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A relational approach to the role of the state in societal transitions and transformations towards sustainability

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ABSTRACT

The important role of the state in societal transitions and transformations towards sustainability has long been acknowledged. Yet, existing theoretical frameworks in the field remain only partially capable of providing the necessary analytical support to study this. In response, this article proposes a relational approach to the role of state power in societal transitions based on the strategic-relational approach to state theory as developed by Bob Jessop. The resulting analytical framework is built around six mutually intertwined dimensions of the state: forms of representation, internal organisation, forms of intervention, social basis, state projects, and hegemonic formation. The article relates each of these to recent issues and research within energy and transitions scholarship and specifies how the framework can be used in empirical studies. Through this approach a sophisticated conception of the state is provided, moving beyond understanding it in purely institutional terms or as a singular, unitary, or monolithic actor.

1. Introduction

It has long been clear that the state has important roles to play in societal transitions towards sustainability (e.g., Eckersley, 2004; 2021; Barry and Eckersley, 2005; Meadowcroft, 2005a; 2005b; 2007; 2009; Stern 2007; Grubb, 2014; Geels, 2014; Bäckstrand and Kronsell, 2015; Figenbaum, 2017; Langhelle et al., 2019; Köhler et al., 2019). Nevertheless, transitions scholars have largely shied away from explicitly integrating state theory in the analytical frameworks that guide empirical work (Johnstone and Newell, 2018; Newell, 2019; Ford and Newell, 2021). In response, this article aims to provide a framework inspired by relational state theory. More precisely, it draws on the work of state theorist Bob Jessop (2016) and his strategic-relational approach (SRA) to state power. When adapted and operationalised for use in transitions scholarship, the resulting relational approach to the role of the state can enable scholars to become better attuned to how and why states varyingly accelerate and impede transitions and their trajectories (Johnstone and Newell, 2018; Eckersley, 2021).

This article builds on and responds to Phil Johnstone and Peter Newell's (2018) critique of how the role of the state has been underdeveloped and neglected in the transitions field, as well as two more recent calls for and attempts to incorporate Gramscian theory. First, Robyn Eckersley (2021, p. 246) argued that a distinction between transitions and great transformations is important regarding state agency and "the depth and direction of change towards ecological sustainability". Eckersley furthermore argued that Gramscian state theory is well-equipped as a basis for the conjunctural analyses needed to identify the next best steps towards a great transformation. Second, Adrian Ford and Peter Newell (2021) have taken more substantive steps toward the operationalisation of key

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Gramscian concepts for use in transitions scholarship (i.e., hegemony, historical bloc, integral state, war of position, passive revolution, *trasformismo*). They do so to gain a better understanding of power in sustainability transitions, especially regarding incumbency and the associated dynamics of regime resistance and accommodation. By comparison, our focus is somewhat narrower as we attempt to address the role of *state power* in transitions and transformations rather than power more generally.

The article is structured as follows. *Section 2* provides a brief overview of existing work on the role of the state in societal transitions and transformations towards sustainability with a particular focus on the contributions mentioned above. *Section 3* introduces and develops an understanding of relational state theory through Bob Jessop's (2016) SRA and its six dimensions of the state. Using these dimensions, *Section 4* shows how such a relational approach allows for a better understanding of the role of the state by drawing on examples from energy and transitions scholarship for each of the six dimensions. In *Section 5*, we take some initial steps to specify how the approach can be applied in empirical analyses, before drawing some final conclusions in *Section 6*.

2. A brief overview of transitions scholarship on the state

Research on sustainability transitions has increasingly engaged the state, recognising that it has access to a "range and depth of powers that only the state can call upon (...) if radical and rapid transitions are to be achieved which allow humanity to operate within planetary boundaries" (Johnstone and Newell, 2018, p. 72; see also Rockström et al., 2009). As such, the state has begun to take centre stage in scholarship where it is often conferred as having important roles integral to limiting global temperature increases by marshalling efforts towards sustainability. However, precisely how and if the state apparatus can be mobilised and utilised to bring about the necessary changes is highly contextual and often a consequence of a complex interplay of actors within and beyond the apparatus competing for power and resources (e.g., Meadowcroft, 2011; Avelino et al., 2016; Eckersley, 2021). In this section, we briefly highlight important contributions from the field that help determine the prerequisites for a more explicit theorisation of the role of the state in transitions.

The increasing attention to the state in the field is highly welcome, but as implied above it comes with a few caveats that need to be taken seriously. States have an obvious role to play in transitions, because they involve "large-scale, society-wide shifts in infrastructures and the provision and consumption of services and resources" (Johnstone and Newell, 2018, p. 72). Indeed, states would seem to occupy a pivotal position since "no other institution can match the state's regulatory capacity" and "nor is there any other institution with the resources and financial transfer mechanisms to provide social welfare and address inequalities and injustices on the scale of states, and this makes them central to managing the unavoidable dislocations that will occur in the transition process" (Eckersley, 2021, p. 248). In the post-Westphalian era, we need to add that the 'scale of state' may refer both to the national level and to the supranational level where state formations such as the European Union (EU) arguably have an even more pronounced capacity for enabling great transformations.

It is tempting to highlight the potential for states to use their leverage to drive, push, and accelerate transitions towards sustainability. A one-sided focus on the potential for *enabling* transitions, however, runs the risk of ignoring the potential of the state for *hindering* them. Any adequate approach to the state needs to be able to capture both sides. As noted by Eckersley (2021, p. 249), states "have a long history of aiding and abetting environmental destruction", indicating a need to figure out the conditions of possibility for states to play an enabling rather than a hindering role. Indeed, recent assessments have been more pessimistic about the actual transformative power of states, rendering somewhat of a paradox: state actors have access to powerful capacities for change but are often unable or unwilling to marshal them, especially when states are closely wedded to (petro)capitalist interests (e.g., Newell and Paterson, 1998; Harvey, 2014; Bailey, 2015; Mol, 2016; Paterson et al., 2016; Johnstone and Newell, 2018; Hausknost and Hammond, 2020; Feola, 2020; Eckersley, 2021).

Expanding on this, Johnstone and Newell (2018, pp. 75–79) identified five areas of neglect in how the role of the state has been conceived. Rather than indicating lacunae per se, we perceive the singling out of these areas as an attempt to pinpoint needs for future work in moving the field forwards:

- 1 Historical outlook, for instance in how alignments between actors competing for state support have shifted historically. Notable work includes Coronil (1997), Baker et al. (2014), and Lockwood et al. (2017).
- 2 Broadening the geographical scope to avoid a too narrow focus on the nation state, pushing instead for further 'globalisation' of perspectives. This has already been pursued in various ways by Newell (2008), Schmitz (2015), and Hargrove et al. (2019), among others.
- 3 Appreciation and analytical attention to the multi-dimensionality of state power, including questions about where powers for transition are located within the state apparatus. Insights can be drawn, for instance from Meadowcroft (2007), Lockwood et al. (2017), and Roberts and Geels (2019).
- 4 De-fetishization of state formations to ensure that they are not seen as unitary actors separated from societies and markets but deeply integrated with them i.e., a relational conception of the state. Examples of how to ensure this is given by Argyriou and Barry (2021) and Ford and Newell (2021).
- 5 A shift of attention to the material side of the state and especially the pathways generated by the adoption of certain technologies. The work of Avelino et al. (2016) and Kok et al. (2021) are useful starting points.

We contend that all these points can be addressed by developing and applying a relational approach to the state – and not just number four as suggested by Johnstone and Newell (2018). A relational approach is furthermore capable of responding to Eckersley's (2021, p. 253) call for a neo-Gramscian theory of the state which would enable transitions scholarship "to move towards a less abstract and more dynamic, historicist understanding of the state". Above all, a relational approach provides a safeguard against the risk of reducing and simplifying states as unitary entities seen to be unproblematically capable of making decisions and taking actions – i.e., as monolithic actors, direct wielders of power, and as decision-makers of their own volition (Harvey, 2014; Johnstone and Newell, 2018). If we are to understand their roles in transitions and transformations in the past, present, and future, the multifaceted and non-unitary nature of state formations needs to be thoroughly and consistently accounted for in our analytical frameworks. This hyper-complexity of the state has long been recognised, for instance in political science, philosophy, and geography (e.g., Ferguson and Mansbach, 1989; Bartelson, 2001; Jessop, 2007; 2009; McGuirk and O'Neil, 2012). As transitions scholars we need to learn from these traditions.

Transitions scholarship is already rich in ideas about the kinds of state that would be able to bring about great transformations. For instance, Eckersley's (2004) green state and Meadowcroft's (2005a) ecostate are two prominent examples that have provided important imaginaries about how states could support such change. However, such interventions have largely been developed from normative ideas about what states ought to be while paying less attention to what states are and how they work. We therefore need to work on expanding our capacity to explain why, for example, the environmentalist state fails to appear if we are to heighten our chances of charting a route towards it (Hausknost and Hammond, 2020). Eckersley's (2021) recent examination of the role of states in orchestrating sustainability transitions is a step in the direction of a less notional and more dynamic understanding where states are treated as they are rather than how we want them to be (Johnstone and Newell, 2018; Eckersley, 2021). Likewise, Ford and Newell's (2021) operationalisation of key Gramscian concepts for transitions scholarship has been a helpful contribution. The present article seeks to continue in this direction by proposing a relational approach to the state.

3. Relational state theory

Taking heed from Johnstone and Newell (2018), Eckersley (2021), and Ford and Newell (2021) this article proposes a relational approach to the state in societal transitions and transformations towards sustainability. It employs a relational ontology of the state based on Antonio Gramsci's (1971) theory of the *integral state* and adapts a version of the *strategic-relational approach* (SRA) to state theory developed from the 1980s onwards by Bob Jessop (1982; 1990; 2002; 2007; 2009; 2016). What the SRA provides, it should be noted, is not so much a theory of the state as it is a theory of state power, how it is exercised, how it succeeds, and how it fails. Jessop (2016, p. 51) explains that "the aim of state theory should be to demystify the state", and that "the state is a complex and polymorphous reality that is best analysed from several entry points and standpoints rather than by focusing one-sidedly on just one of its elements and possible crystallizations". With this in mind, we find multiple entry points in the six different dimensions of the state as identified by Jessop (1990) and use these to propose an initial framework for analysing the role of the state in sustainability transitions (presented in *Section 3.2* and operationalised in *Section 4*).

3.1. The strategic-relational approach

The first challenge in establishing a relational view is to resist the temptation to artificially separate the state from society. Gramsci insisted on an integrated view where the state is not seen to be co-extensive with its apparatus but with the society to which it belongs or corresponds. He defined the *integral state* as follows: "State = political society + civil society, in other words hegemony protected by the armour of coercion" (Gramsci, 1971, p. 263). This serves to highlight that whenever the state is seen to 'do something', we ought to consider it not simply as the act of a single, unified entity but as an event that may veil any number of mutually entwined practices performed by actors working in, through and in interaction with different parts of the state apparatus. The second half of the definition refers to the interplay between consent and coercion through which state power is constituted.

For the SRA, Jessop (2016, p. 176) rephrased the Gramscian definition of the integral state as "government + governance in the shadow of hierarchy" to redirect attention "from the state as a juridico-political apparatus towards the modalities of the exercise of state power". While subscribing to an integral conception of the state, Jessop does frequently separate the state *apparatus* from its wider social context. This rests on the claim that the "core of the state apparatus comprises a distinct ensemble of institutions and organizations whose socially accepted function is to define and enforce collectively binding decisions on the members of a society in the name of their common interest or general will" (Jessop, 1990, p. 341). It is noteworthy that this definition allows for clearly identifiable state institutions around the core of the apparatus while insisting on the impossibility of demarcating its outer boundaries. The shifting of emphasis from 'the state' to 'state power' is accompanied by a definition of the latter as "a contingent expression of a

¹ In the opening of *section 4* we return to explain how our relational approach responds to each area.

² The integral state is precisely what predicated Eckersley's (2021, pp. 253-254) turn to Gramsci: "Neo-Gramscian theory, which rejects a firm ontological divide between capitalist states and societies while also recognising the relative autonomy of the state, can accommodate both structure and agency; it understands the exercise of state power in historically dynamic terms as the institutionally-mediated condensation of the configuration of social forces and hegemonic understandings". For a more detailed discussion of Gramscian concepts in the context of transitions see Ford and Newell (2021).

³ In addition to inspiration from Gramsci, the SRA contains key ideas drawn from Michel Foucault's work on power and governmentality and Nico Poulantzas' theorisations of the capitalist state.

changing balance of forces that seek to advance their respective interests inside, through, and against the state system" (Jessop, 2016, p. 54). The purpose was to "reject attempts to capture 'the essence' of the state and aim instead to elaborate useful theoretical and methodological tools to study its changing forms, functions, and effects" (Jessop, 2016, p. 54). As such, the SRA moves decisively away from conceiving the state as a distinct, unified entity or actor, toward a conception of the state as a social relation. We contend that this is exactly the kind of state theory that is needed to study the role of the state in sustainability transitions, because it allows for fine-grained analyses of how the exercise of state power can act variably, and even simultaneously, as an enabler and a hindrance for transitional and transformational change.

But what does it mean to recast the state as a social relation rather than a unified actor? Most importantly, it means that "whether regarded as a thing (or, better, as an institutional ensemble) or as a subject (or, better, as the repository of specific political capacities and resources), the state is far from a passive tool or neutral actor" (Jessop, 2016, p. 54). Instead, the state will always be predisposed towards some means of action and some types of actors through its specific history of formation and evolution – captured in Jessop's description of the state as being *strategically selective*. The state apparatus, then, is not a neutral terrain nor a level playing field: "the calculating subjects that operate on the strategic terrain constituted by the state are in part constituted by the current strategic selectivity of the state system (...) as well as by past state interventions" (Jessop, 2016, pp. 55-56). It follows that analyses of state effects must be based on an understanding of the political contestation that plays out on the state terrain and of the ensemble of institutions present within and constitutive of the state (see also McGuirk and O'Neill, 2012; Fisker, 2019). Jessop's (2009) metaphor of the state as an *institutional ensemble* is particularly useful here as it encapsulates the state, its formation and formulation, its power, materiality, and capacities, neither as a singular whole or as a unified or monolithic actor, and subsequently, neither belonging to or under the control of a single actor or institution now or in perpetuity.

Accordingly, the SRA expects that the state will have "inbuilt biases that privilege some agents and interests over others; but whether, how, and how far these biases are actualized depends on the changing balance of forces and their strategies and tactics" (Jessop, 2016, p. 54). To account for such biases Jessop imported Andrew Dunsire's (1996, pp. 318–319) concept of *collibration* as a form of meta-governance: "divide and rule, loading the scales, rigging the market, fiddling the books, levelling the playing field, moving the goalposts, and so on. All signify disturbing a balance, or helping to establish a balance, or shifting a point of balance". Collibration is the name that Dunsire gave to all such stratagems. ⁴ For Dunsire, acts of collibration are among the most important stabilising forces in society and may be carried out by actors in many different subsystems, including but not exclusively in the state apparatus (see also Fisker et al., 2022). In the SRA, the same sense of distributed agency is applied more broadly to state power. While Jessop (2016, p. 56) identifies "changing sets of politicians and state officials" as "key players in the exercise of state powers", he also insists that "they always act in relation to a wider balance of forces".

3.2. Towards an analytical framework: six dimensions of the state

The question that now arises is how to establish an analytical framework which can take all of this in to make sense of how state powers are mobilised in concrete situations. We find an answer in Jessop's (1990, p. 345) helpful identification of six dimensions of the state through which "the organizational form and sociopolitical bases of the state" can be analysed: (1) forms of representation; (2) internal organisation; (3) forms of intervention; (4) social bases of state power; (5) state project(s); and (6) hegemonic formations.⁵

Forms of representation refer not only to the electoral and administrative systems of liberal-democratic states but also to the many other ways in which various social forces gain formal or informal representation "to voice and promote their contingent material interests and their unconditional ideal interests (or values) by virtue of their differential access to centres of political formation, decision making, and implementation" (Jessop, 2016, p. 61). This takes place both in and beyond the state apparatus. Mass media, social movements, and political parties are, for instance, often key sites of representation positioned outside the state apparatus but as important parts of the integral state.

Internal organisation refers to the institutional architecture of the state apparatus and how it is vertically, horizontally, and transversally organised. This concerns the distribution of powers between the various branches of government and amongst the nested scales of territorial jurisdictions from the local and all the way to the transnational. Among topics for special consideration, Jessop (1990, p. 345) singles out "the relative weight of different parts of the administrative apparatus" as well as "the relations between nation-states and the emergent supranational state forms and between central government and local, regional and para-statal forms of rule". While complex to begin with, such distributions of power are moreover continuously shifting in repeated rounds of reform and adjustment. Acts of collibration, therefore, often target the internal organisation to create situations where "countervailing powers may restrict politics as the art of the possible and (...) introduce frictions and delays into the political process when major changes are sought" (Jessop, 2016, p. 67).

Forms of intervention refer to the means and capacities for action that are invested in the state apparatus, specifically when these are directed "beyond the boundaries of the state system in its narrow sense" (Jessop, 2016, p. 70). At its most obvious, this includes coercive means such as legislation and taxation, but it can also refer to more subtle and less visible means of intervention whereby state

⁴ Based on the latin *libra*, Dunsire (1996, p. 319) elaborated on his introduction of the term: "When weights placed in one pan of a letter balance begin to equal the weight of a letter in the other, the scales librate, oscillating gently around the horizontal. Co-libration means taking a part in this process, introducing a bias or compensator into such a field so that it arrives at a steady state when otherwise it might not".

⁵ In *The State*, Jessop (2016) reiterates the six dimensions, but for the current purposes we prefer the clarity and precision of the terminology presented in *State Power* (Jessop, 1990).

actors manage to intervene in society through consent and self-disciplining behaviour – i.e., to forms of governmentality. As argued by Davies (2014), a Gramscian perspective ensures that both coercion and consent is considered while expecting that both will always be in play. Once again, collibration is important here since the repertoire of possible interventions is never finally settled. Rather, state actors are themselves involved in "demarcating the changing boundaries between public and private but also the specific institutional mechanisms available for intervention" (Jessop, 1990, p. 345).

Social bases of the state refer to the institutionalised social compromises which allow states to survive and function. Rather than being stable and given, such compromises are unstable equilibria which are constantly subjected to the pressures of a changing set of social forces and the various alliances that continuously form and dissolve amongst them. While often referred to in national constitutions as 'the people', in practice a social basis consists of a "specific configuration of social forces (...) that support the basic structure of the state system, its mode of operation, and its objectives" (Jessop, 2016, p. 72). There is an intimate connection here to the forms of representation in the sense that the extent to which such support is willingly provided often depends on how various social forces can attain adequate representation. State failure, accordingly, is often associated with the withdrawal of support from key forces.

State project(s) refer to the principles and practices that "(1) define and regulate the boundaries of the state system vis-à-vis the wider society and (2) seek to provide the state apparatus thus demarcated with sufficient substantive internal operational unity for it to be able to perform its inherited or redefined 'socially accepted' tasks" (Jessop, 2016, p. 84). So, the object of the social compromise referred to above is a state project. In other strands of state theory, something similar is referred to as the functional imperatives of the state which it must uphold to maintain itself as a state (for a full discussion see Eckersley, 2021). The advantage of adopting Jessop's relational conception of state projects rather than the functionalist conception of imperatives is that it does not set in stone what a state is or what it must or must not do to survive. In any concrete situation there will indeed be imperatives, but they cannot be assumed always to be the same. In other words, the relational account reserves leeway for states to metamorphose into new kinds of states (with different imperatives).

Hegemonic formation is closely related to state projects in the sense that the latter crystalise out of broader hegemonic tendencies which condition what kind of state project is politically feasible in any given conjuncture. A state project pursuing great transformations is only politically feasible if it is somewhat reconcilable with the hegemonic formation. The scope in this dimension is global and considers the pressures exerted through supranational entities, multilateral organisations, and the international state system in general. State projects straying too far from the norms promoted and defended through global organisations such as the United Nations, the International Monetary Fund, and the World Bank, and regional bodies such as the EU, tend to become excluded through economic and diplomatic sanctions, trade embargoes and so forth. So, whereas the social basis of a nation state is more-or-less co-extensive with its territory, realigning state projects with the social basis is not necessarily a feasible option if it involves straying from the path of what is deemed acceptable by prevailing hegemonic formations. While state projects are pursued and promoted by state officials – remembering that there may be competing state projects originating in different branches of the apparatus – hegemonic formations are much broader and co-constituted throughout the social formation. In this sense, hegemonic formations are closely connected to historical blocs as conceived by Gramsci (1971) (see also Ford and Newell, 2021).

Even with these six dimensions in mind it is important to understand the limitations of state theory before moving to engage them for use. In close correspondence to the integral definition of the state, Jessop (2009, p. 371) holds that "an adequate theory of the state can only be produced as part of a wider theory of society", because the state is "peculiarly charged with overall responsibility for maintaining the cohesion of the social formation of which it is merely a part". Whilst appearing often to be quite fixed and stable, states are constantly changing and evolving. This is seen in the "increasingly artificial division between domestic and international affairs" marked by the growing inter-state system, where state sovereignty is increasingly questioned (Jessop, 2009, p. 369; see also Walker, 1993; Rosenberg, 1994). As such, a relational approach that is configured through these dimensions allows for an appreciation of the state's temporal and spatial dynamics but also its ability to interact beyond domestic territorial boundaries. Such an approach is crucial in the context of climate change and driving sustainable transitions and transformations, which will increasingly necessitate coordinated international and global actions across borders (see also Hay, 1999).

4. The state in sustainability transitions from a strategic-relational perspective

"And, at this point, therefore, the manuscript breaks off ... (to be resumed by those who take up the challenge to develop the strategic-relational approach in their own fashion and their own fields)" (Jessop, 2007, p. 245).

As prompted by Jessop, we outline a strategic-relational perspective on the role of the state in sustainability transitions with a point of departure in the six dimensions of the state. Throughout, we draw on examples from existing energy and transitions scholarship. The purpose is to show how the SRA can shed new light on the role of the state in transitions; on how it can both support and hinder change. Before moving on, however, we want to briefly explain how the proposed framework responds to the five areas of neglect pointed

⁶ Whilst these organisations belong to the supranational level in the internal organisation of state apparatuses, they also play decisive roles in hegemonic formations. Examples of this are the actions of the International Monetary Fund in Latin America and the European Troika in the Mediterranean (especially against Greece under the Syriza government) (see Ortiz & Béjar, 2013; Kentikelenis et al., 2016; Siamanta, 2019).

⁷ More-or-less because there are exceptions such as nation states with substantial diasporas. For the current article, however, we leave this aside while noting that in the context of a global climate crisis such exceptions may quickly become the norm.

out by Johnstone and Newell (2018). We contend that a properly relational approach to the state entails (1) deep historical attention to the formative and evolutionary processes of statehood and statecraft, including how these are not merely historical facts but form part of still on-going processes through which state projects are maintained and renewed; (2) a global outlook where the nation state is seen as merely one amongst many possible (and actual) state formations and where the potential for effective state action is often located at the supranational level which corresponds more closely with the scale of the problem; (3) a multi-dimensional view of state power which is attentive to how and by whom it is wielded and which allows for the state terrain to play host to competing and mutually contradictory political projects; (4) an integral perspective where the state is not seen to be simply co-extensive with its institutional apparatus but deeply entangled with the societal context in which it is embedded; and (5) a sensitivity to the material constraints, inertias, and compossibilities that the sedimentation of state practices affords. In the following we take some initial steps to specify how a strategic-relational approach can be applied in empirical analyses within energy and transitions scholarship.

4.1. Forms of representation

In energy and transitions scholarship, the forms of representation have been studied most intensely in work on vested interests (e.g., Geels, 2005; Verbong and Geels, 2010; E. Moe, 2010; 2012; 2014; 2015; Hoffman and Loeber, 2016; Avelino et al., 2016; Avelino, 2017; Köhler et al., 2019; Boute and Zhikharev, 2019). While this literature has brought important insights about the techno-institutional complexes that lead to carbon lock-in (Unruh, 2000), it has also engendered a somewhat problematic understanding of the relation between vested interests and the state, where the former are seen as something external to the latter, 'worming' their way in to co-opt state power. Moreover, there is often an (implicit) assumption that vested interests are malign by default (T.M. Moe, 2015). This may lead to the illusion that vested interests can and should be gotten rid of. In a relational approach, however, the state is always seen to be predisposed to cater for some interests above others, but crucially this can work both ways. Also, because the state is non-unitary, the various interests being served can to some degree be mutually contradictory. The fossil-fuel regime may have been able to sustain carbon lock-in through vested interests in key parts of the state apparatus (and beyond), but this does not exclude the simultaneous co-presence of, for instance, state-led 'incubation rooms' where certain niches find a protected space for development (e.g., Schot, 1998; Kemp et al., 1998, Geels, 2002, Geels and Schot 2007; Verbong and Geels, 2010; Meadowcroft, 2011). An approach inspired by the SRA would study these contradictory co-presences as exemplars of a continuously changing balance of social forces which determines the strategic selectivity of state action in specific situations. Furthermore, it would add additional nuance to discussions that often reduce these dynamics to niche-regime interactions when in fact much more may be going on and further exploration warranted.

An integral view of the state furthermore allows for a nuanced understanding of how vested interests gain and retain their status of privilege. Rather than look narrowly for explanations in the state apparatus, we can begin to appreciate how these interests also receive preferential treatment in how they are represented in the hybrid media landscape, in political parties, in social movements, and so forth. In this context, it can be useful to distinguish between the state apparatus conceived narrowly as an *institutional ensemble* (Jessop, 1990) and the integral state conceived more broadly as a *terrain of contestation* (McGuirk and O'Neill, 2012). Importantly, however, the state apparatus must be seen as a fully integrated feature of this terrain rather than something separate from it. As the metaphor implies, the different terrain features (state apparatus, media, parties, movements, etc.) can blend into each other, even if they may appear to be distinct and identifiable. To be sure, access to the institutional capacities and authority of the state apparatus need to remain a key topic of study, especially if we want to understand why some niches evolve into regimes while others do not. For instance, decisions within the state apparatus to support new interests that upset established interests within the status quo often involve a trade-off between what is gained and what is lost. 'Winners' and 'losers' are picked based not only on the perceived quality and competence of the niches in question, but also considering how much of a disruption they would entail for vested interests (Meadowcroft, 2011).

4.2. Internal organisation

Whether and how the state becomes a hindrance to or an enabler of transitions and transformations is conditioned by how the state apparatus is organised and, more importantly, by the formal and informal power asymmetries and hierarchies that exist amongst state institutions. Taking this dimension seriously ensures against "the state being seen as a 'black box' inside which external demands and support somehow get translated in unknowable ways into specific policies that are then directed outwards" (Jessop, 2016, p. 67). In transitions scholarship, such 'black-boxing' has been perpetuated mainly through taking for granted that the state can be seen unproblematically as a singular, unified, or monolithic actor (e.g., Meadowcroft, 2011; Johnstone and Newell, 2018; Feola, 2020). To be sure, this is not always the result of an oversight on the part of scholars but can instead be a consequence of the scope and focus of many studies. The empirical studies that do open up the black box of the state have already provided some important insights on how state decisions and actions come about, exactly where in the state apparatus they are made, and how they are pushed through (e.g., Meadowcroft, 2007; Mol, 2016; Lockwood et al., 2017; Roberts and Geels, 2019; Hausknost and Hammond, 2020). Importantly, such analyses cannot be limited by the boundaries of national states but must attend to the complexities added by the transition towards a post-Westphalian state system which also reconfigures issues of sovereignty.

⁸ If one is studying, for instance, transition-related changes in energy markets it is indeed reasonable to treat state interventions simply as something the state does which impacts that specific market without going into an analysis about how and why those interventions came about.

Another vital point concerns the false dichotomy between markets and state regulation, where states are assumed to regulate markets from the outside. As shown by the Carbon Majors Database (CMD) 36 of the 100 companies responsible for 71% of global emissions between 1988 and 2015 were state-owned. A further seven were state producers (CMD, 2017, p. 5). Furthermore, 59% of the 635 GtCO₂e operational and product greenhouse gas legacy emissions were from state-owned companies (CMD, 2017, p. 8). These companies should be seen either as part of or intimately connected to the internal organisation of the state apparatus. In any case, states have direct stakes as incumbents in current regimes, something which clearly must be factored into analyses concerned with the role of the state in transitions. An important task for empirical analysis is to locate the state actors who can shape, make, and implement decisions through energy companies owned and/or controlled by the state apparatus. A related task is to map the profound levels of institutional integration between the state apparatus and energy companies.

4.3. Forms of intervention

The most obvious aspect of state involvement in societal transitions is captured by the modes of intervention since this refers to the repertoire of actions available to state actors. Examples include subsidies, concessions, energy price regulations, and carbon taxes. Particularly well known is the historical case of the sail to steam transition, where interventions by the British imperial state featured prominently (Geels, 2002). In the more recent case of Germany's *Energiewende*, the German government published key policy documents and passed legislative support, providing substantial financial incentives (e.g., the German feed-in tariff) while re-evaluating policy and regulation based on the progress of the transition, making changes to enhance the prospects of attaining its goals (Kuzemko et al., 2016).

Through various forms of intervention, considerable influence can be exerted on market actors from within the state apparatus. For instance, Sovacool (2008) and Tomain (2017) have both highlighted the role of phase-out policies and direct market interventions in combatting the slow uptake of clean power in the United States. Further, in nine of the ten examples of rapid energy transitions identified by Sovacool (2016), state actors featured prominently in vital enabling roles. This is particularly interesting given the wide variety of national states covered in the study (i.e., Sweden, China, Indonesia, Brazil, Kuwait, Netherlands, France, Denmark, Canada) (Sovacool, 2016; see also Langhelle et al., 2019). Johnstone and Newell (2018, p. 74) note that state interventions, such as those mentioned above, are often the "consequence of political struggles to gain and execute state power".

The range of interventions available to state institutions can also reach across territorial boundaries through commercial diplomacy and coercive foreign policy. Energy-based statecraft with transnational entanglements can be observed, for example, in Yemen, Iran, Iraq, Venezuela, and Lithuania, where geo-strategic state energy goals are being pursued (e.g., Coronil, 1997; Yergin, 2009; Johnstone and Newell, 2018; Sattich et al., 2022). Likewise, the recent Russian invasion of Ukraine has clear connections with geo-strategic energy goals regarding European reliance on gas imports and seems to be having a direct impact on how the EU pursues its transition targets. This is exemplified by the REPowerEU plan which was launched as a direct response in May 2022 (European Commission, 2022a; see also Lonergran et al., 2022; Medinilla et al., 2022). However, it is important to note that we should be careful not to oversimplify the complexities of the policy mixes that support these interventions, which can entail a diverse array of different arrangements and goals co-evolving out of successive rounds of policymaking often spanning several years (e.g., Kivimaa and Kern, 2016; Kern et al., 2017; Edmondson et al., 2019). The support of the policy mixes that support the spanning several years (e.g., Kivimaa and Kern, 2016; Kern et al., 2017; Edmondson et al., 2019).

Interventions from states are rarely singular in their form, and instead more often encompass complex arrays of policy mixes whose effectiveness is dependant on how well they are aligned with other interventions (e.g., Patashnik and Zelizer, 2013; Rogge et al., 2017). For example, the dilution of policy interventions can occur through efforts being too ameliorative or being insufficiently aligned with other interventions that traverse the necessary policy domains (Kivimaa and Kern, 2016). This can take the form of (counter-)policy mixes whose interventions provide stability towards incumbent fossil fuel practices and high carbon activities, which in-turn can dilute more progressive, sustainable policy mixes that look to disrupt status quo practices to enable change (Kivimaa, 2022). As such, it is important to understand that state interventions in the context of societal transitions and transformations can be far more multifaceted than simple regulatory and legislative measures. They can also transgress the territorial boundaries of nation states with some powers and capacities being moved to supranational state formations such as the EU, thus highlighting the importance of attending to the interrelation between changes in the internal organisation (see Section 4.2) and the repertoire of interventions available to different state actors.

4.4. Social bases of state power

The stability and relative permanence of the first three dimensions depend on a sustained, institutionalised social compromise that equips state actors with the legitimacy to carry out their roles and fulfil their functions. The social basis of state power can be threatened when the inevitable discrepancies between the three formal dimensions and the society to be governed become too large. The most obvious example is when public opinion in key policy areas disagree significantly with state policies and interventions to the extent that the state is widely perceived to be working against 'the will of the people'. With substantial shifts in public opinion on climate change, the emergence of such discrepancies is becoming increasingly pertinent in the context of transition-orientated policy

⁹ The extent of state-ownership of these entities differed. However, the state was often the largest shareholder.

¹⁰ For more on the different definitions, conceptual developments, and empirical advances in the study of policy mixes see Rogge and Reichardt (2016), Rogge et al. (2017), and Kern et al. (2019).

making (e.g., Shwom et al., 2015; Bromley-Trujillo and Poe, 2020).

In responding to popular pressure, however, state actors have often been involved in creating appeasement through symbolic policy measures – or 'policy green-washing' (Armour et al., 2021) – sometimes to the extent of masking the absence of real change. The continual lack of meaningful climate action in countries around the globe has been illustrated by a recent report from the International Energy Agency (IEA) finding that even during 2021, when the global economy performed poorly due to the COVID-19 pandemic, energy-related carbon dioxide emissions rose by 6% to 36.3 billion tonnes - the highest ever (IEA, 2022). Still, states must survive and function, so the current contestation surrounding the issues created by anthropogenic climate change typically revolve around the degree to which a social compromise must be attained for the state to continue to operate with sufficient legitimacy. A relational approach is useful as it allows for a greater exploration of the configuration of social forces that enable the structure of the state system, and thus, the social basis upon which the state is constituted and constructed (Jessop, 2016).

4.5. State project(s)

State projects relate directly to the operational unity of state formations and their capacity to act. Understanding the state projects that are in operation in a given conjuncture is therefore necessary for grasping the actual capacities of the state for enabling or hindering transformational change. The green state and the ecostate are examples of imagined state projects where environmentalist concerns are prioritised vis-à-vis other issues (Eckersley, 2004; Meadowcroft, 2005a). Among actually-existing state projects (ostensibly) pursuing such an agenda, the EU's agreement on a European Green Deal (EGD) is one of the most interesting current examples. Even a cursory glance at its stated goals makes it clear that as a state project it reflects a somewhat contradictory compromise between environmentalist, capitalist, and welfarist interests. ¹¹

Employing the SRA to study how such internal contradictions are negotiated and translated into concrete action would help in understanding what such specific state projects may be (in)capable of achieving. It would also help by providing the conjunctural analyses needed to meet the challenge posed by Eckersley (2021, p. 246) of "how to approach the transition challenge in ways that can gain political traction while also being transformative and not merely ameliorative". The slippage from transformative ambitions to ameliorative outcomes that Eckersley warns against can be captured by the Gramscian concept of *passive revolution*, which involves "a process of transformation, absorption, and incorporation that translates contentious politics into bureaucratic or technical questions" (Jessop, 2016, p. 178), whereby "revolution-inducing strains are at once displaced and fulfilled" (Callinicos, 2010, p. 505). ¹² As noted by Ford and Newell (2021, p. 7) this amounts to a strategy of accommodation where "hegemonic actors secur[e] the acquiescence of key social groups to maintain market and political dominance". This is arguably what has been happening over the past several decades regarding the question of a green transition. While the compatibility of capitalism and a liveable planet for future generations has been questioned (e.g., Harvey, 2006; 2014; Feola, 2020), the critique has largely been absorbed by the push for green capitalism – as seen in the EGD – rather than sparking widespread popular support for anti-capitalist revolutions or post-capitalist transformations (see also Gibson-Graham, 2006; Siamanta, 2019).

4.6. Hegemonic formation

It should be clear from the previous section that state projects are in no way unconstrained by the contexts in which they emerge and evolve. To paraphrase and reappropriate Marx (2005, p. 1), state projects may make history but not under circumstances of their own choosing. In other words, any state project will necessarily be path-dependent and co-constituted by prevailing hegemonic formations, even in cases where they may be characterised as counter-hegemonic. In transitions scholarship, the Gramscian concept of historical bloc has been used to capture the resistance effects that the constraints of hegemonic formations have on transition progress (e.g., Geels, 2014; Ford and Newell, 2021). But hegemonic formations entail more than the concrete strategic alliances observed between, for instance, ministries and the fossil fuel industry. It extends to the range of imaginaries available to policymakers and other actors who make transitions-related decisions.

We have already mentioned (in *Section 4.4*) how state action tends to espouse policy measures which continually treat capitalism as a solution to anthropogenic climate change, rather than at the root of its cause. Indeed, widespread neoliberalisation of government and governance has been instrumental in producing the kind of policy choices favoured by state actors in responding to the perceived need for sustainability transitions, i.e., arrangements meant to bring about transitions primarily through market mechanisms. This could be seen as indicative of an 'ideological lock-in' effect which narrows the perceived array of options for state action to the extent that some forms of action are rendered almost 'unthinkable'. According to Feola (2020) this extends into the ranks of transitions scholars, where capitalism tends to be taken for granted and where options for a post-capitalist transformation are rarely sought. Being attuned to the presence and impact of hegemonic formations can, therefore, help transitions scholars to safeguard against potential complicity in generating a too narrow-minded palette of options for state intervention.

^{11 (1) &}quot;no net emissions of greenhouse gases by 2050"; (2) "economic growth decoupled from resource use"; and (3) "no person and no place left behind" (EU Commission, 2022b, p. 1).

¹² Trasformismo can also potentially be linked to transitions management conceived by Jan Rotman (2005, p. 4) as "a visionary, cyclical process of agenda building, learning, instrumenting and experimenting" which "works through clever, subtle changes and adjustments at several levels concurrently" (see also Loorbach, 2007). For more *on trasformismo* see Gramsci (1971, pp. 106-114), Ford and Newell (2021, pp. 6-7), and Newell (2019, p. 41).

5. Applying the strategic-relational approach in transitions scholarship

So far in this article we have (1) argued for the pertinence of a relational approach to understanding the role of the state and state power in transitions and transformations towards sustainability; (2) presented the theoretical groundwork for such an approach by introducing the basics of the SRA to the state; and (3) explained how each of the six dimensions from the SRA relate to and help explain key issues and topics encountered in transitions scholarship. What remains is to specify how the six dimensions may be applied as a heuristic for empirical analyses.

The proposed relational approach is deliberately kept in its simplest possible form. Indeed, Jessop (1990, p. 345) introduced his six dimensions as a simplistic alternative "for less ambitious purposes". We have chosen this simpler route, because we wanted to make available to transitions scholars a heuristic capable of taking the first important steps in opening the black box of the state in empirical analyses of transitions. A more fully-fledged version of the SRA, however, may be needed for dealing adequately with issues such as "exploring the limits of state intervention" (Jessop, 1990, p. 345). Nevertheless, we want to caution against simplifying the dimensions as separate 'parts' of the state which can then be used as objects for a series of one-sided analyses. The value and usefulness of the approach lies rather in using it to understand and emphasise that a particular issue needs to be analysed *across* the dimensions. If we want to understand, for instance, how and why a specific state intervention – say, a carbon tax – came or may come into being, then we need to work our way across at least some of the other dimensions as well, using them in turn as analytical lenses. Each dimension adds another layer of complexity to the analysis without ever exhausting the complexity of the studied object. Still, not every analysis needs to address all six dimensions in detail, but it is important to retain a reflective awareness about the rest.

Finally, and in line with the point above, we caution against seeing the framework as being fully exhaustive: "Epistemologically, if the real world is infinitely complex, it cannot be exhausted analytically. (...) Instead it requires that we select simplifying entry points into that complexity and recognize that all knowledge is partial, provisional, and incompletable" (Jessop, 2007, p. 229). While the six dimensions are adequate for the purpose of grasping the role of state power in transitions, the number of dimensions can always be multiplied. Accordingly, Jessop (2007, p. 231) describes a "dual movement from abstract to concrete along one plane of analysis and from simple to complex as more analytical planes are introduced in order to produce increasingly adequate explanations". Beyond using the six dimensions, this also means that transitions scholars using the framework will therefore want to bring it into 'conversation' with existing approaches in the field to promote the 'constructive dialogue' that Pel et al. (2016) have called for and the 'theoretical pluralisation' advocated by Hopkins et al. (2020).

It would, for instance, be compatible with Andy Stirling's (2019) configuring fields (CF) approach to the study of power and incumbency in socio-technical transformations. Stirling promoted a worm's eye view on incumbency to challenge prevailing eagle eye views. To the extent that the SRA is employed without straying from Jessop's insistence on moving gradually from abstract-simple entry points towards concrete-complex analyses by traversing the six dimensions of state power, our approach provides a way of moving gradually between worm's eye and eagle eye views within the same analytical framework. Likewise, the SRA would be capable of enriching analyses employing the multi-level perspective (MLP) on socio-technical change (Geels, 2014), for instance by accounting more fully for the role of state power in the interplay between regimes and niches. Our version of the SRA can assist Geels' (2014, p. 27) self-initiated push to "introduce power and politics into the MLP", with its compatibility being underlined by our shared reliance on the Gramscian concept of historical bloc. Finally, and as illustrated repeatedly throughout Section 4, there are rich opportunities for bringing the six dimensions together with Ford and Newell's (2021) operationalisation of key Gramscian concepts for analysing the role of power in transitions.

6. Conclusion

If transitions scholarship is to properly grasp the role of the state in societal transitions and transformations towards sustainability, then we need more nuanced and dynamic conceptions of the state. We also need to integrate those conceptions with the frameworks that we use to study transitions. There is, however, no need to reinvent the wheel. Scholars in political philosophy and political science have theorised the state for centuries and there is plenty to learn from their work. As stated by the Sustainability Transitions Research Network (STRN) Agenda: "we believe it is essential to continue the dialogue with more established disciplines, not just to promote transition ideas in these networks, but also to be challenged by 'outsiders', to benefit from new perspectives, and to further refine current transition approaches" (Köhler et al., 2019, p. 21). The political turn in the field has taken steps in this direction, but as Johnstone and Newell (2018) have made clear, there is still some way to go. In this article, we have followed through on their well-founded claim that "we need a relational account of the state" by proposing what such an account may look like (Johnstone and Newell, 2018, p. 78).

Our turn to Jessop and his SRA reflects a decisive break with any notion of the state as a simple, unified actor, and moves towards an approach that takes seriously the full complexity of how state power is exercised. Simultaneously, it is an approach that lends itself to a relatively simple operationalisation for the study of transitions and which shows signs of compatibility with some of the existing frameworks being applied in the field. Moreover, it is arguably capable of responding to all five areas of neglect identified by Johnstone and Newell (2018). Finally, we believe that it can play a role in answering a challenging question raised by the STRN Agenda: "What can sustainability transitions research say about current political and societal macro developments?" (Köhler et al., 2019, p. 21). An integral view of the state operationalised through the six dimensions of state power makes it possible to provide new answers to this question.

What remains, however, is to test the approach by applying it in empirical studies. This is beyond the scope of the current article which aimed only at making available a carefully configured relational approach to the role of the state in transitions. Undoubtedly,

the approach stands to be modified and improved through use. This is not only welcome, but key to its further development. It is also through use that integration with existing frameworks in the field will have to be worked out in detail. We have pointed to a compatibility with the MLP and the CF approaches but stating that integration is possible is not the same as having achieved it.

Declaration of Competing Interest

None.

Data availability

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References

Argyriou, I., Barry, J., 2021. The political economy of socio-technical transitions: a relational view of the state and bus system decarbonization in the United Kingdom. Energy Res. Soc. Sci. 79, 1–10. https://doi.org/10.1016/j.erss.2021.102174, 102174.

Armour, J., Enriques, L., Wetzer, T., 2021. Mandatory Corporate Climate Disclosures: Now, But How? European Corporate Governance Institute Law Working Paper No. 614. https://doi.org/10.2139/ssrn.3958819.

Avelino, F., Grin, J., Pel, B., Jhagroe, S., 2016. The politics of sustainability transitions. J. Environ. Plann. Policy Manage. 18 (5), 557–567. https://doi.org/10.1080/1523908X.2016.1216782.

Avelino, F., 2017. Power in sustainability transitions: analysing power and (dis)empowerment in transformative change towards sustainability. Environ. Polic. Gov. 27, 505–520. https://doi.org/10.1002/eet.1777.

Bäckstrand, K., Kronsell, A., 2015. Rethinking the Green state: Towards Climate and Sustainability Transitions. Earthscan: Routledge, London. https://doi.org/10.4324/9781315761978.

Bailey, D., 2015. The environmental paradox of the welfare state: the dynamics of sustainability. New Politi. Econ. 20 (6), 793–811. https://doi.org/10.1080/13563467.2015.1079169.

Baker, L., Newell, P., Phillips, J., 2014. The political economy of energy transitions: the case of South Africa. New Politi. Econ. 19 (6), 791–818. https://doi.org/10.1080/13563467.2013.849674.

Barry, J., Eckersley, R., 2005. The State and the Global Crisis. The MIT Press, Cambridge, Massachusetts. https://doi.org/10.7551/mitpress/6439.001.0001. Bartelson, J., 2001. The Critique of the State. Cambridge University Press, UK. https://doi.org/10.1017/CBO9780511490170.

Boute, A., Zhikharev, A., 2019. Vested interests as driver of the clean energy transition: evidence from Russia's solar energy policy. Energy Policy 133. https://doi.

Bromley, R., Poe, J., 2020. The importance of salience: public opinion and state policy action on climate change. J. Public Policy 40 (2), 280–304. https://doi.org/10.1017/S0143814X18000375.

 $Callinicos, A., 2010. \ The \ limits of passive revolution. \ Capital \& \ Class \ 34 \ (3), \ 491-507. \ https://doi.org/10.1177/0309816810378265.$

Coronil, F., 1997. The Magical State: Nature, Money, and Modernity in Venezuela. The University of Chicago Press, Chicago, Illinois.

(CMD) Carbon Majors Database, 2017. The Carbon Majors Database: CDP Carbon Majors Report. Last accessed online on 27.07.2022 from. https://cdn.cdp.net/cdp-production/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf?1501833772.

Davies, J., 2014. Rethinking urban power and the local state: hegemony, domination and resistance in neoliberal cities. Urban Stud. 51 (15), 3215–3232. https://doi.org/10.1177/0042098013505158.

Dunsire, A., 1996. Tipping the Balance: Autopoiesis and Governance. Adm Soc 28 (3), 299-334. https://doi.org/10.1177/009539979602800302.

Eckersley, R., 2004. The Green State: Rethinking Democracy and Sovereignty. MIT Press, Cambridge. https://doi.org/10.7551/mitpress/3364.001.0001.

Eckersley, R., 2021. Greening states and societies: from transitions to great transformations. Env. Polit. 30 (1–2), 245–265. https://doi.org/10.1080/09644016.2020.1810890.

Edmondson, D.L., Kern, F., Rogge, K.S., 2019. The co-evolution of policy mixes and socio-technical systems: towards a conceptual framework of policy mix feedback in sustainability transitions. Res. Policy 48 (10), 103555. https://doi.org/10.1016/j.respol.2018.03.010.

European Commission, 2022a. Communication from the Commission to The European Parliament, The European Council, The Council, The European Economic and Social Committee and The Committee of the Regions - REPowerEU Plan: COM/2022/230 final. Last accessed online on 02.08.2022 from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A230%3AFIN&qid=1653033742483.

European Commission, 2022b. A European Green Deal. Last accessed online on 02.08.2022 from. https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal en.

Feola, G., 2020. Capitalism in sustainability transitions research: Time for a critical turn? Environ. Innov. Soc. Transit. 35, 241–250. https://doi.org/10.1016/j.eist.2019.02.005.

Ferguson, Y.H., Mansbach, R.W., 1989. The State, Conceptual Chaos, and the Future of International Relations Theory. Lynne Rienner Publishers, Denver, USA. Figenbaum, R., 2017. Perspectives on Norway's supercharged electric vehicle policy. Environ. Innov. Soc. Transit. 25, 14–34. https://doi.org/10.1016/j.eist.2016.11.002.

Fisker, J.K., 2019. Terrains and Landscapes of Urban Politics. In: Fisker, J.K., Chiappini, L., Pugalis, L., Bruzzese, A. (Eds.), Enabling Urban Alternatives: Crises, Contestation, and Cooperation. Palgrave Macmillan, Singapore, pp. 43–64. https://doi.org/10.1007/978-981-13-1531-2.

Fisker, J.K., Johansen, P.H., Thuesen, A.A., 2022. Micropolitical practices of multispatial metagovernance in rural Denmark. Environ. Plann. C: Politi. Space 970–985. https://doi.org/10.1177/23996544211057088.

Ford, A., Newell, P., 2021. Regime resistance and accommodation: toward a new-Gramscian perspective on energy transitions. Energy Res. Soc. Sci. 79, 1–10. https://doi.org/10.1016/j.erss.2021.102163, 102163.

Geels, F.W., 2002. Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study. Res. Policy 31 (8–9), 1257–1274. https://doi.org/10.1016/S0048-7333(02)00062-8.

Geels, F.W., 2005. Technological Transitions and System Innovations: A Co-Evolutionary and Socio-Technical Analysis. Edward Elgar, UK. https://doi.org/10.4337/9781845424596

Geels, F.W., Schot, J., 2007. Typology of sociotechnical transition pathways. Res. Policy 36, 399-417. https://doi.org/10.1016/j.respol.2007.01.003.

Geels, F.W., 2014. Regime resistance against low-carbon transitions: Introducing politics and power into the multi-level perspective. Theory Cult. Soc. 31 (5), 21–40. https://doi.org/10.1177/0263276414531627.

Gibson-Graham, J.K., 2006. A Postcapitalist Politics. University of Minnesota Press, London. https://www.jstor.org/stable/10.5749/j.cttttt07.

Gramsci, A., 1971. Selections from the Prison Notebooks of Antonio Gramsci. International Publishers, New York.

Grubb, M., 2014. Planetary Economics. Earthscan: Routledge, London.

Hargrove, A., Qandeel, M., Sommer, J., 2019. Global governance for climate justice: a cross-national analysis of CO₂ emissions. Glob. Transit. 1, 190–199. https://doi.org/10.1016/j.glt.2019.11.001.

Harvey, D., 2006. The Limits to Capital. Verso, London-New York.

Harvey, D., 2014, Seventeen Contradictions and the End of Capitalism, Oxford University Press,

Hausknost, D., Hammond, M., 2020. Beyond the environmental state? The political prospects of a sustainability transformation. Env. Polit. 29 (1), 1–16. https://doi.org/10.1080/09644016.2020.1686204.

Hay, C., 1999. Marxism and the State. In: Gamble, A., Marsh, D., Tant, T. (Eds.), Marxism and Social Science. University of Illinois Press, Chicago, pp. 152–174. https://doi.org/10.1007/978-1-349-27456-7 8.

Hoffman, J., Loeber, A., 2016. Exploring the micro-politics in transitions from a practice perspective: the case of greenhouse innovation in the Netherlands. J. Environ. Plann. Policy Manage. 18 (5), 692–711. https://doi.org/10.1080/1523908X.2015.1113514.

Hopkins, D., Kester, J., Meelen, T., Schwanen, T., 2020. Not more but different: a comment on the transitions research agenda. Environ. Innov. Soc. Transit. 34, 4–6. https://doi.org/10.1016/j.eist.2019.11.008.

IEA – International Energy Agency, 2022. Global Energy Review: CO2 Emissions in 2021. Last accessed online on 27.07.2022 from. https://iea.blob.core.windows.net/assets/c3086240-732b-4f6a-89d7-db01be018f5e/GlobalEnergyReviewCO2Emissionsin2021.pdf.

Jessop, B., 1982. The Capitalist State: Marxist Theories and Methods. Martin Robertson & Company Ltd, Oxford, UK.

Jessop, B., 1990. State Theory: Putting the Capitalist States in Their Place. Penn State University Press, USA.

Jessop, B., 2002. The Future of the Capitalist State. Polity Press & Blackwell Publishing Ltd., USA.

Jessop, B., 2007. State Power: A Strategic-Relational Approach. Polity Press, Cambridge, UK.

Jessop, B., 2009. The State and Power. In: Clegg, S.R., Haugaard, M. (Eds.), The SAGE Handbook of Power. SAGE Publications Inc., London, pp. 367–382. https://doi.org/10.4135/9780857021014.n20.

Jessop, B., 2016. The State: Past, Present, Future. Polity Press, Cambridge, UK.

Johnstone, P., Newell, P., 2018. Sustainability transitions and the state. Environ. Innov. Soc. Transit. 27, 72–82. https://doi.org/10.1016/j.eist.2017.10.006.

Kentikelenis, A.E., Stubbs, T.H., King, L.P., 2016. IMF conditionality and development policy space, 1985–2014. Rev. Int. Politi. Econ. 23 (4), 543–582. https://doi.org/10.1080/09692290.2016.1174953.

Kemp, R., Schot, J., Hoogma, R., 1998. Regime shifts to sustainability through processes of niche formation: the approach of strategic niche management. Technol. Analy. Strateg. Manag. 10 (2), 175–198. https://doi.org/10.1080/09537329808524310.

Kern, F., Kivimaa, P., Martiskainen, M., 2017. Policy packaging or policy patching? The development of complex energy efficiency policy mixes. Energy Res. Soc. Sci. 23, 11–25. https://doi.org/10.1016/j.erss.2016.11.002.

Kern, F., Rogge, K.S., Howlett, M., 2019. Policy mixes for sustainability transitions: new approaches and insights through bridging innovation and policy studies. Res. Policy 48 (10), 103832. https://doi.org/10.1016/j.respol.2019.103832.

Kivimaa, P., Kern, F., 2016. Creative destruction or mere niche support? Innovation policy mixes for sustainability transitions. Res. Policy 46 (1), 205–217. https://doi.org/10.1016/j.respol.2015.09.008.

Kivimaa, P., 2022. Policy and political (in)coherence, security and Nordic-Baltic energy transitions. Oxf. Open Energy 1, 1–14. https://doi.org/10.1093/ooenergy/

Köhler, J., Geels, F.W., Kern, F., Markard, J., Onsongo, E., Wieczorek, A., Alkemaade, F., Avelino, F., Bergek, A., Boons, F., et al., 2019. An agenda for sustainability transitions research: state of the art and future directions. Environ. Innov. Soc. Transit. 31, 1–32. https://doi.org/10.1016/j.eist.2019.01.004.

Kok, K., Loeber, A., Grin, J., 2021. Politics of complexity: conceptualizing agency, power and powering in the transitional dynamics of complex adaptive systems. Res. Policy 50 (3), 1–11. https://doi.org/10.1016/j.respol.2020.104183, 104183.

Kuzemko, C., Lockwood, M., Mitchell, C., Hoggett, R., 2016. Governing for sustainable energy system change: politics, contexts and contingency. Energy Res. Soc. Sci. 12, 96–105. https://doi.org/10.1016/j.erss.2015.12.022.

Langhelle, O., Meadowcroft, J., Rosenbloom, D., 2019. Politics and technology: deploying the state to accelerate socio-technical transitions for sustainability. In:
Meadowcroft, J., Banister, D., Holden, E., Langhelle, O., Linnerud, K., Gilpin, G. (Eds.), What Next for Sustainable Development? Edward Elgar Publishing
Limited, Gloucestershire, UK, pp. 239–259. https://doi.org/10.4337/9781788975209.00024.

Lockwood, M., Kuzemko, C., Mitchell, C., Hoggett, R., 2017. Historical institutionalism and the politics of sustainable energy transitions: a research agenda. Environ. Plann. C: Politi. Space 35 (2), 312–333. https://doi.org/10.1177/0263774X16660561.

Lonergran, K., Gabrielle, P., Sansavini, G., 2022. Energy Justice Analysis of the European Commission REPowerEU Plan. ETH Zurich Research Collection, pp. 1–19. https://doi.org/10.3929/ethz-b-000551952. Working Paper, May 2022.

Loorbach, D., 2007. Transition Management: New Mode of Governance for Sustainable Development. International Books, Utrecht.

Marx, K., 2005. The Eighteenth Brumaire of Louis Bonaparte. Mondial, New York-Berlin.

McGuirk, P., O'Neill, P., 2012. Critical geographies with the state: the problem of social vulnerability and the politics of engaged research. Antipode 44 (4), 1374–1394. https://doi.org/10.1111/j.1467-8330.2011.00976.x.

Meadowcroft, J., 2005a. From welfare state to ecostate. In: Barry, J., Eckersley, R. (Eds.), The State and the Global Crisis. The MIT Press, Cambridge, Massachusetts. https://doi.org/10.7551/mitpress/6439.003.0003.

Meadowcroft, J., 2005b. Environmental political economy, technological transitions and the state. New Politi. Econ. 10 (4), 479–498. https://doi.org/10.1080/

Meadowcroft, J., 2007. Who is in charge here? Governance for sustainable development in a complex world. J. Environ. Plann. Policy Manage. 9 (3–4), 299–314. https://doi.org/10.1080/15239080701631544.

Meadowcroft, J., 2009. What about the politics? Sustainable development, transition management, and long term energy transitions. Policy Sci. 42, 323–340. https://doi.org/10.1007/s11077-009-9097-z.

Meadowcroft, J., 2011. Engaging with the *politics* of sustainability transitions. Environ. Innov. Soc. Transit. 1 (1), 70–75. https://doi.org/10.1016/j.eist.2011.02.003. Medinilla, A., Dekeyser, K., Karaki, K., 2022. Promoting a global green transition following the Russian invasion of Ukraine: the external dimensions of the European Green Deal. ECDPM Discussion Paper No 325, 1–19. Last accessed online on 15.11.2022 from. https://ecdpm.org/application/files/8016/5779/6051/Promoting-Global-Green-Transition-Russian-Invasion-Ukraine-External-Dimensions-European-Green-Deal-ECDPM-Discussion-Paper-325-2022.pdf.

Moe, E., 2010. Energy, industry and politics: energy, vested interests, and long-term economic growth and development. Energy, 35 (4), 1730–1740. https://doi.org/10.1016/j.energy.2009.12.026.

Moe, E., 2012. Vested interests, energy efficiency and renewables in Japan. Energy Policy 40, 260-273. https://doi.org/10.1016/j.enpol.2011.09.070.

Moe, E., 2014. Vested Interests, Energy Policy and Renewables in Japan, China, Norway and Denmark. In: Moe, E., Midford, P. (Eds.), The Political Economy of Renewable Energy and Energy Security. Palgrave Macmillan, London, pp. 276–317. https://doi.org/10.1057/9781137338877 14.

Moe, E., 2015. Renewable Energy Transformation Or Fossil Fuel Backlash: Vested Interests in Political Economy. Palgrave Macmillan. https://doi.org/10.1057/9781137298799.

Moe, T.M., 2015. Vested Interests and Political Institutions. Polit. Sci. Q. 130 (2), 277-318. https://doi.org/10.1002/polq.12321.

Mol, A.P.J., 2016. The environmental nation state in decline. Env. Polit. 25 (1), 48-68. https://doi.org/10.1080/09644016.2015.1074385.

Newell, P., 2008. The political economy of global environmental governance. Rev. Int. Stud. 34 (3), 507–529. https://doi.org/10.1017/S0260210508008140.

Newell, P., 2019. *Trasformismo* or transformation? The global political economy of energy transitions. Rev. Int. Politi. Econ. 26 (1), 25–48. https://doi.org/10.1080/09692290.2018.1511448.

Newell, P., Paterson, M., 1998. Climate for business: global warming, the state and capital. Rev. Int. Politi. Econ. 5 (4), 679–703. https://doi.org/10.1080/096922998347426.

Ortiz, D.G., Béjar, S., 2013. Participation in IMF-sponsored economic programs and contentious collective action in Latin America, 1980–2007. Confl. Manag. Peace Sci. 30 (5), 492–515. https://doi.org/10.1177/0738894213499677.

Patashnik, E.M., Zelizer, J.E., 2013. The struggle to remake politics: liberal reform and the limits of policy feedback in the contemporary American State. Perspect. Politi. 11 (4), 1071–1087. https://doi.org/10.1017/S1537592713002831.

Paterson, M., Gabrielson, T., Hall, C., Meyer, J.M., 2016. Political economy of greening the state. In: Schlosberg, D. (Ed.), The Oxford Handbook of Environmental Political Theory. Oxford University Press, pp. 475–490. https://doi.org/10.1093/oxfordhb/9780199685271.013.34.

Pel, B., Avelino, F., Jhagroe, S., 2016. Critical approaches to transitions theory. In: Brauch, H., Spring, H., Scheffran, J. (Eds.), Handbook On Sustainability Transition and Sustainable Peace. Springer, pp. 451–463. https://doi.org/10.1007/978-3-319-43884-9_19.

Roberts, C., Geels, F., 2019. Conditions for politically accelerated transitions: historical institutionalism, the multi-level perspective, and two historical case studies in transport and agriculture. Technol. Forecast. Soc. Change 140, 221–240. https://doi.org/10.1016/j.techfore.2018.11.019.

Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F.S., Lambin, E.F., Lenton, T.M., Scheffer, M., Folke, C., Schellnhubder, H.J., et al., 2009. A safe operating space for humanity. Nature 461, 472–475. https://doi.org/10.1038/461472a.

Rogge, K.S., Reichardt, K., 2016. Policy mixes for sustainability transitions: an extended concept and framework for analysis. Res. Policy 45 (8), 1620–1635. https://doi.org/10.1016/j.respol.2016.04.004.

Rogge, K.S., Kern, F., Howlett, M., 2017. Conceptual and empirical advances in analysing policy mixes for energy transitions 33, 1–10. https://doi.org/10.1016/j.erss.2017.09.025.

Rosenberg, J., 1994. The Empire of Civil Society: A Critique of the Realist Theory of International Relations. Verso, London.

Rotman, J., 2005. Societal Innovation: Between Dream and Reality Lies Complexity; Inaugural Address. Erasmus University Rotterdam, Rotterdam, The Netherlands. Sattich, T., Morgan, R., Moe, E., 2022. Searching for energy independence, finding renewables? Energy security perceptions and renewable energy policy in Lithuania. Polit. Geogr. 96, 102656. https://doi.org/10.1016/j.polgeo.2022.102656.

Schmitz, H., 2015. Green transformation: is there a fast track? In: Scoones, I., Leach, M., Newell, P. (Eds.), The Politics of Green Transformations. Routledge, pp. 170–184.

Schot, J., 1998. The usefulness of evolutionary models for explaining innovation. The case of the Netherlands in the nineteenth century. Hist. Technol. 14 (3), 173–200. https://doi.org/10.1080/07341519808581928.

Shwom, R.L., McCright, A.M., Brechin, S.R., Dunlap, R.E., Marquart-Pyatt, S.T., Hamilton, L.C., 2015. Public Opinion on Climate Change. In: Dunlap, R.E., Brulle, R.J. (Eds.), Climate Change and Society: Sociological Perspectives. Oxford University Press, New York.

Siamanta, Z.C., 2019. Wind parks in post-crisis Greece: neoliberalisation vis-à-vis green grabbing. Environ. Plann. E: Nat. Space 2 (2), 274–303. https://doi.org/10.1177/2514848619835156.

Sovacool, B.K., 2008. The Dirty Energy Dilemma: What's Blocking Clean Power in the United States. Praeger, Westport.

Sovacool, B.K., 2016. How long will it take? Conceptualizing the temporal dynamics of energy transitions. Energy Res. Soc. Sci. 13, 202–215. https://doi.org/10.1016/j.erss.2015.12.020.

Stern, N., 2007. The Economics of Climate Change: The Stern Review. Cambridge University Press, Cambridge, New York. https://doi.org/10.1017/ CB09780511817434

Stirling, A., 2019. How deep is incumbency? A 'configuring fields' approach to redistributing and reorienting power in socio-material change. Energy Res. Soc. Sci. 58 https://doi.org/10.1016/j.erss.2019.101239.

Tomain, J.P., 2017. Clean Power Politics: The Democratization of Energy. Cambridge University Press, London.

Unruh, G., 2000. Understanding carbon lock-in. Energy Policy 28 (12), 817-830. https://doi.org/10.1016/S0301-4215(00)00070-7.

Verbong, G.P.J., Geels, F.W., 2010. Exploring sustainability transitions in the electricity sector with socio-technical pathways. Technolog. Forecast. Soc. Change 77 (8), 1214–1221. https://doi.org/10.1016/j.techfore.2010.04.008.

Walker, R.B., 1993. Inside/Outside: International Relations As Political Theory. Cambridge University Press. https://doi.org/10.1017/CBO9780511559150.