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**Policy analysis: empiricism, social construction and realism**

Keywords: Policy analysis, interpretive policy analysis, critical realism, historical materialism, critical state theory, knowledge

In a recent article Ulrich Brand has discussed how best to perform policy analysis. I reflect upon the paper as an interdisciplinary researcher experienced in public policy problems and their analysis with a particular interest in the relationship between social, economic and environmental problems. At the centre of the paper is the contrast between two existing methodologies prevalent in political science and related disciplines. One is the rationalist approach, which takes on the character of a natural science, that believes in a fully knowable objective reality which can be observed by an independent investigator. The other is a strong social constructivist position called interpretative policy analysis (IPA), where knowledge and meaning become so intertwined as to make independence of the observer from the observed impossible and all knowledge highly subjective. Brand then offers his model as a way forward, but one that he closely associates with the latter. My contention is that policy analysis, and any way forward, needs to provide more of a transformative combination of elements from both approaches. Indeed I believe this is actually what Brand is doing.

**Policy Analyse: Empirismus, gesellschaftliche Konstruktion und Realismus**

Schlüsselwörter: Policy-Analyse, interpretative Policy-Analyse, kritischer Realismus, historischer Materialismus, kritische Staatstheorie, Wissen


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In a recent article in this journal Ulrich Brand (2013) has discussed how best to perform policy analysis. The issues raised by Brand concern the role and meaning of the State, or the institutions of formal governance, in relation to policy formation within a modern capitalist economy. This involves drawing distinctions between politics, polity and policy in order to make the claim that some distinct aspects of policy have been neglected and/or misinterpreted by existing approaches to policy analysis. Brand particularly wants to promote a form of structural theory under the title of historical-materialist policy analysis (HMPA) as providing a better alternative to traditional analysis and post-structuralist approaches. I reflect upon the paper as an interdisciplinary researcher experienced in public policy problems and their analysis with a particular interest in the relationship between social, economic and environmental problems.

At the centre of the paper is the contrast between two existing methodologies prevalent in political science and related disciplines. In my understanding, the two positions can be characterised as follows. One is the rationalist approach, which takes on the character of a natural science, that believes in a fully knowable objective reality which can be observed by an independent investigator. The other is a strong social constructivist position called interpretative policy analysis (IPA), where knowledge and meaning become so intertwined as to make independence of the observer from the observed impossible and all knowledge highly subjective. Brand then offers HMPA as a way forward, but one that he closely associates with IPA, which he regards as providing a good reference point. My contention is that policy analysis, and any way forward, needs to provide more of a combination employing and transforming elements from both the other approaches rather than a modified version purely building on interpretative analysis. Indeed, I believe this is actually what Brand himself is doing.

1. Rationalism and Naive Objectivism

In the critical coverage of the rationalist approach the rather lose term of ‘positivist’ is used by Brand (429 and 438) as a general and negative attribution. This leaves open what specifically is objectionable about positivism, which has changed much since its foundation as a system of thought by Auguste Comte (1798–1857). The term has been associated with a variety of philosophical approaches over the intervening 150 years. A more precise definition of the relevant problematic is therefore necessary and here I suggest the core concern might be summarised as naive objectivism (Sayer 2010).

On this basis, rationalist policy analysis is recognised as making distinct assumptions about ontology and epistemology. Reality is regarded as being formed of identifiable objects that remain unchanged regardless of whom is doing the investigation of them, but more importantly that investigation is assumed to produce a self-evident truth. Truth here is meant as empirical facts speaking for themselves, so there is little or no controversy possible given the proviso of a scientific quality investigation. The object of study (e.g., society or an aspect thereof) is meant to reveal itself in a singular and complete way through correctly conducted research (e.g., scientific observation). Several objections can be raised against this position.

On the ontological front, non-observable factors and causes are easily overlooked in favour of facts that can be observed or easily investigated via available methods. Thus, for example, Brand raises the common absence from rationalist policy analysis of the role played by power structures (429). The lack of attention to metaphysical concepts compounds this problem by making the investigator believe they make no metaphysical claims when undertaking an inves-
tigation. In general, the naïve objectivist fails to understand the essential role played by conceptualisation in creating understanding. Thus they lack a broader perspective on their work, openness to alternatives and the ability to think critically. Mainstream economics is a good example.

Naïve objectivism also tends to make claims for reality being stable, unchanging and context independent. This allows for easy generalisation and universal statements on the basis of limited observation. If A is observed occurring in correlation with B then a causal inference is assumed. The more often this relationship is observed the greater the confidence in the existence of the causal relationship. Event regularities, that can be measured statistically, then become a central matter for scientific investigation. As Brand notes, this results in policy analysis being reduced down to a largely context independent matter of compiling facts about who gets what, when and how (429).

On the epistemological front knowledge is equated to the empirical. What can be observed, or more generally sensed, is taken to be all that matters. Indeed reality is typically reduced down to what is measurable and even what has already been measured (e.g., secondary data). Experts are those who create knowledge and politics is absent from the interpretation and use of knowledge. The State acts in the public interest using best available scientific evidence. In policy terms, the overall picture is one that Dryzek (2005) has labelled administrative rationalism.

2. Interpretation and Strong Constructivism

While there are critical flaws in the naïve objectivism of the rationalist approach, the extent to which this means adopting a strong social constructivist alternative is far from clear. Indeed, when Brand introduces IPA as a better approach (429), several claims are made which I feel cannot be sustained. The implications of this for Brand’s own favoured alternative of HMPA then need to be clarified because, as I will explore, the stated close proximity with a strong social constructivist position, in contrast to the rationalist one, is misleading.

One aspect of my concern here is the extent to which knowledge creation can be regarded as totally subjective and relative, i.e. a matter of individual investigator and context. The claim in IPA is that ‘knowledge creates reality’, to paraphrase Brand (429), or, to quote him, that “meanings and reality are produced” (430). I feel greater clarity about what is meant would help distinguish the role of interpretation from the factual basis of knowledge i.e., epistemological from ontological claims.

Clearly humans use their knowledge to impact the world around them. Human knowledge rearranges the world in both intended and unintended ways. For example, knowledge of the internal combustion engine may be regarded as promoting burning of fossil fuels on a vast scale, releasing gases that change the functioning of ecosystems and planetary climate. In this respect past knowledge can be seen as having the potential to change future reality. Knowledge of what is wrong today for humans and non-humans might also lead to a different future. Yet in important ways humans are working within the structure of a reality they do not produce.

What is certainly produced in the process of knowledge creation are concepts. The role of conceptualisation is a key aspect of investigation ignored by the naïve objectivist. However, that any investigation, research or analysis, requires concepts does not mean that concepts create reality. This is certainly misleading if taken to imply that reality is dependent upon or simply changes in accord with the concepts humans create. A straightforward counter to the generality of this position is provided by noting that biophysical objects of study remain unchanged by
conceptualisation. For example, that humans regarded the Earth as flat as opposed to round or the Earth as centre of the Universe as opposed to the Sun had no impact on these objects, i.e. the shape of the Earth or the solar system. If anything, reality creates knowledge because false conceptualisations face reality, allowing the possibility of learning and progress as ideas are shown to fail (e.g., proving impractical, inadequate, bad explanations, poor predictors).

The contention might be that social sciences, such as policy analysis, are different because the social scientist studies an object of which they are a part. This can be typified as involving an extra layer of interpretation, or verstehen, a double hermeneutic (i.e., both of the object and the societal conceptualisation of that object). Here I think a distinction is necessary between a weak and strong constructivist position. As Steup (2010) explains: “constructivism, if weak, asserts the epistemological claim that scientific theories are laden with social, cultural, and historical presuppositions and biases; if strong, it asserts the metaphysical claim that truth and reality are themselves socially constructed.” Where Brand lies is left uncertain in his article, but I find the former is the only tenable position.

That “different groups conceive the world in different terms” (429) is far from being able to substantiate either that conceiving the world in a specific way changes reality to conform with the conception of it, or that worldviews can be held as valid regardless of reality. Policy analysis is the investigation of something that is in important ways external to the researcher and something about which they have good reason for concern because the problems involved are very real ones. That humans create knowledge does not mean in so doing they create reality, but rather they create their own understanding of reality, and this is an important distinction. Knowledge, and its role in society and between society and the State, then remains crucially dependent upon reality. This is why those who deny the holocaust must be understood as telling lies about reality and denying the truth. They do not merely construct something different, or have some different knowledge, or provide another interpretation. Why they choose to deny reality is a social science research question, but their existence leaves unchanged the real events to which their position is answerable.

Furthermore, the claim that the observer is inseparable from the observed seems highly exaggerated. Most social scientists, I would suggest, have little or no impact on their object of study. For example, a political scientist can study global climate change policy without any perceptible impact on that policy or anyone involved in the formation of that policy. In this respect there seems every prospect that research can be conducted in a manner that is substantively independent of the object being studied in much the same way as in the natural sciences.

If the epistemological position is accepted (i.e., weak constructivism) then the question is how the investigator as part of society can avoid bias in the knowledge they create. Here I agree with Sayer (2010, 25) that “[t]he intellectual’s interpretation of meaning is (or should be!) rigorous and self-aware, thinking […] about beliefs and concepts as well as with them”. Part of the self-awareness is the realisation of the interconnection between facts and values. This does not mean that facts are replaced by values or that we can construct and associate events with whatever values we like and still claim to give an accurate or true account. It does require that social science be conducted in a way that is critical and honest about the representation of the objects it studies.

Another way in which IPA, as described by Brand, seems to overstretch itself is in the claims made about the role of uncertainty and change. In this respect, Brand refers to “the radical uncertainty and complexity of the actual world” and goes on to state that “there is no fixed or stabilized world” but rather “meanings are constantly changing” (429). What does this imply? First,
reference is being made to an actuality, or reality, and that means accepting that a reality external to ourselves exists and that is something upon which we can reflect. The importance of this lies in enabling beliefs or statements to be answerable to how things are, something outside themselves. Acceptance of this position means that we look to reality for confirmation of truth rather than, for example, justifying statements on the basis of their current usefulness or coherence with other statements (Spash 2012, 43). Second, that the “actual world” changes is an undeniable aspect of reality, but this does not equate to everything “constantly changing” in the sense that all knowledge becomes constantly invalid as things change. In contrast, some things are repetitive and/or relatively stable while others are not, and that stability is the essence of how humans have created knowledge through trial and error, through practice. If the writings of Marx are still relevant today that is because some things remain unchanged, stable or fixed pretty firmly (if not permanently).

Yet, this should not be taken as rejecting the importance of potential instability and change. The prevalence of reductionist and mechanistic thinking, not least in economics, has proven highly problematic in this regard and encouraged downplaying radical uncertainty. Environmental policy is an area in which the contrast between what I term strong and weak uncertainty is stark (Spash 2002a). The former raises issues of unknown and unknowable outcomes, surprise events, unique occurrences, irreversibility and social indeterminacy. The latter is a narrow realm in which all outcomes are known and the probabilities of their occurrence can be known. In environmental policy, the strong uncertainty of a problem is often discussed and then rapidly dismissed and substituted by policy analysis based upon weak uncertainty. Thus, for example, the International Panel on Climate Change moved from scenario analysis to placing likelihoods on a limited set of future states to claims of probabilistic prediction of the occurrence of selected future states (Spash 2002b). In such instances subjective probabilities of ‘experts’ are employed to avoid the reality of strong uncertainty. Despite the work of Keynes (1988 [1921]) on the conceptualisation of strong uncertainty most economists persist in using an inappropriate weak uncertainty approach in all their policy applications and so claim impossible predictive capacities. In contrast, the potential for surprise events and being aware of the fallibility of all knowledge should make humans more humble and encourage a precautionary approach in policy.

In ecological economics some have then responded by calling for public participatory approaches to knowledge creation and policy formation (e.g., post-normal science Funtowicz/Ravetz 1994). Brand rightly warns of over optimism with respect to the possibilities and effects of participation (430). However, this remains a key aspect of the alternative to the rationalist agenda for policy formation and implementation, not least because of the concern that expertise and knowledge are powerful tools in the undemocratic reproduction of society (438). At the same time, any serious academic (let alone a Professor) is already engaged in the role and use of expert knowledge as a practice and cannot then deny its relevance for other ends, e.g. more democratic ones, emancipation, fighting oppression and so on. Once again a more nuanced understanding seems necessary and here one that includes expert and scientific knowledge as well as aspects of realism.

3. The Way Forward

Brand states that “[i]nterpretative policy analysis, and especially its Foucauldian version, is a good reference point for an HMPA” (430), but he clearly wants to go beyond this. His aim is to
develop a more sophisticated understanding of the State, policy and policy-making. He also sees HMPA as having the potential to more accurately elucidate the role of knowledge in the relationship between the State and society. At certain points (432, 435, 437, 439), he clearly accepts a role for empiricism, and so the aspects of ‘positivism’ being rejected are not simply that a scientific (rationalist) approach is totally flawed, nor that empirical investigation is unwarranted. Rather, I would suggest, the concern is how researchers (and policy analysts in particular) can make claims for empirical investigation that can actually be sustained and validated. What needs more thought is how such empiricism works alongside an understanding based upon weak constructivism and a realist structural position.

In Brand’s article I see much underlying realism. For example, HMPA is expected to “elucidate more accurately” and be able to explain the structural conditions under which societal actors and forces “do in fact act” (430). This implies an object about which investigators can be accurate and that they have the ability to make factual claims. He calls for “concrete analyses against the background of theoretical assumptions and concepts” (431). This seems to diverge quite distinctly from the ideas, attributed to Foucault, that reality and meaning are produced. However, in other statements Brand supports a (strong?) social constructivism leaving unclear his overall position. Brand states that, “IPA focuses on the important fact that the problems to be dealt with do not exist objectively, but are social constructions” (435). What should we take this to mean? The concern for rejecting objectivity here, I have suggested, is imprecise and should be specified as naïve objectivism not a rejection of the existence of reality or objects. What is being constructed is understanding of that reality and this requires concepts. How problems are understood is then partially related to the conceptualisation of their characteristics. At the same time not just any conceptualisation can be regarded as valid, because we still wish to relate to the real world. Indeed Brand uses his understanding of the real world to criticise others (e.g. the lack of attention to power, the misconceptualisation of the State) and suggests we progress our knowledge about the world through concrete analysis and empirical studies. So, while policy problems are certainly conceptualised and interpreted, policy analysis is not merely about using social constructs in the sense of having no knowledge of existence beyond what some social group (academic or other) fancies to imagine.

Indeed one aspect of the paper that worries me most is the lack of an explicit account of the realist element of policy analysis. This seems present but between the lines of Brand’s text. While the discussion of structural aspects of the social and political do have the flavour of realism the term is not associated with them. There are no mentions of reality or realism in the presentation of HPMA. However, there are twenty six mentions of “concrete” in various relationships (e.g., analysis, strategies, policy, policies, conflicts, forms of power). The term concrete then seems a code word for something being real, substantive and, yes, in many ways objective (but not naïvely so).

Beyond this matter of explicit terminology, the emphasis on the social and political neglects biophysical reality. Policy formation, I would suggest, cannot be discussed purely in terms of societal relationships and power as if there were no biophysical world informing human knowledge and constraining human action. Why do we formulate environmental policies? Clearly there are real physical pollutants (toxic waste, radiation, hormone discharges, greenhouse gases, acidic deposition, chlorofluorocarbons) and physical actions (cutting trees, building roads and houses, using cars and planes) that have real biophysical consequences (health impacts, species loss, ecosystem degradation, water, soil and air contamination, climate change, biodiversity loss). Regarding such problems as purely social constructs does them little justice and significantly
misrepresents them. If humanity were instantly removed from Earth today the biophysical consequences of their past actions would persist (e.g. climate forcing would continue due to the stock of manmade greenhouse gases in the upper atmosphere and the operation of biophysical systems in the absence of humanity).

Brand seems to acknowledge something of this when he mentions the need to understand more than capitalist relations (e.g., capital accumulation or class domination) to understand environmental policy formation (431). He, if rather briefly, goes on to state that environmental problems have their own dynamic, such as the material degradation of living conditions and the role of modern science. However, I feel this caveat needs rather more attention and expansion. Human relationships with Nature and assumptions about reality seem highly relevant here. For example, the philosophy that ‘dilution is the solution to pollution’ might work for some pollutants in limited amounts but has proven disastrous given the type and scale of pollutants humans have developed. Policy based upon this engineering philosophy has been revealed as inappropriate given biophysical reality. The idea of biophysical reality being a constraint on and/or motivator for human action is absent from Brand’s discussion, although the bite of that constraint has been a primary concern of the environmental movement and a key policy driver.

In order to provide some focus for reflection (in this rather abstract discussion) some policy examples would also have helped. For example, consider how might a policy analyst best understand the creation of the Clean Air Acts in Britain and their consequences for international environmental policy? Coal burning for household heating and cooking was responsible for the infamous London smogs of the 1800s and 1900s. These ‘pea soup’ smogs were finally brought to an end after a related high number of hospital admissions and deaths were recorded by the newly founded National Health Service in the early 1950s. In particular, during the London smogs of 1952–1953, the death toll rose above 4,000, especially affecting the old and those with cardiac and respiratory disorders (Holdgate 1980, 79). The Clean Air Acts of 1954 and 1962 restricted the zones where coal could be burnt, while electricity produced by large coal-fired power stations was increasingly used for heating and cooking. Coal smogs were largely removed, but one result of the new power stations was to inject sulphur dioxide and nitrous oxides high into the atmosphere, where they were out of sight and out of mind. That was until the 1970s when Scandinavian scientists began to publicise the link between the changes in their forests and water ecosystems due to acidic deposition. A decade of dispute and scientific research led to the more general acceptance that the long-range transportation of air pollutants from the UK and Germany to Scandinavia was possible, but there was no action by the major emitters. Emissions were given more serious attention by the German government once their own forests began to die and environmentalists began to successfully move into mainstream politics. However, the main impact on emissions in the UK was due to the changing political and economic fortunes of the coal industry with successive Conservative administrations (under Maggie Thatcher) determined to break the power of the mining unions. The availability of cheaper natural gas and a move away from heavy industry aided this political agenda.

The point I wish to make with this example is that policy analysis requires understanding the interaction of social, economic and ecological factors. Capitalism, class and power relationships help understand some aspects of the events. Thus, in the 1980s and 90s, political and structural change was affecting emissions rather than any concern for environmental damages inflicted on others. However, air pollution itself, its characteristics, its detection and scientific investigation are all important and key to the evolution and understanding of the policy developments. This involves both the collection of empirical data and its analysis using traditional expert
led scientific approaches to create knowledge. The use and abuse of expert knowledge and suppression of research might well form part of the events, but this is because the reality of forest declines and dead people in London is a rather basic physical fact that confronts the existing societal understanding. Dead people, dead trees and collapsing ecosystems are real events not social constructs. Of course how society understands their implications is a matter of interpretation and this is where Brand’s HMPA might enable key insights. The different State reaction in Germany, UK and Scandinavia and their relative treatment of information can be empirically studied, along with their discursive and institutional governance structures, as Brand suggests should be done by policy analysts (426). The existence of different power groupings and vested interest are key mechanisms affecting policy reactions.

Yet this still leads me to doubt some of the statements Brand makes concerning policy formation. I do not believe that “whether or not certain issues become the object of policies is an open question” (434), or at least not so open as this suggests. Consider the case of fracking which reveals the neoliberal State allied with corporate interests (Bridge 2012), and the regulated controlling the regulator in Galbraithian ways (Galbraith 2007 [1967]). Despite the attempted control and suppression of information, fracking is a policy problem because of the real impacts it has on water systems. Institutions, power relationships and vested interest groups are all important mechanisms of policy formation, but so are biophysical consequences and human-Nature relationships. This is not to deny the role of powerful players in the suppression and manipulation of information (something with which I am personally familiar, Spash 2014), but to argue that even the most powerful must face reality, and there are only limited valid alternative ways of interpreting events.

Another way to put my concern is to ask what level of environmental crises would motivate action. How many dead people? How many floods or droughts? How many deformed children living next to waste dump sites? How many collapsed ecosystems? What sort of society and political structure can maintain such a set of exploitative social and environmental relationships? Are we to suppose there are no biophysical consequences interacting with the social and political structure?

Answering such questions would certainly seem to require looking at the role of information in society and power relationships, but also the ability of empirical investigation and scientific research to be performed in an open and critical way. Basic facts can prove hard to counter but may be suppressed as a result. Those who collect the data and produce the facts about the problem may be attacked and censored in order to discredit the information. Once facts, such as 4,000 people died due to smogs, are accepted, policy action can still fail to occur. In some contexts those who suffer might be regarded as expendable, the legal system might allow harm of the innocent, or the society might be lacking in basic human rights. Those who benefit from the system, that is creating the harm, can be expected to defend it. There is certainly a concern that:

“the ecological crisis and its particular problems will not be framed under capitalist conditions as policy problems in opposition to the general interests of capital, although they may be framed against, or in tension, with the interests of certain capital factions, depending on a variety of empirical factors”. (Brand 2013, 435)

This is often expressed as “jobs are more important than the environment”, and the administrative rationalism that “the benefits of environmental degradation outweigh the costs”. More subtly the Green Economy, tradable pollution permits and biodiversity offsets can be advocated to make
the necessary corrections to market failures using new market institutions. Yet what is being discussed here is how the problem is “framed” and understood, not its existence. The realisation of policy can then be recast as a complex of potential causal powers, including the biophysical, which can drive policy in different directions.

The discussion of a variety of potential causal powers, which may or may not be activated, would also clarify the empirical as only that which is realised. Brand’s “empirical factors” (435) should then be distinguished from potential causes which may either remain unrealised or fail to be empirically observed. Empiricism is important but limited as a way in which to understand reality. An alternative radical social ecological economy is a potential, but under capitalist conditions prevented from arising. Empiricism can only reveal limited aspects of what has been actualised. There is the possibility that empirical research might show power relationships that prevent certain types of information from leading to policy action, but much remains hidden from the empirical perspective.

A critical realist perspective can, I believe, help clarify the relationships between the real, the actual and the empirical. The naïve objectivist typically reduces reality to atomistic events and regularities between them basing their knowledge claims only on what is observable. This means what is observed is taken to be what exists and reality is equated to the empirical. Yet, empirical observation is limited and only forms a subset of actual events (i.e., to simplify, not everything that happens is measured or measurable). Similarly, the actualised is a subset of the potential (i.e., what could have happened if …). This recognises that the reduction of reality to activated and/or realized mechanisms neglects unactivated and/or unrealized mechanisms that exist as potentials (e.g. potential policies that go unformulated and unrealised). There is then a distinction between real structures and actual events as well as between actual events and empirical experience.

Humans may well maintain exploitative relationships with Nature that empirically appear unproblematic for a long time, just as capitalism exploits labour and still thrives. This was a central argument made in the 1970s explanation of how exponential growth patterns in human society could lead to collapse without being recognised by traditional scientific empiricism (Meadows et al. 1972). The structure of our material and energy throughput economy is incompatible with maintaining the structure and functioning of ecological systems, but empiricism is backward looking and will reveal the full scale of the disaster only after the event, when action is too late.

4. Concluding Remarks

Ulrich Brand has proposed that neither the rationalist nor the interpretative approaches to policy analysis are adequate. They both fail to address important aspects of reality and propose methodological procedures that exclude each other’s insights. While IPA has made some valid criticisms of the rationalist approach the position also has its own problems. The strong constructivist perspective as a reaction to the naïve objectivist can be regarded as having heavily overplayed its hand in terms of the extent to which scientific investigation is to be rejected and all knowledge is to be regarded as contextual and relative. Indeed, despite Brand claiming close proximity, there seem to be some stark differences between his HMPA and the neo-Foucauldian IPA.

While Brand allies himself explicitly as closer to the interpretative approach he makes proposals which, to me, seem closer to an alternative that embraces but aims to transform certain
elements of the previous approaches. In this respect some of the claims about social construction of knowledge appear to contradict others about the role of structure and empirical analysis. Perhaps the use of examples to explicate the proposed framework for policy analysis might help. There certainly is a need for recognition that policy analysis does require concepts that need to be constructed but also does relate to a social, economic and ecological reality. This requires steering a course between naïve objectivism and strong social constructivism. In the process, an explicit account is required of the role and form of empirical analysis and what it can and cannot be expected to deliver. In doing so, analysis of the hidden real structures and potentials of the world need to be placed at the fore.

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