1 Introduction

The convergence of complex, interconnected, synchronous, and intractable problems is the salient existential challenge of the twenty-first century. Examples are pandemics, climate change, economic inequality, social disenfranchisement, and global insecurity – and, more importantly, the way they interact to magnify the collective impacts. A central premise of this Element is that the old ways of thinking about public policy have generated the conditions for such problems to emerge and have a poor record of resolving them. Further, the committed application of old ways of thinking, even when refashioned around novel technologies, institutional reform, and policy change, accelerate problem convergence. This Element critically interrogates the epistemic roots of policymaking as understood by existing theories, with the aim of illuminating new theoretical space for the emergence of a twenty-first-century policy episteme in scholarship and practice. Our normative orientation is a critical perspective, informed by the Frankfurt School and postcolonial studies, on the dominance of policy narratives that privilege certain ideologies, serve power, and perpetuate crisis conditions despite their claims to the contrary. Our novelty – a call to action for scholarship in public policy – is an examination of how the COVID-19 pandemic is a temporally condensed preview of longer-evolving crises like climate change, and how such crises render the old policy thinking anachronistic during a liminal moment in systemic transition. The audience for this call includes not only those who embrace critical policy studies but also scholars and practitioners in multiple geographies and contexts who operate under mainstream understandings of public policy.

This Element focuses on the epistemics of policy rather than on the ontology of policy, as the former relates more directly to our argument about instrumental rationalism. At the same time, we acknowledge that ontological factors cannot be ignored because they determine how public policy itself is conceptualized. As part of this acknowledgment, we propose a particular definition of policy to observe how it has become anachronistic and to consider what happens to policy when it enters the liminal state of a soft collapse transition. We derive our definition from the field of translation studies, as elaborated in Berger and Esguerra's (2017) *World Politics in Translation*. We proceed with an understanding of policy as the step between what needs to be done and the actual doing; a translation between thought and the "real world" where policy provides instructions, guardrails, and rule sets. This translation occurs within the context of actors, ideas, and institutions that shape content and mediate implementation (Clarke et al., 2015). As policy produces, sustains, and reproduces itself and its rule sets, it emerges as one of several determinants of power relations and

influences how social, political, economic, and cultural practices become hegemonic forms of "common sense." Like other expressions and conduits of power, policy is limited, unstable, and in many cases contested due to its divergence and fluidity. While "policy" as a broad and often amorphous concept defies attempts at definitional essentialization, we maintain that policy's multiple paths, instabilities, and contestations are settings in which hegemonic rule sets can still take hold. Based on this argument, this Element contends that technocratic rationalism emerged in the twentieth century as the dominant mechanism for policy's translation between abstraction and the real world, and that the perpetuation of this technocratic rule set into the twenty-first century has made policy anachronistic in concept and practice. This anachronism renders technocratic rationalism increasingly dysfunctional as the "sense" in common sense. As such, we ask what happens to policy's translation function when systemic context enters the liminal state of a soft collapse. Our cautionary proposition is that anachronistic policy is a poor translator in this liminal state.

In probing the evident failures of public policy to address complex problems, an influential line of scholarly criticism holds that policymaking has been unduly influenced by instrumental rationalism.[1] The allegation is that instrumental rationalism is mismatched with complex problems because it sees only what it can measure and fails to acknowledge the full range of problem determinants, intensifiers, and their social constructions (Colebatch, 2018; Turnbull, 2006). In this way, critics impugn instrumental rationalism not only for failing to understand policy problems but also for exacerbating sociopolitical inequities and perpetuating power imbalances. Indeed, such criticisms have been leveled for decades, within both critical policy studies and less mainstream strands of public policy and administration. As minority voices in the field of public policy, critical theorists resolutely disavow instrumental rationalism and challenge the hegemony of its positivist epistemics. This critical studies scholarship often bears a normative mandate for the policy field to embrace constructivist, interpretivist, and discursive perspectives associated broadly with critical theory.

This Element goes beyond this convincing but well-trodden argument about instrumental rationalism. The basis of our provocation to prevailing understandings about and practices of policymaking is that the field is anachronistic. That

[1] For our definition of instrumental rationalism, see the Glossary. We define instrumental rationalism as the thought-system and accompanying rule set holding that discrete and targeted policy interventions (as instruments or tools) can be successfully applied to problems expressed in knowable and well-defined terms. We use the term instrumental rationalism, as against instrumental rationality, in reference to a normative logic around which the policy profession structures its analytical thinking. If rationality is the act of being rational, rationalism is the epistemic rule set and belief system that institutionalizes rationality.

is, ways of thinking about and doing public policy emerged from or were designed around the realities of twentieth-century problems, with the expectation that such problems could be managed if not solved. Only with the convergence of twenty-first-century problems – complex, interconnected, synchronous, and elusive of conclusive solutions – are the epistemic and practical shortcomings of a solutionist approach to policymaking exposed.

Mainstream scholarly efforts to determine the extent of policy success or failure have seldom considered the match between the dominant policy epistemic and the broader context of humanity's complex adaptive system. McConnell's (2010) study of policy success has been valuable for establishing frameworks for measurement but also reflects a dominant intellectual perspective that assumes policy's ways of thinking accord in concept and practice with the complex adaptive system in which policy is embedded. This perspective suggests either that policy assumes, anticipates, or works towards the equilibrium of the broader system, or that policy can stand detached from systemic context including that characterized by disequilibrium. Public policy and scholarly understandings of it thus lose their connection to reality as that reality slips into a bewildering state of wicked problems, destabilized epistemics, and ultimately soft collapse. As such, influential scholarly works concerning success and other aspects of policymaking were fit to context in their time but become increasingly anachronistic, as do the policies they study.

By retaining pre-crisis ways of thinking about problems and solutions, the policy field perpetuates a faulty epistemic, and society fails to avert its own overshoot of socio-ecological carrying capacities. The current manifestation of this phenomenon is a "soft" collapse (Kuecker 2020) in which some institutions (i.e., ways of thinking codified into policy practice) remain seemingly stable due to a resolute doubling-down on the vehicles – political and financial – that prop them up. The academic mainstream of public policy appears to be a partner in this effort by refitting its own anachronistic epistemic to new contexts; the fundamentals are argued by vestals of the old epistemic hearth to be sound if not canonical, in need only of better analytical tools, concepts, and frameworks. The foundations of enabling institutions are, to be fair, still considered by the mainstream to be fair targets for critique – but correctible by the same types of solutions that had always seemed to work for simpler problems erstwhile. With more complex tools, the profession in study and practice believes it can accomplish what it always has – but more quickly, efficiently, and effectively. The tragic inconvenience is that shifts in problem context often outpace policy evolution, compromising the immediate relevance of old epistemics to emergent crises. The consequent time lag engenders an anachronism that fails the new context of the twenty-first century and the "perfect storm" of convergent

crises (i.e., ecological degradation, pandemics, and the folly of addressing them while protecting the systems and rule sets that benefit status quo interests).

We observe the anachronistic quality of modern policymaking not exclusively in its practical manifestation – instrumental rationalism – but also in an underlying epistemic that validates as a policy logic the concepts of "solutionism" and "problemacity"; both are reflected in Deweyian and Lasswellian pragmatism and more broadly in the problem orientation of the policy sciences tradition (Turnbull, 2006). The understanding of reality offered by this epistemic is disciplined by its frame of vision; when elements able to be measured are seen, the unseen is erased over time from a reality that is ultimately constructed for rhetorical or political purposes. Indeed, much of what is unseen by efforts to name and frame policy problems relates to context – a matter that theoretical approaches like the policy sciences framework attempt to address by measuring tangential properties (Cairney et al., 2019; Ascher, 1987). It is appropriate, however, to reflect not only on context but also on shifts of context; the scale of those shifts; and whether legacy epistemics fully capture the emergent complexities, uncertainties, and nuances of new contexts. Until the policy field sees the twenty-first century as a context shift, the old epistemic will continue to make sense while failing in practice – and scholars will continue to engage in handwringing about why better analytical tools, concepts, and frameworks make no larger difference. If society has indeed breached the threshold of a new context, it is fair to question whether this new era renders old styles of policy thinking anachronistic.

In making this provocation, we acknowledge the decades of literature about wicked problems, which have confronted technocratic hubris and prompted scholarly conversations about the ambiguities of policy context (Head, 2019; Peters, 2017; Scott, 1998; Rittel and Webber, 1973). Synchronous and interconnected crises are the wicked problems of the twenty-first century and deserve not merely a reform-minded and reworked epistemic framing but also an ontological reawakening that questions the very foundations of how society is structured and the role of policy (as authority or an organizing mechanism) within it. As such, public policy made relevant for the new context would not be public policy at all, in the way academics and practitioners now choose to understand it. Adherence to the notion of public policy as a logical system by which society organizes itself to solve collective problems is indicative of a soft rather than a hard collapse, because it leads to momentary illusions of stability and success made possible by superficial improvements to old thinking (e.g., through better and "bigger" data and their "smart" application). However, this reframing fails to forestall the irreversible destabilization of underlying systems and arguably accelerates it by obscuring or window-dressing negative effects

that might otherwise be apparent enough to alarm society. Progress becomes, simply, a faster and cheaper way to do the wrong things.

Understanding the current era of public policy scholarship and practice as existing in this liminal state between old and new epistemics allows us to de-essentialize our critique of public policy in that we avoid reducing policy epistemics to a Platonic ideal; rather, we emphasize the prospects of freedom from old structures as made possible during periods of disruptive and large-scale transitions. In short, the policy field in a soft collapse–driven context shift is free from the old paradigm and its enabling structures, but their replacements are not yet sitting in a box at the front door. There is no imminent revolution after which the alternative is ceremoniously revealed. The liminal state is a lumbering era of disorder and noise, where truths are destabilized and discredited and the consequent epistemic confusion marks only the potential for liberation from the old paradigm. This state reflects Connolly's (2011) description of emergence as a "world of becoming" having "unnumerable, interacting open systems with differential capacities of self-organization set on different scales of time, agency, creativity, viscosity, and speed" (p. 25). Connolly (2013) sees emergence as a condition of late capitalism, whereas we see it as the in-between-ness of an unfolding collapse. The liminal state implies that the legitimacy of technocratic reasoning is undermined, and with it the moral and technical authority of policy experts and agents. Amid the noise of liminality and epistemic reshuffling, alternative policy epistemics have no less validity and thus an opportunity to emerge without the hindrances of legacy institutions and their tools of erasure. Eschewing a teleological approach, we argue that this process is no product of master planning or cynical capture by aggrieved parties, but a natural consequence of epistemic stasis and indeed rot. We seek to elucidate how the process materializes, so that opportunities for new theoretical development can be recognized. Our critique broadly concerns how the evolutionary product of Western Enlightenment thinking has precipitated one of the great follies of the modern social sciences – intellectual support for the technocratic solutionism that has dominated policy practice and mainstream policy scholarship.

This Element's argument is based more on practical realities than its deeply theoretical nature may make it appear. The cavalcade of totalizing and neocolonial post-WWII war policy projects – modernization, development, sustainability, and now smartness – reflect a long-running policy epistemic that has evolved in rhetoric if not concept and substance. To maintain its legitimacy through the twenty-first century, the old epistemic must rationalize and subdue complex problems while maintaining enough contextual stability to protect status quo political and economic systems and the interests that benefit from

them. Despite this charge, whatever policy learning that emerged from addressing the twentieth century's wicked problems, including learning that might have prompted critical reflection on prevailing policy epistemics, might not be serving society well so far in the twenty-first century. On a global level, the COVID-19 crisis may be seen as a condensed version of the type of synchronous and interconnected disruptions that will emerge in the twenty-first century, and the ability of the wealthy and influential to insulate themselves from the impacts gives further effect to the illusion of stability held among those in power. The band plays on, even as the ship sinks.

The COVID-19 pandemic exhibits how twenty-first-century policy crises are not contained problems but converge with and exploit the vulnerabilities of multiple concurrent problems, leading to a cascade of failures that tips human systems into a series of soft collapses that can potentially precipitate an apocalyptic hard collapse; the imminence of collapse becomes the new system's context that frustrates solutionist policy logic. As the *res novae* emerging from a confluence of policy crises, the twenty-first century's perfect storm is composed of an onslaught of challenges that, to extend the metaphor, can be seen as frontal bands – arriving in waves, converging on one another, and multiplying the collective effects. Given these circumstances, the current moment is an existential flash point and should be recognized as such by policy practitioners and scholars. A post-pandemic policy epistemic is ripe for development, and this Element establishes the theoretical basis for how such a policy epistemic might be understood. Undertaking such work does not categorically dismiss the validity of existing scholarship, but it calls upon scholars to reframe it in potentially creative and even iconoclastic ways. The liminal state between epistemic regimes renders all scholarly understandings valid and none hegemonic, as any conceptualization of public policy has the potential to influence emergent understandings; a genuine epistemic shift breaks the path dependencies that privilege certain policy frames. A lingering question, then, is what emerges from this liminal state as the new context comes into focus; a new policy epistemic will not necessarily be the product of a totalizing dictate or even an organized effort. This emergence is a transition, more a process than an event, and takes time – potentially much of the twenty-first century. Society is at the starting point of this process, when difficult questions need to be asked about how society understands the fundamental essence of policymaking itself – whether as an epistemic, behavior, or value set. At this stage, the role of the pioneer scholar is to establish theoretical space for discussions about how the new epistemic emerges, and this Element advances this effort by exhibiting how that process might look. We thus heed calls by numerous scholars to proceed with an open mind; Turnbull's (2006) "epistemology of questioning" and

Homer-Dixon's (2006) "prospective mind," and system dynamicists preference for qualitative forecasting over predictive precision (Meadows, 1980, 2008) indicates that navigating the liminal state should be done with humility. We observe such caution in, for example, postulating that the anachronistic quality of policymaking and its mismatch for twenty-first-century problems may bear the severity if not the speed of the COVID-19 pandemic.

In considering the many pathways by which a new epistemic fills or redefines the gap vacated by the abandoned public policy anachronism, it is necessary to revisit the notion of public policy itself as a construct. Our proposition is that the new public policy will not simply be a reworking of existing public policy. Indeed, decades of scholarly reflection have led to a rigid essentialism – the view that public policy as an idea or behavior is conceptually reducible and Cartesian. As such, policy practice is anchored not only in the solutions and capabilities at hand but also in a dichotomous set of approaches bequeathed by rivalrous scholarly traditions: totalizing interventionism and measured incrementalism – with the latter still presuming "an instrumental approach directed by more or less clearly formulated intentions" (Turnbull, 2006, p. 12). These traditions, while representing opposite ends of a continuum, still share a focus on solutions – an approach itself anchored in the problem orientation of the policy sciences. In breaking with this orientation, a novel twenty-first-century policy epistemic would be focused not on solutionism but on some alternative that – by virtue of liminality and emergence – has no name, form, or even a vague signifier. Our proposal avoids framing terms like "precaution," "mitigation," and "preparedness," which are potentially problematic reflections of how fields like disaster risk reduction (Kuecker and Hartley, 2020) perpetuate instrumental-rationalist ways of thinking that put the soft in soft collapse. As such, a twenty-first-century epistemic is not merely the more intricate internalization of precaution and mitigation in existing policy logics and systems; this would, we argue, fail to capture the scale of the effort needed to see beyond instrumental rationalism. The new public policy is an emergent property that flows from soft collapse but is not knowable within the liminal state of transition and emergence. As such, the epistemic shift is not a revolution in the widely regarded sense, even though the act of seeing beyond rationalism can be considered equivalent in scale and consequence to an epistemic revolution. We do not necessarily call for such a revolution as an engineered effort, nor do we predict that revolution is the only way change happens. Rather, we argue that soft collapse is the "midwife of change" that creates the space for challenging epistemological structures and that kick-starts a transition with the liminal state being an intermediate step. The liminal state is thus characterized by epistemic noise and disciplinary territoriality, a faithful adherence to

anachronistic ideas and emergent properties that elude classification but invite fresh theorization. Table 1 summarizes these ideas.

In developing this argument, this Element proceeds by introducing a case, outlining the aforementioned critical-analytical approach, and applying that approach to derive actionable policy insights. Section 2 introduces a case to explore our theoretical proposition of looming epistemic change. The case is the convergence of crises leading to soft collapse, as related primarily to sustainability and climate change but exacerbated by social conflict, economic precarity, state insecurity, and public health threats. As such, the case is focused not on a single policy domain but on problem convergence, reflecting our previous point about the realities of policy problems that spill over, interact, and synchronize. This approach also makes a methodological point: convergent crises are characterized by boundary jumping, rendering the standard single-case approach too myopic for the type of questions we ask in this Element. While single-case studies are indeed appropriate for answering certain questions, applying the approach to this argument would succumb to the same type of technocratic rationalism that we critique – indeed, our claims must be qualified and cautiously presented lest we indulge ourselves in a technocratic hubris that claims to know "the answer." Given our argument about emergence, liminality, and transition, we believe that conclusive statements are predictably difficult to make. In this Element, we hope to provide a sound basis for raising questions, pointing not only towards future research but also, potentially, a new subfield of policy studies focused on the evolution of the concept and governance more generally in a soft collapse setting.

Section 3 outlines the theoretical elements of our argument, including novelties and departures from mainstream scholarship. It traces the intellectual development of instrumental rationalism and the failures of its application not only to the complex and wicked policy challenges of the twentieth century but also to the synchronous and interconnected crises of the twenty-first century and their manifestation in an epistemically destabilizing soft collapse. It engages the policy sciences framework, Lasswellian pragmatism, and pragmatism in contemporary policy studies to review ideas about where solutionism and instrumental rationalism – and their underlying epistemic – have failed twentieth-century policy problems. In so doing, Section 3 aims to understand whether the policy sciences can retain their core theoretical foundations while adapting to a seismic transition in public policy – from epistemic anachronism to epistemic relevance in a soft collapse and emergent context. We maintain that such a course correction would need to recognize the autonomy of other knowledges, an argument we make in Section 3 using a postcolonial interpretation of how marginalized groups retain their autonomy through the de-othering power of alternative policy epistemics.

Table 1 Theoretical and practical dynamics of the old and new public po

Theoretical dynamics			
	Legacy (positivist)	Present (post-positivist; critical)	Liminality (episte tension)
Old epistemic	Dominant; supplement to practice	Anachronistic	Defensive; discipl territorial
New epistemic	Marginal; incidental; situational	Iconoclastic; pesky; "playing from behind"	Assertive; emerge
Practical dynamics			
	Legacy (solutionism; problemacity)	Present (soft collapse)	Liminality
Old epistemic	Dominant	Fraying in the face of complex problems	Doubling-down th superficial adva (e.g., technolog
New epistemic	Unthinkable; impractical	Untested but plausible alternatives	Assertive; emerge

Indeed, scholars eschewing essentialist definitions of public policy, such as Freeman (2012), recognize the policy epistemic as fluid, evolving, and diverse; the challenge is to consider whether the collective script of a shared understanding of public policy (Freeman, 2012, p. 13) is itself a violation of non-essentialism or whether, for practical reasons and theoretical development, the field should undertake a course correction to prepare for epistemic liminality and what emerges thereafter.

Section 4 orients our theoretical argument into an actionable frame, examining how three ways of policy thinking – labeled technocratic, Frankfurt, and predicament – treat the issue of epistemic instability and the liminality of soft collapse in the context of policy change. We close with a discussion about the difficulties of activating an epistemic transition as against those of engaging in mere alteration to policy logics. We present a case for a paradigm shift in policy thinking, drawing on ideas about how revolutionary thought emerges in policy contexts. Our claim is that radical changes in the ossified and unsustainable epistemic logics of the world's economies, societies, politics, and cultures will probably fail to outpace the march of climate catastrophe and systemic collapse. The alternative, we propose, is an epistemic shift forced by the collapse itself, at cost to life, livelihood, and the ecosystem. From the collapse emerges a reboot of civilization and a re-starting of history. Under the old civilization, collapsing structures were the midwife of change because social systems are often fundamentally conservative, slow to change, and thus anachronistic. This, we argue, is no recipe for addressing emergent existential crises. The inability of society to transform itself in avoiding the catastrophic effects of such crises becomes the end of history. The midwife of change, however, lacks patience and proceeds with the collapse, rendering existing theories and institutions meaningless and thereby providing space for the emergence of a new ontology – a thing created by human agency in an era where no way of thinking is more epistemically privileged than the next. The "new public policy" emerges from this liminal state and is unknowable – a source both of its intrigue and also of its theoretical and empirical elusiveness. This Element attempts to prompt a scholarly reckoning with this challenge.

Our diagnosis, while seemingly pessimistic, establishes the foundation for a clean slate in how policy problems are understood – pointing towards a potentially fruitful new era of research and practice that considers the richness of diverse perspectives and opportunities to de-normalize and de-mainstream policy solutionism. Indeed, the ongoing collapse gives society an opportunity to free itself from structures and habits that valorize and privilege old thinking to make space for new. New structures emerging from collapse, no revolution but an organic process, also allow for a *carte blanche* phase of systemic