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Introduction

The use of the concept of resilience in social sciences is far from new. Several disciplines and fields of research, including psychology, child development, criminology, biology, ecology and social work, have laid out the components and strengths of a resilience approach in the past sixty years, if not beyond. Along the way, different definitions and viewpoints of resilience have been proposed. In strands of psychology, resilience refers to the capacity of an individual to adapt positively after a traumatic event. Criminologists define resilience as a process of positive adaptation. While ecologists use resilience to describe how an ecosystem can return to a state of equilibrium and maintain its function after a disturbance.

While these disciplines have consolidated and expanded these viewpoints, resilience has emerged as an important and much-discussed theme in the public policy realm and in various sub-fields of world politics, including security studies, international interventions, urban studies, state-society relationship in neoliberal era, environmental regimes, terrorism and counter-terrorism studies, international human rights to name just a few (Ancelovici 2013, Bourbeau 2013, 2015a, Chandler 2012, Corry 2014, Jenson and Levi 2013, Ryan 2015, Wagner and Anholt 2016, Young 2010).

At the same time as resilience is gaining popularity in world politics, a particular genealogy of resilience is structuring much of the critical literature. In an often-quoted article, Jeremy Walker and Melissa Cooper argue that resilience was born in “system ecology in the 1970’s”, that it has since “infiltrated” and “colonised” other disciplines and fields of study, and that they traced “the genealogy of resilience from its formulation in ecosystems science to its recent proliferation across disciplines and policy arenas” (Walker and Cooper 2011, 144). Most, if not all, critical scholarship on resilience relies exclusively on Walker and Cooper’s peculiar genealogy of resilience and accepted its main argument about the origin of resilience: for Julian Reid (2012, 71), “it is no accident that the concept of resilience derives directly from ecology”, and for Jonathan Joseph (2013, 40) resilience “has been plucked from the ecology literature” to justify particular forms of governance.

I propose a different genealogy of resilience. Whereas Walker and Cooper seek to establish *the* genealogy of resilience in a finite and deterministic way, my aim is to highlight *a* genealogy of resilience, which I believe to be more inclusive than the restricted and partial one that has been so far proposed. Because it allows for the possibility of multiple genealogies, the approach presented in this article offers a more productive basis for dialogue than Walker and Cooper’s definitive and absolute judgment.

This article argues that understanding the multiple and multidisciplinary paths through which resilience has percolated into world politics is an essential first step to conducting an analysis

of the application of resilience in international politics. By tracing the diverse expressions of resilience to various markers within the history of resilience, this article contends that this is an opportune moment (a) to move scattered scholarships on resilience a step further, (b) to better theorise the relationship between resilience and world politics, and (c) to foster a multidisciplinary dialogue on resilience.

The body of this article is organised as follows. In the first section, I analyse the dominant genealogy of resilience that forms the basis of much of the literature lamenting the “arrival” of resilience in world politics. This analysis constitutes the springboard for the second section, where I develop an alternative genealogy of resilience.

Genealogies and the flaws of linearity

A genealogy uncovers how a present situation has become logically possible.¹ It is not a history of the past, but rather a history of the *present*, which seeks to understand and underline how the present is deeply connected with critical junctures and pathways of the past. As such, one of the central questions asked by genealogical analysis is, “What past paths made the present possible?” In this sense, a genealogy is a *history of knowledge*; understanding how a particular facet of knowledge has percolated into the present helps constitute and solidifies our understanding of present issues. A genealogy studies the historical conditions of a phenomenon’s emergence. Historicising the present, one could say, is the main purpose of a genealogy (Bartelson 1995, Price 1995).

Rather than aiming at a full description of the past at a given point in time or attempting a complete historical explanation of an issue, a genealogy underscores past markers that help us understand the present. It is often said that a genealogy is episodic: it emphasises certain practices belonging to the past that make sense of expressions of an issue in the present (Bartelson 1995). Equally important to genealogical analysis are the examples, which form episodes when juxtaposed with each other. Examples embody dominant practices.

Genealogy rejects linear historical analyses that conceive the past, present, and future as fixed points on a timeline; the objective is not to connect dots between the past and the present to form a linear, temporally continuous line, nor to trace the emergence of an issue as a series of practices converging towards a singular, definitive end. Genealogy shies away from accounts that underscore continuities and historical successions (Nietzsche [1887] 2007). Rather, a genealogical analysis focuses on past tipping points, critical junctures, or accidents that permits the present to exist as is; yet, genealogy emphasises that, once a path has been chosen following these crucial markers, it is difficult to dislodge it. Following Foucault ([1971] 1984, 81), a genealogy seeks to “identify the accidents, the minute deviations [...], the errors, the false appraisals.” Rarely, if ever, do genealogists understand expressions of an issue as components of a long and unidirectional narrative.

¹ Undoubtedly, there are methodological, theoretical, and normative issues about genealogy on which there is substantial disagreement among scholars that this article cannot fully engage with (Nietzsche [1887] 2007, Foucault [1971] 1984, Deleuze 1988, Dreyfus and Rabinow 2014).

The image often employed to portray a genealogy is one of a tree with numerous branches, each of which has its own splits as well, creating a fractal, multi-leaved structure. Conceptually, this “tree” metaphor highlights the genealogical notion that most issues have a rich, dense cluster of historical antecedents and contemporary outcomes, non-linear and non-direct in nature. By shying away from the singular and embracing the plural, genealogy allows us to uncover multiple strands (or branches) of simultaneous happenings. In short, it strives to document “the history of interpretations” (Dreyfus and Rabinow 2014, 108).

For a genealogist, the origins of an issue are characterised by a disparity and diversity of meanings; some interpretations get forgotten, set aside, or defeated, while others become integrated into the construction of a dominant narrative. This narrative can be broad: two positions at the top of the genealogical “tree” might be quite distant from each other. In mapping out the tree’s branches, the relevant pathways are not just presented and described; rather, a genealogy emphasises points of contention and contestation in the interpretation of the issue at hand. Instead of searching for a single, sequential, overarching path in the evolution of a concept, a genealogy accepts, highlights, and builds on multiple conjunctures, branches, and non-linear paths. A genealogy reveals tension and embraces conflict.

Because of the fluid nature of genealogical analysis, conclusions reached through a genealogy are not held as representing *the* reality. Methodologically speaking, a genealogical analysis cannot produce the universal truth about an issue. Knowledge remains contextual and particular. Genealogical scholars heavily emphasise that their conclusions (and, indeed, all conclusions) remain within the realm of interpretation. At the same time, genealogists do not accept that all interpretations are equally valid, that “anything goes,” or that everything is always possible. A genealogy embraces historical continuities and contingencies, but rejects historical linearity and determinism (Price 1997).

Despite these general genealogical premises, some scholars have employed a genealogical analysis to argue that resilience has entered the realm of world politics through a single, unique path. In an influential article, Walker and Cooper contend that resilience was born in ecology in the 1970s and has since “infiltrated” other disciplines and fields of study, including psychology and global governance. The authors posit not only that the term “originated in the work of the ecologist Crawford S. Holling”, but also that “the success of this ecological concept in *colonizing* multiple arenas of governance is due to its intuitive ideological fit with a neoliberal philosophy of complex adaptive systems” (Walker and Cooper 2011, 144, my emphasis). In and of itself, this is a strong argument. Yet Walker and Cooper raise the stakes further, contending that there is “a strong selective dimension to the emerging consensus on resilient growth, one that both reiterates and modifies the Darwinian law of natural selection” and that “the resilience perspective is no less rigorous in its selective function than Darwinian evolution” (Walker and Cooper 2011, 156).

Walker and Cooper’s peculiar analysis has informed most if not all critical scholarship on resilience. For Mark Neocleous (2013, 3) resilience is “stemming from the idea of a system and originating in ecological thought”, for Reid (2012, 71), “it is no accident that the concept of resilience derives directly from ecology”, for Joseph (2013, 40) resilience “has been

plucked from the ecology literature” to justify particular forms of governance, and for Chris Methmann and Angela Oels (2015, 51), “the concept of resilience was born and grew up in the environmental sciences during the 1970s.” These statements are not argumentative; these authors are not *arguing* that ecologists and C.S. Holling initially developed the concept in the 1970s and that other disciplines recently jumped on the resilience bandwagon. Rather, the “ecological” origin of resilience is presented as a fact, as an undebatable truth, as “demonstrated” by Walker and Cooper’s genealogy.

I take issue with Walker and Cooper’s particular genealogy of resilience for several reasons. First, they present a deterministic point of view. There is a disconnect between the putative role of genealogy and the analysis these authors present. Despite titling their contribution “Genealogies of resilience”, the reader is told that the authors are providing “*the* genealogy of resilience” (Walker and Cooper 2011, 144, my emphasis). However, it is largely accepted that a genealogy cannot (nor should) attempt to uncover the proper origin of a problematic: to attempt such an endeavour would be to wrongly presume that both the present and the past have fixed meaning. The fact remains that our knowledge of social worlds is rarely fixed or finite in the way Walker and Cooper envision. Such definitive and authoritative statements are particularly surprising coming from critical-theory-attuned scholars, who typically shy away from such foundational claims. Even if it were possible to isolate “the” genealogy of resilience as applied to international politics, the version provided by Walker and Cooper fails to include large fields of research in world politics. Indeed, their account of resilience considers almost exclusively the field of critical infrastructures — an important research theme in world politics, but neither the most important one nor one that can claim to represent world politics in its entirety. Consider, for instance, the pains that Walker and Cooper take to demonstrate that their argument has validity outside the study of US Homeland Security documents. To drive home the point that we are witnessing a totalising enterprise of permanent crisis, one of the vignettes they introduce is the case of the Stockholm Resilience Alliance; an alliance of academic (mainly ecologists) and policy makers totalling about 50 members. Yet surely, the actions of a 50-member alliance scarcely prove the idea that we are witnessing a totalising neoliberal project. In short, Walker and Cooper’s title is right, but their article falls wide of the mark.

Second, Walker and Cooper present a unidirectional narrative of resilience. Their account does not sit well with the general understanding that a genealogy rejects linear historical analyses that conceive the past, present, and future as fixed points on a timeline. A genealogy tends to reject analyses that highlight continuities and historical succession; rather, it embraces and pays attention to discontinuities and multi-directionalities. By shying away from the singular and embracing the plural, genealogy allows us to uncover multiple strands of simultaneous happenings.

In their efforts to close the debate—in other words, to depoliticise the origin of resilience—Walker and Cooper foreclose any inductive research into alternate facets of resilience, since the conclusion is already known. They trace the evolution of resilience into international

politics as a logical process toward a known end, i.e. neoliberalism (see Figure 1).² The result of this narrow view of resilience has been a circular set of arguments: scholars have been busy documenting neoliberal expressions of resilience without paying much attention to expressions of resilience not dictated by neoliberalism. Instead of engaging in a debate as to whether resilience is in fact a by-product of neoliberalism—in all expressions, everywhere, for all issues, and at all the time—or whether and to what extent some governments have instrumentalised and even perhaps hijacked the concept of resilience, some critical-theory-attuned scholars accept the assumption as face value, thereby reinforcing Walker and Cooper’s view of a single, unidirectional path of development.³

[Figure 1]

Third, for anyone interested even tangentially in resilience, Walker and Cooper’s claim that resilience was ‘invented’ in ecology is surprising. Part of the problem is that other scholars have boldly re-stated this claim without properly examining it. Claudia Aradau, for example, claims that not so long ago “resilience was quasi-absent from academic debates. In the 1970’s, C.S. Holling’s [article] and Jerome Kagan’s [article] appeared to be the only significant contributions, which lacked any substantial follow-up for quite some time. Hardly any other articles mentioned resilience at the time” (Aradau 2014, 73).

Yet, this is a supposedly “accepted truth” that does not sit well with a vast body of literature in psychology and social work, for example. A search in the two main databases for psychology and psychiatry (PsycINFO and MedLine) between 1955 and 2000 reveal the term “resilience” (or “resiliency”) in the title of 1315 peer-reviewed articles and academic press books, in the abstract of 3211 articles and books, and as a keyword in 1310 publications. Nearly 500 PhD dissertations focusing on resilience were completed between the end of World War II and the close of the 20st century.

This hardly qualifies as absence of debates. If critical theorists are right in suggesting that a focus on silenced discourses reveals as much as a focus on dominant discourses then one is led to wonder why, and for what purpose, vast swaths of literature on resilience have been so bluntly ignored. Certainly the consequence of this choice is obvious: claiming that eco-systems specialists invented resilience permits scholars to treat expressions of resilience in world politics as a logical extension of the literature on ecological systems’ adjustment capacity (that is, a literature that emphasises equilibrium and management). On the other hand, if one acknowledges that resilience has been around for more than sixty years in numerous theoretical capacities, this direct association is harder to justify. This illustrates to extent to which Walker and Cooper’s analysis acts as an authoritative and definitive study on

² Chris Zebrowski presents a similar argument (but with a twist) in his study of emergency and critical infrastructures programmes in the UK: for him (2015: 10, 88), the emergence of resilience in contemporary governance is the “correlates of the emergence of a neoliberal order of security governance.” In other words, resilient populations are “an interpretation of social behaviour determined by, and supportive of, neoliberalism.”

³ To be sure, there is an important critique that investigates whether governmental programmes that ‘build’ resilience induce adjustments to a situation without helping the ‘beneficiaries’ to challenge the underlying conditions of a given situation. However, the key point here is that such an understanding equates a particular government’s use of resilience with the concept of resilience. In only focusing on these expressions of resilience there is a risk that the myriad forms that resilience takes are subsumed (Bourbeau and Ryan 2017).

the origin of resilience. It leaves scholars with no other way forward when faced with expressions of resilience that do not fit neatly with the neoliberal argument: they must either disregard these expressions as idealistic and anecdotal or ignore them altogether.

If Srdjan Vucetic (2011, 1302) is right that the effectiveness of a genealogy depends on its ability “to foreground how the conventional assumptions about the world have implications for our present-day reasoning” and if we take seriously Richard Price’s (1995, 103) conclusion that one of the insights of genealogy as a method is to open up “insightful, important, and fruitful avenues of inquiry” then I hope to (a) show the limits of the conventional assumption, made by some scholars, that resilience is nothing more than a by-product of neoliberalism, and to (b) suggest alternative ways to understand the place and applicability of resilience in world politics.

A (brief) non-linear history of resilience

I insist that the relationship between the concept of “resilience,” its disciplinary origins, and the multiple expressions that scholars have found in a multitude of fields, area studies, cases, and regions of the world have followed multiple paths. The genealogical tree of resilience does not have a single branch, but rather possesses several branches. Expressions of resilience in world politics need to be studied not only within an overdrawn eco-systems-politics frame of inference, but in terms of its multiple relations with other disciplines, concepts, and approaches.

In the next few pages, I underscore the multiple origins of resilience within disciplines as varied as psychology, social work, engineering, and ecology, and trace the diverse expressions of resilience in world politics, branch by branch, to these various markers within the history of resilience. I use genealogy as a method to make sense of the ubiquity of resilience in the social sciences and to underscore the different paths by which resilience has been imported into world politics, as shown in Figure 2. It is important to note however that the branches upon which I am focusing in this article are genealogical branches among (potentially) many others—they are not totalising ones and they do not constitute a theoretical argument about ‘the’ origin of resilience.

This is an opportune moment to trace the diverse expressions of resilience in world politics if we are to work toward a more comprehensive, open, and multidirectional understanding of the ways in which resilience has been and could be further applied to world politics. This is not to say that the proliferation of usage of resilience in world politics literature should be celebrated, nor do I want to suggest that resilience is inherently a positive course of action devoid of negative political consequences. In fact, these questions have been sufficiently debated elsewhere and there is no need to rehash them here (Bourbeau 2015b, Dunn Cavelti et al. 2015, Wagner and Anholt 2016, Walsh-Dilley and Wolford 2015). Instead, what is important to highlight is that, before we can conduct an analysis of the application of resilience in world politics, we must understand the diverse paths through which resilience has percolated into world politics.

[Figure 2]

Several scholars have been keen in the past few years to push forward a conceptualisation of resilience that goes back few centuries ago, if not more. The notion that an individual would ‘bounce back’ has indeed long been associated with resilience. After all, the English word ‘resilience’ itself derives from the Latin verb ‘*resilire*’, meaning to ‘jump back’. Key markers in the history of the word include Francis Bacon’s philosophical treatise on the nature of sound, *Sylva Sylvarum*, published in 1626, in which he uses the term resilience to illustrate the capacity of an echo to bounce back and to characterize conditions of the reflexion of sounds (Bacon 1627).

An English lexicographer of the 17th century, Thomas Blount, included resilience in his dictionary *Glossographia*, defining it as “a leaping or a skipping back, a rebounding” (Blount 1656, 126) Yet, Blount’s dictionary is no ordinary dictionary. The aim of the glossary was not to list the complete words of English but rather to provide definitions of specialist words employed in specialised literature so that those outside of these circles of knowledge could understand the texts. As he explained in his preface, although “I had gained reasonable knowledge in Latine and French tongues... I was often graveled in English books: that is, I encountered such words, as I either not at all, or not thoroughly understood” (Blount 1656, i). The inclusion of the term *resilience* in Blount’s work strongly suggests that its use was restricted to intellectual circles at the time.

In 1668, in a treatise on the nature of space (which he sees as an “exemplary immaterial entity”), the Cambridge Platonist and philosopher Henry More has one of his characters state that “by the special providence of God, at the releasement of the soul from the body, there is the strong and peremptory resiliency from this sordid region of misery and sin” (More 1668, III, XXIV, 369). Almost a century later, in 1751, Samuel Johnson spoke about “the common resiliency of the mind” (1751, 344).

It was not until the 20th century, however, that this idea of the “resiliency of the mind” was coupled, in the psychological literature, with the notion of coping in the face of difficult circumstances. By the middle of the 20th century, resilience was used to describe the response of children in war-torn England (Scoville 1942), and an increasing number of scholars began to theorise “ego-resilience” as the capacity to bounce back or to recoil (Block and Thomas 1955). Indeed, Lili Peller (1954) highlights that ego-resilience is often expressed as part of the cathartic function of play in child development; J.S. Tyhurst (1957) finds a consistent pattern in individual reactions to disaster that comprises three overlapping phases: (a) a period of impact, (b) a period of recoil, and (c) a post-traumatic period; Paul Chodoff (1968) speaks about the “coping capacities” of Jewish infants and children who survived the Holocaust; and in a series of articles, Jerome Kagan (1973, 1976) underlines the capacity of children’s and young adults’ cognitive functions to bounce back despite infant retardation; observing the partially reversibility of infant retardation, he concludes in favour of the inherent resiliency of human cognitive development.

Although a considerable amount of psychological literature has focused on the theorisation and application of individuals’ capacities to “bounce back”, this broad research agenda has not necessarily been uniform. Among the various turns it has taken, scholars have focused on

notions of “invulnerability” (Anthony 1974), “invincibility” (Werner and Smith 1982), “protective factors” (Garmezy 1974, Rutter 1987), “successful adaptation” (Masten et al. 1990), “positive adaptation” (Luthar 2003), and the multiple and sometimes unexpected “pathways” to resilience (Bonanno 2004).

In this strand of literature, resilience is understood in individualistic terms, as a set of individual qualities allowing someone to bounce back. Resilience is a characteristic that some individuals possess while others do not. For these scholars, studying resilience is important because it allows scholars to better understand the ‘little something’ that permits certain individuals, but not others, to bounce back in the face of a trauma.

Within the literature in world politics, this agential understanding of resilience has proven to be influential. For David Chandler, a paradigm shift in the way we conceptualize critical agency is currently pervading world politics: at its crux, this can be described as a shift from an external to an internal focus. Whereas the formerly dominant liberal internationalist paradigm emphasizes the agency of external interveners, the newly emergent resilience paradigm emphasizes locally based prevention and individual empowerment; this new focus on resilience puts “the agency of those most in need of assistance at the center, stressing a program of empowerment and capacity-building” (Chandler 2012, 216).

Similarly, scholars often criticise resilience—as a whole—without acknowledging that they are, in fact, criticising this particular understanding of resilience. Brad Evans and Julian Reid (2013, 14) argue that there lurks beneath resilience a dehumanising political agenda because resilience emphasises risk to and care for the self: resilience distinguishes between those who have the ability and the power to secure themselves from risk and those “who are asked to live up to their responsibilities by accepting the conditions of their own vulnerability and asking not of the social.” Resilience is a strategy for creating “contemporary regimes of power which hallmark vast inequalities in all human classifications” (Evans and Reid 2013: 14). Because they borrow psychology’s understanding of resilience as a set of individual qualities, Evans and Reid see in a rather grim light the social and political (and potentially terrible) consequences of resilience on the marginalised-ones in today’s world. They indeed have gone a step further in portraying resilience in bleak, individual subjugation terms.

In their responses to the forum on their newest book, Evans and Reid (2015, 154) declare that their conceptual journey across the resilience terrain has forced them to “appreciate the hidden depth of its nihilism, the pernicious forms of subjugation it burdens people with, its deceitful emancipatory claim that force people to embrace their servitude as though it were their liberation.” The authors have become exhausted by “the chains [resilience] places around all our necks” (2015, 154). Because resilience’s nihilism is “devastating”, its political language “enslaving”, and its modes of subjectivity “lamenting”, Evans and Reid (2015, 157) have decided “after this volume to never write, publicly lecture or debate the problematic again.”⁴ Admittedly, these sweeping assertions are made with style and elegance. But they

⁴ A promise that appears to be too difficult to fulfil as at least one of them has wrote a book-chapter about it, and has even published a co-authored book on resilience.

remain un-substantiated and constitute a fragile foundation upon which to build our theorisation of resilience.

Part of the problem is that these scholars adopt an understanding of resilience that has been long abandoned by many psychologists. Indeed, wanting to move away from a conception of resilience as a set of dispositional and individual qualities, psychologists, social workers and criminologists have proposed, since the 1990s, to ‘de-individualise’ resilience and to see it as a social and multifaceted process working at the individual, family, community, and societal levels. The problem with understanding resilience as a personality trait that an individual possess (or not) is that it opens the door to the danger of blaming the victim, of rendering injured parties responsible for not being able to react with resilience to a given shock. As we will see shortly, psychologists and social workers have proposed different conceptualisations.

In the context of this genealogy, world politics scholars who criticize resilience based on such a partial understanding of the concept are guilty of the translation problem in multidisciplinary work: in short, these scholars are importing an incomplete set of elements from one discipline to address a given issue while leaving aside the more nuanced understandings of the discipline that have been developed over the years in the literature. Although a parsimonious shortcut might thus be obtained, it is gained at the great expense of exactitude, richness and complexity.

Another key marker in the history of resilience appeared in 1807, when Thomas Young spoke about resilience of *material*. Young was arguably the first to propose that the capacity of solid material to resist impulse “may properly be termed resilience”. The resilience of a material, he continues, “is measured by the product of the mass and the square of the velocity of a body capable of breaking it” (Young 1807, 110). The work of Thomas Young, a scientist who made notable contributions to the fields of Egyptology and solid mechanics, has been particularly influential on the work of another scientist: Thomas Tredgold. Tredgold picks up on Young’s idea first in his study of timber’s “power of resisting a body in motion (called resilience)” in 1818 and then in his 1822 *Practical essay on the strength of cast iron and other metals* (Tredgold 1818, 216, 1822). The leitmotiv of “bending but not breaking” captures well this particular understanding of resilience.

The idea of resilience as a measurement of the vulnerability of a given material has seen widespread adoption in several disciplines, including chemistry and mechanical engineering. Most notably, it led to the development of the Charpy impact test, a standardised high strain-rate test that provides a measure of a material’s notch robustness. The test became pivotal in World War II. Before the war, riveting was the almost universal method used to fabricate steel structures. By 1939, however, welding was gaining acceptance in steelwork construction of ships, and extensive adoption of this new technique was enabling the United States to produce ships at an unprecedented rate. A critical problem emerged, however: more than one fifth of all ships produced by welding had serious fractures, and some of these fractures were sufficiently severe to force abandonment of these (brand new) ships at sea. A Board of Investigation, convened by the Secretary of the US Navy to determine the causes of the fractures, made crucial use of the Charpy test to identify resilience failures in important

notches of the ships; based on the results of the test, fabrication standards and material remedies were developed, resulting in a consistent reduction in fractures from over 130 per month in March 1944 to less than five per month in March 1946 (US Navy 1947).

The Young-Tredgol's themes of persistence, endurance, and robustness were also at the heart of some of the uses of resilience in world politics. This theme of resiliency in the face of disaster would be picked up by the United States Strategic Bombing Survey during and after World War II (MacIsaac 1976). Commissioned by President Franklin Roosevelt in 1944 and headed by a board of experts, the objective of the Strategic Bombing Survey was to study the effects of allied aerial attacks on Germany (and later on Japan) and thus to evaluate whether air power was an important instrument of military strategy. Among the board members were John Kenneth Galbraith, Paul H. Nitze, and Rensis Likert (an organisation psychologist studying people's beliefs, attitude, and feelings toward international affairs). The documents and official report released by the study underscore the resilience of the German society, economy and army; in fact, the Strategic Bombing Survey report underlined resilience to such an extent that sociologist David Stark (2014) describes it as one of the first systematic studies of resilience in a social system, casting the relationship between vulnerability and resilience into a new light.

Scholars have also equated resilience with the persistence and endurance of an institution. For example, Robert Powell maintains that "international institutions history matter", i.e. that "the cost of changing or constructing new regimes thus gives existing regimes some resilience to shifts in the balance of power" (Powell 1994, 342). Equally, Peter Hasenclever *et al.* (1997) argue that international institutions can be more or less effective, and "more or less robust (or resilient)." For them, "regime *robustness* (resilience) refers to the 'staying power' of international institutions in the face of exogenous challenges. [...] In other words, institutions that change with every shift of power among their members or whenever the most powerful participants find that their interests are no longer optimally served by the current regime *lack* resilience" (Hasenclever *et al.* 1997, 2, their emphasis).

Other scholars have underscored the resilience of authoritarian regimes to democratic pressures (Goldstone 2011, Li 2012, Nathan 2003, Shambaugh 2008), and of nationalism in the face of regionalism (Dieckhoff and Jaffrelot 2004). Past research has focused on instances of sociopolitical resilience in the modern world, including the differing resilience of social capital in Britain and the United States (Hall 1999) and the resilience of the welfare state of advanced industrial societies in the face of neoliberalism (Pierson 1996). In the same lineage, Tat Yan Kong (2006) and David Clark (2002) underscore, respectively, the resilience of labor market reforms and of public service regimes in the face of globalisation and economic liberalisation. Similarly, resilience has been employed to underscore the enduring capacity of national sovereignty against various global dynamics (Ansell and Weber 1999) or even the very existence of NATO in the post-Cold war era (Barany and Rauchhaus 2011).

Unsurprisingly, a focus on robustness and persistence can also be found in the literature on critical infrastructures. For some scholars, the objective is to gain a better understanding of a community's properties, strengths and limits in order to enhance, promote, and maximise its

resilience (Aldrich 2012, Boin and McConnell 2007, Vale and Campanella 2005). For others, a more critical perspective is needed to understand the origins as well as the consequences of these strategies, which might not all be in the interest of the individual/citizen (Coaffee 2013).

One of the main limits of understanding resilience merely in term of persistence is that it eschews the renewal and transformational aspects of resilience. Resilience is not only about maintaining the status quo, but it is also about transforming and remodelling an individual, a group, or a social structure. The transformational aspect of resilience implies the introduction of novel vectors of response that will (implicitly or explicitly) change existing policies and set new directions for governance in this field (Bourbeau 2013, Bourbeau and Ryan 2017).

The field of ecology has also formulated its own comprehension of resilience that have had several ramifications in world politics literature. The key ecological episode in our genealogical analysis of resilience concerns the juxtaposition of equilibrium and system with resilience: what are the conditions under which an ecological system can be displaced from a fixed point of equilibrium and then return to that equilibrium once the shock has passed? For scholars investigating this question, resilience is a characteristic of a species that describes “the rate at which population density returns to equilibrium after a disturbance away from equilibrium” (Pimm 1991, 18, 1984, Mittelbach et al. 1995). For C.S. Holling (1973, 14), resilience is a “measure of the ability of these systems to absorb changes of state variables, driving variables, and parameters, and still persist [...]. Resilience is the property of the system.” Holling’s seminal article would become the inspiration and the starting point for a dynamic and varied literature on socio-ecological resilience (Adger 2000, Carpenter et al. 2001, Pimm 1991). Scholars will indeed push Holling’s argument a few steps farther, directly highlighting the synergistic and co-evolutionary relationship between social and ecological systems, by understanding resilience as “the capacity of linked social-ecological systems to absorb recurrent disturbances [...] so as to retain essential structures, processes, and feedbacks” (Adger et al. 2005, 1036). For Carl Folke and his colleagues, the emphasis is on the combined capacity of humans and natural systems to achieve “management that secures the capacity of ecosystems to sustain societal development and progress with essential ecosystem services” (Folke et al. 2003, 354, Folke et al. 2010).

The influence of an ecological understanding of resilience is best captured in the literature on climate change. For example, a special report on climate change adaptation published by the Intergovernmental Panel on Climate Change (IPCC) adopted the ecological/system approach to resilience in defining resilience as the “ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner” (IPCC 2012, 5). In the same lineage, the UN Secretary General’s High-Level Panel of Global Sustainability uses an ecological approach to resilience in its 2012 report *Resilient People, Resilient Planet* (UN 2012, Corry 2014).

The wording employed by ecologists (equilibrium, systems, variables, measurement, probability, management), their forthright objective of bringing resilience “thinking” to the forefront of social sciences scholarship, and the fact that some governments’ and

international institutions' initiatives have relied on this literature has provoked strong reactions and responses from some scholars, especially critical-theory-attuned scholars.

For many critical theorists, resilience is a form of reasoning that participates in a neoliberal rationality of governance. For Pat O'Malley, resilience is a "technique [...] aligned with advanced liberal governance" (2010, 506). While Joseph (2013, 42) contends that resilience is best understood in the context of "rolling-out neoliberal governmentality" and that neoliberalism is the "logic behind the rise of resilience", and Methmann and Oels (2015, 52) agree "with the existing literature that resilience governs through advanced liberal government." Resilience, argue Filippa Lentzos and Nikolas Rose (2009), "has become something that can be engineered into systems, organizations, perhaps nations and persons." A growing body of research, particularly popular among critical theorists, views resilience one-dimensionally as a neoliberal by-product; on this view, resilience is a means to the end of imposing the rationalist state's interests onto a populace in an unexamined way. Among other things, resilience is lamentable on this view because of its insistence on the dominance of natural scientific systems over social perspectives.

Unfortunately, at the centre of this perspective lies a problematic conflation of one particular manifestation of resilience (the state's neoliberal understanding) with the *concept of resilience itself*. Rather than rejecting the *application* of neoliberal resilience by certain governments many critical theorists use these examples of government overreach as a basis for rejecting the concept of resilience altogether. In equating application with conceptualization in this way, I believe that these scholars lose the opportunity to arrive at a more nuanced understanding of our sociopolitical world. Even though advocates of a neoliberal understanding of resilience have so far failed to engage with this line of argument, an increasing number of scholars have raised similar criticism (Bourbeau 2015b, Chandler 2014, Corry 2014, Ryan 2015, Wagner and Anholt 2016). In sum, accepting that the ecological definition of resilience is but one possible facet of a broader, multidimensional concept offers a richer approach.

One last path that I want to uncover in this genealogy is the processual path. For the past two decades, psychologists and social workers have sought to fully detach the concept of resilience from the "blaming the victim" problem that comes with understanding resilience as a personal trait. In doing so, they have rallied around a definition of resilience that stresses *process* and *diversity*. For Suniya Luthar, resilience is "a dynamic process encompassing positive adaptation within the context of significant adversity" (Luthar et al. 2000, 543); for Ingrid Schoon, a "dynamic process whereby individuals show adaptive functioning in the face of significant adversity" (Schoon 2006, 6). Perhaps the work of social worker Michael Ungar best characterises this trend away from understanding resilience as a set of qualities. For Ungar (2004, 342), resilience is "the outcome from negotiations between individuals and their environments for the resources to define themselves as healthy amidst conditions collectively viewed as adverse." This is important as these efforts at defining resilience in processual terms are not idiosyncratic nor are they isolated attempts; they reflect a large consensus in psychology, a discipline that has been working on resilience for more than 60 years. The American Psychological Association defines resilience as "the process of adapting

well in the face of adversity, trauma, tragedy, threats or even significant sources of stress” (APA 2014, Southwick et al. 2014).

From this processual perspective on resilience, scholars have put forward several sets of arguments and propositions about resilience as applied to world politics. Caitlin Ryan (2015) has demonstrated the importance of thinking about how communities and groups engage in their own resilience building because resilience itself may be a tactic of resistance employed collectively and strategically to adapt to protracted conflicts and chronic adversity. Using the example of “sumud” in Palestine, she shows that a processual understanding of resilience provides a better understanding of the complex and dynamic relationship among sumud, resilience, and resistance than other conceptualisation of resilience.

In a co-authored piece, Ryan and I argue that conceptualising resilience and resistance as mutually exclusive reflects a substantialist ontological position rather than a relationalist one (Bourbeau and Ryan 2017). A substantialist position accepts that entities exist prior to their relations with others, a position that allows scholars to identify these fixed entities as primary units of analysis in research. In sharp contrast, a relationalist position posits that entities gain their meaning through their processual relations with other entities. From a relationalist approach, we suggest that resilience and resistance are engaged in mutual assistance rather than mutual exclusion.

Scholars have also argued that resilience has both a dark and a bright side (Potvin and Davis 2017). Against this rigid critical-theoretic view of resilience as an inherently negative quality, much literature can be arrayed to suggest that resilience strategies have had a positive impact in many international contexts. Bouchard (2013), for example, highlights Québec’s pushback against neoliberalism as a successful case of socioeconomic and cultural resilience, while Davis (2012) introduces the case of Medellín, Columbia, where a positive capacity for resilience yielded invigorated urban institutions and a reduction in urban violence; other work in this vein emphasizes the importance of resilience in reducing sectarian attacks and violence against civilians during times of war. Researchers in this vein may be understood as advocates of a *processual* understanding of resilience. Others have highlighted the importance of local networks and knowledge in reducing violence against civilians in war zones, and the role of local religious leaders in forbidding sectarian attacks has been identified as a key factor for the development of resilience in Baghdad City (Carpenter 2014, Williams 2013). Seeing resilience in this processual lineage, I have proposed a threefold typology—resilience as maintenance, resilience as marginality, and resilience as renewal—in which resilience as maintenance captures the idea of seeking to maintain the status quo after a shock or a disturbance, of ‘bouncing back’ in the face of adversity, while resilience as renewal implies the transformation of basic policy assumptions and encapsulates the idea of “bouncing forward” and the potential remodelling of social structures (Bourbeau 2013).

The processual approach to resilience differs crucially from the critical theoretic approach in emphasizing the importance of context in understanding the resilient actions of a community or governing body. Factors such as communal history, collective memory, and social convention significantly affect the behaviour of sociopolitical agents during times of crisis

and cannot be disregarded by a well-grounded theory. For example, research suggests that for war-affected youth, forgetting negative memories or creating more benign memories is an essential component of resilience. In their study of trauma memories and resilience among Afghan youth, Catherine Panter-Brick and her colleagues (2015) demonstrate that the impact of war on youth depends in large part upon whether youth are able to make sense of collective violence in historical and social terms. Others have shown that in the context of children affected by armed conflict, the social environment (including the immediate family as well as peer, school and community settings) is a vitally important factor in determining the resilience of the children (Betancourt and Khan 2008, Tol et al. 2013). Resilience is not a matter of individuals taking steps toward building individual resilience, but plays out on multi-levels. This is particular true in the subfield of terrorism and counter-terrorism studies. For Jon Coaffee (2013, 10), “community resilience cannot simply be left to communities themselves but requires steering, not rowing, from state level in some form of collaborative alliance to be successful.” A recent special issue of *Studies in Conflicts and Terrorism* also debates the added value of resilience from a multilevel point of view (Malkki and Sinkkonen 2016, Argomaniz and Lehr 2016).

The processual approach also emphasizes the importance of inertia in determining the trajectory of an agent’s response to a shock or disturbance: once a particular understanding of an issue is established, based on past experiences and decisions, that understanding becomes difficult to alter. For example, Daniel Aldrich and Michele Meyer (2014) highlight the critical role of social capital and networks in resilient strategies associated with disaster management. Building on previous research—including Hall’s (1999) and Pierson’s (1996) studies of modern sociopolitical resilience described above—Peter A. Hall and Michèle Lamont’s (2013) work examines resilience not as a neoliberal tool, but as a social response to neoliberal policies. Hall and Lamont’s research mirrors the processual approach to resilience, in the sense that both perspectives emphasize the importance of social construction and interpretation in determining a population’s or individual’s resilient strategy in the face of shocks and critical junctures.

Conclusion

One often reads that a genealogical analysis is most useful when a scholar has identified an issue (or a given set of arguments) as problematic but largely uncontested in the present; such a situation opens up the need to investigate how that issue has come to be represented in the present. By deconstructing the particular series of events and markers that led to the present understanding of an issue, a genealogy offers a “counter-memory” that not only examines known elements and rearranges them, but also highlights the ways in which an issue originates, practically and discursively, from multiple, diffuse points.

For a genealogist, the origins of an issue are characterised by a disparity and diversity of meanings; some interpretations get forgotten, set aside, or defeated, while others become integrated into the construction of a dominant narrative. This narrative can be broad: two positions at the top of the genealogical “tree” might be quite distant from each other. In mapping out the tree’s branches, the relevant pathways are not just presented and described;

rather, a genealogy emphasises points of contention and contestation in the interpretation of the issue at hand. Instead of searching for a single, sequential, overarching path in the evolution of a concept, a genealogy accepts, highlights, and builds on multiple conjunctures, branches, and non-linear paths. A genealogy reveals tension and embraces conflict.

Adopting an extensive genealogy of resilience has several implications. First, it opens up space for debates on the strength, benefit, limits, and weaknesses of applying resilience to our study of world politics. Second, it acknowledges the validity of arguments about the relationship between resilience and neoliberalism while putting these arguments into a broader and richer context so that the literature does not develop on the assumption that resilience is only a by-product of neoliberalism. Third, it permits the development of analytical frameworks capable of incorporating the multiple and multifaceted expressions of resilience manifested in our contemporary social world. My hope is that the study of resilience will develop into a field of research where the different ‘branches’ highlighted in this article are developed, studied, compared, and contrasted.

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Figure 1. Walker and Cooper's genealogy of resilience

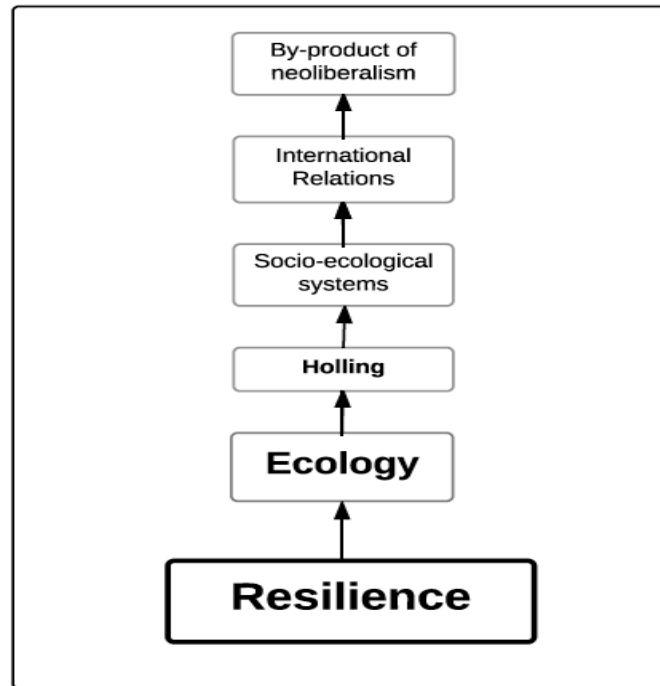


Figure 2. A Genealogy of Resilience

