly at a press conference on the newly released government report, placing environmental protection and green urbanization at the very front of the tasks facing the State Council (BBC 2015; Xinhua News Agency 2015b). Key policy documents put forward in recent years have developed the notion of the 'New Urbanization'. In 2014, the State Council released a lengthy policy document called "The National Guidelines of New Urbanization, 2014–2020" (Guojia xinxing chengzhenghua guihua, 2014-2020, 国家新型城镇化规划, 2014-2020), with a list of implementing strategies. In the document, policy makers highlighted urbanization as an important symbol of national modernization and set a new guiding ideology for urbanization. It stated, '[Chinese] Urbanization has been promoted against the backdrop of overpopulation, relative shortage of resources, fragile ecological environment, and uneven regional, urban, and rural development". To achieve modernization, the authors of the "National Guidelines of New Urbanization, 2014–2020" listed several areas for development: from justice, urban and rural coordination, efficiency planning, environmental and ecological conservation, cultural development, and government guiding market mechanisms to the reconfirmation of the overall organization and the principle of control by the central government. Most notably, the document eschewed any references to Western orthodox principles of diversity and inclusivity in its proposed urbanization strategy. On the contrary, it proposed a strategy of 'top level design' (Dingceng sheji, 顶层设计), particularly in terms of the development of ecologically sustainable new towns (Xu 2013; State Council 2011; Noesselt 2017, 350).⁴ This new policy thinking, which incorporates the precautionary principle in tackling environmental problems at their source, emphasizes that in formulating policies, each department must accept higher level institutions, such as the State Council, to coordinate various departments in the governance system. For example, in energy governance, the State Council leads the Ministry of Environment, the National Development and Reform Commission, and provincial governments to tackle the long-running challenges (Liu et al. 2013, 145; Chen 2016, 200).

The focus on top-down planning and steering was intended to "coordinately promote stable economic growth and structural optimization" (Xinhua News Agency 2015a). With its clear emphasis on the key role of the scientific and technocratic bureaucracy, the document rejects the orthodox template put forward by the World Bank and other international organizations, which prioritized an open and participatory process. By contrast, the Chinese document indicated a concerted move in the opposite direction, albeit for domestic reasons: to address the negative consequences of administrative decentralization (Shin 2013; Sorace and Hurst 2016).

⁴ These initiatives seem contrary to the joint research report "Urban China: Toward Efficient, Inclusive and Sustainable Urbanization", coauthored by the State Department and the World Bank in 2014, which advocated an open and inclusive urbanization approach.

Policy documents from recent years indicate that the Xi-Li administration's approach to dealing with sensitive environmental issues is to look to enhance the technocratic bureaucracy's steering capacity. One of the most significant of these documents was the revised Environmental Protection Act 2014, which came into force in 2015. The Act proposes a number of new institutional arrangements and policy instruments that are designed to allow the central state to further strengthen its ability to steer policy formulation and implementation.⁵ For instance, a new environmental pollution warning mechanism deploys the 'precautionary principle'⁶ to allow closer monitoring of local government (Article 47) and also incentivize local officials to conform to and act in the interests of central government's environmental objectives. The document also proposed a tougher approach to enforcing accountability by aligning performance to officials' promotion prospects, a potential sanction that had previously been absent (Shapiro 2012). Other potential sanctions and rewards were now to be exercised by the Ministry of Environmental Protection, such as the right/power to detain the property of enterprises that have breached the environmental regulations and the right/power to sanction illegal enterprises (including sanctions in conjunction with other administrative departments such as financial and/or land use approval). The revised law also added a centralized regulatory intervention mechanism to address and sanction non-compliant behavior of both local government and enterprises, as well as to reduce rent-seeking behavior by business and government officials.

One new measure introduced by central government since Xi Jinping came to power is the establishment of 'environmental inspection teams' (*huanjing jiancha xiaozu*, 环境监察小组). As with all similar inspection teams (*xunshizu*, 巡视组) dispatched by the Party-State, environmental inspection teams contain retired ministry officials and officials from the Organization Department of the Chinese Communist Party who carry out tours of provincial administrative units' environmental monitoring facilities. This top-down mode of inspection was strongly advocated and subsequently institutionalized in 2015 by the Deepening Reform Leadership Small Group (Naughton 2017, 5–6). Xi Jinping's 2017 report to the nineteenth party congress proposed more formal mechanisms of centralized monitoring by establishing natural resources asset management and natural ecological regulatory agencies. The logic of establishing these mechanisms was made explicit by Yang Weimin, the Deputy Director of the Central Finance Leading Group Office, who pointed out:

In the past, almost all the departments involved in natural resource management have set up their own protected areas. There are a large number of these areas, covering a large amount of territory, but the regulation is not in place or is not working. In addition, a piece of land may be allocated by different departments for different purposes. We must have a unified, complete spatial

⁵ For many years, environmental legislation in China has often been considered positive, but due to the weak law enforcement, environmental governance has been severely criticized.

⁶ See, for instance, O'Riordan and Cameron (1994) and O'Riordan and Jordan (1995) for discussions of the concept in practice.

planning process at the heart of the national governance system (Xinhua News Agency 2017).

Yang Weimin's words articulate a mode of governance that is different from the established de-centered paradigm of environmentalism advocated in the West. On the contrary, it relies on top-down governance mechanisms carried out by the party and state apparatus. It prioritises outcomes over process in a fashion that is antithetical to the orthodox Western practices.

2.3 Green Urbanization and Sustainable Infrastructure

One of the most significant keys for the delivery of the Chinese central government's objectives is the restructuring of China's energy sector, in particular its reliance on carbon-based energy. It is striking that the current Xi-Li administration appears to now be willing to confront carbon interests and to exercise top-down decision power to enforce policy implementation (Green and Stern 2016). Specifically, the Xi-Li administration talks about seeking a new path in which 'energy waste could genuinely be reduced and at the same time (we) keep the growth of economic development' (Xu 2014a; NEA, DRCSC and Ministry of Land and Resources of the PRC 2016). It is proposed that this new path should include a series of new, strict, enforcement measures over the industry with the aim to mitigate large industrial greenhouse gas emissions, as well as a variety of policy instruments such as energy-saving assessment reviews, finance and land use pre-assessments, and other 'gateway' controls for steel, nonferrous metals, building materials, petrochemical, and chemical industry products, requiring these business actors to implement environmental impact assessments before being given appropriate administrative approval for projects.⁷ In addition, the new Act proposed tackling air quality issues, for instance over the prevalence of particulate matter in the atmosphere. In 2013, the 'Action Plan for Atmospheric Pollution Prevention' (Daqi wuran fangzhi xingdong jihua, 大气污染防治行动计划) jointly issued by the NDRC and the Ministry of Environmental Protection, introduced new measures to enforce implementation and subject local governments to accept central government assessment of their performance. These measures were to be coordinated centrally (Johnson et al. 2017, 116).⁸

On the evidence so far from the early years of the Xi-Li administration, we can observe a re-centralization of state power and a reduction of autonomy further down the administrative chain (Naughton 2017; Van Rooij et al. 2017). As mentioned earlier, central government implemented a cap on coal electricity (*Meidian zongliang*)

⁷ Although it seems too early to conclude ultimately whether China will really decouple the use of fossil fuels and economy growth, data indicates that, over the past two years, China's overall coal use has been reduced: Economic growth in 2014 remained at the same level as the previous year, but the use of coal in 2014, however, fell by 1.6% (Macauley 2015). Perhaps what is more surprising is that in 2014 China's carbon emissions also fell for the first time after increasing sharply during the reform and opening up process. According to an estimation by the International Energy Agency, China's annual carbon emissions fell by 2% in 2014 alone (Lean 2015).

⁸ This includes the National Development and Reform Commission, Ministry of Environmental Protection, Ministry of Industry and Information Technology, Ministry of Finance, Ministry of Housing and Urban Affairs, National Bureau of Energy, and so on.

guanzhi, 煤电总量管制)⁹ and this was augmented by a new requirement, introduced in 2014, for key enterprises¹⁰ to submit extensive details of their estimated greenhouse gas emissions (State Council 2014b). As part of this initiative, central government introduced standardized guidelines for the accounting and reporting of greenhouse gas emissions to preempt problems of asymmetric information in the central–local relationship.

Attempts to standardize the reporting of environmental data where a necessary precursor to central government issuing targets for reducing greenhouse emissions. The Action Plan set out the intention to eliminate at least 150 GW generated by coal-fired electric plants by 2015, followed by the phase out of another 350 GW by 2020 (China Daily 2014). These targets represent a decisive break with the past, given that since the Mao era the coal industry has been privileged in China's plans for endogenous technological development, self-sufficiency, and energy security (Chen and Lees 2016, 579-581; Qi et al. 2016). China's domestic environmental crisis has compelled the current leadership to restructure its energy sector. At the same time, China has made the link between its domestic crisis and the global environmental emergency and has taken on a more active global leadership role (Mathews and Tan 2014), often in co-operation with the United States (Bäckstrand and Elgström 2013, 1373). Despite the interregnum of the Trump Presidency, which has put it on hold for the time being, this nascent Sino-American co-operation reduced the number of institutional veto players and focused directly on the urgency of tackling global climate change.

2.4 Social Justice and the Need for the Efficient Execution of Policy

Beyond discussion of technical measures to reduce greenhouse emissions, any assessment of the Action Plan must also engage with issues of social justice and fairness. As already discussed, China's rapid economic growth and unplanned urbanization highlighted issues of geographical justice, including the unequal treatment of rural Chinese compared with their urban counterparts. The urbanization policy prescriptions provided by the Xi-Li administration seem to indicate a shift towards reforms focused on alleviating the issue of unequal rights at the local level. This shift was reflected in the 2014 policy document 'State Council's Opinion on Further Reform of the Household Registration System' (*Guowuyuan guanyu jinyibu tuijin huji zhidu gaige de yijian*, 国务院关于进一步推进户籍制度改革的意见), which proposed a 'a unified urban and rural household registration system' designed

⁹ The plan of implementing the cap on coal electricity was written in the "Strategies for Energy Industry to Strengthen Air Pollution Control" (*Nengyuan hangye jiaqiang daqiwuran fangzhigongzuo fangan*, 能源行业加强大气污染防治工作方案. 2014a. No. 506) and the "Energy-Saving and Emission Reduction: The Action Plan for Upgrading and Transforming the Coal-Fired Power Industry for 2014–2020" (*Meidian jieneng jianpai shengji yu gaizao xingdong jihua, 2014–2020*, 煤电节能减排与改造行动计划, 2014–2020. 2014b. No. 2093).

¹⁰ This refers to enterprises that reached 13,000 tons of carbon dioxide in 2010 or those corporations whose total energy consumption reached 5000 tons of standard coal in 2010.

to normalize and standardize urban immigrants' status.¹¹ The measures included an attempt to implement an effective residence permit (*Juzhuzheng*, 居住证) system and accelerate the construction and sharing of a national population information database (State Council 2014a). Once again, we see explicitly top-down measures introduced to overcome the implementation gap caused by decentralization and, in doing so, mitigate the persistent gap in welfare between rural settlers in cities and established urban citizens, particularly in terms of the inequality in access to education, employment, and health benefits.¹²

In addition to the reform of urban and rural household registration restrictions, the Xi-Li Administration has also moved to centralize the coordination of social security policies themselves. For instance, central government has sought to introduce a 'unified pension scheme for the rural and urban residents' (Xu 2014b) as well as a 'Comprehensive National Pilot Program of New Urbanization' (Guojia xinxing chengzhenhua zonghe shidian fangan, 国家新兴城镇化综合试点方案), which designated 64 new administrative units to implement the pilot policy, which was to commence in the coastal provinces and to be adapted to local conditions. The preliminary outcomes of the pilot projects are due in 2017. From 2018 until 2020, central government intends to synthesize the experience of these local pilots and to 'implant' similar institutional arrangements throughout the entire territory of China (People's Daily 2015). The regional experiment that is deemed most successful will eventually be rolled-out at the national level as an environmental policy template, so that the project of new urbanization can then be implanted according to local conditions. This cycle of policy development further enhances central government's steering capacity.

Over the last decade or more China's developmental path has moved away from a previously single-minded emphasis on economic growth and begun to address the environmental consequences of that growth process. Where these policies address issues of urbanization in China, this shift has also begun to encompass issues of social justice and fairness in terms of the disparity between the rights and welfare enjoyed by rural and urban citizens. What has also become evident from the early years of the Xi-Li administration, however, is that the central state has begun to concentrate more steering capacity to itself, to overcome an increasingly irresistible sense of crisis, including a growing environmental consciousness among Chinese citizens. The discussion around urbanization or environmental protection is not a new one, but the Xi-Li administration's reforms demonstrate the level of urgency that is now acknowledged by Chinese elites. In short, the cognitive problem identified by the policy elites is not that there has been too much concentration of power,

¹¹ This policy is an attempt to eliminate the household distinction of agricultural and *non-hukou* aliens and to promote a unified system for the registration of residents, thereby placing all public services into a single information system to obtain control. Here, the town identity number is a unique identifier, enabling the central government to garner political control by more or less dispelling information asymmetry.

¹² Yu and Ding (2008) have conducted an empirical analysis of the unfair treatment of migrant workers, which has long been experienced because of the lack of household status in cities, pointing out the structural discrimination of the existing regime.

but rather that power is too scattered and fragmented in this policy area. All in all, the Xi-Li leadership seems to be focused more intently on the efficient execution of urban policy.

3 Conclusion

Our analysis in this article indicates that, at the level of institutional strategies, the policy of the 'new' green urbanization and the strategy for its effective implementation indicates an emerging paradigm of authoritarian environmentalism, in which we can observe a break by the Xi-Li administration in its approach to centralization as a tool of policy. In other words, the Xi-Li's more explicitly top-down mode of governance has been deployed to manage and reconcile the often competing imperatives of development and environmental protection. We find that, in terms of operating practices, there is no evidence of the orthodox participatory model that originated from the emancipatory tradition of environmentalism in the Western context. In the face of the growing environmental crisis in China, the Chinese Communist Party did not seek to emulate the orthodox environmental governance paradigm associated with notions of sustainable development. This means that it did not delegate decision-making power to the lower tiers of government or encourage and cultivate dialogue with civil society. On the contrary, in implementing its policy of the New Urbanization, Chinese central government has sought to implement its own policy instruments by re-centralizing policy making and enforcement. In particular, central government has attempted to overcome the loss of steering capacity associated with decentralization and standardize the content and implementation of urban policies. Recent policy documents indicate that Xi-Li administration intends to strengthen and extend the hierarchical command and control mechanisms and consolidate the powers of environmental and urban planning at the top of the chain of command.

As noted the central state's new emphasis on centralized steering capacity represents a break from the orthodoxy of sustainable development and assumed the role of the 'interventionist state' (Giddens 2011, 96; as cited in Blühdorn 2013, 24). We identify this as evidence of an emerging *authoritarian environmentalism* that aims to limit the number of potential veto players in the policy process. The new green urbanization process promoted by the Xi-Li administration aims to consolidate the Chinese Communist Party's ability to steer and control the process of modernization. The emphasis on outcomes over process, including a partial return to a centralized planning mode, reverses the trend towards what many China scholars have called fragmented authoritarianism (Lieberthal and Oksenberg 1988; Lampton 1987). It remains to be seen whether this recentralization of power and administrative discretion will be extended to other policy areas in China.

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