Dealing with the Darkside of Policy Design: Policy Resilience and Volatility in Policy Mixes

> Michael Howlett Department of Political Science Simon Fraser University Burnaby BC Canada <u>howlett@sfu.ca</u>

> > Presented to ICPPIV Montreal PQ June 2019

Abstract

Policy design studies to date have focussed almost exclusively on the "good" side of policy formulation, that is, dealing with concerns around ensuring that knowledge is marshalled towards developing the best feasible policy in any given context under the assumption of well-intentioned governments and accommodating policy targets. This work has looked at issues around how policies evolve over time and focused upon understanding how such policies can be made more robust and resilient but without carefully examining or allowing for the possibility that government intentions may not be solely oriented towards the creation of public value, or that policy targets may indulge in various forms of 'misconduct' from fraud to gamesmanship, undermining government intentions of whatever kind. While self-interested, corrupt or clientelistic policymaking has been the subject of many studies in administrative and regulatory law, even the best of policy intentions can be perverted in implementation and the need to design policies to be resilient against conscious and determined efforts on the part of policy targets to undermine them is pressing. Although the question of intentional efforts to undermine or pervert policies and programmes in less than benign ways on the part of policy targets has only now become a source of interest among policy scholars some lessons can be learned from these other studies of policy tools and instruments about improving policy designs to deal with malicious behaviour.

Introduction: Professor Pangloss and the Volatility of Policy Designs

Current work on policy design often adopts a panglossian vision of the subject, viewing policymaking activity through "rose-coloured" glasses as a well-intentioned effort on the part of governments to address and resolve problems in a dispassionate, technical way that best serves the public interest (Arestis and Kitromilides 2010). Even those studies which insist on the political and power-based nature of policy narratives and target constructions still hold out hope that such 'distortions' can be corrected and clearer visions of evidence-based policy solutions can emerge from policy processes and be implemented effectively (Feldman 2018; Oliver and Pearse 2017).

Such thinking does a disservice to policy design and policy studies, however, by failing to address head-on the possibilities, often observed in policy-making practice, that (a) policy-makers are often driven by malicious or venal motivations rather than socially beneficial or disinterested ones and (b) policy targets are also not saints and have proclivities and tendencies towards activities such as gaming, free-ridership and rent-seeking that must be curbed if even wellintentioned policies are to achieve their aims (Hoppe 2017; Feldman 2018).

These aspects of policy-making and policy design constitute the degree of '*volatility*', found in a policy area, that is, the likelihood or propensity of certain instruments and certain design situations to lead to unstable policy mixes due to the deployment of instruments and tools which by their nature involve a high risk of failure, and the likelihood of certain design situations to lead to their adoption. This can be contrasted to more stable tools and mixes, and more stable contexts, in which designs are likely to approximate the image often set out in the literature on the subject.

This paper addresses both these issues and the state of the policy design literature on the causes and consequences of such behaviour. It proposes a new research agenda dealing with this 'dark side' of policy designs volatility and the processes of policy designing which lead to them.

The Darkside of Policy-Making: Dealing with Maliciousness and Wilful Ignorance on the Part of Policy-Makers and Policy-Takers

The general problem of poor or self-interested behaviour interfering or undermining efforts to promote the public good, of course, is one of the oldest in political study (Saxonhouse 2015). This has several aspects which are policy relevant but often ignored or downplayed in thinking and writing about policy-making. These range from the use of public authority to promote the interests of ethnic, religious and other favored groups or specific sets of "clients" (Gans-Morse et al 2014; Goetz 2007) or penalize or punish others (Howlett et al 2017), its (mis)use to enrich or otherwise benefit policy-makers and administrators (Uribe 2014), and its use to manipulate a variety of activities of target groups through, for example, vote-buying or other forms of electoral pandering (Brancati 2014; Manor 2013) (see Table 1 below).

			Key Actors	
		Public Agencies	Regulated Private & Public Actors	Private Actors
	Public	Altruism and Public Good (Beneficial programme design and delivery)	Regulated Industries and Relationships	Harnessed to Public Purposes (Efficiency/Innovation etc)
Interest Served	Private	Corruption/Client elism/ Group/ethnic favoritism	Gaming rules	Gaming/Crime/ Fraud

Table 1 – Problematic Aspects of Tool Deployment by Interest Served

Although omnipresent in popular accounts and traditional and social media visions of policy-making, these activities are generally absent from standard textbooks and other works on policy-making (Howlett et al 2009; Anderson 1975, Weimer and Vining 1989) which often adopt as self-evident the idea that policy-making and policies should be developed in accordance with the best evidence and practice in order to generate public value (Mintrom and Luetjens 2018, Moore 1994 and 1995). While this is a noble thought, the evidence of corruption, collusion, clientelism and other forms of "bad" policy-making behaviour is all around us (Dahlström et al 2012) and is a pervasive trope in the popular media (Cappella and Jamieson 1996). However, this behaviour extends beyond the activities of policy-makers themselves to the equally under-studied phenomenon of public or target group perversion of even the noblest efforts at generating public value.

Both such behaviours should not be ignored but rather should serve as cautionary notes for policy-makers and serve as constraints which erstwhile policy designers should consider introducing an additional set of criteria for developing and evaluating effective policy designs and dealing with the risks of policy failure (Peters et al 2018; Taylor 2013 and 2019). This is especially the case with designs which implicitly or explicitly rely on goodwill and engaged, compliant, target group behaviour for their effectiveness, such as co-production, collaboration and other forms of voluntary regulation (Ansell et al 2017). But these also extend to all other forms of policy activity and instrument use, from the provision of loans and subsidies to the creation of administrative rules and the provision of information (Howlett 2019). Policy designers concerns with the resiliency and robustness of their designs (Howlett 2019) need to anticipate such behaviour and take steps in their designs to prevent its occurrence or channel it towards the public good (Schultze 1977; Blanc 2018).

The Problems of Maliciousness and Wilful Ignorance

The fact that false, biased or misleading information enters into political discussions and policy deliberations is not new and the policy sciences have always recognized the limits or bounds of knowledge in policy-making (Simon 1967 and 1978; Jones 2002). Similarly, the idea that policy problems are at least in part socially constructed and the nature of policy problems, solutions and targets are biased in various ways is also an old insight (Schneider and Ingram 1993 and 1998, Foucault 1979; Lemke 2002). Both of these components of policy-making and their impact on policy work and analysis have been a steady subject of debate and interest in the field for decades (Fischer 1987; Fischer and Forrester 1993).

Nevertheless, with respect to the role of knowledge or the epistemologies of policy-making

and policy analysis, policy scientists have always viewed themselves as following a mode of 'speaking truth to power' (Wildavsky 1979); that is, assembling and presenting verifiable facts and evidence about what works and what does not to policy-makers, taking steps to offset biases and overcome limitations on knowledge in so doing. Epistemologically speaking, the underlying theory of knowledge behind the mainstream policy sciences, existing as a pre-supposition for much analysis and deliberation, has always been a 'realist' one; that is, a stance towards the world in which it is assumed that 'evidence' objectively exists and can be marshalled by careful study and analysis to address specific kinds of policy problems. Generations of policy scholars have advanced, applied, and refined rational or instrumental models and approaches to policy-making that interpret the policy making process based on the principle assumption that all policy participants are able to distinguish fact from fiction, even if conflicts over meaning and strategy may be endemic to the politics of policy-making (Tribe 1972; Goodin 1980; Saward 1992; Hawkesworth 1992).

This approach has always acknowledged the limits of cognition, or the social and ontological "boundedness" of rationality, but has rarely dealt with the perpetual desire of self-interested parties, from decision-makers to policy targets, to hijack, distort or otherwise re-orient public processes towards their ends and goals (Jones 2002; Habermas 1974).

The former concern, relating to the difficulties of predicting accurately all possible courses of action and their implications, has led policy scientists to deal with both actual uncertainty or a true lack of knowledge about future states of affairs (Manski 2011 and 2013; Morgan and Henrion 1990) as well as with a related but different epistemological concern: *ignorance* on the part of policy-makers or targets. Both are considered to be major sources of policy failure even when polices are well-intentioned and evidence-based (Bovens and t'Hart 1996; Howlett 2012).

The policy sciences are well-prepared to deal with the second issue of a lack of knowledge representing a correctable deficiency in *existing* knowledge. This, it is commonly argued, can be ameliorated by careful knowledge transmission and persistent education activities directed either towards policy-makers who may be ignorant, for example, of the latest science on an issue such as climate change, or of policy targets who likewise may not know about a programme or subsidy for which they are eligible. In fact some scholars have characterized the work of policy analysis as a whole in precisely these terms, that is, as involving principally the effort to generate and disseminate as much policy relevant knowledge as possible, ensuring decisions are taken which are fully cognizant of all "known-knowns" (Hawkesworth 1992; Chow and Sarin 2002; Logan 2009). The first concern, on the other hand, is related to the limits or bounds of knowledge which policy-makers need to be cognizant of in assessing policy options and determining specific courses of action (March 1978; Forester 1984; Jones 2001 and 2002). These are the "unknown-unknowns" so famously described by former US secretary of defence Donald Rumsfeld in his ruminations of what led to the policy fiasco of the US invasion of Iraq (Logan 2009).

The one epistemological effort aims to transform ignorance by the injection of knowledge, converting inappropriate and incorrect knowledge into more reliable evidence which can better inform the actions of policy-makers and takers. And in the second, the recognition of the boundedness of knowledge is seen not as an excuse not to undertake good faith efforts at better empirical description and analysis of the social world and the impact of specific kinds of government interventions within it, but rather as a warning to all parties of the imperfect nature of knowledge, the difficulties involved in predicting the future, and the need to hedge reason against uncertainty and act in a prudential or precautionary fashion if the public interest is to be served (Dunn 1991; Van der Sluijs 2005; Manski 2011).

Both these fixes, however, assume that the end of policy-making is to serve the public interest and enhance public value (Mintrom and Luetjens 2018, Moore 1995) and that what can be thought of as errors of omission and commission in policy-making are unintentional, with all participants amenable to learning and carefully-considered action. Although studied much less frequently, or course, a more Machiavellian stance towards the policy process exists, in which a much more malicious intent informs policy deliberations and actions (Goodin 1980; Riker 1988; Saward 1992; Schultz 2017). As highlighted by many studies of corruption and clientelism in government decision-making (Scott 1989; Treisman 2007), for example, this stance towards knowledge is an alternative to prudential reason which utilizes certain types of evidence and facts while ignoring others in promoting and disseminating self-interested policy alternatives. In such efforts, lies and mis-statements and appeals to emotional and cultural stereotypes and attribution of false motives to rivals and targets are quite common (Goodin 1980; Maor 2015; Perl et al 2018).

Maliciousness also motivates a fourth policy-making stance, the analogue of 'classical' unintentional ignorance to evidence, which is 'wilful' or intentional ignorance, the phenomenon of burying one's head in the sand or purposely ignoring existing evidence and persisting with false beliefs (Proctor and Schiebinger 2008). This has come to the fore in contemporary policy-making and commentary around the Trump, Orbán and other recent neo-nationalist administrations in Europe, North America and elsewhere (Richey 2017; (Oliver ad Wood 2014; Pasek et al 2015; Del Vicario et al 2017; Oliver and Wood 2014; Perl et al 2018).

Whether such actions are taken for the personal enrichment of proponents or for evil purposes such as the elimination, oppression or exploitation of rival groups or ethnicities, *malice* in this sense is a rival epistemological stance to the policy analytical orthodoxy. It is one in which instrumental reason is still present in policy-making but is exercised in the individual or group

self-interest rather than for that of the public (see Figure 1).

		Extent of knowledge of policy problems and solutions	
		High	Low
Nature of knowledge utilization	For the public good	Instrumental rationality/reason Policy problem: boundedness, uncer- tainty Solutions: more and better analysis, prudence	Ignorance Policy problem: high propensity for avoid- able policy failure, blame Solutions; Enhanced Education, Better Knowledge Dissemi- nation & Transmission
	For particular gain	Maliciousness Policy problem: high private value, low or negative public value Solution: transparency and account- ability; legal proscription	Willful ignorance Policy problem: high propensity for avoid- able policy failure Solution: suppression, legal proscription

Figure 1 – The Epistemology of Maliciousness

Source: Perl, Anthony, Michael Howlett, and M. Ramesh. "Policy-Making and Truthiness: Can Existing Policy Models Cope with Politicized Evidence and Willful Ignorance in a 'Post-Fact' World?" *Policy Sciences* 51, no. 4 (December 2018): 581–600. <u>https://doi.org/10.1007/s11077-018-9334-4</u>.

Like ignorance, the malicious use of knowledge to manipulate policy processes is also anathema to traditional policy science, not only on moral grounds, since it typically replaces the public interest with the private as the chief criterion for policy adoption, but also on epistemological ones as it undermines the ability of analysts to accurately describe and convey an objective appraisal of costs and benefits to policy-makers in that interest.

Such actions have been studied from time to time – such as when policy actors spin and misinform policy making by introducing inaccurate information into policy debates and

deliberations as happened in the 1960s and 1970s around tobacco control and more recently around global warming (Oreskes and Conway 2011) – but not systematically.

Dealing with the Adverse Behaviour of Policy Takers

Most of the concerns raised above, when they have been examined, have been analyzed in the case of policy-makers. But there is a large second area of concern which also exists: that related to the adverse or malicious behaviour of policy "takers". This issue also has to do with mendacity and/or Machiavellian behaviour on the part of policy-takers, a subject often glossed over in studies of policy compliance and 'target behaviour' (Howlett 2018).

Here the idea commonly found in the policy literature is that the only real issue in policy compliance is merely a matter of "getting incentives (and disincentives)" right" (Howlett 2018). This not only ignores aspects involved in the social and political construction of targets highlighted above (Schneider and Ingram 1990a, 1990b), but also minimizes the complex behaviours which go into compliance, most notably considerations of legitimacy, but also related to cupidity, trust and other social and individual behavioural characteristics as well as the operation of a wide variety of descriptive and injunctive social norms (Howlett 2019; Bamberg and Moser 2007; Thomas et al 2016).

Not the least of the problem with this view is that it has a notion of policy-takers as static targets who do not try, or at least do not try very hard, to evade policies or even to profit from them (Howlett 2019; Braithwaite 2003; Marion and Muehlegger 2007). Such activities on the part of policy takers, however, are key in determining the success of various government initiatives ranging from tobacco control to bus fare evasion (Delbosc and Currie 2016; Kulick et al 2016) and should be 'designed for' in the sense that determined non-compliance and gaming should be taken

into account in designing policies, along with many other such behaviours, such as free-ridership, fraud and misrepresentation (Harring 2016). As it stands, these are often thought of as purely 'implementation' issues and left up to administrators to deal with rather than forming an essential component of policy formulation and design (Doig and Johnson 2001; Kuhn and Siciliani (2013).

The Impact of Wilful Ignorance and Maliciousness on Policy Resilience: Dealing with the Volatility of Policy Mixes in Policy Designs

Contemporary studies of policy design have increasingly focused on better understanding "policy mixes," that is, bundles of tools and instruments commonly assembled into policy programs to attain a government aim (Howlett 2011; Rogge and Reichardt 2016). Recent research has begun to examine the manner in which such mixes have been constructed, how they have evolved over time and how they can be designed to be more robust and resilient in the face of various kinds of challenges post-enactment (Beland et al 2019; Jordan and Matt 2014).

Although some recent studies have begun to look at *robustness*, or how policy mixes can be designed to remain effective over a range of alterations in their contexts and targets (Capano and Woo 2017; Capano et al. 2018), *resilience*, or the ability of a policy to withstand challenges to its elements and persist in effectiveness over time, especially when deliberate efforts are made to alter, adapt or repeal all or part of it is a key concern (Comfort 2010; Duit 2016; Folke 2006; Holling 1973; Wilts and O'Brien 2018; Howlett 2019) and is a design parameter directly affected by malicious target behaviour.

The need for robustness and resilience: designing policy mixes over space and time

It is well recognized that even when policies are designed with a clear evidentiary basis in a model formulation process so that they are well suited to the issues and concerns of the contemporary era, they may still fail over time if they do not adapt to changing circumstances and concerns as policy implementation proceeds and the policy is put into action (Nair and Howlett 2017; Bennett and Lemoine 2014a and 2014b).

This suggests a need to be able to design and adopt policies featuring some level of agility and flexibility in their components and processes. In more turbulent circumstances, for example, where policy ideas and actors change frequently (Howlett and Ramesh 1998), policies must be designed to be flexible. In practice, this mean policies and policy-making require additional and redundant resources and capabilities which allow them to change course as conditions change, including feedback mechanisms and procedures for automatic or semi-automatic adjustment (Pierson 1992 and 1993; Baumgartner and Jones 2002; Jacobs and Weaver 2015).ⁱ

This is also true of what is needed to deal with volatility in policy mixes. That is, when policy tools are utilized which are subject to gaming, fraud or misrepresentation, for example, additional resources are required to build in the accountability, monitoring and auditing functions required for such mixes to operate effectively (Blanc 2018).

Recent studies of policy design have established insights into the question of what makes a policy design 'sticky' or more likely to remain in place over the long term which are often lambasted but which can reduce volatility if used properly. Path dependency, for example, is a well-known phenomenon in social processes (Arthur, 1988; 1989; David, 1985; 1986; Liebowitz and Margolis, 1995; 1990) which has been applied with effect in the policy sciences in order to understand the construction and maintenance of policy trajectories – that is, how initial policy actions remain more or less in effect over a long period of time, often being reinforced and made more difficult to change ("locked in") by the passage of time (Greener 2005; Cox 2004; Deeg 2001). Although much of the literature on path dependency and lock-in focuses on questions around (sub)optimality and (in)effectiveness of policy mixes which have evolved in this way (Peters et al 2018; Howlett and Rayner 2013; del Rio 2010), these studies also reveal several lessons that can be drawn for resilient and robust policy designs in general and more specifically in the case of highly volatile ones.

That is, mixes that emerge over long stretches of time as a result of earlier policy decisions and layering thus often face the situation in which even when the initial logic of a mix may have been clear at the outset, it can gradually transform into a degenerative or incoherent mix over time (Bode 2006; Hacker 2005). These kinds of 'unintentional' mixes can be contrasted with 'smarter' designs which involve creating new sets of tools specifically intended to overcome or avoid the problems associated with path-dependent layering processes. A key element in such smarter designs involves including procedural tools such as periodic reviews and sunset provisions which can enhance resilience and robustness (Gunningham et al 1998; Kiss et al 2013). This is less a concern for how policy mixes might evolve over time in an unintentional fashion as new elements are added to old mixes in successive rounds of policy-making, and how these may be corrected, but more towards the *intentional* introduction of additional elements into a policy mix either at the outset or in a delayed or stages fashion, but in either case in a process envisioned from the outset, and carried out in a clear and intentional way (Justen et al 2014, Taeihagh et al 2013), so that new elements become 'locked-in' to an initial design (Howlett 2019).

On a substantive level, "robust" policies are those which incorporate some slack, allowing room for adjustments as conditions change. Robust policies, as in the case of a bridge or building,

13

need to be 'overdesigned' or 'over-engineered' in order to allow for a greater range of effective, thus 'robust', responses across contexts and time. This is well illustrated in the case of crisis and disaster management where, in order to be able to survive crises, systems and organisations require redundancy, back-up systems, and a greater use of materials than would normally be necessary for efficiency in a technical sense (Lai 2012). Organisations which are too lean (Radnor and Boaden, 2004) may eliminate elements that could be useful when circumstances change, thus restricting the ability of an organization to respond to surprises (Room 2013b).

Resilience, on the other hand, requires the ability to alter and adapt policies on the fly – to improvise effectively. This can involve, for example, building into a policy a range of 'automatic stabilizers' such as welfare payments or unemployment insurance payments which increase in the event of an economic downturn, maintaining some level of spending and saving despite a general economic contraction or removing some funds from investment availability during boom times (Salamon, 2002). Policy designs that contain both a substantive component — a set of alternative arrangements thought to be potentially capable of resolving or addressing some aspect of a policy problem — as well as a procedural component — a set of activities related to maintaining some level of agreement among those charged with formulating, deciding, and administering a policy and control over target behaviour are more resilient than those which lack them.

Correcting Wilful Ignorance and Maliciousness through the Inclusion of Procedural Tools in Policy Designs

Malicious activity and willful ignorance on the part of policy-makers can be called out by policy analysts and ultimately eliminated from deliberations by prudent decision-makers concerned about policy efficiency and effectiveness (Dunn 1988; Webber 1992). But what about such activity on the part of policy targets? How should policies be designed to avoid such behaviours on their part (Galanter 1980)?

Ensuring policy robustness and resilience in the face of maliciousness requires the inclusion of procedures which allow responses to surprises – including non-compliance by policy targets - to be improvised and implemented in an effective way *as they occur* (Room 2013a and 2013b). This includes, for example, built-in policy reviews, and mechanisms for outside evaluation and control including provisions for future public hearings and information access, disclosure and dissemination which allow significant adjustments to changing circumstances to occur (Lang 2016).

On a more substantive level, however, many mix designs have been developed with only the most rudimentary and cursory knowledge of how tool compliance relationships operate or how specific kinds of tools are likely to interact and change over time (Kiss 2013; Taylor et al 2013). However some work on this subject does exist, however, and can serve as a starting point for the analysis of how to deal with volatile tools and designs

In the mid-1970s and early 1980s, for example, Bruce Doern, Richard Phidd, Seymour Wilson and others argued that a critical aspect of instrument choice centered on compliance and that the best way to deal with uncertainties around compliance involved the temporal sequencing of tools in reaction to compliance gains and losses. They argued that different policy instruments varied primarily in terms of the 'degree of government coercion' each instrument choice entailed (Doern 1981; Doern and Phidd 1983; Doern and Wilson 1974; Tupper and Doern 1981) and that tool choices should 'move up the spectrum' of coercion from minimum towards maximum as compliance issues persisted and government goals failed to be met by lower coercion tools. Preferring "self-regulation" as a basic default, for example, they argued governments should first

15

attempt to influence overall target group performance through exhortation and then add or replace instruments as required in order to compel recalcitrant societal actors to abide by their wishes, eventually culminating, if necessary, in the public provision of goods and services.

This suggests the need for constant monitoring and assessment or evaluation of policy impacts and outcomes and the ability to respond to any compliance deficits with new tools or altered calibrations (e.g. higher fines or greater subsides, as the case may be) in order to secure desired levels of compliance. This fits nicely with Weaver's (2014 and 2015) admonition that designers think not in terms of compliance, per se, but rather in in terms of 'compliance regimes' in which different policy targets can be treated in different ways depending on the actual motivations of their behaviour. This again is a subject which requires a high level of policy acumen and analytical/evaluation capacity on the part of government (Wu et al 2015; Howlett 2015).

As far as wilful ignorance goes, it has been present in earlier eras in regimes in which, policy-making for example, centered on the prejudiced beliefs of members of the public about ethnic groups or the stereotypical treatment of minorities , women and others. In general the worst aspects of this behaviour such as hate-speech and slander, were suppressed or circumscribed by either law or convention or both (Herz and Molnar 2012) while education systems attempted to deal with gaps in the underlying fact base that serves as the foundation for such views (Tumin et al 1958; Tent 1984). This kind of speech has recently moved out of the far fringes of political debate and tabloid-level publicity and literally been given a space and amplified voice by the opening up social media and non-traditional news outlets from Reddit to Breitbart (Bogers and Wernerson 2014; Perl et al 2018). This is at least in part due to the decline of traditional media gatekeepers, allowing many views to evade legal and conventional limits on speech (Wallace 2018). Like the education activities around the elimination of more classical ignorance, some

efforts to re-establish gatekeepers are by necessity system-wide, but also can be included in specific policy designs through, for example, education and outreach programmes which promote tolerance or enhance social norms related to the elimination of bias and prejudice (Weiss and Tschihart 1994).

In general there are several causes of policy volatility which can be situated in the relationships which exist between well- and other-intentioned policy behaviour on the part of policy-makers and policy-takers. These take different forms, however, depending on the policy tools involved. Hence most perversions of the public interest such as corruption are organizational in nature and can be cured through a combination of organizational and regulatory activity such as the creation of anti-corruption agencies and the development of more effective financial and recruitment controls, including limits of party funding and government contracting and procurement activity (Graycar 2015; Graycar and Prenzler 2013; Phillips and Levasseur 2014).

Other perversions have a more quasi-governmental aspect and affect other policy tools such as authority-based (regulatory) ones or financial instruments. These range from more prosaic forms of regulatory capture (Levine and Forrence 1990) to the gaming of regulations and sophisticated swindles and abuses of government treasury and tax largesse (Doig and Johnson 2001; Raghunanden 2018). These require the use of careful monitoring of policies and regulatory behaviour and the use of acts such as the Federal Advisory Commission Act in the US or various lobbyist registries controlling regulator-regulatee interactions through enhanced mandatory transparency (Chari et al 2007; Carpenter and Moss 2013; Karty 2002). Incomplete contracts and poor procurement practices, for example, can allow government procedures and rules to be gamed at the public expense and require better legal construction and design (Scott and Triantis 2005).

This discussion is summarized in Table 2 below

17

Tool Type	Flaw	Perverse	Solutions
		Results	
			PROCEDURAL TOOLS
Organization	Public Failure/	Diversion of	Accountability/transparency etc
	Corruption/	public resources	Anti-Corruption bureaus
	SOEs contracting	to private	Blockchain bidding &
	Co-production -	aims/end	procurement/contracting records
	clientelism		Fraud Squads
Authority	Regulatory Gaming/	Diversion of	Careful Design, Monitoring &
	Capture	public ends to	Learning
	Bribes and kick-backs	private	Whistleblower laws
			Sunset laws
			Merit appointments
			Conflict of interest laws
Treasure	Gaming/Fraud	Diversion of	Complete Contracts, Careful
	_	public resources	subsidy/tax design
		to private	Monitoring and
		Ĩ	verification/enforcement/inspections
Nodality	Diversion of	Private Gain	More carefully targeted messages
	individual/group		Truth in advertising laws
	message for private ends		-
	E.g. propaganda or		
	blackmail		

Table 2 - Tool Volatility and Design Alternatives

As Table 2 shows, designs based on nodality and nudges and/or treasure resources (e.g. those most closely associated "modern' collaborative governance) always highly volatile as incentives are ripe for cheating and gaming and protections are often low. Therefore there is a need to "design in" correctives such as accountability mechanisms, verification and monitoring plans and the like right at the outset in order to ensure these are locked in and left in place as the programme or policy matures (Plaček and Ochrana 2018; Vine and Sathaye 1999). Other designs based on authority or regulation tend to decline over time (Capture/corruption). Again this can be controlled for right at the start through the use of procedural devices such as sunset clauses and term limits, conflict of

interest rules, ethics commissioners and similar kinds of administrative procedures (McCubbins et al 1987).

There is a need to assess risks of failure right at the outset (Falco 2017; Taylor et al 2019). The bottom line however is that while all designs are susceptible to gaming and corruption, not all are volatile as others. That is, volatility is (1) not always at the same point in time (creation vs after some time) (2) not always manifested in the same way and (3) requires different ways to correct for problems. Market mixes are always vulnerable and highly volatile and require constant monitoring. Regulatory or organizational alternatives are also vulnerable but less volatile or more inert; mainly requiring control over the long term to avoid capture and corruption.

Conclusion: Controlling Volatility and Dealing with the Darkside of Policy Making/Design

Whether it is policy design in the sense of policy studies – that is, dealing with the design of policy instruments and instrument mixes (Howlett 2019) – or with the application of 'design thinking' to policy formulation – in the form of more publicly driven participatory efforts to define problems and identify solutions in a 'thinking outside the box' style (Blomkamp 2018, Clarke and Craft 2017), both orientations can be criticized for having neglected the realpolitik of policy-making and policy-taking (Colebatch 2018; Turnbull 2018). Although political scientists, sociologists and anthropologists have invoked a sizable literature on policy advice in the tradition of Machiavelli's advice to princes (Machiavelli 1988; Goldhamer 1978; Shore et al 2011; Colebatch 2018) which has emphasized the use of state power in the pursuit of personal and political gain, this long record of activity has been largely ignored by policy textbooks and studies.

Instead of dealing head-on with the diverse motivations which drive policy-makers, including such topics as corruption, venality and the desire to punish enemies and reward supporters, these works all begin from the premise that policy-makers and actors, especially those in authoritative positions in governments and bureaucracies, are motivated by the best of intentions to improve the public weal or may be plagued by relatively benign concerns around bureaucratic budget maximization or other behaviours interfering with generally good intentions. In such works, errors are attributed to poor information or poor timing, for example, rather than to maliciousness and problems in implementation and formulation, especially, are ascribed to barriers to effectiveness, such as poor analytical, managerial or political capabilities and competences (Wu et al 2015).

While there is no doubt that these constraints exist and contributes o many policy failures (McConnell 2010 and 2017), it is also the case that other issues also bedevil policies including adopting policies for all the wrong reasons, such as conferring unwarranted benefits on members of society or enriching the bank accounts of public officials. This part of the 'dark side" of policy-making is almost never referred to, let alone studied and analyzed in the policy sciences. Yet the existence and nature of 'manipulatory politics' (Goodin 1980) is well-known and often observed and such behaviour on the part of policy-makers is the traditional fodder of muckracking newspapers and, increasingly, social media accounts of policy-making. Rather than be ignored, it is a subject worthy of systematic study in a more full-formed policy science.

The same is true of the behaviour of "policy-takers", that is the targets of public policies. Again, while the early policy studies had a well rounded notion of the kinds of activities undertake by policy-makers towards targets (Edelman 1988) and the highly political nature of the construction of sections of the populace as targets in the first place (Schneider and Ingram, 1990a; 1990b), these aspects of policy-making and compliance were largely lost in the 1970s and 1980s, only emerging in the period after 1990 as the limits of interventions and analysis based on narrow economistic assumptions about target behaviour emerged (Radin, 2002).

Most policy studies continue to focus exclusively on the behaviour of 'rational' individuals faced with government incentives and disincentives, approaching these subjects from a hedonic, utilitarian perspective. Not only does this ignore non-utilitarian aspects of behaviour such as addiction or self-harm, but also, generally moral sentiments and orientations linked to religious, ethical and other sets of widely or individually-held beliefs (Howlett 2018), as well as malicious and poorly intended behaviour. Although some of these subjects have re-emerged thanks to the work and studies of behavioural economists who have resisted simple notions of hedonism and rationality in their work (Thaler et al 2010; Thaler 2018), many works built around the notion of nudges and the insights of choice architectures treat them as deviations from the standard model which lead to its modification and nuancing, rather than its abandonment.

A more fully-fledged policy science needs to be more open minded about how the minds of targets work and to be fully-informed by empirical and experimental work into these subjects, including those behaviours which form the 'dark-side' of policy-making. As this paper has suggested, all tools can be perverted (except perhaps nodality) and as such tools must be designed and deployed with possibility of perverse outcomes in mind. The policy realm is not the place for naivete about altruism and the good intentions of either policy-makers and policy-takers. Policy scholars need to look at more carefully at the Dark Side if the promise of the policy sciences is to be realized and more realistic policy designs are to be adopted and implemented.

Footnotes

References

Anderson, J. E. Public Policymaking. New York: Praeger, 1975.

- Ansell, Christopher, Eva Sørensen, and Jacob Torfing. "Improving Policy Implementation through Collaborative Policymaking." *Policy & Politics* 45, no. 3 (July 7, 2017): 467–86. <u>https://doi.org/10.1332/030557317X14972799760260</u>.
- Arestis, Philip, and Yiannis Kitromilides. "What Economists Should Know about Public Policymaking?" *International Journal of Public Policy* 6, no. 1/2 (2010): 136–53. https://doi.org/10.1504/IJPP.2010.031211.
- Bacchi, Carol. Analysing Policy. Pearson Australia, 2014.
- Bamberg, Sebastian, and Guido Möser. "Twenty Years after Hines, Hungerford, and Tomera: A New Meta-Analysis of Psycho-Social Determinants of pro-Environmental Behaviour." *Journal of Environmental Psychology* 27, no. 1 (March 2007): 14–25. https://doi.org/10.1016/j.jenvp.2006.12.002.
- Baumgartner F.R. & B. D. Jones (2002). Positive and negative feedback in politics. In F. R., Baumgartner & B. D. Jones (Eds.), *Policy dynamics* (pp. 3-28). Chicago: University of Chicago Press.
- Beland, D., Rocco, P., & Waddan, A. (Forthcoming). Policy feedback and the politics of the Affordable Care Act. *Policy Studies Journal*. 2019
- Bennett, Nathan, and G. James Lemoine. "What a Difference a Word Makes: Understanding Threats to Performance in a VUCA World." *Business Horizons* 57, no. 3 (May 1, 2014a): 311–17. https://doi.org/10.1016/j.bushor.2014.01.001.
- Bennett, Nathan, and James Lemoine. "What VUCA Really Means for You." *Harvard Business Review* 92, no. 1/2 (February 2014b). https://papers.ssrn.com/abstract=2389563.
- Blanc, Florentin. From Chasing Violations to Managing Risks: Origins, Challenges and Evolutions in Regulatory Inspections. Edward Elgar Publishing, 2018.
- Blomkamp, Emma. "The Promise of Co-Design for Public Policy." *Australian Journal of Public Administration*, 2018, n/a-n/a. <u>https://doi.org/10.1111/1467-8500.12310</u>.
- Bode, I. "Disorganized Welfare Mixes: Voluntary Agencies and New Governance Regimes in Western Europe." *Journal of European Social Policy* 16, no. 4 (2006): 346–59.
- Bogers, Toine, and Rasmus Wernersen. "How `Social' Are Social News Sites? Exploring the Motivations for Using Reddit.Com." *IConference 2014 Proceedings*, March 1, 2014, 329– 44. <u>https://doi.org/10.9776/14108</u>.

¹Recognition of this need is in strong opposition to many ideas about policy-making which equate better designs with efficiency, implying the allocation of only the minimum amount of resources possible, and which also often emphasize routinization and the replication of standard operating procedures and programme elements in order to ensure consistency in programme delivery (Moxey et al 1999; Cole and Grossman 1999). It requires clearer thinking about what exactly sequencing means, how it occurs in policy-making and how it can best be managed to ensure resilient and robust policies are created and remain in effect.

- Bond, Alan, Angus Morrison-Saunders, Jill A. E. Gunn, Jenny Pope, and Francois Retief. "Managing Uncertainty, Ambiguity and Ignorance in Impact Assessment by Embedding Evolutionary Resilience, Participatory Modelling and Adaptive Management." *Journal of Environmental Management* 151 (March 15, 2015): 97–104. https://doi.org/10.1016/j.jenvman.2014.12.030.
- Bovens, M., and P. t Hart. Understanding Policy Fiascoes. New Brunswick, N.J.: Transaction Press, 1996.
- Braithwaite, V.A., ed. *Taxing Democracy: Understanding Tax Avoidance and Evasion*. Aldershot, Hants, England; Burlington, VT, USA: Ashgate Pub Ltd, 2003.
- Brancati, Dawn. "Democratic Authoritarianism: Origins and Effects." *Annual Review of Political Science* 17, no. 1 (2014): 313–26. <u>https://doi.org/10.1146/annurev-polisci-052013-115248</u>.
- Capano, G., & Woo, J. J. (2017). Resilience and robustness in policy design: A critical appraisal. *Policy Sciences*, 50(3), 399-426
- Capano, G., Howlett, M., & Ramesh, M. (2018). Designing for robustness: Surprise, agility and improvisation in policy design. *Policy & Society*, 37(4), 405-421.
- Cappella, Joseph N., and Kathleen Hall Jamieson. "News Frames, Political Cynicism, and Media Cynicism." *The Annals of the American Academy of Political and Social Science* 546 (1996): 71–84.
- Carpenter, Daniel, and David A. Moss, eds. *Preventing Regulatory Capture: Special Interest Influence and How to Limit It.* New York: Cambridge University Press, 2013.
- Chari, Raj, Gary Murphy, and John Hogan. "Regulating Lobbyists: A Comparative Analysis of the United States, Canada, Germany and the European Union." *The Political Quarterly* 78, no. 3 (2007): 422–38.
- Chow, Clare Chua, and Rakesh K. Sarin. "Known, Unknown, and Unknowable Uncertainties." *Theory and Decision* 52, no. 2 (March 1, 2002): 127–38. https://doi.org/10.1023/A:1015544715608.
- Clarke, Amanda, and Jonathan Craft. "The Vestiges and Vanguards of Policy Design in a Digital Context." *Canadian Public Administration* 60, no. 4 (December 1, 2017): 476–97. https://doi.org/10.1111/capa.12228.
- Cole, Daniel H, and Peter Z Grossman. "When Is Command-and-Control Efficient Institutions, Technology, and the Comparative Efficiency of Alternative Regulatory Regimes for Environmental Protection." *Wisconsin Law Review* 1999 (1999): 887.
- Colebatch, HK. "The Idea of Policy Design: Intention, Process, Outcome, Meaning and Validity." *Public Policy and Administration* 33, no. 4 (October 1, 2018): 365–83. <u>https://doi.org/10.1177/0952076717709525</u>.
- Comfort, L. K. (2010). *Designing resilience: Preparing for extreme events*. Pittsburgh: University of Pittsburgh Press.
- Cox, R. "The Path-Dependency of an Idea: Why Scandinavian Welfare States Remain Distinct." *Social Policy and Administration* 38, no. 2 (2004): 204–19.
- Curzon, Hannah Fay, and Andreas Kontoleon. "From Ignorance to Evidence? The Use of Programme Evaluation in Conservation: Evidence from a Delphi Survey of Conservation Experts." *Journal of Environmental Management* 180 (September 15, 2016): 466–75. https://doi.org/10.1016/j.jenvman.2016.05.062.
- Dahlström, Carl, Johannes Lindvall, and Bo Rothstein. "Corruption, Bureaucratic Failure and Social Policy Priorities." *Political Studies*, 2012, n/a–n/a. <u>https://doi.org/10.1111/j.1467-9248.2012.00998.x</u>.

- Daugbjerg, C. (2003). Policy feedback and paradigm shift in EU agricultural policy: The effects of the MacSharry Reform on future reform. *Journal of European Public Policy*, 10(3), 421-437.
- Deeg, R. "Institutional Change and the Uses and Limits of Path Dependency: The Case of German Finance." Koln: Max-Planck-Institut für Gesellschaftsforschung, 2001.
- Del Vicario, Michela, Fabiana Zollo, Guido Caldarelli, Antonio Scala, and Walter Quattrociocchi. "Mapping Social Dynamics on Facebook: The Brexit Debate." *Social Networks* 50 (July 2017): 6–16. <u>https://doi.org/10.1016/j.socnet.2017.02.002</u>.
- Delbosc, Alexa, and Graham Currie. "Four Types of Fare Evasion: A Qualitative Study from Melbourne, Australia." *Transportation Research Part F: Traffic Psychology and Behaviour* 43, no. 4 (November 1, 2016): 254–64. https://doi.org/10.1016/j.trf.2016.09.022.
- Doern, G. B. The Nature of Scientific and Technological Controversy in Federal Policy Formation. Ottawa: Science Council of Canada, 1981.
- Doern, G. B., and R. W. Phidd. Canadian Public Policy: Ideas, Structure, Process. Toronto: Methuen, 1983.
- Doern, G. B., and V. S. Wilson, eds. Issues in Canadian Public Policy. Toronto: Macmillan, 1974.
- Doig, A., and S. Johnson. "New Public Management, Old Populism and the Policing of Fraud." *Public Policy and Administration* 16, no. 1 (2001): 91–111.
- Dollery, B., and J. Wallis. *Market Failure, Government Failure, Leadership and Public Policy*. London: Macmillan, 1999.
- Duit, A. (2016). Resilience thinking: Lessons for public administration. *Public Administration*, 94(2), 364-380
- Duit, Andreas. "Resilience Thinking: Lessons for Public Administration." *Public Administration* 94, no. 2 (June 1, 2016): 364–80. <u>https://doi.org/10.1111/padm.12182</u>.
- Dunn, W. N. "Methods of the Second Type: Coping with the Wilderness of Conventional Policy Analysis." *Policy Studies Review* 7, no. 4 (1988): 720–37.
- Dunn, William N. "Assessing the Impact of Policy Analysis: The Functions of Usable Ignorance." *Knowledge and Policy* 4 (December 1991): 36–55. <u>https://doi.org/10.1007/BF02692780</u>.
- Edelman, M. J. Constructing the Political Spectacle. Chicago: University of Chicago Press*, 1988.
- Falco, Gregory. "Constraint Tree Analysis: A Method to Evaluate Threats to Technology Policy Goals." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, February 19, 2017. <u>https://papers.ssrn.com/abstract=2939209</u>.
- Feldman, Yuval. *The Law of Good People: Challenging States' Ability to Regulate Human Behavior*. 1 edition. Cambridge UK; New York, NY: Cambridge University Press, 2018.
- Fischer, F., and J. Forester, eds. *The Argumentative Turn in Policy Analysis and Planning*. Durham: Duke University Press, 1993.
- Fischer, F., ed. Confronting Values in Policy Analysis: The Politics of Criteria. Beverly Hills, Calif.: Sage, 1987.
- Folke, C. (2006). Resilience: The emergence of a perspective for social-ecological systems analyses. *Global Environmental Change*, 16(3), 253-267,
- Folke, Carl. "Resilience: The Emergence of a Perspective for Social-Ecological Systems Analyses." *Global Environmental Change* 16, no. 3 (August 2006): 253–67. https://doi.org/10.1016/j.gloenvcha.2006.04.002.
- Forester, J. "Bounded Rationality and the Politics of Muddling Through." *Public Administration Review* 44, no. 1 (1984): 23–31.

Foucault, Michel. "On Governmentality." Ideology and Consciousness 6 (1979): 5-21.

- Galanter, M. "Legality and Its Discontents: A Preliminary Assessment of Current Theories of Legalization and Delegalization." In *Alternative Rechtsforen Und Alternativen Zum Recht*, edited by E. Blankenburg, E. Klausa, and H. Rottleuthner, 11–26. Bonn: Westdeutscher Verlag, 1980.
- Gans-Morse, Jordan, Sebastián Mazzuca, and Simeon Nichter. "Varieties of Clientelism: Machine Politics during Elections." *American Journal of Political Science* 58, no. 2 (April 1, 2014): 415–32. <u>https://doi.org/10.1111/ajps.12058</u>.
- Goetz, Anne Marie. "Manouevring Past Clientelism: Institutions and Incentives to Generate Constituencies in Support of Governance Reforms." *Commonwealth and Comparative Politics* 45, no. 4 (2007): 403–24.
- Goldhamer, Herbert. The Adviser. New York: Elsevier, 1978.
- Goodin, R. E. Manipulatory Politics. New Haven: Yale University Press, 1980.
- Grabosky, P. "Counterproductive Regulation." *International Journal of the Sociology of Law* 23 (1995): 347–69.
- Graycar, Adam. "Corruption: Classification and Analysis." *Policy and Society* 34, no. 2 (June 1, 2015): 87–96. <u>https://doi.org/10.1016/j.polsoc.2015.04.001</u>.
- Graycar, A., and T. Prenzler. *Understanding and Preventing Corruption*. 2013 edition. Palgrave Pivot, 2013.
- Greener, I. "The Potential of Path Dependence in Political Studies." *Politics* 25, no. 1 (2005): 62–72.
- Gross, Matthias. Ignorance and Surprise: Science, Society, and Ecological Design. MIT Press, 2010.
- Gunningham, N., P. Grabosky, and D. Sinclair. *Smart Regulation: Designing Environmental Policy*. Oxford: Clarendon Press, 1998.
- Habermas, Jurgen 1974 Knowledge and Human Interests (Boston: Beacon Press)
- Hacker, J. S. "Policy Drift: The Hidden Politics of US Welfare State Retrenchment." In *Beyond Continuity: Institutional Change in Advanced Political Economies*, edited by W. Streek and K. Thelen, 40–82. Oxford: Oxford University Press, 2005.
- Hacker, J. S. (2005). Policy drift: The hidden politics of US welfare state retrenchment. In W. Streeck & K. Thelen (Eds.), *Beyond continuity: Institutional change in advanced political economies* (pp. 40-82). Oxford: Oxford University Press.
- Harring, Niklas. "Reward or Punish? Understanding Preferences toward Economic or Regulatory Instruments in a Cross-National Perspective." *Political Studies* 64, no. 3 (October 1, 2016): 573–92. <u>https://doi.org/10.1111/1467-9248.12209</u>.
- Hawkesworth, M. "Epistemology and Policy Analysis." In *Advances in Policy Studies*, edited by W. Dunn and R. M. Kelly, 291–329. New Brunswick: Transaction Press, 1992.
- Herz, Michael, and Peter Molnar, eds. *The Content and Context of Hate Speech: Rethinking Regulation and Responses.* Cambridge; New York: Cambridge University Press, 2012.
- Holling, C. S. (1973). Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, 4(1), 1-23.
- Hood, C. The Tools of Government. Chatham: Chatham House Publishers, 1986.
- Hoppe, Robert. "Heuristics for Practitioners of Policy Design: Rules-of-Thumb for Structuring Unstructured Problems." *Public Policy and Administration*, June 4, 2017, 095207671770933. <u>https://doi.org/10.1177/0952076717709338</u>.

- Howlett, M. "Managing the 'Hollow State': Procedural Policy Instruments and Modern Governance." *Canadian Public Administration* 43, no. 4 (2000): 412–31.
- Howlett, M. "The Lessons of Failure: Learning and Blame Avoidance in Public Policy-Making." *International Political Science Review* 33, no. 5 (2012): 539–55.
- Howlett, M., & Rayner, J. (2007). Design principles for policy mixes: Cohesion and coherence in "new governance arrangements." *Policy and Society*, 26(4), 1-18.
- Howlett, M., and M. Ramesh. "Policy Subsystem Configurations and Policy Change: Operationalizing the Postpositivist Analysis of the Politics of the Policy Process." *Policy Studies Journal* 26, no. 3 (1998): 466–82.
- Howlett, M., and M. Ramesh. "The Two Orders of Governance Failure: Design Mismatches and Policy Capacity Issues in Modern Governance." *Policy and Society*, Is Governance for Everybody?, 33, no. 4 (December 2014): 317–27.
- Howlett, Michael P., and Jeremy Rayner. "Patching vs Packaging: Complementary Effects, Goodness of Fit, Degrees of Freedom and Intentionality in Policy Portfolio Design." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, 2013. <u>http://papers.ssrn.com/abstract=2273342</u>.
- Howlett, Michael, and Ishani Mukherjee, eds. *Handbook of Policy Formulation*. Cheltenham: Edward Elgar, 2017.
- Howlett, Michael, and Sreeja Nair. "The Central Conundrums of Policy Formulation: Ill-Structured Problems and Uncertainty." In *Handbook of Policy Formulation*, edited by I. Mukherjee, 2017.
- Howlett, M. "Policy Analytical Capacity: The Supply and Demand for Policy Analysis in Government." *Policy and Society*, Special Issue on The Dynamics of Policy Capacity, 34, no. 3 (September 1, 2015): 173–82. <u>https://doi.org/10.1016/j.polsoc.2015.09.002</u>.
- Howlett, Michael, Anka Kekez, and Ora-ORN Poocharoen. "Understanding Co-Production as a Policy Tool: Integrating New Public Governance and Comparative Policy Theory." *Journal of Comparative Policy Analysis: Research and Practice* 19, no. 5 (October 20, 2017): 487–501. https://doi.org/10.1080/13876988.2017.1287445.
- Howlett, Michael. "Governance Modes, Policy Regimes and Operational Plans: A Multi-Level Nested Model of Policy Instrument Choice and Policy Design." *Policy Sciences* 42, no. 1 (2009): 73–89.
- Howlett, Michael. "Matching Policy Tools and Their Targets: Beyond Nudges and Utility Maximisation in Policy Design." *Policy & Politics* 46, no. 1 (January 18, 2018): 101–24. https://doi.org/10.1332/030557317X15053060139376.
- Howlett, Michael. "The Criteria for Effective Policy Design: Character and Context in Policy Instrument Choice." *Journal of Asian Public Policy* 0, no. 0 (December 6, 2017): 1–22.
- Howlett, Michael. "The Temporal Dimension(s) of Policy Designs: Resilience, Robustness and the Sequencing of Tools in Policy Mixes." *International Review of Public Policy* 1, no. 1 (2019).
- Howlett, Michael. *Designing Public Policies: Principles and Instruments*. New York: Routledge, 2011.
- Howlett, Michael. *Designing Public Policies: Principles and Instruments*. 2nd Edition. London: Routledge, 2019.
- Jacobs, A. M., & Weaver, R. K. (2015). When policies undo themselves: Self-undermining feedback as a source of policy change. *Governance*, 28(4), 441-457,

- Jones, B. D. "Bounded Rationality and Public Policy: Herbert A. Simon and the Decisional Foundation of Collective Choice." *Policy Sciences* 35 (2002): 269–84.
- Jones, B. D. *Politics and the Architecture of Choice: Bounded Rationality and Governance.* Chicago: University of Chicago Press, 2001.
- Jones, RonNell Andersen, and Lyrissa Barnett Lidsky. "Of Reasonable Readers and Unreasonable Speakers: Libel Law in a Networked World." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, February 8, 2016. https://papers.ssrn.com/abstract=2729625.
- Jordan, A., & Matt, E. (2014). Designing policies that intentionally stick: Policy feedback in a changing climate. *Policy Sciences*, 47(3), 227-247
- Justen, A., Fearnley, N., Givoni, M., & Macmillen, J. (2014). A process for designing policy packaging: Ideals and realities. *Transportation Research Part A: Policy and Practice*, 60, 9-18
- Karty, Kevin D. "Closure and Capture in Federal Advisory Committees." *Business and Politics* 4, no. 2 (2002): 213–38. <u>https://doi.org/10.1080/1369525022000015649</u>.
- Kiss, Bernadett, Clara González Manchón, and Lena Neij. "The Role of Policy Instruments in Supporting the Development of Mineral Wool Insulation in Germany, Sweden and the United Kingdom." *Journal of Cleaner Production*, Environmental Management for Sustainable Universities (EMSU) 2010, 48 (June 1, 2013): 187–99. <u>https://doi.org/10.1016/j.jclepro.2012.12.016</u>.
- Kuhn, Michael, and Luigi Siciliani. "Manipulation and Auditing of Public Sector Contracts." *European Journal of Political Economy*. Accessed September 9, 2013. <u>https://doi.org/10.1016/j.ejpoleco.2013.08.002</u>.
- Kulick, Jonathan, James Prieger, and Mark A. R. Kleiman. "Unintended Consequences of Cigarette Prohibition, Regulation, and Taxation." *International Journal of Law, Crime and Justice* 46 (September 1, 2016): 69–85. <u>https://doi.org/10.1016/j.ijlcj.2016.03.002</u>.
- Lai, Allen Y. "Organizational Collaborative Capacity in Fighting Pandemic Crises A Literature Review From the Public Management Perspective." *Asia-Pacific Journal of Public Health* 24, no. 1 (January 1, 2012): 7–20. <u>https://doi.org/10.1177/1010539511429592</u>.
- Lang, Achim. "Collaborative Governance in Health and Technology Policy The Use and Effects of Procedural Policy Instruments." *Administration & Society*, August 10, 2016, 0095399716664163. <u>https://doi.org/10.1177/0095399716664163</u>.
- Lemke, Thomas. "Foucault, Governmentality, and Critique," 2000.
- Leung, Wanda, Bram Noble, Jill Gunn, and Jochen A. G. Jaeger. "A Review of Uncertainty Logan, David C. "Known Knowns, Known Unknowns, Unknown Unknowns and the Propagation of Scientific Enquiry." *Journal of Experimental Botany* 60, no. 3 (March 1, 2009): 712– 14. <u>https://doi.org/10.1093/jxb/erp043</u>.
- Levine, M.E., and J.L. Forrence. "Regulatory Capture, Public Interest and the Public Agenda: Towards Synthesis." *Journal of Law, Economics and Organization* 6, no. Special (1990): 167–98.
- Machiavelli, Niccolo, Quentin Skinner, and Russell Price. *The Prince / Machiavelli ; Edited by Quentin Skinner and Russell Price*. Cambridge Texts in the History of Political Thought. Cambridge ; New York : Cambridge University Press, 1988. <u>http://www.loc.gov/catdir/toc/cam031/88005048.html</u>.
- Mahoney, J. (2000). Path dependence in historical sociology. Theory and Society, 29(4), 507-548.

- Manor, James. "Post-Clientelist Initiatives." In *Democratization in the Global South*, 243–53. International Political Economy. Palgrave Macmillan, London, 2013. <u>https://doi.org/10.1057/9780230370043_11</u>.
- Maor, Moshe. "Emotion-Driven Negative Policy Bubbles." *Policy Sciences* 49, no. 2 (September 1, 2015): 191–210. <u>https://doi.org/10.1007/s11077-015-9228-7</u>.
- Manski, Charles F. "Policy Analysis with Incredible Certitude." *The Economic Journal* 121, no. 554 (August 1, 2011): F261–89. <u>https://doi.org/10.1111/j.1468-0297.2011.02457.x</u>.
- Manski, Charles F.. Public Policy in an Uncertain World: Analysis and Decisions. Harvard University Press, 2013.
- March, J. G. "Bounded Rationality, Ambiguity, and the Engineering of Choice." *Bell Journal of Economics* 9, no. 2 (1978): 587–608.
- Marion, Justin, and Erich Muehlegger. "Measuring Illegal Activity and the Effects of Regulatory Innovation: A Study of Diesel Fuel Tax Evasion." Cambridge: John F. Kennedy School of Government Faculty Research Working Paper Series RWP07-026, 2007.
- McConnell, Allan. "Hidden Agendas: Shining a Light on the Dark Side of Public Policy." *Journal* of European Public Policy, October 3, 2017. http://www.tandfonline.com/doi/abs/10.1080/13501763.2017.1382555.
- McConnell, Allan. Understanding Policy Success: Rethinking Public Policy. Basingstoke: Palgrave Macmillan, 2010.
- McCubbins, M. D., R. G. Noll, and B. R. Weingast. "Administrative Procedures as Instruments of Political Control." *Journal of Law, Economics, and Organization* 3, no. 2 (1987): 243–77.
- Mintrom, Michael, and Joannah Luetjens. "The Investment Approach to Public Service Provision." *Australian Journal of Public Administration*, 2018, n/a-n/a. <u>https://doi.org/10.1111/1467-8500.12250</u>.
- Moore, Mark H. "Public Value as the Focus of Strategy." *Australian Journal of Public Administration* 53, no. 3 (1994): 296–303.
- Moore, Mark H. Creating Public Value: Strategic Management in Government. Cambridge: Harvard University Press, 1995.
- Morgan, M. G., and M. Henrion. *Uncertainty: A Guide to Dealing with Uncertainty in Quantitative Risk and Policy Analysis*. Cambridge: Cambridge University Press, 1990.
- Moxey, Andrew, Ben White, and Adam Ozanne. "Efficient Contract Design for Agri-Environment Policy." *Journal of Agricultural Economics* 50, no. 2 (1999): 187–202. https://doi.org/10.1111/j.1477-9552.1999.tb00807.x.
- Nair, S., & Howlett, M. (2016). From robustness to resilience: Avoiding policy traps in the long term. *Sustainability Science*,
- Oliver, J. Eric, and Thomas J. Wood. "Conspiracy Theories and the Paranoid Style(s) of Mass Opinion." *American Journal of Political Science*, 2014, n/a–n/a. <u>https://doi.org/10.1111/ajps.12084</u>.
- Oliver, Kathryn, and Warren Pearce. "Three Lessons from Evidence-Based Medicine and Policy: Increase Transparency, Balance Inputs and Understand Power." *Palgrave Communications* 3, no. 1 (December 12, 2017): 43. <u>https://doi.org/10.1057/s41599-017-0045-9</u>.
- Oreskes, Naomi, and Erik M. Conway. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. Export ed edition. New York, NY: Bloomsbury Press, 2011.
- Pasek, Josh, Tobias H. Stark, Jon A. Krosnick, and Trevor Tompson. "What Motivates a Conspiracy Theory? Birther Beliefs, Partisanship, Liberal-Conservative Ideology, and

Anti-Black Attitudes." *Electoral Studies* 40 (2015): 482–89. https://doi.org/10.1016/j.electstud.2014.09.009.

- Plaček, Michal, Milan Půček, and František Ochrana. "Identifying Corruption Risk: A Comparison of Bulgaria and the Czech Republic." *Journal of Comparative Policy Analysis: Research and Practice* 0, no. 0 (September 3, 2018): 1–19. <u>https://doi.org/10.1080/13876988.2018.1472473</u>.
- Perl, Anthony, Michael Howlett, and M. Ramesh. "Policy-Making and Truthiness: Can Existing Policy Models Cope with Politicized Evidence and Willful Ignorance in a 'Post-Fact' World?" *Policy Sciences* 51, no. 4 (December 2018): 581–600. <u>https://doi.org/10.1007/s11077-018-9334-4</u>.
- Peters, B. Guy, Pauline Ravinet, Michael Howlett, Giliberto Capano, Ishani Mukherjee, and Meng Hsuan Chou. *Designing for Policy Effectiveness: Defining and Understanding a Concept*. Elements Series. Cambridge: Cambridge University Press, 2018.
- Phillips, Susan, and Karine Levasseur. "The Snakes and Ladders of Accountability: Contradictions between Contracting and Collaboration for Canada's Voluntary Sector." *Canadian Public Administration* 47, no. 4 (2004): 451–74.
- Pierson, P. (1992). "Policy feedbacks" and political change: Contrasting Reagan and Thatcher's pension reform initiatives. *Studies in American Political Development*, 6, 359-390.
- Pierson, P. (1993). When effect becomes cause: Policy feedback and political change. *World Politics*, 45(4), 595-628.
- Proctor, Robert, and Londa Schiebinger, eds. *Agnotology: The Making and Unmaking of Ignorance*. Stanford, Calif: Stanford University Press, 2008.
- Radin, B. A. *Beyond Machiavelli: Policy Analysis Comes of Age*. Washington DC: Georgetown University Press, 2000.
- Radnor, Zoe J., and Ruth Boaden. "Developing an Understanding of Corporate Anorexia." *International Journal of Operations & Production Management* 24, no. 4 (April 1, 2004): 424–40. https://doi.org/10.1108/01443570410524677.
- Raghunandan, Aneesh. "Government Subsidies and Corporate Fraud." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, November 20, 2018. <u>https://papers.ssrn.com/abstract=3035254</u>.
- Riker, W. H. The Art of Political Manipulation. New Haven: Yale University Press, 1986.
- Río, Pablo del. "Analysing the Interactions between Renewable Energy Promotion and Energy Efficiency Support Schemes: The Impact of Different Instruments and Design Elements." *Energy Policy* 38, no. 9 (September 2010): 4978–89. <u>https://doi.org/10.1016/j.enpol.2010.04.003</u>.
- Rogge, K. S., & Reichardt, K. (2016). Policy mixes for sustainability transitions: An extended concept and framework for analysis. *Research Policy*, 45(8), 1620-1635,
- Rogge, K. S., Kern, F., & Howlett, M. (2017). Conceptual and empirical advances in analysing policy mixes for energy transitions. *Energy Research & Social Science*, 33(Supplement C), 1-10
- Room, Graham. "Agile Policy on Complex Terrains Nudge or Nuzzle?," October 2, 2013a. <u>http://www.horizons.gc.ca/eng/content/agile-policy-complex-terrains-%E2%80%93-nudge-or-nuzzle</u>.
- Room, Graham.. "Evidence for Agile Policy Makers: The Contribution of Transformative Realism." *Evidence & Policy: A Journal of Research, Debate and Practice* 9, no. 2 (May 24, 2013b): 225–44. <u>https://doi.org/10.1332/174426413X662653</u>.

- Salamon, L. M. *The Tools of Government: A Guide to the New Governance*. New York: Oxford University Press, 2002.
- Saward, M. Co-Optive Politics and State Legitimacy. Aldershot: Dartmouth, 1992.
- Saxonhouse, Arlene W. "Aristotle on the Corruption of Regimes: Resentment and Justice." In *Aristotle's Politics: A Critical Guide*, edited by Thornton Lockwood and Thanassis Samaras. Cambridge: Cambridge University Press, 2015. <u>https://doi.org/10.1017/CBO9781107280748.011</u>.
- Schneider, A., and H. Ingram. "Social Construction of Target Populations: Implications for Politics and Policy." *American Political Science Review* 87, no. 2 (1993): 334–47.
- Schneider, Anne L, and Helen M Ingram, eds. *Deserving and Entitled: Social Constructions and Public Policy*. SUNY Series in Public Policy. Albany: State University of New York, 2005.
- Schultz, David, 2017. "Alternative Facts and Public Affairs," in *Journal of Public Affairs Education*, Vol. 23, No. 3, pp. 775 – 778
- Schultze, C. L. The Public Use of Private Interests. Washington: Brookings Institute, 1977.
- Scott, James C. "The Analysis of Corruption in Developing Nations." *Comparative Studies in Society and History* 11, no. 03 (1969): 315–41.
- Scott, Robert E., and George G. Triantis. "Incomplete Contracts and the Theory of Contract Design." *Case Western Reserve Law Review* 56 (2005): 187–201.
- Shore, Cris, Susan Wright, and Davide Pero, eds. *Policy Worlds: Anthropology and Analysis of Contemporary Power*. Berghahn Books, 2011.
- Simon, Herbert A. "Rationality as Process and as Product of Thought." *The American Economic Review* 68, no. 2 (May 1, 1978): 1–16.
- Simon, Herbert. "The Logic of Heuristic Decision Making." In *The Logic of Decision and Action*, edited by Nicholas Rescher, 1–35. Pittsburgh: University of Pittsburgh Press, 1967.
- Taeihagh, Araz, Moshe Givoni, and René Bañares-Alcántara. "Which Policy First? A Network-Centric Approach for the Analysis and Ranking of Policy Measures." *Environment and Planning B: Planning and Design* 40, no. 4 (2013): 595-616. <u>https://doi.org/10.1068/b38058</u>.
- Taylor, Christopher M., Elaine A. Gallagher, Simon J. T. Pollard, Sophie A. Rocks, Heather M. Smith, Paul Leinster, and Andrew J. Angus. "Environmental Regulation in Transition: Policy Officials' Views of Regulatory Instruments and Their Mapping to Environmental Risks." Science of The Total Environment 646 (January 1, 2019): 811–20. https://doi.org/10.1016/j.scitotenv.2018.07.217.
- Tent, James F. *Mission on the Rhine: "Reeducation" and Denazification in American-Occupied Germany*. Chicago: University of Chicago Press, 1984.
- Thaler, Richard H. "From Cashews to Nudges: The Evolution of Behavioral Economics." *American Economic Review* 108, no. 6 (June 2018): 1265–87. https://doi.org/10.1257/aer.108.6.1265.
- Thaler, Richard H., Cass R. Sunstein, and John P. Balz. "Choice Architecture." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, April 2, 2010. http://papers.ssrn.com/abstract=1583509.
- Thomas, Alyssa S., Taciano L. Milfont, and Michael C. Gavin. "A New Approach to Identifying the Drivers of Regulation Compliance Using Multivariate Behavioural Models." Edited by Petr Heneberg. *PLOS ONE* 11, no. 10 (October 11, 2016): e0163868. <u>https://doi.org/10.1371/journal.pone.0163868</u>.

- Treisman, Daniel. "What Have We Learned About the Causes of Corruption from Ten Years of Cross-National Empirical Research?" *Annual Review of Political Science* 10 (2007): 211– 44.
- Tribe, L. H. "Policy Science: Analysis or Ideology?" *Philosophy and Public Affairs* 2, no. 1 (1972): 66–110.
- Tumin, Melvin, Paul Barton, and Bernie Burrus. "Education, Prejudice and Discrimination: A Study in Readiness for Desegregation." *American Sociological Review* 23, no. 1 (1958): 41–49. <u>https://doi.org/10.2307/2088622</u>.
- Tupper, A., and G. B. Doern. "Public Corporations and Public Policy in Canada." In *Public Corporations and Public Policy in Canada*, edited by A. Tupper and G. B. Doern, 1–50. Montreal: Institute for Research on Public Policy, 1981.
- Turnbull, Nick. "Policy Design: Its Enduring Appeal in a Complex World and How to Think It Differently." *Public Policy and Administration* 33, no. 4 (2018): 357–364. https://doi.org/10.1177/0952076717709522.
- Uribe, Carlos Andrés. "The Dark Side of Social Capital Re-Examined from a Policy Analysis Perspective: Networks of Trust and Corruption." *Journal of Comparative Policy Analysis: Research and Practice* 16, no. 2 (March 15, 2014): 175–89. <u>https://doi.org/10.1080/13876988.2012.741441</u>.
- Van der Sluijs, Jeroen. "Uncertainty as a Monster in the Science-Policy Interface: Four Coping Strategies." *Water Science and Technology: A Journal of the International Association on Water Pollution Research* 52, no. 6 (2005): 87–92.
- Vine, Edward, and Jayant Sathaye. "The Monitoring, Evaluation, Reporting and Verification of Climate Change Projects." *Mitigation and Adaptation Strategies for Global Change* 4, no. 1 (March 1, 1999): 43–60. <u>https://doi.org/10.1023/A:1009651316596</u>.
- Wallace, Julian. "Modelling Contemporary Gatekeeping." *Digital Journalism* 6, no. 3 (March 16, 2018): 274–93. <u>https://doi.org/10.1080/21670811.2017.1343648</u>.
- Weaver, R. Kent. "Compliance Regimes and Barriers to Behavioral Change." *Governance* 27, no. 2 (April 1, 2014): 243–65. https://doi.org/10.1111/gove.12032.
- Weaver, R. Kent. "Getting People to Behave: Research Lessons for Policy Makers." *Public Administration Review* 75, no. 6 (2015): 806–16. <u>https://doi.org/10.1111/puar.12412</u>.
- Webber, D. J. "The Distribution and Use of Policy Knowledge in the Policy Process." In Advances in Policy Studies Since 1950, edited by W. N. Dunn and R. M. Kelly, 383–418. New Brunswick, N. J.: Transaction Publishers, 1992.
- Weimer, D. L., and A. R. Vining. *Policy Analysis: Concepts and Practice*. Englewood Cliffs, N.J.: Prentice-Hall, 1989.
- Weiss, J. A., and M. Tschirhart. "Public Information Campaigns as Policy Instruments." *Journal* of Policy Analysis and Management 13, no. 1 (1994): 82–119.
- Wildavsky, A. B. Speaking Truth to Power: The Art and Craft of Policy Analysis. Boston: Little-Brown, 1979.
- Wilts, Henning, and Meghan O'Brien. "A Policy Mix for Resource Efficiency in the EU: Key Instruments, Challenges and Research Needs." *Ecological Economics*, 2018. <u>https://doi.org/10.1016/j.ecolecon.2018.05.004</u>.
- Wu, X., M. Ramesh, and M. Howlett. "Policy Capacity: A Conceptual Framework for Understanding Policy Competences and Capabilities." *Policy and Society*, no. 3/4 (2015). <u>https://doi.org/10.1016/j.polsoc.2015.09.001</u>.