

Violence, Conflict, and World Order:
Rethinking War with a Complex Systems Approach

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

This thesis employs a complex systems approach to argue that the nature of violent conflict coevolves with broader features of world order.

The first chapter demonstrates that International Relations and Comparative Politics – the predominant fields in the study of violent conflict – are insufficiently *systemic* to elucidate recent events. International Relations theories do not endogenize the formation of actors, struggle with systemic change, and remain unproductively fixated on anarchy. Comparative Politics focuses inordinately on ‘domestic’ causes of violent conflict and retains the baggage of modernization thinking. At the same time, the very concept of ‘war’ unproductively narrows the study of violent conflict. After identifying several key ‘macrotrends’ in warfare, the chapter proposes conceptual distinctions between violence, conflict, and order to better understand long-term variations.

Chapter Two develops an ontology of world order based in complex systems thinking. After defining world order and exploring the nature of systems, the account conceives system structure as an *emergent* phenomenon in three senses. First, it draws upon structuration theory and complex adaptive systems thinking to explain the internal organization of collective social agents. It then draws upon political economy and constructivist thought to argue that agents form emergent relational structures by which they constitute, reproduce, and transform each other. Finally, this chapter argues that worldviews, institutions, and technologies constitute ‘emergent schematic assemblages’ as diffuse social entities in themselves. This ontology ultimately highlights actor differentiation, interaction capacity, and emergent schematic assemblages as core features of world order.

The third chapter applies this ontology to argue that there are three broad sets of conflicts embedded in the system structure of world order which each evolve, erupt into violence of a particular character, and differentiate social actors in ways shaped by the broader features of world order (particularly its worldviews, institutions, technologies, and interaction capacity). World order shapes the consequent violent conflicts, but those violent conflicts also reshape world order, generating a co-evolutionary relationship. This framework helps explain several major trends in the nature of violent conflict by highlighting systemic influences on the formation of units and their vertical differentiation.

Chapter Four further develops the links between globalization and violence by examining the rise of organized crime and of reactionary fundamentalist identity movements. It argues that these examples suggest possible future trajectories in the co-evolution of world order and violent conflict by challenging statehood as a basic organizing logic and by producing violence that is ill captured by basic notions of war, yet rivals its lethality.

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List of Abbreviations

BRP	Beliefs, rules, and procedures
CE	Common Era
CoW	Correlates of War (Project)
DRC	Democratic Republic of Congo
DTO	Drug Trafficking Organization
ICT	Information and communications technology
IMF	International Monetary Fund
IR	International Relations
IS	Islamic State
MNC	Multinational Corporation
NATO	North Atlantic Treaty Organization
OPEC	Organization of the Petroleum Exporting Countries
PRIO	Peace Research Institute Oslo
SAS	Small Arms Survey
SNC wars	Symmetric non-conventional wars
UCDP	Uppsala Conflict Data Program
UN	United Nations
UNODC	United Nations Office on Drugs and Crime
VCO	Violence, Conflict, and Order
WIT	Worldviews, institutions, and technology
WTO	World Trade Organization

CHAPTER ONE:

The Study of Violence, Conflict, and Social Order

I. Three Intuitions: An Introductory Overview

This thesis originates from three broad intuitions: the world is changing in fundamental ways, these changes are reshaping the nature of violent conflict, but we yet lack sufficiently *systemic* theory with which to understand such transformations.

The field of International Relations (IR) has long been synonymous with ‘systemic’ or ‘structural’ theory, but the association has grown dubious today. Some argue that theories such as neorealism were *never truly structural* to begin with due to their foundation in microeconomics (Wendt, 1999: 15-16; see also: Donnelly, 2019). Others lament IR’s apparent retreat into *micro-theory* at a time of unprecedented global interconnectivity (Albert and Cederman, 2010; Kessler and Kratochwil, 2010). Even more radically, some thinkers suggest that today’s mounting social complexities represent an *epochal shift* that is ill captured by longstanding paradigms of world politics (Rosenau, 2006; Cerny, 2010).

The latter position reflects a growing interest in ‘globalization’ and ‘global governance’ as novel lenses with which to understand a changing world. Globalization consists of a *quantitative* shift in the intensity (speed, variety, and inter-linkages) of transplanetary connections, and a *qualitative* shift towards instant and simultaneous contacts, which are made in *no* time and occur everywhere at the *same* time (Scholte, 2005: 60-64; Young, 2006: 308). The field of Global Governance abandons many of IR’s core assumptions in order to understand these trends within a more complex, multidisciplinary, and systems-oriented perspective (Dingwerth and Pattberg, 2006; Weiss and Wilkinson, 2014; Rosenau and Czempiel, 1992). These new frameworks could be paradigm shifting, but have only begun to incorporate potentially invaluable insights from complex systems thinking (see, for example: Kavalski, 2007; Bosquet and Curtis, 2011).¹

One of the most important questions for such approaches concerns the extent and manner in which these global processes are changing the nature of violent conflict. Mary Kaldor (2012 [1999]) famously initiated such inquest by arguing that globalization is

¹ Notable efforts to develop complexity-based approaches to international relations and world politics include: Cederman, 1997; Alberts and Czerwinski, 1997; Jervis, 1997a; Walby, 2009; Albert, Cederman, and Wendt, 2010; Cudworth and Hobden, 2011; Gunitsky, 2013; Root, 2013; and Wagner, 2016.

generating ‘new wars’ defined by their illicit transnational economies, their fragmentary identity politics, and their strategic use of humanitarian atrocity. The ensuing debates, however, became quickly bogged down in questions of what is genuinely ‘new’ and what features of contemporary conflict have precedents elsewhere (for example: Kalyvas, 2001; Newman, 2004; Duyvesteyn and Angstrom, 2004; Malesevic, 2008). By focusing on particular details, many neglected the deeper question of how a changing world-historical context affects violent conflict.²

The new wars concept did, however, spur much more rigorous investigation of the changing nature of organized violence. Some of this literature focuses on the decline of war specifically (Goldstein, 2011), and some on the decline of violence more broadly (Pinker 2011), while others trace the shifting character and organization of armed conflict (Kalyvas and Balcells, 2010). Some rely heavily on quantitative analyses to systematically test for correlations (Wimmer, 2013) while others employ qualitative narrative to trace complex historical processes (Hathaway and Shapiro, 2017).

These and related studies identify a range of large-scale and long-term trends – herein termed *macrotrends* – of organized violence. Such regularities suggest that features of *world order* – what social organization exists at the highest, most encompassing scale of human interaction – may affect the nature of violent conflict in *systemic* ways. As demonstrated below, however, the International Relations literature suffers from an impoverished understanding of systems, the civil wars literature emphasizes internal (intrastate) causes of armed conflict, and the rigid division between the study of the domestic versus the international is an artificial barrier to knowledge. More fundamentally, the keystone concepts of these and other disciplines – *statehood* and *war* – do not adequately encompass many armed conflicts, nor today’s major sources of violent death.

The ultimate challenge is to move beyond a unitary conception of ‘new wars’ in order to link *specific* changes in world order to distinctive characteristics of particular

² For example, the contemporary use of private militaries is often identified as a key change in the nature of armed conflict (for example, Kaldor 2012; Singer, 2008), but one that has precedents in the medieval use of mercenaries (as noted in Mueller, 2004). The political economy of feudal Europe that enabled the latter, however, is very different from the links between globalization and privatized violence today, so that apparently similar phenomena arise from different conditions. A similar point can be made about ‘warlords’ as prominent actors in armed conflicts today that also have a variegated history spanning millennia (Rich, 2004: 198-200).

armed conflicts. Such advances, however, require a broader theorization of the causal linkages between world order and violent conflict. The major research question of this thesis is thus: *How do systemic changes of world order reshape the nature of violent conflict?*

The very formulation of this question contains three distinct propositions that are supported by the ensuing chapters: world order is a changing system; the nature of violent conflict changes over time in discernable macrorends; and that there are causal relations between world order and violent conflict (of various forms, at multiple scales) that help explain these macrorends. The third contention is at the heart of this dissertation, and the major thesis of this thesis is that violent conflict co-evolves with the system structure of world order – that violent conflict alters key features of world order, which in turn reshape the nature of violent conflict through processes elaborated in Chapter Three.

A core premise of the inquiry is that the complexity literature can furnish a *systems ontology of world order* that explains recent macrorends of violent conflict better than other approaches. But before turning to complex systems (in the next chapter), the remainder of this chapter accomplishes several stage-setting tasks. First, it exposes a lacuna in our understanding of violent conflict opened by the shortcomings of the IR and civil wars literatures, stemming particularly from their impoverished understandings of systems. It then presents several macrorends in organized violence while noting the potential problems of the large-n quantitative studies that identify these patterns. Finally, this first chapter argues that the concept of ‘war’ can mislead investigation in several ways, then (drawing upon: Kalyvas et al., 2008) makes conceptual distinctions between *violence*, *conflict*, and *order* to provide a better framework of analysis.

Chapter Two of this thesis explains, elaborates, and connects key concepts from the complexity literature to build a complex systems-based ontology of world order. Ontology is the study of the fundamental components of reality. Every theory, whether explicitly or not, makes assumptions about the basic ‘things’ that constitute the world (Wendt, 1999: 5; DeLanda, 2006: 7), and this ontology provides the foundational pillars (such as categories, entities, and variables) of theory. Chapter Two builds an ontology of world order by distinguishing between *order*, *systems*, and *structure*; by using the concept of *emergence* to explain three different forms of social structure; and by exploring the nature of the rules (schemata) that steer agent behaviour in world order.

Chapter Three uses this ontology to argue that there are three sets of structural conflicts embedded in world order which evolve and erupt into violence of differing character alongside broader changes of interaction capacity, worldviews, institutions, and technology. It demonstrates the ways in which a systems ontology can explain the causality of established macrotrends of violent conflict before considering present and potential developments, such as urban insecurity and the impacts of climate change.

Chapter Four, finally, examines two case studies – violent organized crime and reactionary fundamentalism – that suggest possible trajectories for the continued evolution of conflict and violence in world order. More specifically, the chapter argues that these conflicts are challenging statehood as a basic organizing logic and producing violence that does not fit basic notions of war yet rivals the lethality of war. These case studies thus represent important departures from several of the trends and mechanisms explored in Chapter Three that may grow increasingly consequential in years to come.

This thesis is not an exercise in ‘normal science’ but rather a reconsideration of ontology as it relates to violence, conflict, and order. Its contribution to knowledge is best characterized as ‘synthetic integration’. The arguments below are not based on the ‘fieldwork’ that typifies much social science in its pursuit of empirical case studies, nor does it include the sort of ‘primary’ (documentary) research that makes for rigorous historical inquiry. Instead, this thesis draws together the concepts, theories, and empirical studies of others (across several disciplines) to forge novel connections and gain a richer view of violence in the world today. It offers empirical examples mainly as ‘proof of concept’ rather than as conclusive studies. This thesis presents and critiques many other works; but more importantly, it refines and expands upon such components in novel ways to foster integration and synthesis. The resulting account is uniquely my own.

II. The Systemic Deficits of International Relations Theory

A core premise of this thesis is that existing theoretical approaches to violent conflict fail to capture the influence of world order because they are insufficiently systemic in their ontology. Chapter Two therefore develops a systems ontology of world order that can better countenance such connections. As is standard scholarly practice, this novel framework should be compared and contrasted with extant approaches in order to establish the shortcomings of the latter and the value-added of the former. But rather than finding a rival theory pursuing the same questions and objectives, this thesis immediately encounters – and ultimately attempts to bridge – one of the deepest and most problematic rifts in the social sciences: the divide between the study of the domestic versus the international, the internal versus the external.

According to this bifurcation, the domestic sphere enjoys the hierarchical authority that allows a national political community to flourish under the rule of law; the international realm, in contrast, is fundamentally anarchical so that might makes right and sociability is thin at best (for example: Waltz, 1979: 112-113; Wendt, 1999: 7-15; Kennan, 1986).³ The schism is particularly evident in the study of violent conflict, where different groups of scholars study *interstate* versus *intrastate* wars in separate literatures employing different methods, theories, and ontological assumptions. International Relations (IR) focuses on international wars and generally attributes them to the structure of the international system, whereas Comparative Politics (and much of the Peace and Conflict Studies literature) examine civil wars by highlighting domestic causes and prescribing better *national* institutions as remedy (Call and Wyeth, 2008; Paris, 2004; Paris and Sisk, 2009).

This divided state of affairs represents a major null hypothesis for this thesis: that the domestic and international are distinct realms each with a unique ontology, that cannot (and need not) be unified into one overarching systems ontology of social reality (on this point, see: Walker, 1993); the violent conflicts that afflict each realm are distinct

³ As Wendt (1999: 13) puts it, “At home states are bound to a thick structure of rules that holds their power accountable to society. Abroad they are bound by a different set of rules, the logic, or as I shall argue, logics, of anarchy.”

phenomena without common causes. Admittedly, most scholars acknowledge that such distinctions are increasingly blurred and eroding,⁴ but disciplinary divisions continue to maintain the separation – and even incommensurability – of these fields.

As an attempt to identify the *causal mechanisms* by which the system structure of world order shapes the forms taken by violent conflict, this thesis argues that the domestic-international divide is artificial and increasingly unproductive. The sections below contend that the poor quality of systems in thinking in these riven fields constricts their explanatory power. Subsequent chapters propose that a more thoroughly systemic ontology (as developed in Chapter Two) can bridge key disciplinary gaps to reveal the ways in which features of world order influence *all* forms of violent conflict (as demonstrated in Chapter Three).⁵ The remainder of the present section argues that the major ‘paradigms’⁶ of international relations thought are insufficiently *systemic* in three crucial ways, while the subsequent section makes similar critiques of the civil wars literature. The shortcomings identified by these two sections set the agenda for a systems ontology that is better able to assess the influence of world order on violent conflict.

In the most rudimentary sense (and as elaborated in Chapter Two), a system is a collection of *units* whose *interconnections* produce *emergent properties* – novel behaviours at the scale of the whole that persist through time (Meadows, 2008). Table 1 uses this tripartite schema to chart six leading IR paradigms as systemic ontologies,⁷ specifying the

⁴ Philip Cerny (2010: 18), for example, proposes that “World politics not only crosses over between the international and domestic levels of analysis but also involves a process of interaction and semifusion of the two supposedly distinct levels, however uneven and continually evolving, that is fundamentally transforming our understanding of how the world works.”

⁵ It should be emphatically noted that this thesis does not attempt to develop some sort of ‘grand unified theory of violent conflict’; it more tractably seeks to identify causal mechanisms by which the systems structure of world order influences violent conflicts of various kinds, alongside additional causes operating at other scales.

⁶ Joseph S. Nye and David Welch (2014: 68-77) argue that the main schools of thought in IR (such as realism, liberalism, Marxism, and constructivism) constitute broad ‘paradigms’ that are each composed of the basic assumptions, concepts, and propositions upon which more specific ‘theories’ (such as balance of power theory and the democratic peace) are built.

⁷ The English School of IR (Bull, 1977) is notably absent from Tables 1 and 2. The omission of this and other paradigms (such as Post-Structuralism, Marxism, and Feminism) is largely a consequence of limited space. But it also stems from an apparent tension within the English School: its foundations in rationalism (Buzan, 2014a: 6, 14) tend towards the rational choice models of neorealism and neoliberal institutionalism, while its focus on sociability and culture tend towards constructivism. It must be noted, however, that the deeply historical-sociological approach employed by English School thinker Barry Buzan (and his various co-authors) is especially amenable to the systems ontology and co-evolutionary account of world order and

units, connections, and emergent properties that constitute each approach. Table 2 plots each paradigm's stance on five additional issues of central import to systems thinking. Referring to these tables as summaries, the following subsections detail three major gaps in the systemic quality of IR paradigms and theories. These shortcomings (as formulated in the subheadings) represent the crucial tasks that a better systems ontology *should* perform.

violent conflict developed in this thesis. These particular works and ideas turn up often and productively in Chapters Two and Three, where they are more fully developed and explained.

Table 1: Mainstream International Relations Paradigms as *Systemic* Approaches

	Liberal Internationalism (Wilson, 1917)	Neorealism (Waltz, 1979)	Neoliberal Institutionalism (Keohane, 1984)	Complex Interdependence (Keohane & Nye, 1977)	Constructivism (Wendt, 1999)	World-Systems Theory (Wallerstein, 2004)
Units:	-States and Nations -Nations are groups of shared heritage whose most basic interest in peace is best served by self-determination within their own (liberal-democratic) state	-States -States are rational unitary actors with a preponderant interest in survival (political independence) in the self-help (zero-sum) conditions of anarchy	-States -States are rational, egoistic, unitary actors with shared interests in security and wealth	-States, specific government agencies, and non-state actors -States are not unitary and coherent actors, but pursue multiple interests within several distinct issue areas that have no fixed hierarchy between them.	-States -States are constituted (in their identity, interests, capacities, and interactions) by shared ideas of what states are.	-States and classes -The capital class is driven by an interest in unending profits to compel strong (core) states to protect high profit economic production, leaving low-profit, competitive production to weaker (peripheral) states
Connections:	-Free trade and cosmopolitan attitudes support peace (and other interests) within and between liberal democratic states (security communities)	-Use, threat, and potential use of military force -Alliances and wars to maintain a balance of power	-Institutions coordinate and channel states' strategic interactions by enabling credible commitments, providing information, and reducing transaction costs	-Actors at multiple levels (interstate, transgovernmental, and transnational) are mutually (though asymmetrically) dependent on one another within multiple issue areas involving flows of money, goods, people, and information across borders	-Interactions teach and reproduce the identity, interests, and powers of states	-Economic relations of capitalist production that transfer net surplus value from peripheral to core states and (especially) the capital class
Emergent Properties:	-A 'harmony of interest' in which peace, justice, and national self-determination reinforce one another	-Balance of power -Emulation of successful state strategies amidst interstate competition -Socialization to appropriate state conduct	-International regimes (rules, norms, principles, decision-making procedures) that facilitate international cooperation and positive-sum outcomes despite the collective action problems created by anarchy	-International regimes -Policy integration across borders on a number of issues	-Collective identities (shared international cultures): Hobbesian (enemies), Lockean (rivals), or Kantian (friends)	-International core-periphery structure -Contemporary crisis of capitalism as it reaches limits to growth, such as declining profits and production inefficiencies.

Table 2: Key Systemic Features of Mainstream International Relations Paradigms

	Liberal Internationalism (Wilson, 1918)	Neorealism (Waltz, 1979)	Neoliberal Institutionalism (Keohane, 1984)	Complex Interdependence (Keohane & Nye, 1977)	Constructivism (Wendt, 1999)	World-Systems Theory (Wallerstein, 2004)
Theoretical Emphasis:	-The harmony of rational self-interest (between individuals and nations), the first and foremost of which is peace	-The constant danger of military conflict and the zero-sum premium it places on military power	-International institutions as an essential, semi-autonomous part of world politics that enable self-interested actors to better achieve economic and political goals by cooperating	-The politics of setting and controlling the agenda (especially the institutional rules) in multiple, detached issue areas.	-The shared ideas that <i>constitute</i> social reality (identities, interests, powers, norms, etc.) and <i>cause</i> actors to behave according to such meanings.	-The capitalist mode of economic production and its inherent inequalities.
Nature of Power:⁸	-Harmful: to be tamed and transcended by justice within liberal institutions -First and second faces of power	-Material: military force (zero-sum) -First face of power	-Material: military and economic resources, translated into outcomes -First and second face of power	-Institutional: agenda-setting (rule making) stemming from asymmetries in mutual dependence -Non-fungible resources specific to issue areas -Military force is of little use -Second face of power	-Ideational: ideas constitute social reality and cause behaviours -Third face of power	-Material: wealth (the self-reinforcing accumulation of capital) -Relational: the mutual constitution of capital and labour -Second face of power
Nature of Structure:	-The character of domestic regimes and international institutions create conditions for international peace or war.	-The distribution of (primarily military) capabilities among functionally equivalent states amidst anarchy	-The distribution of power and wealth alongside the incentives and constraints generated by international institutions.	-The distribution of issue-specific resources mobilized within international regimes amidst actors' differential vulnerability to alterations of institutional rules -International networks, norms, and institutions	-The distribution of shared ideas (collective knowledge), such as the implications of anarchy or the nature of national interest, that are reproduced in social interaction	-The unequal international division of labour between core and periphery states, and the net transfer of value from the latter to the former.

⁸ The 'faces of power' in this row refer to Steven Lukes' (2005) 'three faces of power': power as decision-making, power as agenda-setting, and power as the ability to shape perceptions and preferences.

Table 2: Key Systemic Features of Mainstream International Relations Paradigms *Continued*

	Liberal Internationalism (Wilson, 1918)	Neorealism (Waltz, 1979)	Neoliberal Institutionalism (Keohane, 1984)	Complex Interdependence (Keohane & Nye, 1977)	Constructivism (Wendt, 1999)	World-Systems Theory (Wallerstein, 2004)
Nature and Causes of Change:	-Changes in the character of domestic regimes and international institutions can promote either peace or war	-Change involves the redistribution of power among states, caused exogenously by uneven economic growth, technological developments, and aggression -Fundamental change entails a transition from international anarchy to hierarchy, but is very unlikely to occur	-Change entails shifts in the distribution of economic power leading to the redesign of international regimes	-Change occurs when international regime rules face altered circumstances, such as new technological and economic processes, and redistributions of issue-specific power -International organization tends to resist change	-Change encompasses a cultural shift between Hobbesian, Lockean, and Kantian identities arising from interdependence, common fate, homogenization, and self-restraint -Change is rare because culture is largely a reproductive, self-fulfilling prophecy	-Change arises from the internal contradictions (production inefficiencies and declining profits) of the modern capitalist system, which have created a crisis that will generate fundamental change of the world-system
Sources of Violent Conflict:	-Particular interests create self-serving institutions and distort people's perceptions of their own (personal and national) interests	-Imbalances of power (prevention of hegemony) -Security dilemmas in which one state's efforts to bolster military power to defend itself render other states less secure in an escalating process	-Growing government interactions amidst institutions insufficient to foster cooperation create greater possibilities of political conflict	-Interdependence creates potential for conflict because societies are more sensitive to decisions made elsewhere, but it also renders military force costly, ineffective, and unlikely to be used between interdependent countries	-Collective culture in which actors have enemy identities based on a Hobbesian understanding of anarchy	-Exploitative productive arrangements require forcible imposition and generate resistance

Endogenizing Actors

Many critics rebuke IR theory for treating states *exogenously*; such admonitions, however, actually encompass three distinct issues: assuming that the state is the sole or most relevant actor in world politics; taking for granted (as givens) the key identity, capacities, and interests of the state; and postulating a sharp, mutually-exclusive divide between *systemic* theories (that focus on the relationships between states) and *unit-level* theories (that emphasize the characteristics of states). All three represent significant obstacles to systemic analysis.

The field of International Relations examines the interaction of *states* as the *most important* – if not the *only relevant* – actors in world order, and often with good empirical and pragmatic justification (for example: Wendt, 1999: 7-10). But where some treat inter-state relations as fundamentally timeless (Gilpin, 1981; Waltz, 1979: 66), most of human history, in actual fact, *did not* feature the states and states systems taken for granted by IR theory today (Donnelly, 2011: 158-9).⁹ Over time and space, world order has featured a diversity of governance organizations including tribes, chiefdoms, city-states, leagues, empires, religious orders, and charter companies. And between Keohane and Nye's (1977) 'complex interdependence' theory and today's global governance literature, scores of theorists emphasize the ability of transnational actors – both public (global civil society) and private (business firms) – to shape world politics in substantial ways (For example: Cerny 2010; Büthe and Mattli, 2011; Ruggie, 2004).

Such a fluid and diverse history of governance actors surely demands explanation. Rather than taking actors for granted (as is generally the case in IR), systemic theory must *endogenize* actor formation by explaining *why* varying unit-types emerge, evolve, flourish, and decline amidst the shifting conditions of their environment (Cederman, 1997). To treat actors endogenously is to learn how they *emerge within* their broader context (world order) and reshape that milieu, rather than taking them for granted and thereby removing

⁹ Kalevi Holsti (2018: 186) notes that as late as “the French revolution, the world was composed of a heterogeneity of political forms. It included republics (e.g., the Dutch Republic, Venice), empires, city-states, kingdoms, duchies, confederations of towns, khanates, and others. To call nineteenth century Europe a ‘states system’ was only partly correct. It was a mixed system of empires, nation-states, and quasi-sovereign small polities.”

them from the purview of explanation. Systemic analysis (particularly in the social realm) should elucidate the ways in which a system and its parts shape and constitute one another.

This proposal, however, directly contravenes the orthodox IR tendency to, first, treat states (their nature, interests, and capacities) as exogenously given matters of assumption, and second, to deride more detailed consideration of unit features as ‘reductionist’ theory – emphatically *not* systems theory. These positions are most prominent in Kenneth Waltz’s (1979) neorealism where they reflect his desire to develop a systems theory stripped of anything and everything outside his minimalist understanding of structure,¹⁰ and his application of a faulty methodological position imported from microeconomics.¹¹ He simply and deliberately assumes that states are functionally equivalent rational unitary actors driven primarily by an interest in survival (via military power) amidst the self-help conditions of international anarchy. These fixed characteristics are hardly an accurate – and certainly not an empirical – depiction of states, but for Waltz, that is beside the point.¹²

Following Milton Friedman’s (1970) ‘positive science of economics,’ units need not behave in ways stipulated by theory; all that matters is that the theory accurately predicts the phenomenon of interest – in Waltz’s case the formation of an international balance of power as the structural consequence of anarchy – which arises when units behave *as if* in the way stipulated by theoretical propositions.¹³ For Waltz (1979: 117, italics added), “assumptions are not factual. One therefore cannot legitimately ask whether they are *true*,

¹⁰ Structure, for Waltz, solely concerns the “arrangement” or “positioning” of the units, and excludes their characteristics and interactions (1979: 78-80).

¹¹ “In a microtheory, whether of international politics or of economics, the motivation of the actors is assumed rather than described. I assume that states seek to ensure their survival. This assumption is a radical simplification made for the sake of constructing a theory. The question to ask of the assumption, as ever, is not whether it is true but whether it is the most sensible and useful one that can be made” (Waltz, 1979: 91).

¹² Waltz (1979: 199) maintains that “assumptions are neither true nor false and that they are essential for the construction of theory. We can freely admit that states are in fact not unitary purposive actors. States pursue many goals, which are often vaguely formulated and inconsistent. They fluctuate with the changing currents of domestic politics, are prey to the vagaries of a shifting cast of political leaders, and are influenced by the outcomes of bureaucratic struggles. But all of this has always been known, and it tells us nothing about the merits of balance-of-power theory.”

¹³ “Viewed as a body of substantive hypotheses, theory is to be judged by its predictive power for the class of phenomenon which it is intended to ‘explain’... the only relevant test of the *validity* of a hypothesis is comparison of its predictions with experience” (Friedman, 1970: 8-9). Curiously, Friedman is *not* listed in Waltz’s bibliography, yet their methodological positions are identical.

but only if they are *useful*.” To judge theoretical assumptions for their realism “is fundamentally wrong and productive of much mischief” (Friedman, 1970: 14).

By this methodology, Waltz finds it perfectly acceptable (and highly productive) to treat states exogenously because he aims solely and strictly to predict balance of power behaviour, not to provide an accurate account of states as actors. His “theory makes assumptions about the interests and motives of states, rather than explaining them” (Waltz, 1979: 122). But this position is dissatisfying for several reasons. As Robert O. Keohane (1986: 23-24) laments, there is a

serious... disjunction between the assumptions of our systemic theory and what we know about unit-level behaviour. Some of us seek eventually to build an integrated theory of world politics, linking the domestic and international levels of analysis, rather than being content with unit-level and system-level theories that are inconsistent with one another.

When a systemic phenomenon such as the balance of power arises from the interactions of units *as if* they had characteristics and behaved in ways that are empirically suspect, the explanation is hardly complete. The theory instead opens a puzzle concerning the mechanisms by which units *actually* produce the outcomes predicted by *inaccurate* assumptions. Theoretical propositions such as those concerning the nature, interests, and capabilities of the state can be further explored by empirical inquiry in order to better understand the causal mechanisms that really operate. The more such assumptions are pursued, corrected, clarified, and reconciled across levels of analysis, the more complete the causal explanation they constitute.

Of course, all theories must make assumptions that are impossible to prove through investigation. Such assumptions are *ontological* in nature, concerning the fundamental components of social reality (whether material or ideational, individual or collective, agentic or structural, for example). These are not the *testable* assumptions defended by Waltz and Friedman. Ontological issues are so foundational – indeed *pre-theoretical* or *meta-theoretical* – that they are inherently difficult to prove or disprove. They should be justified and evaluated for their accuracy wherever possible, but will encounter the very limits of epistemic capability. Ontological assumptions (as discussed further below) are a

necessary and legitimate foundation for theory; but theoretical assumptions concerning empirical matters demand further investigation.

Waltz's methodological faults arise (in large part) from his frequent use of the 'economistic analogy,' by which he applies an especially barren understanding of systems modeled after microeconomics. In this parallel, a group of competing states – whatever their characteristics and interactions – in conditions of anarchy spontaneously form an international system featuring balance of power behaviour, just as a group of competitive firms spontaneously forms a market.

As elaborated in Chapter Two, the complexity literature provides a much more sophisticated understanding of systems. One of its central themes is the process of *co-evolution* by which organisms (agents) alter their environments, these changed environments then modify (through selection) those very species that produced them, and these newly-altered organisms make further environmental alterations that drive subsequent species selection, and so on. Agents and systems are not autonomous, exclusive, and incommensurable levels of analysis (as Waltz suggests); they are deeply interlinked through ongoing processes of mutual constitution.¹⁴ Agents (such as states) are systems in themselves and subsystems of an international system. These scales (or cycles within cycles) are dynamically intertwined in a process of co-evolution that sees cause and effect run in both directions (Holling, 2001). While 'systemic' theory is often conceived as a level of analysis, it is more fundamentally an approach that examines the *inter-linkages* among *processes* operating at *multiple scales*. System structure thus involves both the nature of the parts and the relationships (or arrangement) among them (Donnelly, 2019).¹⁵

This ontological approach does not generate the predictive specificity Friedman would demand, but enables much richer causal explanation within complex systems than his economistic foundations allow, largely because the multi-scalar view of systems permits the endogenization of actors via co-evolutionary processes.

¹⁴ Exemplifying this vein of systemic thinking, Wendt (1999: 12) argues "that it is impossible for structures to have effects apart from the attributes and interactions of agents [that are excluded from Waltz's structural theory]. If that is right then the challenge of 'systemic' theory is not to show that 'structure' has more explanatory power than 'agents,' as if the two were separate, but to show how agents are differentially structured by the system so as to produce different effects."

¹⁵ As Donnelly (2019: 911) explains, "In assembled social systems, individuals and groups – parts and wholes – mutually co-constitute one another *and recurrently reconstitute* one another."

Historical sociology provides a prime example of the endogenous co-evolution of modern European states and the European international system in an explanation well beyond the capabilities of mainstream IR theory. With different (but not exclusive) emphases, Charles Tilly (1985; 1990) and Hendrik Spruyt (1994) trace the processes by which the heterogeneous order of approximately a thousand political units (including kingdoms, city states, leagues, and empires) in Europe at the end of the first millennium became the homogenous order of two-dozen or so national states at the end of the second.

For Tilly, the underlying impetus was the fifteenth century revolution of military affairs (introducing fortifications, massed infantry, and artillery) that heightened competition between wielders of coercion. In a form of racketeering, the latter 'protected' populations and territories from other armed actors in exchange for the taxes that sustained and expanded their military forces. The rising intensity of armed struggle between rulers compelled them to deepen their administration of populations and territories (by eliminating or coopting local rivals and collecting more taxes more efficiently) and to promote capital accumulation (an expanding tax base), but also enabled sectors of the population to bargain for rights, political representation, and services in exchange for taxation. Such bargains produced citizenship and modern state rule, so that 'war made the state, and the state made war'.

For Spruyt, the impetus came earlier when trade began to expand in eleventh century. A growing class of urban traders allied with secular, territorially based rulers, paying them taxes to protect commerce and enforce contracts. Centralization, rationalization, and territorial exclusivity each facilitated economic growth in a virtuous circle that consolidated the key institutions of modern statehood and saw such entities prevail over other institutional forms. In this way, Spruyt maintains that superior economic performance enabled the superior military capabilities emphasized by Tilly.

In these accounts, military and economic competition acted as systemic selective pressures that reshaped political units by prompting the formation of new social actors, alliances, and institutions that in turn augmented economic and military pressures until national statehood out-competed rival unit types. The process featured 'bottom-up' or 'internal' forces of local bargaining, coalition-building, and administration, and 'top-down' or 'external' forces of military and economic competition. These two sets of forces

propelled each other in a positive feedback that drove the coevolution of the national state and an international system based on territorially exclusive sovereignty.¹⁶

This co-evolutionary history strongly suggests that unit formation is a *systemic* concern that can and should be endogenized within systemic approaches. While the characteristics of any *particular* unit may be depicted as largely unit-level concerns, the shifting features of *populations of units* experiencing selective processes are a system-level dynamic. Waltz (1979: 77) notably recognizes some evolution in terms of *competition* (that eliminates unfit states by conquest) and *socialization* (by which states learn appropriate behaviour). By these processes, the system shapes its units, which (by implication) change over time. For Waltz, however, such competition and socialization render units more and more *alike* rather than spurring variation and change. He misses the ways in which the selection of units changes the broader selective environment in ways that further reshape those units in iterative cycles. Waltz employs a shallow application of evolutionary thinking that falls far short of the *co-evolution* featured in the example above.

The process of European state formation additionally reveals Waltz's misunderstanding of *unit differentiation*, the second concept in his three-tiered approach to structure.¹⁷ By deductive logic, Waltz (1979: 93-97, 104-105) proposes that anarchy renders all states functionally similar. Each state performs the same set of core governing tasks in order to avoid any form of dependence on others. Units therefore differ only in *capability* (power), not *functions*, so that the whole issue of differentiation can be ignored.

John Gerrard Ruggie (1986: 142, italics removed) counters that differentiation does not denote the degree of likeness among units, but rather "the principles on the basis of which the constituent units are separated from one another." As a result, Waltz provides "no means by which to account for, or even to describe, the most important contextual change in international politics in this *millennium*: the shift from the medieval to the

¹⁶ More specifically, state security provision and bureaucratic administration enabled economic growth and technological advance, which drew growing segments of the population into new production processes, from where they could demand further rights and services from the state to improve their economic performance. In this way, positive feedbacks between economic activity, the state's security and administrative apparatuses, and the rights and entitlements of citizens contributed to the formation of modern European states, and altered the identities, interests, and capacities of their constituent groups. Chapter Two revisits these dynamics further below.

¹⁷ These three tiers, in order of importance, are the *ordering principle* (anarchy versus hierarchy), the *differentiation* of units, and the *distribution of power* among them.

modern international system” (ibid: 141) – a transition from multiple overlapping principles of differentiation to territorial exclusivity (sovereignty) as the dominant one.

Within this overarching transition, however, the nature of ‘statehood’ varies over time and place in systemically significant ways.¹⁸ Jack Donnelly, (2011: 158-9), for example, argues that “17th-century dynastic states, 19th-century national states, and 20th-century territorial states – not to mention the ‘warring states’ of ancient China or the city-states of Classical Greece – behaved in fundamentally different ways” (see also: Kaldor, 2012: 15-31). Indeed, Ruggie (1986: 147) suggests that different eras of world order have featured different “hegemonic” forms of state-society relations as systemic features (see also: Cox, 1996: 86); Stephen Krasner (2001) identifies significant variation in the meaning of ‘sovereignty’ over time;¹⁹ while constructivists (Wendt, 1999; Katzenstein, 1996; Campbell, 1998) trace important shifts in states’ identities and their consequent interests. And though all contemporary states formally share *de jure* sovereign equality, the wealthy states of the North Atlantic region tend to feature Weberian rationalization as an intrinsic feature of statehood, whereas post-colonial states often retain neopatrimonial networks (traditional or personalistic forms of authority) as their most important (though informal and clandestine) institutional structures (Jackson, 1990; Helmky and Levitsky, 2004).

Given such disparities of ‘statehood’ across time and place, the recurring claim that states have long been and remain the principle actors of world order ultimately reveals little about the nature of governance actors and obscures a significant range of variation in

¹⁸ Here the concept of ‘state’ is conceived broadly, consistent with Charles Tilly’s (1990: 1-2) definition “as coercion-wielding organizations that are distinct from households and kinships groups and exercise clear priority in some respects over all other organizations within substantial territories. The term therefore includes city-states, empires, theocracies, and many other forms of government, but excludes tribes, lineages, firms, and churches as such.” Joining to this definition the organization’s ability to conduct autonomous foreign policy, Butcher and Griffiths (2017) argue it comprises a ‘culturally neutral’ understanding of statehood that is universally applicable across time and space. They further suggest that this conception of statehood encompasses virtually all significant forms of governance actor in history (including kingdoms, city-states, empires, leagues, and so on) so that the difference between such organizations is quantitative (extent of territorial control and power) rather than qualitative. By implication, *world order* has always been *international order*. Butcher and Griffiths’ critics, however, refute these claims in multiple ways (see: Nexon et al., 2017). Statehood is insufficient to capture the diversity of unit differentiation across time and space, and not all world orders are international.

¹⁹ Krasner (2001) observes that sovereignty refers to at least four different capacities, not all of which are possessed by all states at all times: interdependence sovereignty (control of border flows); domestic sovereignty (authority over internal affairs); Westphalian sovereignty (exclusion of foreign interventions); and international legal sovereignty (the mutual recognition of juridically independent territorial entities).

their behaviour. Differences such as those outlined above suggest that systemic theory *cannot* simply take “states as states, without paying attention to the differences among them” (Waltz, 1979: 72). Systemic thinking should instead *explain* such trends by endogenizing actors into theory.

While Waltz maintains that unit characteristics and behaviours are entirely irrelevant to systemic theory,²⁰ others have opened the black box of the state to argue otherwise. Liberal internationalism proposes that domestic regimes matter because the institutions of democracy and free trade foster peace at home and abroad. Liberal institutions and domestic sociability can be transposed to the international realm, allowing each nation to pursue its collective destiny while respecting other nations’ right to do the same.²¹

Robert Gilpin (1981: 19), another neorealist, argues that the interests and foreign policy goals of the state derive from those of its ruling coalition, and vary alongside transitions of the ruling elite.²² Wallerstein (2004) similarly associates state interests with those of the capital class. Robert O. Keohane’s (1984) neoliberal institutionalism treats the state and its interests as exogenously given,²³ but Andrew Moravcsik’s (1997) extension of liberal theory suggests that state *preferences* – not capabilities – compose international structure, and these preferences are shaped by state-society relations stemming from domestic institutions, economic interdependence, and popular ideas.

²⁰ “In defining international-political structures we take states with whatever traditions, habits, objectives, desires, and forms of government they may have. We do not ask whether states are revolutionary or legitimate, authoritarian or democratic, ideological or pragmatic. We abstract from every attribute of states except their capabilities. Nor in thinking about structure do we ask about the relations of states—their feelings of friendship and hostility, their diplomatic exchanges, the alliances they form, and the extent of the contacts and exchanges among them. We ask what range of expectations arises merely from looking at the type of order that prevails among them and at the distributional capabilities of their concrete connections” (Waltz, 1979: 99).

²¹ Convincing Congress to enter the First World War, American President Woodrow Wilson (1917) proposed that “We are at the beginning of an age in which it will be insisted that the same standards of conduct and of responsibility for wrong done shall be observed among nations and their governments that are observed among the individual citizens of civilized states.”

²² Gilpin (1981: 19) argues that “the state may be conceived as a coalition of coalitions whose objectives and interests result from the bargaining among several coalitions composing the larger society and political elite... The objectives and foreign policies of states are determined primarily by the interests of their dominant members or ruling coalitions.”

²³ Keohane adopts Waltz’s conception of the rational, unitary state, but additionally assumes that states have an interest in wealth as well as power, and that many states share interests, so that cooperation is possible despite the overarching condition of international anarchy. These interests are treated as exogenous; it is rather the institutional rules that change to incentivize alterations in states’ pursuit of given interests.

Moving even further from Waltz's core assumptions, Keohane and Nye's (1977) theory of complex interdependence argues that the state is neither unitary nor rational because different agencies pursue a variety of different interests in issue-specific agglomerations of interstate relations (formal diplomacy), transgovernmental networks (government bureaucrats working in directly with their portfolio counterparts in other states), and (non-state) transnational actors.

While these theories recognize the variability and composite nature of state interests, none of them actually endogenizes the state. Alexander Wendt's (1999: 316) account of the reproduction of states' identity and interests comes closest:

In interaction, states are not only trying to get what they want, but trying to sustain the conceptions of Self and Other which generate those wants. Agents themselves are ongoing effects of interaction, both caused and constituted by it... even when identities and interests do not change during interaction, on this view their very stability is endogenous to interaction, not exogenous.

Endogenizing actor reproduction represents an important advance, but Wendt's constructivism does not go further by attempting to explain the origins and development of state identities, and allows only three types of identity (Hobbsian, Lockean, and Kantian) depending on states' interpretation of anarchy.

As this discussion suggests, IR theory struggles to endogenize states into systemic theory; the challenge only multiplies with the recognition of non-state actors as agents of world politics. But, as Martha Finnemore (2014: 223) suggests, all such agents of global governance should be endogenized, and "the causes and character of proliferating new actors [is] a major research question—not something we want to just notice and describe as we analyze other problems, but something we treat as an object of research and want to understand conceptually and theoretically." The issue is even more important because (as the above account of state formation suggests) unit formation is often a violent process that is shaped by, and reshapes, broader features of world order.

Explaining Change

Endogenizing the formation, development, and transformation of actors is part of a broader imperative to endogenize *change* within world order.²⁴ The various paradigms of International Relations offer many explanations of continuity and reproduction, but have long struggled to explain transformation.²⁵ The literature generally treats the causes of change as exogenous, and in so doing it overlooks the ways in which *systems change themselves* – a crucial feature of complex adaptive systems. “The implicit argument [of neorealism, but repeated in other theories as well] that the system strongly conditions behaviour but lacks the ability to constitute itself or condition its [own] transformation, is implausible” (Herrera, 2006: 17). As a corollary, IR paradigms tend to emphasize equilibrium-based models of stability and ignore the non-equilibrium dynamics that produce runaway growth and major transitions. This subsection examines these two issues in turn.

In his effort to endogenize technology as a driver of change in the international system, Geoffrey Herrera (2006: 1-27) argues that IR theories provide useful notions of what *counts as change*,²⁶ but none of them actually *explains what causes* it. The sources of change lie outside their understandings of world order.

For neorealism, neoliberal institutionalism, and complex interdependence, change involves the *redistribution of power* (and, in the latter two theories, the consequent adjustment of international regimes to such power shifts). Uneven economic growth, technological advances, aggression, or other events may redistribute power, but the origins of these factors remain external to these schools of thought.

²⁴ Several scholars (Gilpin, 1981: 39-40; Buzan and Little, 2000: 7) argue that a change of basic unit types is the most profound form of systems transformation, but IR theory has largely ignored, for example, the persistence of formal colonial empires into the second-half of the twentieth century, despite the unique and consequential violent conflicts that attend this unit type.

²⁵ This problem is highlighted and explored in a recent Special Presidential Issue of *International Studies Review* (volume 20) edited by T. V. Paul (2018).

²⁶ Herrera (2006: 7) lists different understandings of what systems change involves, roughly ordered from least to most common in occurrence: ordering principle (realism, liberalism); nature of units (constructivism); collective identity (constructivism); hegemonic transition (realism); interaction capacity (English school, constructivism); economic interactions (liberalism); and the redistribution of capabilities (realism).

Wendt approaches change differently by highlighting *transitions of collective identity*. Like other IR theories, however, the causes of such transformations (which he identifies as interdependence, perceptions of common fate, homogenization, and self-restraint) remain exogenous to his account.

Neoliberal institutionalism and (especially) complex interdependence do propose an endogenous mechanism of change in which increasing interdependence draws more diverse actors into world politics where they expand cooperative institutions and thereby enable more exchanges and foster greater interdependence. By this positive feedback, complexity begets greater complexity, which is indeed a recurrent dynamic of complex systems (Arthur, 1993) that features later in this thesis. The process, however, yet falls short of a theoretical explanation of transformation in world order (Herrera, 2006: 19, 23).

In perhaps the most deliberate attempt to endogenize change, Wallerstein (2004) argues that the capitalist world-system has reached the planetary limits of its own expansion. Declining profit margins and production inefficiencies constitute internal contradictions that will undermine the present world-system and open the way to an alternative. Wallerstein's account, however, is not very convincing. He identifies the year 1968 as the beginning of the end of the capitalist world-system, yet capitalism has shown considerable resilience and expansion over the last half century. More importantly, his theory has been widely criticized for its economic determinism, which subordinates politics, militarism, and ideology to the functional needs of capitalism in a historically dubious manner (Mann, 2010; Joseph, 2010: 58-61).

A second problem in IR's conception of change is its bias towards equilibrium and stability in its analysis. At one extreme, Waltz (1979: 69) declares categorically that systemic "theory explains continuities...[,] recurrences and repetitions, not change." When states maintain a balance of power to prevent any one of them from gaining preponderance, they act as a negative feedback that keeps the international system in a dynamic equilibrium of sovereign independence and self-help amidst anarchy. The distribution of power may change, but the system remains fundamentally the same. Transformation, for Waltz, would require a switch of ordering principles from anarchy to hierarchy (world government), but the balance of power averts such an event.

Other classic IR paradigms display similar tendencies towards stability over change. Neoliberal institutionalism emphasizes equilibrium understood in game-theoretic terms as the optimal strategies that states employ given their interests, perceptions of others' cost-benefit calculations, and established institutional rules. And Wendt's constructivism is highly conservative insofar as actors draw upon established meanings and identities in their actions in ways that entrench those same meanings and identities. "As a self-fulfilling prophecy culture has natural homeostatic tendencies, and the more deeply it is internalized by other actors the stronger those tendencies will be" (Wendt, 1999: 315).

Equilibria often characterize complex systems, but so too do states of *disequilibrium*. Robert Gilpin's (1981) theory of hegemonic transition proposes a cyclical relationship between the two, wherein an established equilibrium falls into disequilibrium and the system finds a new equilibrium. In Gilpin's account, a hegemonic state creates an international institutional order – an equilibrium – that serves its own interests, but also satisfies others by facilitating mutually beneficial cooperation. When power shifts from the hegemon to rising countries, it creates a disequilibrium between the distribution of benefits under the established institutional order and the changing distribution of capacities. The causes of the power shift are exogenous to the theory. If international arrangements do not change to better accommodate new powers, hegemonic war will likely ensue, and its victor will establish a new institutional order (or restore the old, if the incumbent hegemon prevails). Then the cycle repeats itself.²⁷ These dynamics notwithstanding, Gilpin (1981: 7) maintains that nothing fundamental has changed about international relations since the time of Thucydides.

The complexity literature, in contrast, suggests that systems may remain in a state of disequilibrium as positive (self-reinforcing) feedbacks push them further and further away from an equilibrium. As Robert Jervis (1997b: 56) notes, "Nature is not likely to 'settle down' to a steady state as the development and growth of any life form will consume—and be consumed by—others, closing some ecological niches and opening others, which in turn will set off further changes." In the same way, politics "rarely settles

²⁷ The process mirrors C. S. Holling's (2001) conception of the adaptive cycle in nature wherein a period of exploitation and growth eventually creates rigidities and vulnerabilities, producing a collapse and a reorganization of elements that opens a new period of exploitation and growth.

down as each dispute, policy or action affects others and re-shapes the political landscape, inhibiting some behaviours and enabling others” (ibid: 57). Similarly, Brian Arthur (2014: 2) argues that the economy features *increasing* (as well as diminishing) returns that generate non-equilibrium behaviours in “a constantly developing set of institutions, arrangements, and technological innovations” (see also: Kauffmann, 2008: 150-76).

Along these lines, several scholars (see: Ikenberry, 2014a) argue that a hegemonic war and the rise of a new (perhaps Chinese?) hegemonic order (as Gilpin’s theory would predict) will likely *not* transpire because past hegemonic cycles mask cumulative, long-term developmental trajectories that could disrupt the historical pattern. The world has seen an explosive growth in population, technology, knowledge, economic production, institutions, and interconnectivity. Positive feedbacks within these processes could forestall the hegemonic cycling of the past by fostering non-equilibrium dynamics (Section II of Chapter 3 explores such arguments in greater detail).

As this discussion suggests, a striking feature of complex systems is that their internal processes can produce drastic changes even in the absence of exogenous shocks. The various positive and negative feedbacks that make up the system can push it unexpectedly from equilibrium to disequilibrium, or even into multiple equilibria. “Change emerges out of the international political system itself” (Herrera, 2006: 2). International Relations, however, scarcely countenances such phenomena due to its restrictive understanding of systems wherein change is exogenous and stable equilibriums prevail.

Move Beyond Anarchy

Anarchy is perhaps the most fundamental concept of contemporary IR theory.²⁸ In Waltz’s neorealism, it is *the* foundational ordering principle underpinning all other system features (such as self help and the balance of power), and the basis of all *systemic* explanation. Neoliberal institutionalism adopts the same footings, but argues that international institutions can enable greater cooperation than neorealism allows (if they provide the

²⁸ Jack Donnelly (2015), surveying over a century of IR literature, finds that the centrality of anarchy within IR is actually a recent phenomenon stemming from Waltz’s (1979) publication of *Theory of International Politics*. The concept was generally not foundational to the IR theory published before the 1980s.

right incentives).²⁹ Wendt (1992) famously challenged these core assumptions by arguing that “anarchy is what states make of it.” He demonstrates that self-help and power politicking behaviours do not follow automatically from anarchy, but depend on states’ mutable identities, interests, and interactions. The concept of anarchy, however, is no less essential to Wendt’s constructivism than it is to others insofar as he understands the international system in terms of three possible ‘cultures of anarchy’.

Such accounts overestimate the significance of anarchy, and the concept’s centrality to IR theory impedes systemic analysis of world order. As an explanatory factor, anarchy is inherently *negative*, attributing causal power to the conditions *that are not operating* rather than those that are. “Absence of an international government (or a comparable institution) is not an ordering principle... It simply indicates one way in which the system is not ordered” (Donnelly, 2015: 413). Anarchy is, in this sense, a *non-cause* or a *non-variable*, even if it does, in some way, accurately characterize the international context.³⁰ But in even this sense, it fails. Anarchy is an erroneous depiction of world order that peremptorily excludes hierarchy and governance as prominently observable features of the system. It also provides a meagre basis on which to understand, compare, and contrast the various world orders that mark human history.

Anarchy in IR theory signifies the absence of world government (a ruler), of authority in the international realm (rule), and/or of binding international laws (rules) (Donnelly, 2015: 410). For Waltz (1979: 114-116), anarchy and hierarchy are mutually exclusive, and constitute the only possible ordering principles of the international system. In the absence of world government, anarchy is by default the core feature of world order. Other theories, however, identify considerable hierarchy and vertical differentiation between states according to their unequal positions within the international political economy. Theories of hegemonic stability (Gilpin, 1981; Keohane, 1984) argue that hegemonic states play a unique leadership role by crafting and maintaining the

²⁹ The English School (Bull, 1977) takes neoliberal institutionalism even further to suggest that long-term cooperation under shared rules generates not just common interests, but also shared values and beliefs. An international ‘civilizing process’ creates deep sociability in the ‘anarchical society’ of international affairs.

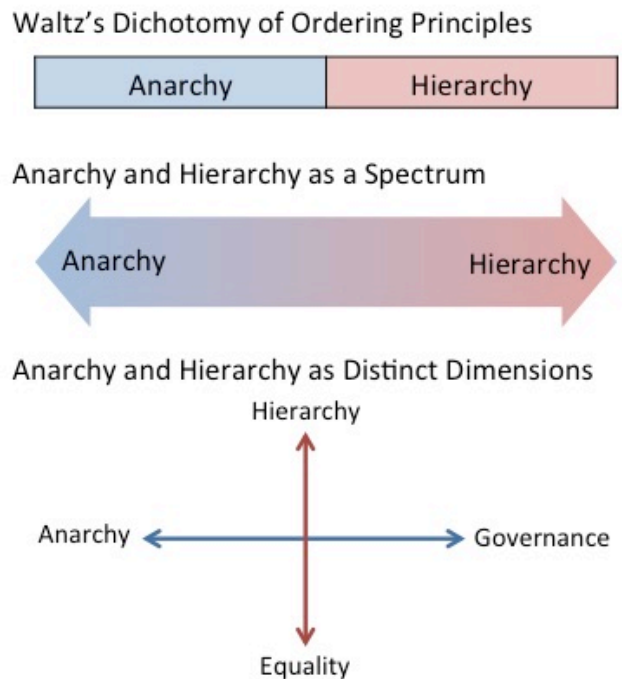
³⁰ Explaining world politics in terms of anarchy is like explaining that the sky is blue because of its lack of the color red. Strictly speaking, both are true, but highly superficial and hardly explanatory.

international institutional order.³¹ World-systems theory (Wallerstein, 2004) postulates an international division of labour between core states that monopolize the most profitable economic sectors, peripheral states relegated to low-profit production, and semi-peripheral states transitioning between the two.

David A. Lake (2010) goes even further by arguing that global governance features multiple forms of hierarchy, involving both state and non-state actors, which belie the anarchic assumptions of IR theory. He defines political authority as “rightful or legitimate rule” (ibid: 591), a social contract in which one actor accepts constraints on its freedom of action in exchange for the beneficial order provided by the rule of another. Lake identifies several forms of such authority in world order, including state-to-state hierarchies (such as American hegemony over the Caribbean littoral), supranational authorities (such as the WTO), and private transnational authority (such as credit rating agencies that regulate both corporations and state borrowers).

Accounts such as Lake’s suggest that world order, or particular sets of relationships within the system, can be placed on a spectrum between anarchy and hierarchy depending on the ‘thickness’ of rule. Alternatively, anarchy and hierarchy may not constitute opposites but instead *distinct dimensions* of social organization, with governance and equality, respectively, as their counterparts (McConaughy et al., 2018: 184). In either case, Jack Donnelly (2015: 419-420) argues that “hierarchy provides almost as poor an account of the structure of international (and national) systems as

Figure 1: Possible Relationships between Anarchy and Hierarchy



³¹ Similarly, Donnelly (2015: 408) notes that “great power states systems are defined by the formal hierarchical superiority of states over nonstate actors and the (at least informal) rights, liberties, and responsibilities of great powers.”

anarchy. It simply states that the pattern of stratification is not flat. It does not tell us *how* a system is stratified – or anything else about the (many and varied) ways in which international systems are structured.”

McConaughy et al. (2018) take up this challenge by setting out three dimensions of hierarchy (heterogeneity of contracting, autonomy of central authorities, and the balance of investiture between segments and center) to distinguish eight ideal types of governance structure: national-states, empires, and symmetric and asymmetric versions of federations, confederations, and conciliar systems. Some of these may be considered more anarchical than others, but none of them reduces to the concept of anarchy used in IR. Further, these ideal types bridge the domestic-international divide insofar as they can be found at multiple scales “within, across, and among sovereign states” (ibid: 181).³² International organizations such as NATO and the WTO have confederal characteristics normally associated with the domestic realm, while Russia and China act externally as national-states while organized internally as empires.

This discussion suggests that the concept of anarchy grossly obscures the amount of hierarchy and the varieties of governance in world order. It provides a poor foundation for theory. Consequently, its centrality to IR has stymied the discipline’s ability to understand and contrast the diversity of international systems in human history. Buzan and Little (2000: 48), for example, argue that by privileging the notion of anarchic structure, IR has “a tendency to read the present structure of the international system into the past” by imposing restrictive and Eurocentric frames of analysis. Donnelly (2012) demonstrates that three different examples of Waltzian anarchy – forager societies, the (hypothetical) Hobbesian war of all against all, and a great power international system – involve widely divergent behaviours despite sharing the same ordering principle. To satisfactorily distinguish between such examples, Donnelly (ibid: 619) proposes six “elements of structure” and uses them to elucidate the essential differences between four eras of the European states system:³³

³² Further, the “framework suggests that world politics is marked by a heterarchy of nested and overlapping political structures” (MacConaughy et al., 2018: 181).

³³ These eras are the medieval (1250), early modern (1650), pre-World War I (1900), and post-World War II (1975).

- 1) "Stratification: the layered and ranked arrangement of social positions.
- 2) Functional differentiation, which defines and allocates social functions
- 3) Unit differentiation, which generates actors and distributes them across positions.
- 4) Norms and institutions: rules, roles, and practices that regulate relations and help to constitute actors of a particular type.
- 5) 'Geotechnics': the material dimension of social positions and relations, conceptualized in terms of geography and technology.
- 6) Polarity: the number of great powers in a system."

The systems ontology of world order developed in Chapter Two builds upon these more discerning dimensions.

The ultimate implication of the foregoing discussion is that world order may not have a single, simple, overarching ordering principle such as anarchy (Donnelly, 2015: 414). Its historical variety and evident complexity suggest instead the interplay of multiple principles and organizational logics, demanding a systemic understanding that moves beyond IR's fixation on anarchy.

III. The Dubious Construct of 'Civil War'

As a corollary of its focus on inter-state relations, IR generally concentrates on international war – war *between* states – as the major threat to global security. This focus is well justified: international wars have been the most deadly forms of organized violence in history, culminating in the two World Wars and a nuclear arms race threatening the survival of humanity as a whole. More recently, however, other types of war have increased in frequency and garnered greater attention: armed conflicts *within* states, which have variously been termed 'internal wars,' 'intrastate wars,' 'intrapolity wars,' 'insurgencies,' and, most commonly, 'civil wars.'

These armed conflicts are largely ignored by IR theory because they are understood to be 'domestic' in nature. Civil wars have instead been studied predominantly in the discipline of Comparative Politics using theories, methods, and explanations distinct from those of IR. This division of labour treats international war and domestic war as fundamentally different and separable phenomena, each with causal dynamics unique to its referent scale (Levy and Thompson, 2010: 186; Wood, 2013: 231-232). As suggested above and argued further below, this disciplinary schism is untenable and misleading.

This section makes four additional critiques of the civil war literature. First, the field tends to locate the causes of violent conflict *within* societies using detailed case studies. Explanations are largely ad hoc, context-specific, and understate the possible relationships between these seemingly localized conflagrations and world order. Second, what general systemic theory does figure into the civil wars literature is a vestige of its ancestry in modernization theory. The result is a shallow and empirically dubious engagement with systems thinking. Third, the very notion of 'civil war' is contradictory, poorly distinguished, and impedes the study of violent conflict today. Finally, this section integrates ideas from IR theory and the civil wars literature into three broad explanatory approaches to armed conflict that apply at multiple scales, domestic and international, as a step towards the desegregated study of contemporary violence.

Surveying the recent proliferation of civil war studies, Lars-Erik Cederman and Manuel Vogt (2017) identify three main “explanatory logics that have dominated much of this literature” (ibid: 1992):

- *Grievance*: violent conflict arises from socioeconomic and/or political injustices, such as ethnic exclusion and relative deprivation between groups (for example: Gurr, 1970; Horowitz, 1985; Cederman et al., 2010).
- *Greed*: opportunistic individuals (leaders and their followers) fight in order to maximize personal gain, particularly when the potential rewards to violence outweigh peaceful economic prospects (for example: Collier and Hoeffler, 2004).
- *Opportunity*: specific motivations (whether greed or grievance) are less important than the conditions that enable (and even favour) the mobilization of violence. State weakness and state collapse in particular foster predatory rent seeking and the use of violence to advance a multitude of agendas (for example: Fearon and Laitin, 2003).

These explanatory logics clearly overlap, and are in practice often indistinguishable.³⁴ Of equal import, they each locate the causes of civil wars *within* the afflicted societies, and consequently prescribe the construction, strengthening, and reform of *national* institutions as the remedy to violent conflict. Measures including democratization, power sharing, and minority rights address grievances; economic development (through neoliberal policies) reduces the attractiveness of fighting; and state capacity building measures diminish the broader opportunities for armed conflict (Cederman and Vogt, 2017: 2002-2004). Democratization, economic liberalization, and statebuilding remain the central pillars of international peacebuilding in countries emerging from civil war (Paris, 2004; Paris and Sisk, 2009; Paris, 2010).

Given the internal focus of causal explanations and peacebuilding remedies, the civil war literature predominantly features in-depth case studies and knowledge particular to

³⁴ For example, economic inequality, whether between individuals or groups, can be considered both a grievance and an economic motivation for fighting. For accounts that dispute the greed-grievance divide with process-based explanations that include both types of factors, see: Arnson and Zartman, 2005; de Soysa, 2000.

specific countries or regions. Causal accounts are largely ad hoc, under-theorized, and non-cumulative; and their ontology and methods are distinct from those used in IR.

As a consequence, the civil wars literature overlooks the many possible relationships between these conflicts and their broader historical context within systems of world order. (The next section explores notable exceptions to this trend). Ann Hironaka (2005: 7), for example, complains that “Conventional explanations of civil war often fail to perceive the substantial influence of international [factors] in the creation and maintenance of war-prone states.” Similarly, Andreas Wimmer (2013: 111) laments that “Long term processes of political development or the transformation of principles of statehood play only a marginal role in the contemporary study of civil war.” And Gearoid Millar (2019: 3) argues that more recent studies that do focus on trans-scalar linkages address only the ways in which “the global, regional, national and local interact *within* a given state. As such... [they] are insufficiently equipped to perceive, understand, and suggest solutions for overcoming the *globally structured nature of contemporary conflict*.”

The bias towards internal causes is perhaps most obvious in the discourse of ‘state failure’ that has pervaded the literature for nearly three decades (beginning with: Helman and Ratner, 1992). The paradigm starts with an ideal of Weberian statehood and proposes that other societies’ distance from this model causes their civil wars and other domestic maladies (Call, 2008: 1499). Like the concept of anarchy in IR, such accounts attribute causal power to those institutions *that are not operating* (world government and the modern state, respectively) while ignoring *those that are*, even in the midst of violent conflict. Numerous accounts stress the state’s loss of the monopoly of legitimate violence, (Kaldor, 2012; Münkler, 2005), but many societies *never experienced* such a monopoly to begin with (Call, 2008: 1499). International statebuilders generally presume a *blank slate* upon which to construct Weberian statehood as a largely technocratic peacebuilding solution, ignoring the patrimonial networks, traditional and personalistic forms of authority, and non-state security and justice provision that have long been at the centre of governance (Fischer and Schmelzle, 2009). And in a crucial sense, the state failure discourse blames the afflicted society for its armed conflict while overlooking the responsibility of the international community and the causal influence of world order (Call, 2008: 1500).

The highly particular, unsystematic nature of civil war studies stems from the broader intellectual climate in which it emerged. The field of Comparative Politics traces its pedigree to the Cold War-era invention of ‘area studies’ when (largely American) policymakers enlisted historians and social scientists to develop the policy-relevant knowledge they needed to pursue ideological competition in specific Third World countries (Wallerstein, 2004: 9-11; Wallensteen, 2014: 13). The result was ‘problem-solving theory’ that took for granted existing institutions and power relations and aimed to make them run more smoothly (Cox, 1996: 88; Latham, 2000: 6).³⁵ ‘Critical theory’, in contrast, is more systemic insofar as it “stands back from the existing order of things to ask how that order came into being, how it may be changing, and how that change might be influenced or channelled” (Cox, 1996: 525). But even today, “it is perhaps something of a surprise that an explicitly ‘critical’ subfield of civil war research has not yet coalesced in the way that it has in the related fields of security studies and terrorism studies.” (Jackson, 2014: 79).

Modernization theory (Rostow, 1960; Pye 1959) represented the most ‘systemic’ thinking of Cold War-era social science insofar as it proposed a general model of global social change.³⁶ The theory divided the world into ‘traditional’ and ‘modern’ societies and posited a series of universal, linear stages by which countries moved from the former to the latter.³⁷ Modernization thinkers understood insurgencies and wars in the Third World as products of nefarious revolutionaries hijacking the tumultuous transition and interrupting the ‘natural’ course of social development. Drawing on country-specific knowledge, however, modernization theorists proposed practical steps by which the United States could speed up the modernizing process and prevent its subversion (Latham, 2000: 210).

³⁵ Cox (1996: 88-89) argues that the “strength of the problem-solving approach lies in its ability to fix limits or parameters to a problem area and to reduce the statement of a particular problem to a limited number of variables which are amenable to relatively close and precise examination.” The “assumption of fixity”, however, “is not merely a convenience of method, but also an ideological bias [towards conservatism and the status quo]. Problem-solving theories can be represented, in the broader perspective of critical theory, as serving particular national, sectional, or class interests, which are comfortable within the given order.”

³⁶ Michael E. Latham (2000: 210) proposes that: “In promoting modernization, Kennedy policymakers also approached societies as integrated systems. Economic growth and political reform, planners argued, were to be pursued in tandem with desired changes in the indigenous worldview.” Indeed, such thinkers understood tradition and modernity as two stable equilibriums of social cohesion, with a tumultuous transition between them (ibid). Modernization theory, in its concern with transformative change, qualifies as ‘critical theory’ by the above definition, but (as demonstrated below) is not a very good one.

³⁷ The parallel between modernization theory to the failed state literature is glaring: it divides the world into weak/failing states and strong states and prescribes a universalistic series of statebuilding measures to transform countries from the former to the latter.

But the whole endeavour was driven more by ideological zeal than scientific rigor: modernization theory celebrated America's development as a universal model of progress, validated American identity by projecting its institutions abroad, and legitimated interventions in the Third World (ibid).

By the late 1960s, modernization theory had not produced the results it promised. Its basic assumptions and praxis, however, remained central to international politics once repackaged as 'development' (Cullather, 2000). And when the end of the Cold War spurred a surge of liberal internationalist actions in conflict-affected states, governments and international institutions linked development to international security so that the pursuit of liberal institutions became an urgent – and even militarized – imperative (Duffield, 2001; 2007; Evans, 2010).

As forms of systemic thinking, modernization, development, and the liberal peace all assume that all societies will converge on liberal capitalist democracy as the optimal set of arrangements. In this sense, they support Waltz's contention that states become functionally identical over time. Hinton L. Root (2013), however, challenges this simple convergence hypothesis by employing a more sophisticated understanding of system co-evolution.

From evolutionary biology, Root uses the metaphor of a *fitness landscape*, a three-dimensional topography over which an agent (or species) hypothetically travels as it adapts and evolves. The *area* (latitude and longitude) of the landscape represents all potential combinations of traits (forms and behaviours) the agent could possibly adopt. Its present position corresponds to its current array of traits, small changes entail short movements over the landscape, while large transformations require much longer treks. The *altitude* of a given position among the peaks and valleys of the landscape signifies the agents' higher or lower (respectively) *fitness* to its environment (which encompasses the material world and interactions with other agents) based on the particular combination of traits corresponding to that point. In this framework, adaptation and evolution are *computational* processes by which an agent or species attempts to find and climb fitness peaks in order to meet the challenges posed by its environment (Beinhocker, 2011).

Modernization theory and liberal internationalism assume that there is a single, persistent, globally optimal fitness peak upon which all societies converge – the liberal

capitalist democratic institutions at Francis Fukuyama's (1992) 'end of history'. Root argues instead that societies' unique histories, cultures, and circumstances place them in far-flung locations on the fitness landscape, from where they pursue different *local* fitness peaks that represent diverse niches in the global political economy.³⁸ More importantly, the landscape itself changes due to the actions, reactions, and anticipations of interdependent actors. The height of peaks and valleys fluctuates over time, and no optimum is permanent. New niches arise where there were none before, and the area of the fitness landscape may expand with the advent of novel traits. Root's approach ultimately explains the success of China, the rising powers, and illiberal regimes better than modernization theory and liberal internationalism by employing a more sophisticated understanding of co-evolutionary systems.³⁹

Modernization theory and the liberal peace, as the most 'systemic' frameworks that have informed much of the civil wars literature, are thus both unconvincing and shallow in their engagement with systems thinking (particularly when contrasted to more complex co-evolutionary approaches, such as Root's account). It is hardly surprising that even amidst these universalistic approaches, investigation of civil war has remained highly particularistic, and divorced from analyses of international relations and world order. Both of these critiques, however, concern the *manner* in which civil wars have been studied; a much more fundamental issue concerns the validity of the very *concept* of 'civil war'.

There is certainly no agreed, authoritative definition of civil war,⁴⁰ but various formulations seem to agree on its core actors, aims, and setting:

³⁸ While there may be a highest peak (greatest fitness) at a given moment of time, the evolutionary journey there could be long, uncertain, and fraught with valleys, whereas local peaks are more easily reached and satisfactory even if not optimal.

³⁹ As Root (2013: 3) puts it, "Competition in highly interdependent global environments produces far greater local variation and diversity of structures and strategies than modernization theory ever anticipated. Rather than a one-to-one mapping of the traits of successful incumbents by their emerging challengers, heightened competition drives social agents to alter their environment by creating niches that offer new opportunities for interaction, and that competition in turn reveals new niches that other actors can exploit." What W. Brian Arthur (1993) understands as the exponential growth of niche-creation is in this way represented by an expanding fitness landscape (greater combinatorial possibility) with a growing number of localized peaks (niches filled by specialization).

⁴⁰ In their survey of the recent civil war literature, Cederman and Vogt (2017: 1993) define civil war "as armed combat between an incumbent government and a nonstate challenger that claims full or partial sovereignty over the territory of the state. In other words, civil war always concerns an incompatibility in terms of political control." Similarly, Hironaka (2005: 3) defines civil war as "large-scale, organized, and sustained conflict between a state and domestic political actors." And the US Army's 1990 Field Manual for

- *Actors*: civil war is fought between the government of a state and at least one non-state armed group.
- *Aims*: the state regime fights to maintain its control of government and national territory, while rebels fight to either gain control of the existing government apparatus, or to secede with a portion of territory on which to establish a new state.
- *Setting*: civil wars are ‘internal’, fought primarily within the territorial boundaries of a state and/or within its political community (a single polity or society).

Beyond these points the necessary and sufficient features of civil war, and especially the manner by which it is distinguished from other forms of violent conflict, remain widely disputed. Nicholas Sambanis’s (2004: 829-831) attempt to provide an exhaustive definition (summarized in Table 3) is hardly definitive, but aptly illustrates the various dimensions involved (especially when coding civil wars for quantitative analysis).

Table 3: Nicholas Sambanis's Comprehensive Definition of Civil War

Context:
<ul style="list-style-type: none"> • The war occurs within an internationally recognized state with a population greater than 500 000. (This condition excludes ‘extra-systemic’ wars of imperial conquest, colonial rebellion, or national liberation, because they do not occur on territory recognized as a state).
Parties:
<ul style="list-style-type: none"> • The government must be a party in the fighting. (This condition excludes ‘non-state wars’ fought solely among non-state actors). • The parties are organized politically and militarily in pursuit of declared political agendas. • The rebels must have a physical presence within the country at war, even if they also operate outside of it.
Violence:
<ul style="list-style-type: none"> • Violence must be sustained, with no three-year period yielding fewer than 500 deaths. • The weaker party must mount “effective resistance” by inflicting at least 100 deaths on the

Low-Intensity Conflict defines civil war as “A war between factions of the same country; there are five criteria for international recognition of this status: the contestants must control territory, have a functioning government, enjoy some foreign recognition, have identifiable regular armed forces, and engage in major military operations” (quoted in: Armitage, 2017: 225).

stronger party. (This condition excludes rebellions that quickly devolve into one-sided state violence, such as genocide or politicide).

Duration:

- The start of the war is (with some exceptions) the first year that causes at least 500-1000 deaths.
- The war ends when:
 - A peace treaty creates at least six months of peace.
 - A ceasefire, truce, or cessation of fighting (without a formal peace agreement) creates at least two years of peace.
 - A decisive military victory enables the rebels to establish a new regime.
- A new war begins if new parties enter the war over new issues.

The three areas of definitional consensus noted above (actors, aims, and setting) *themselves* create serious problems for the notion of civil war. Indeed, the ‘internal’ nature of civil war places a contradiction at the heart of the concept: the term ‘civil’ suggests a community (or polity) of fellow citizens,⁴¹ whereas ‘war’ implies a fundamental demarcation of self and other, friend versus enemy, and citizen versus foreigner (Armitage, 2017: 22-23, 32-33). From its intellectual origins in Ancient Rome, the notion of civil war has always been “deliberately paradoxical: a war that could not be a war, fought against enemies who were not really enemies” (ibid: 33). Wimmer and Min (2009) develop a comprehensive typology of war in which they replace ‘civil war’ with ‘intrapolity war’ (a war *within* a polity, in contrast to *interpolity wars between* polities), but they merely expose the deeper issue: these conflicts occur because *there is no single polity or national community*; they involve rival visions of political community that generally feature widely divergent boundaries of inclusion and exclusion.

The notion that civil wars are internal to the territorial boundaries of a sovereign state raises further problems. Although much of the fighting may occur domestically, these conflicts generally involve immense international and transnational flows of goods, weapons, money, and people from other states, rebel groups, international organizations, transnational civil society, business interests, organized criminal networks, and cross-border ethnic communities (Checkel, 2013). Indeed, 55 percent of rebel groups active since

⁴¹ Indeed, the term ‘civil’ derives from the Latin ‘civis,’ denoting ‘citizen,’ so that civil war is violent conflict between fellow citizens of a common polity.

1945 have enjoyed transnational linkages (Salehyan, 2009: 5), including cross-border sanctuary and training grounds.

Furthermore, secessionary groups generally declare new national-territorial boundaries in which they govern. War, from their perspective, is specifically *international* insofar as they battle to maintain their nascent sovereignty against the state of which they were once part (as was the case of the Southern Confederate States during the American Civil War – see Armitage, 2017: 167). And wars fought on behalf of populations marginalized by a national state are often very similar to wars of national liberation against the imperial or colonial rule of another state (Sambanis, 2004: 816).⁴²

The three areas of agreement above also fail to distinguish civil war from other forms of domestic political violence directed against governments, such as rebellions, uprisings, riots, terrorism, revolutions, and coups attempts. The distinction generally relies upon a threshold number of annual ‘battledeaths’ above which these other types of violence qualify as civil wars, but the appropriate number is arbitrary and disputed. The contention is political as well as academic: rebels often prefer the term ‘civil war’ in order to legitimate their violence as political struggle, while governments often use alternatives (such as criminal violence or terrorism) to delegitimize their foes (Mundy, 2011).⁴³ And there is further disagreement about whether the deliberate targeting of civilians – by government or rebels – should be considered *part of a civil war*, or understood as a *distinct* form of violence (such as genocide, politicide, massacre, repression of dissidents, or crimes against humanity).⁴⁴ A consequent issue is whether and when to count civilian deaths as ‘battledeaths’.

Finally, while civil war is generally understood as a fight for state control – a decisive end – a key insight from the greed literature is that many of these armed conflicts

⁴² In the more technical terms of the Correlates of War Project and UCDP-PRIO, it is very difficult to distinguish ‘intrastate’ wars from ‘extrastate’ or ‘extrasystemic’ wars.

⁴³ As Jackson (2014: 82) echoes, “the act of labeling and distinguishing a ‘civil war’ from a ‘terrorist campaign’, for example, is neither neutral nor without consequence... If it is designated as a terrorist campaign, for example, it will not only be analysed in very different ways by scholars and treated very differently by various state actors than if it is described as a civil war, but there will likely be a series of real-world consequences for the protagonists, the victims, third parties and observers.”

⁴⁴ As Sambanis (2004: 816) states this problem, “it is unclear *what degree of organization* is required to distinguish a civil war from one-sided, state sponsored violence.” Subsequent chapters of this thesis generally do distinguish one-sided violence against civilians from war fighting, even though the two often coincide in time and space.

include actors that benefit more from the continuation of hostilities. ‘Civil wars’ often enable “the emergence of an alternative system of profit, power, and even protection” (Keen, 2000: 22) that can only flourish amidst continued instability. Such cases do not resemble civil wars with the discrete political goal of state capture. Instead, such cases

are likely to become more like a business than a war in the sense that, because the perpetrators are profiting from the enterprise, they may have little interest in ending it... Warfare, if that is what it is called, then becomes a continuous way of life, routine and self-perpetuating, and these kinds of low-intensity wars may be scarcely differentiable from high-intensity crime (Mueller, 2004: 22).

Given these fundamental conceptual problems, it is hardly surprising that the first page of the *Routledge Handbook of Civil Wars* (Newman and DeRouen, 2014: 1) proposes that “it is quite legitimate to question whether a unified field of civil war studies exists – or, indeed, if it should.” The implication is that interstate war and intrastate war may have much more in common than suggested by the disciplinary schism between IR and Comparative Politics. If this is indeed the case, then it should be possible to formulate generalized explanations of violent conflict that apply at multiple scales to various forms of armed conflagration. Below are three (non-exclusive) possibilities, each invoking a particular form of structure alongside purposive agency.

- *Realism*: Actors seek to maximize their power, wealth and/or status in strategic competition with rivals seeking to do the same. Their cost/benefit calculations may lead them to do so through the use of violence, particularly amidst security dilemmas and when such acts are relatively unconstrained (weak rule of law). This approach broadly reflects realist thought in IR, and political economy approaches to civil wars. Structure involves the distribution of *interests* and *capacities* among actors.
- *Liberalism*: Whatever their other, conflicting interests, actors share a broader interest in peace and stability that, with the appropriate institutions, can mitigate

the appeal of violence. Liberal institutions – democracy and free trade – are ideally suited to maintaining a ‘harmony of interest’ in peace while granting actors the liberties to pursue their other interests. Violent conflict arises when particular interests override the general interest in peace and fairness. This approach reflects liberal IR theories (Wilsonian liberal internationalism and Keohane’s neoliberal institutionalism) and the liberal peace approach to peacebuilding after civil wars. Structure in this case involves the *institutional rules*, as reinforced or challenged in agent interactions.

- *Constructivism*: Actors are motivated to maintain and realize a particular collective identity (and its associated ideology) that fulfills crucial cognitive and emotional needs (for ontological security, for example). Identity and norms become social facts through their mutual constitution in social interaction – actors are socialized to agree that they exist. Violent conflict arises when adherents perceive their identity and its ideological project to be threatened by other groups and ideologies, or when groups define themselves in direct opposition to one another. This approach mixes constructivist approaches to IR and identity-based accounts of civil war. The relevant structure is one of *meaning*, which motivates believers but can also be manipulated instrumentally by non-believers if they anticipate the cognitive-affective attachments of adherents.

IV. Macrotrends of War

The forgoing critiques notwithstanding, a number of scholars and organizations have tried to comprehensively catalogue the many different wars of the past.⁴⁵ War has long been and remains a major threat to people around the world, but the token instances counted under the category ‘war’ are highly diverse in nature. As Levy and Thompson (2011: 1) note: “War is a persistent feature of world politics, but it is not a constant. It varies over time and space in frequency, duration, severity, causes, consequences, and other dimensions.”

This section first analyses the long-term trends in warfare identified by three prominent and exhaustive datasets: the Correlates of War (CoW) Project, Uppsala Conflict Data Program at the Peace Research Institute Oslo (UCDP-PRIO), and a dataset compiled more recently by Andreas Wimmer and Brian Min (2009). These compendia document some notably different patterns and variations over the past two centuries depending on how they distinguish war-types (as summarized in Table 4 below). The second half of this section then considers several attempts to explain the causal processes underpinning such macro-trends in the shifting nature of war. These few but highly insightful studies transgress the domestic-international divide to connect changes in world order to wars of diverse and variable characters.

⁴⁵ Indeed, by the early 2000s, the civil war literature was reaching the limits of qualitative case studies and aspired to find broader trends among them (Wallenstein, 2014: 14). But many of these large-n studies cross national studies of civil war “succumbed to the temptation of running simplistic economic ‘horse races’ between the main theoretical competitors” (Cederman and Vogt, 2017: 2005). “The aggregation of complex variables has resulted in parsimonious findings which arguably neglect the complexity of armed conflict; simultaneously, the differences in the codification and definition of key concepts result in contradictory results” (Newman and DeRouen, 2014: 8). In a sense, the pendulum has swung too far the other way, from in-depth but ad hoc case studies to an econometric reductionism that neglects context.

Table 4: Comparing War Datasets

	Correlates of War (ver. 4)⁴⁶	UCDP-PRIO (ver. 19.1)⁴⁷	Wimmer and Min (2009)⁴⁸
Time-Span	1816-2007	1946-2018 for state-based conflict 1989-2018 for non-state conflict and one-sided violence	1816-2001
Definition of War	An armed conflict that produced at least 1000 battle-deaths per year.	A state-based armed conflict is “a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a calendar year.” ‘Minor’ conflicts involve 25-999 battle-related deaths per year; ‘wars’ at least 1000 battle-related deaths per year.	An armed conflict that produced at least 1000 battle-deaths per year from at least two identifiable organizations, one of which is a state (based on CoW definition). The definition thus excludes pogroms, riots, civilian massacres, warfare between tribal fighters, and other forms of mass violence.

⁴⁶ The CoW Typology of War by Meredith Reid Sarkees is available at: http://www.correlatesofwar.org/data-sets/COW-war/the-cow-typology-of-war-defining-and-categorizing-wars/at_download/file. The CoW War List available at: http://www.correlatesofwar.org/data-sets/COW-war/cow-war-list/at_download/file.

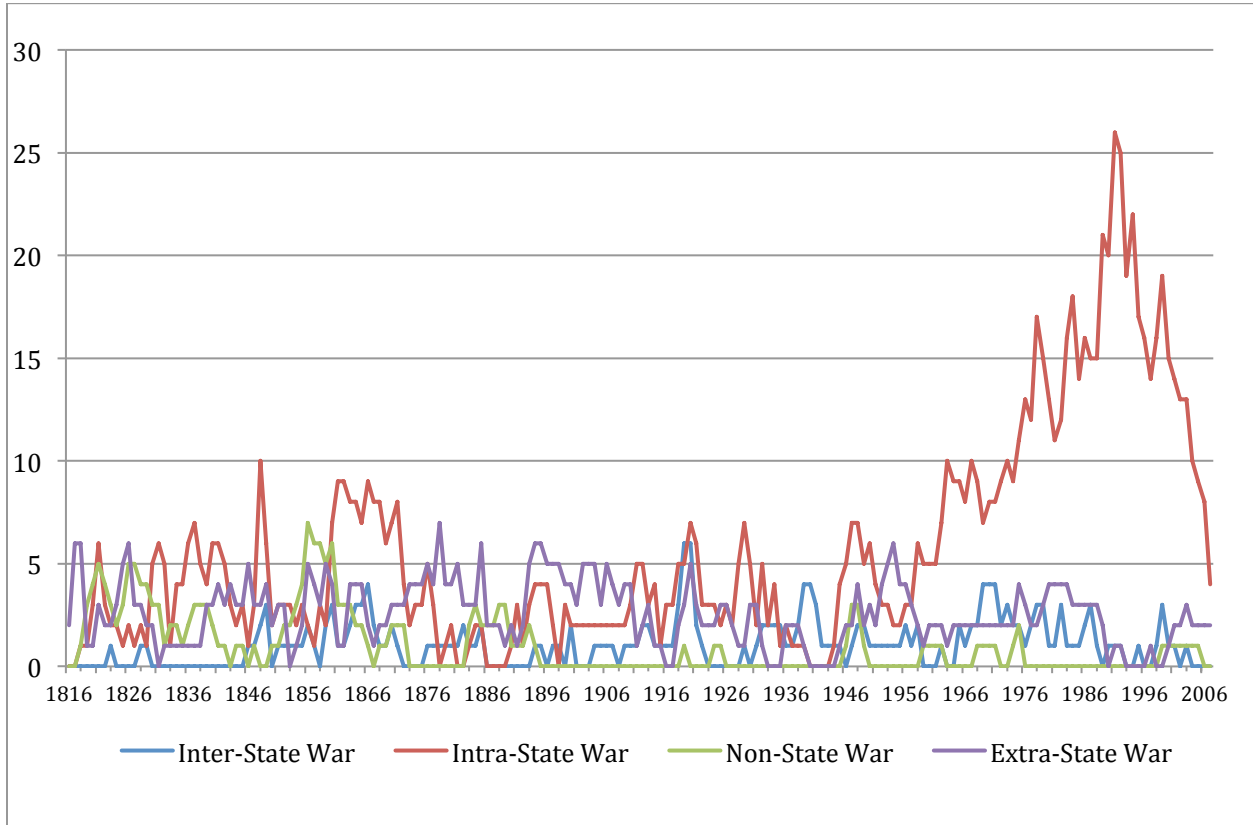
⁴⁷ The UCDP/PRIO Armed Conflict Dataset Codebook Version 19.1 is available at: <https://ucdp.uu.se/downloads/ucdprio/ucdp-prio-acd-191.pdf>. The UCDP/PRIO Armed Conflict Dataset Version 19.1 is available at: <http://ucdp.uu.se/downloads/ucdprio/ucdp-prio-acd-191.xlsx>. The UCDP List of Definitions is available at: <https://www.pcr.uu.se/research/ucdp/definitions/>.

⁴⁸ This dataset is included here because its typology contrasts those of the CoW and UCDP/PRIO, and because it is the dataset used by Wimmer (2013) in subsequent work on nationalism and war, summarized further below and analyzed in Chapter Three

Table 4: Comparing War Datasets *Continued*

	Correlates of War (ver. 4)	UCDP-PRIO (ver. 19.1)	Wimmer and Min (2009)
Typologies of War (and number of wars counted)	<p>Distinguished by actor status (recognition) within the international community:</p> <ul style="list-style-type: none"> • Interstate war (203): Fought between two or more recognized states. • Intrastate war (1098): A war within the borders of a recognized state. • Extra-state war (494): A recognized state fights a non-state entity outside the state’s borders. • Non-state war (190): fought between non-state entities outside or across the boundaries of recognized states. 	<p>Distinguished by actor status (state versus non-state) plus one-sided violence.</p> <p>State-Based Armed Conflict:</p> <ul style="list-style-type: none"> • Extra-systemic: A state fights outside of its own territory against a non-state group to control of territory outside the state system. • Interstate conflict: an armed conflict between two or more governments • Internal (Intrastate) conflict: fought between a government and one or more non-governmental parties, with no interference by other countries • Internationalized Internal: An internal conflict in which another country (or countries) provides troops that participate in combat to one or both sides. <p>Non-State Conflict: Fighting between two organized armed groups, neither of which is the government.</p> <p>One-Sided Violence: Use of force by the state or a formally organized group against civilians.</p>	<p>Distinguished by actor motivations linked to the institutions governing the territory in which hostilities occur:</p> <p>Inter-Polity Wars:</p> <ul style="list-style-type: none"> • Balance of power (interstate) wars (92): fought between states over borders, territory, and regional hegemony. • Wars of conquest (72): fought to expand a state by incorporating other territories and peoples on a permanent basis. <p>Intra-Polity Wars:</p> <ul style="list-style-type: none"> • Secessionist Civil Wars (109): fought against a political centre to establish an independent state. Such wars may be nationalist (82) in their attempt to establish a modern nation-state or non-nationalist (27) in their efforts to establish an alternative form of polity. • Non-Secessionist Civil Wars (189): fought between groups, one of which is the state, over domestic power relations. Such wars may involve ethnic mobilization (70), or non-ethnic mobilization (119), such as class.

Figure 2: Number of Ongoing Wars of Different Types, 1816-2007 (CoW)



Data Source: Correlates of War Project 'War List,' available at: <http://www.correlatesofwar.org/data-sets/COW-war>.

The Correlates of War Project (CoW) counts as 'war' armed conflicts that generate at least 1000 battle deaths per year, and tracks four broad categories of war distinguished by the status of the belligerents within the interstate system (Sarkees, n. d.; Sarkees and Wayman, 2010). In this classificatory schema, *interstate wars* fought between two or more recognized state entities are relatively scarce through the nineteenth century, and show small spikes in the 20th century amidst the two World Wars and around 1970 (See figure 2).⁴⁹

Correlates of War figures reveal that 'extra-state,' 'non-state,' and 'intrastate' wars were more common than interstate ones during the nineteenth century. *Extra-state wars* were notably frequent as European empires conquered territories not yet recognized by the international community, and fought to hold them as colonies against local rebellions.

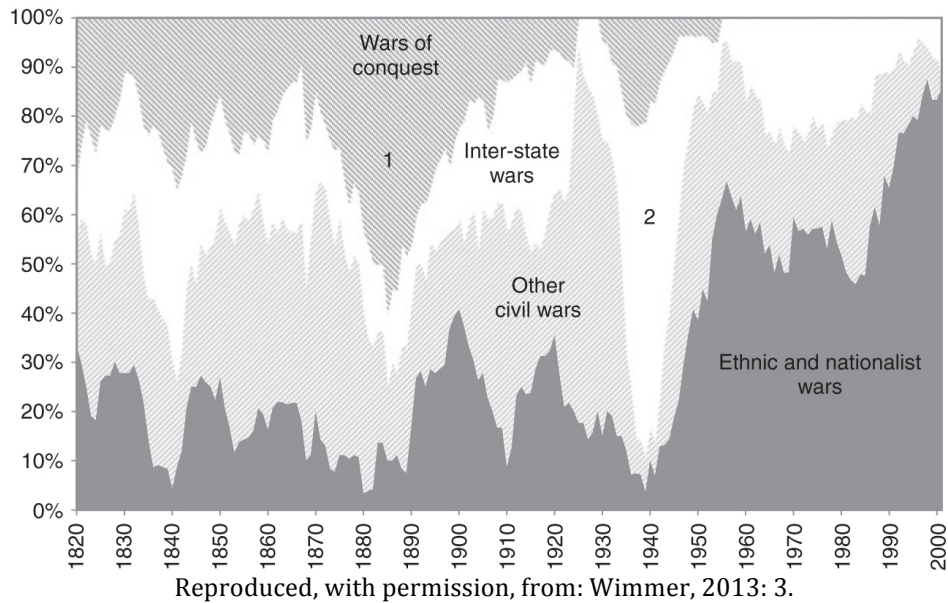
⁴⁹ The first two humps, however, may understate the history because the World Wars are each counted as a single interstate war, not as amalgams of multiple wars in different theatres on several fronts, as they are counted by Wimmer in Figure 3 below.

Such colonial wars persisted into the second half of the twentieth century, and the category 'extra-state wars' also includes the international occupation of Afghanistan and Iraq as more recent examples. *Non-state wars*, fought between non-state entities outside or across the boundaries of recognized states, were similarly common in colonial and unrecognized territories during the nineteenth century, but became less frequent with the consolidation of international territorial borders in the twentieth century.

Intrastate wars occur within the borders of recognized states, and their frequency reflects the tumult of the past two centuries over who gets to rule, with what sort of regime. By definition, this category includes civil war, regional wars, and inter-communal wars; in application it encompasses such diverse episodes as China's 1967 Cultural Revolution, Chile's 1973 Coup d'état, "Africa's World War of 1998-2002," and many other occasions of rebellion and revolt. The most pronounced trend captured by CoW and other data sets is the surge of ongoing intrastate conflicts amidst the decolonizations of the latter half of the twentieth century. These wars peaked in number during the early nineties, and dropped sharply thereafter. Overall, the CoW War List presently includes 203 interstate wars, 1098 intrastate wars, 190 non-state wars, and 494 extra-state wars over the 1816-2007 period.

Using his own dataset and presenting the proportions (rather than absolute numbers) of war types over time, Andreas Wimmer (2013) finds that in the 1820s, each of his four categories of war (wars of conquest; inter-state wars; ethnic/nationalist civil wars; and other civil wars) accounted for approximately one quarter of all ongoing wars. As European powers fought their way into Africa and Central Asia in the 1880s, wars of conquest spiked to encompass more than half of all wars (marked 1 on the graph); during World War II, interstate wars climaxed at around three-quarters of the total (marked 2 on the graph); and by the end of the 20th century, wars of conquest had ceased altogether, ethnic and nationalist civil wars accounted for over three quarters of all ongoing wars, and roughly equal (but small) numbers of inter-state and other civil wars made up the remainder.

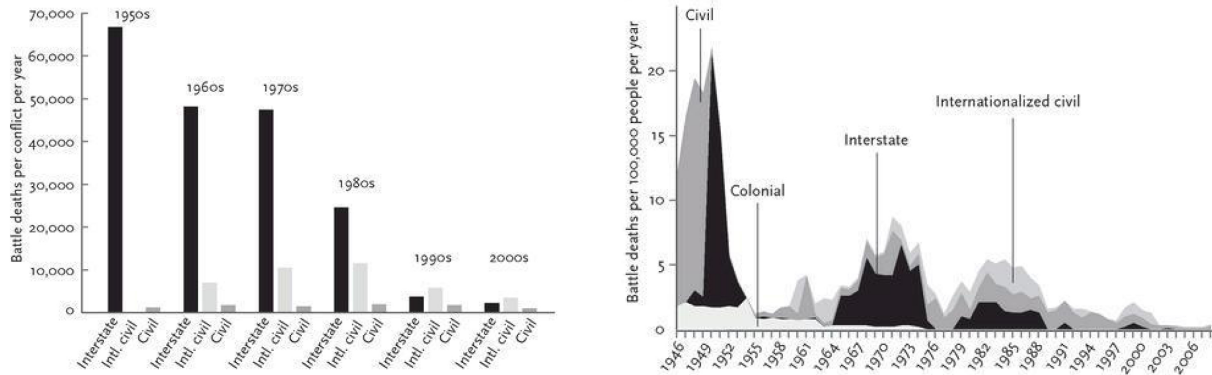
Figure 3: Prevalence of War Types, 1820-2000 (Wimmer)



Finally, Steven Pinker uses UCDP-PRIO data covering the past half-century to reveal a significant overall decline in battle deaths from interstate, civil, and internationalized civil war types, both in absolute numbers and as a proportion of world population. Interstate wars have generally been orders of magnitude more deadly than the other two war types, yet both the severity and frequency of interstate wars have plummeted. In the 1990s and 2000s, internationalized civil wars became the most lethal type, but with relatively low death tolls. Notably, all annual rates of battle deaths in this period are just a fraction of the lethality reached during World War II, which neared 300 per 100 000 world population per year (ibid: 301).⁵⁰

⁵⁰ As Joshua Goldstein (2011: 4) summarizes the trend: “In the first half of the twentieth century, world wars killed *tens of millions* and left whole continents in ruins. In the second half of that century, during the Cold War, proxy wars killed *millions*, and the world feared a nuclear war that could have wiped out our species. Now, in the early twenty-first century, the worst wars, such as Iraq, kill *hundreds of thousands*. We fear terrorist attacks that could destroy a city, but not life on the planet. The fatalities still represent a large number and the impacts of wars are still catastrophic for those caught in them, but overall, war has diminished dramatically.”

Figure 4: Deadliness of Different War Types, 1946-2008 (Pinker/UCDP-PRIO)



Reproduced, with permission, from: Pinker, 2011: 304, 301.

Studies such as these reveal the diversity of episodes that are typed as ‘war’, the variety of categories employed, the shifting prevalence of different types of war over time (including the general decline of interstate and colonial wars, and the appreciable spike then decline in the number of ongoing civil wars in the post-WWII era), and the overall decline of the lethality of war. These trends, however, are regularly overlooked in contemporary discussions of war, whether in policy circles, academia, and especially the media.

Of course, such large-n quantitative analyses must be treated with caution because they are susceptible to several types of error. First, the data can be unreliable, especially as it moves further back in history and outside of the Western world (Goldstein, 2011: 233-234). Second, such methods presume that all of the token instances in a type category are instances of the same basic sort of thing (such as ‘civil war’), but these categorizations may not be valid. As Kalevi J. Holsti (1991: 10, 11) points out: “The real difficulty is that through history the use of force in statecraft has had different meanings, and if this is so, the sources, causes, or correlates of war in one period cannot be easily transferred to another... one is still troubled by the lack of contextual factors and the assumptions that all wars are equal.”⁵¹ And finally, these datasets involve myriad decisions about the coding of such

⁵¹ Pejcinovic (2013) similarly argues that the justifications that define war as an institution change in coevolution with international society. And Levy and Thompson (2011: 1) argue that “War is a social practice adopted to achieve specific purposes, but those practices vary with changing political, economic, and social environments and with the goals and constraints induced by those environments.”

factors as battledeaths, war onset, and war termination, which affect the patterns that emerge from the data (see, for example: Sambanis, 2004: 825). These large-n quantitative studies do, however, provide a broad overview of the variability of war over the last two centuries.

The aggregate historical trends revealed by quantitative studies suggest that systemic forces may be at work, and that the features of world order in a given era may shape and reshape the armed conflicts that rage within it. These potential causal relations, however, remain opaque and understudied, but scholars are beginning to explore the lacuna. With the exception of Mary Kaldor,⁵² their accounts (listed in Table 5) represent a new wave of scholarship that moves beyond the new wars debate of the 2000s. All of them seek to identify and explain shifting trends in the nature of war with greater rigor than earlier inquiries; and all of them identify causal factors that are aptly illuminated with the systemic understanding of world order applied in this thesis. Together, they provide a much more nuanced, complex, and wide-ranging picture of continuity and change than captured by the 'old wars' versus 'new wars' dichotomy.

For each author, Table 5 lists the key transformative event identified, core characteristics of war before that event occurred, novel tendencies ensuing from the event, and the crucial causal factors at play. The accounts are listed in the chronology of the transformational events they identify. Chapter Three of this thesis connects many of these accounts to the causal powers of world order acting as a system; for now it suffices to note the wide diversity of both the trends and explanations presented by this growing literature.

⁵² Mary Kaldor's (revised) work is included as a paradigmatic statement of the new wars approach against which the other accounts can be contrasted.

Table 5: The Changing Nature of War: Chronology of Trends and Causes

Author:	Data Span:	War Before:	Transformational Event(s):	War After:	Crucial Variable(s):
Levy and Thompson (2011)	Human History	Bladed weapons and pre-industrial siege technologies, agrarian political economy, and political institutions limited the number of soldiers that could be fielded, the distances they could travel, the length of their campaigns, and the amount of destruction they could inflict.	~1500 onwards: the third acceleration of warfare in human history, consisting of intense interstate competition, the advent of gunpowder, and the industrial revolution in Europe. Warfare then diverged into two trajectories: one for strong industrial states that experienced the third acceleration, and one for weak agrarian states that did not.	-Strong industrial states have developed military capabilities of such destructiveness that the costs of war outweigh its benefits. -Weak agrarian states generally cannot mobilize the resources necessary for interstate war, but are particularly susceptible to intrastate wars.	The co-evolution of: political economy, the threat environment, political organization, weaponry, and military organization (listed in declining order of importance).
Wimmer (2013)	1816-2001	-Ethno-nationalist, balance of power, imperial conquest, and non-ethnic civil war each represent a quarter of all wars at the beginning of the 19 th century. -In the early nineteenth century, empires governed about half of the Earth, and dynastic kingdoms, tribal confederacies, and city-states governed most of the rest.	~1815: Post-Napoleonic rise of nationalism – the notion that like should rule over like – overpowers other fundamental principles of political legitimacy, prompting concerted efforts to create nation states out of other forms of polity, often through war.	-At the end of the twentieth century, ethno-nationalist wars represent about three quarters of all wars, and wars of conquest disappeared entirely. -At the end of the twentieth century, virtually all of the world’s areas are governed as autonomous nation states. -As nationalism became the main principle of political legitimacy, colonial societies fought for independence; newly founded nation states competed over ethnically mixed territories; and civil wars erupted from the political exclusion practiced in new, multiethnic states.	Nationalism: The principle that like should rule like led people of various unit-types to pursue nation-statehood, altering the prevalence of different types of war and reasons for war in that transformation.

Table 5: The Changing Nature of War: Chronology and Trends, Continued

Author:	Data Span:	War Before:	Transformational Event(s):	War After:	Crucial Variable(s):
Hathaway and Shapiro (2017)	17th century to present	'Old World Order': war and conquest were necessary, legal and legitimate means of righting wrongs – might makes right.	1928: The Kellogg-Briand Pact begins the prohibition of territorial conquest, a norm consolidated after WWII.	'New World Order': Military aggression and territorial conquest are illegal. Wars of territorial conquest between states decline, but the guarantee of borders promotes state failure and an increase of intrastate conflicts.	Consolidation of the norm against territorial conquest after a concerted internationalist campaign.
Hironaka (2005)	1816-1997	-Civil wars are shorter (average 1.5 years in the 1900-45 period) and more decisive. -Strong states formed through interstate and civil wars that shifted borders to better match capable rule.	1945: The founding of the United Nations, its reification of national territorial borders, and its pursuit of decolonization.	-Civil wars are more prevalent and longer lasting (average 4 years); interstate wars decline. -States form with an international guarantee of borders and international material support, but are unable to realize the institutional blueprints they inherit from the world polity. They are vulnerable to long civil wars due to their weakness, Cold War patronage, and international interventions.	The different processes of state formation in Europe versus the post-colonial world as a result of the norms and institutional blueprints of the post-WWII world polity.

Table 5: The Changing Nature of War: Chronology and Trends, Continued

Author:	Data Span:	War Before:	Transformational Event(s):	War After:	Crucial Variable(s):
Kaldor (2012)	17th century to present	<p>'Old Wars':</p> <ul style="list-style-type: none"> -Goals concern territory and ideological cleavages. -Methods involve vertically organized military specialists aiming to control territory (conventional wars) or the hearts and minds of populations (guerrilla warfare); violence is constrained by rules and norms. -Financing depends upon the taxation and administration of the warring polities, and thereby advanced the formation of modern European states. 	1980s onward: Globalization has altered the character of organized violence.	<p>'New Wars':</p> <ul style="list-style-type: none"> -Goals concern the fragmentary identity politics of cosmopolitanism versus particularism. -Methods involve informal and thuggish groups creating humanitarian catastrophes intended to eliminate civilian populations; violence is unconstrained. -Financing depends on illicit ties to the global economy and transnational organized crime -These characteristics promote state weakness and collapse. 	Globalization: the intensification of global political, economic, military, and cultural connectivity, alongside changes in the nature of political authority.
Kalyvas and Balcells (2010); Balcells and Kalyvas (2014)	1944-2004 (147 civil wars)	<ul style="list-style-type: none"> -Irregular (guerrilla) wars dominate; these wars tend to last longer, be more harmful to civilians, and be won by incumbents. -Civil wars are located mostly in Asia and Latin America. 	1991: The end of Cold War superpower patronage, including material support, revolutionary beliefs, and military doctrine. This weakens both client states and rebels, and also sees the dissolution of former Soviet republics with huge conventional arsenals.	<ul style="list-style-type: none"> -Conventional civil wars (in the former Soviet Republics) and asymmetric non-conventional wars (in sub-Saharan Africa) dominate; these wars are shorter than irregular ones and likely to end in some sort of tie; civil war has become more tractable. -Irregular civil wars are less prevalent. -Civil wars are located mostly in Eurasia, sub-Saharan Africa, and the Middle East and North Africa. 	'Technologies of rebellion' employed by incumbents versus rebels, particularly light versus heavy weaponry, but also the ideologies and military doctrines with which they are deployed.

Table 5: The Changing Nature of War: Chronology and Trends, Continued

Author:	Data Span:	War Before:	Transformational Event(s):	War After:	Crucial Variable(s):
Goldstein (2011)	1946-2008 (PRIO)	-Battle deaths in the last two decades of the Cold War averaged 250 000 per year.	1991: End of Cold War and consequent expansion of peace operations.	-Decline in the number and severity of interstate and civil wars. -Battle deaths in two decades following the Cold War averaged 75 000 per year.	-Rise of robust international peace operations (including peacekeeping, diplomacy, humanitarianism, and development aid). -Part of a general decline in the prevalence and severity of war over human history.

V. The Limits of 'War'

War has “probably [been] the most destructive form of human behaviour” over our species’ history (Levy and Thompson, 2010: 1), and remains in the minds of many the gravest threat confronting humanity today.⁵³ For neorealists especially, war is an ever-present existential threat to world order. As Jack Levy (1983: 1) notes, “the avoidance of war without the sacrifice of other core values is a primary policy objective of nearly all states. The buildup of national military capabilities is a constant preoccupation of statesmen but one that diverts significant resources from more constructive social pursuits, often contributes little to the security toward which it is directed, and may be a leading cause of the war it aims to avoid.” But as the macro-trends examined above attest, war has declined over the past century in both its frequency and lethality. Crediting the tireless efforts of peacemakers worldwide, Joshua Goldstein (2011: 6) proclaims that “Year by year, we are winning the war on war.”⁵⁴ Even more provocatively, Steven Pinker (2011: xxi) provides exhaustive evidence that “violence has declined over long stretches of time and we may be living today in the most peaceable era in our species’ existence.”

Any celebration of the global reduction of violence over human history, however, may be cut short in three ways. First, it is possible that the data has been misread. Bradley Thayer (2013: 405-411), for example, suggests that the decline is largely a Western trend,⁵⁵ and an epiphenomenon of a particularly fortuitous but ephemeral moment of history –

5 Year Period	Average Battle-Related Deaths per Year
1946-49	417 000
1950-54	266 000
1955-59	44 000
1960-64	118 000
1965-69	181 000
1970-74	293 000
1975-79	125 000
1980-84	230 000
1985-89	211 000
1990-94	109 000
1995-99	83 000
2000-04	55 000
2005-08	53 000
Total since 1945	Approx. 10.5 million
From: Goldstein, 2011: 238. Based on PRIO data.	

⁵³ It is notable, however, that public opinion in the richest nations now tends to regard climate change as the greatest threat to the world, followed by issues including cyberattacks, the Islamic State, North Korea, and the influence of Russian, American, and Chinese power (Poushter and Huang, 2019).

⁵⁴ Even more specifically, Goldstein (2011: 4) notes with optimism that “In the post-Cold War era that began in 1990, far fewer people have died in wars each year than during the Cold War. And within the post-Cold War era, the new century so far has seen fewer deaths per year from war violence than the 1990s. More wars are ending than beginning, once ended they are less likely to restart, and the remaining wars are more localized than in the past.”

⁵⁵ Responding to Pinker (2011), Levy and Thompson (2013: 412) similarly remain “more skeptical about the continued decline of civil wars and interstate wars outside of the West.”

American hegemony. Such doubts notwithstanding, there is indeed a broad scholarly consensus that war has declined (Mueller, 2009).⁵⁶

The decline trend may be reliable, but (second), as Goldstein and Pinker readily acknowledge, it could reverse. The decline in civil wars, for example, remains recent and tentative, having peaked less than three decades ago. And from climate change to artificial intelligence, hegemonic power transitions to resource scarcity, and financial crisis to automation (amongst other concerns), the immediate future portends no shortage of issues that could potentially trigger a resurgence of war.

The third cause for caution is that the decline of war could mask the *transformation* of violent conflicts into alternate forms that are overlooked by perspectives focused on war.⁵⁷ Such a transformation could occur amidst a general decline of violence, or represent a countervailing trend that expands violence in coming years. This section explores this third possibility by critiquing the very concept of war and discussing other contemporary forms of organized violence that elude the category yet rival its lethality.

As with civil war, there is no commonly accepted or authoritative definition of the more general category of 'war'. As a starting point, Levy and Thompson (2010: 5), in their treatise on the subject, provide a broad definition of war "as *sustained, coordinated violence between political organizations*".⁵⁸ More specifically, their definition encompasses the use of violence in a sustained and high-magnitude manner between two or more political organizations in strategic pursuit of their interests (ibid: 5-11). But even this very general definition has a particular historical and cultural lineage stemming from Modern Europe

⁵⁶ The 2013 *Human Security Report* (Human Security Research Project, 2013) provides a thorough critique of Pinker's findings and endorses the general trend towards declining violence, which the *Human Security Report* itself had noted earlier (Human Security Centre, 2005) in reference to the decline of war.

⁵⁷ On this point, it should be noted that Pinker demonstrates a decline in *all* forms of violence, not just war. Edward Newman (2013: 154) notes that skeptics about the decline of intrastate conflict in particular suggest "that the decline – even when apparently based upon empirical evidence – may owe something to the manner in which conflicts are codified and the data are interpreted, and the rather short timeframe within which these apparent downward trends are recorded. In addition, the decline appears to be based upon an analysis of civil war which privileges a rather classical model of civil war: large-scale government versus nongovernment conflict; wars of national liberation; major wars of insurgency; and wars of secession."

⁵⁸ The International Law Association's inquiry into the definition of 'armed conflict' in international law (ILA, 2012: 319) identified "at least two characteristics found with respect to all armed conflict: 1) The existence of organized armed groups 2) Engaged in fighting of some intensity". The report (ibid: 320) also notes that the term 'war' has largely been replaced in international law by the term 'armed conflict'. Although "the existence of international armed conflict is a significant fact in the international legal system,... the Committee found no widely accepted definition of armed conflict in any treaty."

and the Cold War (Holsti, 1991: 13). “What we tend to perceive as war, what policy makers and military leaders define as war, is, in fact, a specific phenomenon which took shape in Europe somewhere between the fifteenth and eighteenth centuries, although it has gone through several different phases since then” (Kaldor, 2012: 15).

The lack of consensus notwithstanding, the term ‘war’ in common and academic parlance of the post-World War II Western world tends to involve at least some (if not all) of the following characteristics:

- War is a *continuation of politics* by other means (Clausewitz, 2008: 28), exercised by a political authority in order to achieve its interests, however defined. It is “an act of force to compel our enemy to do our will” (ibid: 13, italics removed). As a political instrument, war “is one of many ways of wielding influence, of compressing change into a relatively short period of time, of resolving issues that were not amenable to other techniques of settlement” (Holsti, 1991: 17).
- War is fought *between* two or more political organizations in a *mutual* exchange of violence; it thus excludes one-sided attacks on people who are not fighting back (Levy and Thompson, 2010: 6). War can therefore be distinguished from genocide, ethnic cleansing, politicide, democide, and other forms of massacre perpetrated against non-combatants.
- War is conducted by *specialists in violence* who are trained in the use of force and organized into some sort of hierarchy of command and control. In Clausewitz’s ‘trinitarian’ understanding, war is conducted by professional *militaries*, as directed by *governments*, and separable from (yet dependent upon) *societies*. By implication, war is fought between soldiers, and should not target civilians.
- War has a discernable *beginning and end*, and thus represents a temporary rupture of ‘normalcy’ (or ‘normal politics’), which is ultimately restored through decisive battles and peace settlements. Peace and war are mutually exclusive conditions.
- War allows for a *legitimate/legal type of killing* amongst combatants that is distinct from the criminal offence of murder (Walzer, 2006: 38-39). Once an armed conflict is underway, international humanitarian law supersedes human rights law and national sources of law, granting states and their agents “expanded rights to kill

without warning, detain without trial, and suspend or derogate from treaties and other obligations” (ILA, 2012: 324).

- War has moral and legal *limits* on the ways in which it may be conducted. In a wide variety of historical and cultural settings, people have integrated various “notions about who can fight, what tactics are acceptable, when battle has to be broken off, and what prerogatives go with victory into the idea of war itself” (Walzer, 2006: 24-25). Although such standards are frequently violated, their existence as common understandings of *what war is* can be seen in the justifications and objections to apparent transgressions, and the lies that politicians tell about them (ibid: 19-20, 44-46).

The relevance of each of these characteristics to the definition of war is highly debatable, especially across different times and places, but that is indeed the point. Kalevi J. Holsti aptly captures the issue in statements made almost three decades apart from each other:

In the second half of the twentieth century, the forms of armed combat have diversified to the point where we can no longer speak of war as a single institution of the states system... If war was once an institution in the sense that it had established norms, rules, etiquettes, and standardized strategies and tactics, that is no longer the case today. The uses of force for political purposes range from intifadas, terrorism, and guerrilla wars, through peacekeeping interventions, to conventional set warfare between organized armies. (Holsti, 1991: 272).

The institutional character of war has changed no less significantly. The European interstate wars of the seventeenth through twentieth centuries were characterized by the Clausewitzian distinctions between combatants and civilians and between clearly identified armed forces fighting for known political objectives achieved through violent means to force and enemy to surrender. The dividing line between war and peace was clearly demarcated. Peace ended with declarations of war, and war ended with formal peace conferences.

These clear distinctions have largely disappeared. Most contemporary ‘wars’ are between factions within states and limited foreign interventions, characterized by the deliberate targeting of civilians, hazy or unknown political objectives, fragility of armistices and peace treaties, and the reappearance of mercenaries. (Holsti, 2018: 189).

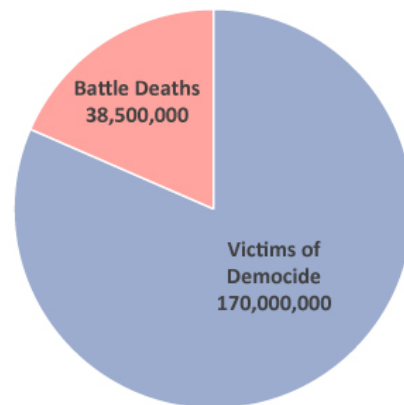
Amidst such uncertainty, debate, and change, many have used the term ‘war’ capriciously, from the ‘war on poverty’ to the ‘war on drugs’ and the ‘war on terror’.⁵⁹ There should perhaps be a ‘war on declarations of war on things that are not matters of war’. Phrases such as these are no doubt misleading, but there are additional reasons to question the terminology of war, and particularly any presumption that war is the most lethal form of killing that humanity inflicts upon itself. The remainder of this section presents three such considerations, arguing that the notion of war has connotations and denotations that omit from its purview some of the most troubling violent conflicts in recent years.

1. *Many of the violent deaths associated with wars are not the product of war fighting*

Much of the deadly violence that occurs during war is not a result of war fighting. It does not stem from the confrontation between the organized armed forces (combatants) of rival belligerent groups in battle, but rather from “one-sided violence” in which an armed combatant group assaults an unarmed civilian population in campaigns usually termed genocide, ethnic cleansing, politicide, or, most broadly ‘democide’ – any attempt to exterminate a segment or segments of the civilian population.

Emphasizing this distinction, R. J. Rummel (1994: 3, 9) found that in the first 88 years of the 20th century, governments killed approximately 170 million non-combatants *outside* of battle settings, a number *4.4 times* as

Figure 5: Democide Victims versus Battle Deaths, 1900-1988 (Rummel)



⁵⁹ Recent studies suggest that the militaristic language used as part of the ‘war on cancer’ can actually impede patients’ recovery (Sample, 2019).

large as the 38.5 million battle deaths of the period.⁶⁰ “Most democides occur under the cover of war, revolution, or guerrilla war, or in their aftermath” (ibid: 22), but their victims are either not counted,⁶¹ or hidden amongst the ‘battle deaths’. In this way, quantitative accounts such as those summarized above can misrepresent the true number of war deaths or the actual (non-war) nature of the killing. Common estimates that World War II killed 40 to 60 million people, for example, include (but do not distinguish) the up to 47 million killed by democide during the global conflagration (ibid: 24-25).

Counterinsurgencies are particularly prone to acts of democide amidst their combat (Valentino et al., 2004). In theory, counterinsurgency attempts to win ‘hearts and minds’ by targeting violence solely against insurgents while providing civilians with security and other public goods. Insurgencies, however, often flourish because governments are not willing to mount the reforms sought by large segments of the population. Within such limitations, ‘hearts and minds’ strategies are insufficient and unsuccessful, and the counterinsurgency devolves into indiscriminate violence against civilians to punish or deter their perceived support for insurgents (Branch and Wood, 2010).

During the Guatemalan civil war, for example, the army implemented a ‘30/70 bullets and beans’ counterinsurgency strategy that massacred the 50 to 75 thousand largely indigenous people deemed lost to guerrilla subversion in acts that the United Nations found to constitute genocide against the Mayan peoples (Schirmer, 1999: 94; REMHI, 1999; Rothenberg, 2012: 61-80). The remaining seventy percent of the population in conflict areas were subject to relocation and military control of all aspects of daily life in order to prevent contact with the rebels (Schirmer, 1998: 23-4).

While fear of rebel support among civilians drove the genocide in Guatemala, Stathis Kalyvas (2006: chs. 7, 10) argues that significant portions of the violence of the Greek civil war (1944-49) stemmed not from the political conflict, but from denunciations made to settle interpersonal feuds and seize opportunities for material gain created by the war. The

⁶⁰ Indeed, Rummel (1997: 3-4) lists fifteen ‘megamurderer’ regimes, defined as “those states killing in cold blood, aside from warfare, 1 million or more men, women, and children.” All such regimes were authoritarian or totalitarian, though democracies have perpetrated democides as well, on smaller scales (ibid: 14-16).

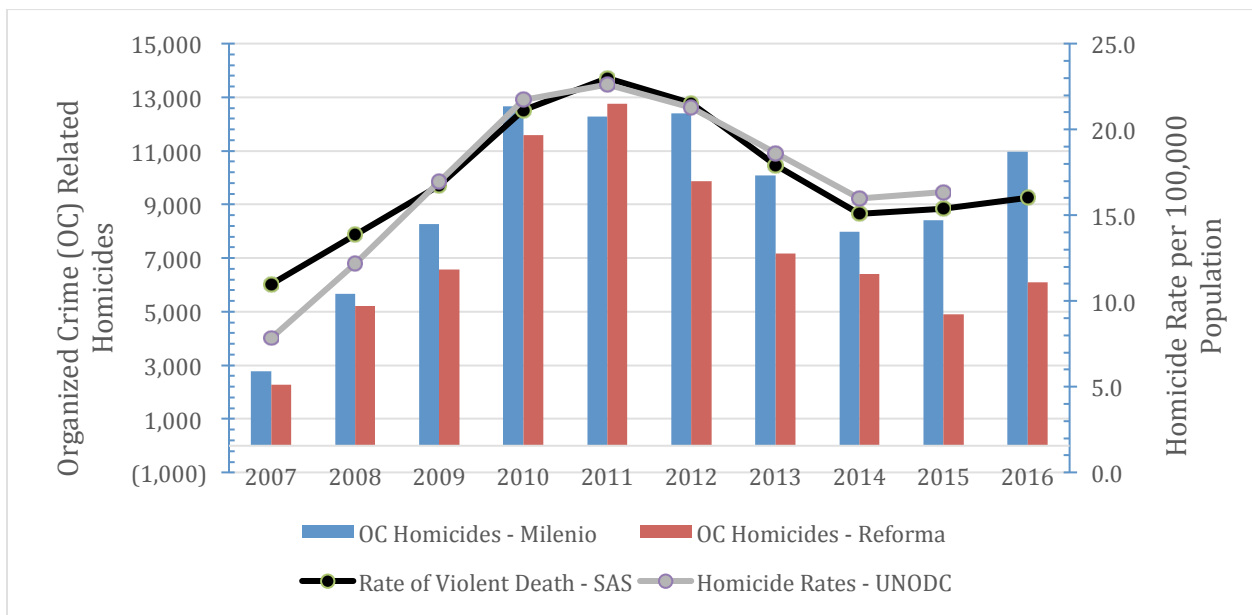
⁶¹ In the CoW methodology, for example, “the requirement of sustained combat (or mutual military action) is instrumental in contrasting war with one-sided violence, such as massacres. Thus incidents in which there were large-scale massacres of unarmed combatants (or prisoners) outside of combat operations would not be considered wars” and are thus excluded from the war data (Sarkees, n. d.: 13).

most devastating violence of both wars did not arise from war fighting, but from deliberate assaults against civilians.

2. *Many non-war forms of violence rival contemporary wars in their lethality*

The world hosts many instances of organized violence that rival contemporary wars in their lethality, but may be overlooked or underemphasized in large-scale analyses because they do not fit common conceptions of war, and thus lack the priority that attends the label. As Keith Krause (2013: 44) points out, a “narrow focus on *battle deaths* (of recognized combatants or civilian collateral casualties of battle) and a particular definition of *organized group* (with political aims) excludes from purview almost entirely such things as the [2008] postelection violence in Kenya (which claimed more than 1,000 lives) or the violence in Mexico that involved the direct use of the armed forces and has claimed more than 40,000 lives since 2006!”

Figure 6: Organized Crime and Deadly Violence in Mexico, 2007-2016

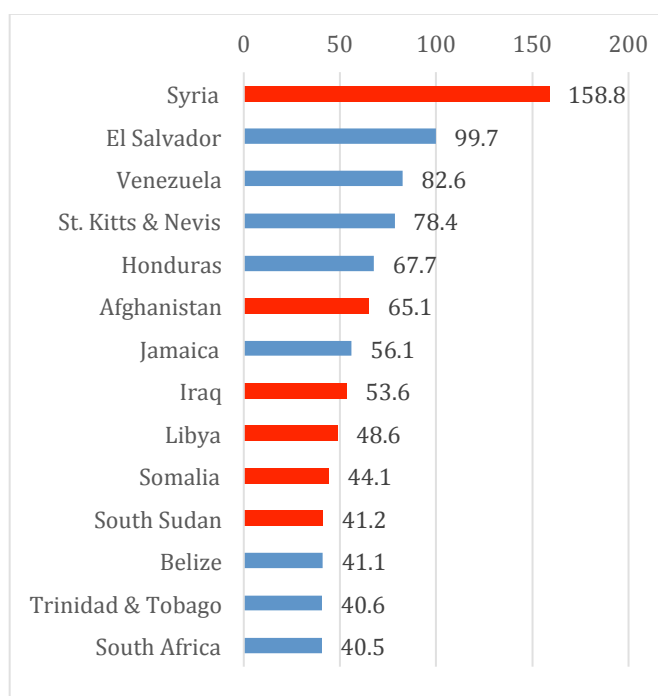


Sources: *Milenio* and *Reforma* numbers compiled by Justice In Mexico at the University of San Diego, available at: <https://justiceinmexico.org/data/>; Small Arms Survey (SAS) rate of violent death data available at: <http://www.smallarmssurvey.org/tools/interactive-map-charts-on-armed-violence.html>; and United Nations Office on Drugs and Crime (UNODC) homicide statistics available at: <https://data.unodc.org/#state:1>.

The number of deaths related to organized crime in Mexico in the 2007-2016 period is now estimated to be as high as 91 547 by *Milenio* and 72 841 by *Reforma* (Mexican periodicals that have tracked the fatalities). Ironically, the violence exploded in part because the Mexican government mistreated its campaign against organized crime *as a war*, particularly after 2006 when Mexican President Felipe Calderón deployed 50 000 soldiers and 30 000 Federal Police officers (Wilkinson and Ellingwood, 2010) in a direct “frontal attack against narcotraffcking, in all territories, with all the force in [government] reach, all the time” (Aguilar and Castañeda, 2009: 11-12, translated by author).

Despite these considerable absolute numbers of homicide in Mexico, the country’s rate of violent death in the 2007-2016 period remained low relative to dozens of other countries, in the range of 10-20 killed per 100 000 population. This rate is nowhere near that of war-torn Syria, which the Small Arms Survey found to have the highest rate of violent death in 2016 at 158.8 per 100 000 population (the rate peaked in 2013 at 267.8; in the decade before the 2011 Arab Spring it was between just 2 and 3). Of the 14 countries with a rate of violent death above 40 per 100 000 population in 2016, however, only six (marked in red in Figure 7) were experiencing or emerging from war.⁶²

Figure 7: Highest Rates of Violent Deaths per 100 000 Population, by Country, 2016

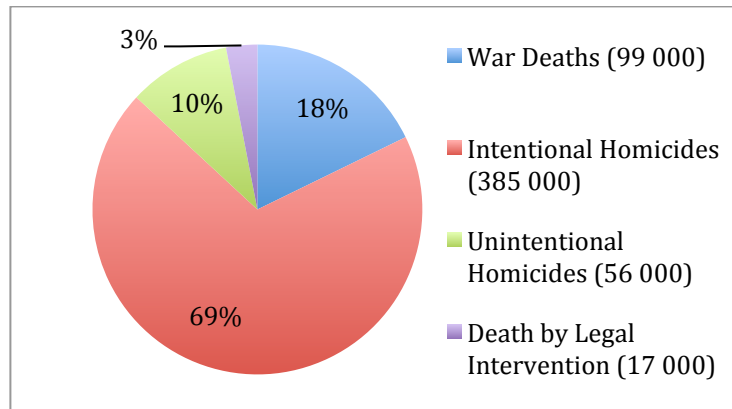


Source: Small Arms Survey
<http://www.smallarmssurvey.org/tools/interactive-map-charts-on-armed-violence.html>

⁶² Similarly, Geneva Declaration’s (2015) *Global Burden of Armed Violence* report found that in 2012, “37 countries exhibited lethal violence rates higher than 10 per 100,000. Only 13 of these countries were experiencing a conflict or had recently emerged from one” (ibid: 51-52). And the Small Arms Survey found that of “the 20 countries with the highest rates [of violent death in 2015], only nine were affected by armed conflict in the observed period, highlighting that violence related deaths are not solely an issue in countries affected by open conflict. It should be noted that in absolute numbers, more lives were lost to violence in

Today, much of the world’s most deadly violence is *not* war violence, as revealed in Figure 8. War deaths remain less than a quarter of violent deaths worldwide, but their absolute numbers have risen over the past decade, from an annual average of 55 000 in the 2004-2009 period, to 70 000 in 2007-2012, and to 90 000 in 2010-2015. The growth stems largely from wars in Afghanistan, Iraq, and Syria (SAS, 2016). The vast majority of violent deaths, however, occur outside of war zones. Overall, the “global rate of violent deaths is on the rise... While the number of countries registering medium to high levels of violence has decreased, the average violent death rate in the highest category has increased, pointing to a growing proportion of violent deaths in a decreasing number of countries” (SAS, 2016: 7).

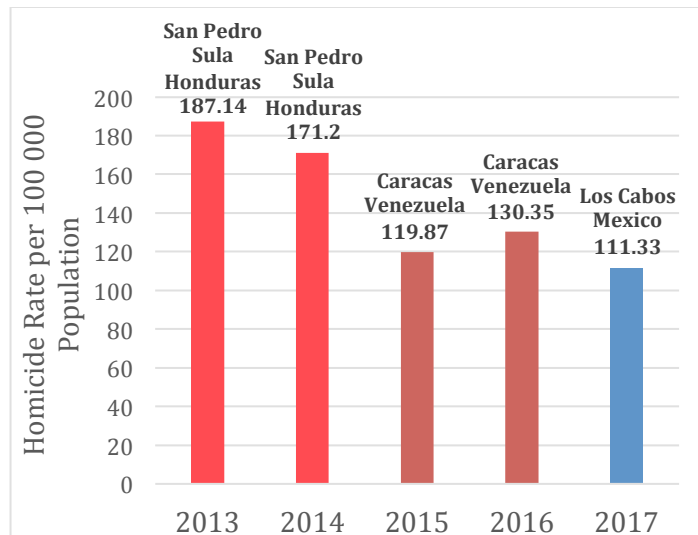
Figure 8: Sources of Violent Death in 2016 (SAS)



Source: Small Arms Survey
<http://www.smallarmssurvey.org/tools/interactive-map-charts-on-armed-violence.html>.

Nationally aggregated statistics, however, do not capture the uneven spatial distribution of violence. For the first time in history, about half of humanity now lives in cities, so that issues of human security are deeply intertwined with urban

Figure 9: The World’s Deadliest Cities



Source: Statistics from Seguridad, Justicia y Paz, available at: www.seguridadjusticiaypaz.org.mx.

2015 in large countries such as Brazil (56,500), India (36,000), and Nigeria (28,000) than in Syria. In fact, Brazil’s death toll for 2015 exceeds those of Iraq and Syria combined” (Small Arms Survey [SAS], 2016: 5).

insecurity (Humansecurity-cities.org, 2007). As a consequence, many cities experience extremely high homicide rates stemming from crime (organized and common) as well as (non-war) political violence.

3. *Many contemporary armed conflicts are so multifaceted that they defy the longstanding binaries that define 'war'*

Numerous instances of contemporary organized violence run obliquely to the basic distinctions and dichotomies of established classifications.⁶³ The recent prominence of the concept of 'hybridity' within the peace, conflict, and security literatures highlights this condition (Lawrence, 2017). Krause (2013: 44-45) thus stresses the "categorical hybridity" between war and peace, war and crime, and war versus non-war violence. The archetypal characteristics of war outlined above scarcely adhere to many cases of violent conflict. Motivations, institutions, and temporalities are multifaceted and fluid.

In what Krause terms 'motivational hybridity,' organized violence involves a wide range of motivations – political, economic, interpersonal, and ideological, amongst others. Perpetrators often act with multiple simultaneous aims, creating diverse dynamics of violent conflict (Geneva Declaration, 2011: 15, 18). The variety of motivations often reflects the 'institutional hybridity' of violent actors, who do not fit into the basic state versus non-state dichotomy (Krause, 2013: 45-48). Prime examples include state officials who act in illegal (or extra-legal) ways, militias with informal ties to government and political parties, local self-defence groups, private security companies, and organized criminal groups who manage to corrupt and capture segments of government.

Motivational and institutional hybridity generate 'temporal hybridity' when the goals, participants, and patterns of violent conflict change over time (Krause, 2013: 48-49). Peace agreements, for example, often do not signal the end of organized violence, but rather its evolution into new forms that may render the purported 'peacetime' more violent

⁶³ The Correlates of War project puts this point rather lightly: "As wars have become more complex, involving not only multiple state actors but a plethora of nonstate entities as well, the task of ensuring that wars are placed within the appropriate categories has become more complicated... Wars themselves are often not as clearly delineated as our typologies and can often contain elements of different types of wars, and a war can, over its life span, metamorphose from one type to another" (Sarkees, n. d.: 19, 23).

than the war that preceded it (Suhrki and Berdal, 2011).⁶⁴ And “attempts to establish a monopoly over the legitimate use of force are often at odds with the various roles that violence plays in contemporary states, especially (but not exclusively) in postconflict contexts” (Krause, 2013: 39).

In ways such as these, established binaries and typologies make implicit assumptions that can misrepresent reality and generate inappropriate policy responses (Geneva Declaration, 2011: 15, 18). The organization Geneva Declaration has developed one promising strategy to avoid such pitfalls with its ‘unified approach’ to violence. The framework attempts to count each and every violent death around the world without imposing familiar distinctions (such as between organized versus interpersonal violence) or focusing exclusively on particular categories (war or political violence versus criminal violence). As Geneva Declaration subtitled its 2015 report, “every body counts.”⁶⁵ The organization assesses empirically the commonalities and differences between myriad instances of deadly violence, and attempts to find common underlying causes of – and causal linkages between – apparently separate forms of violence. This approach abandons the priority habitually bestowed upon ‘war’ by academics and policymakers alike, and adopts a more humanitarian orientation by aspiring to reduce the overall level of violence in the world regardless of the categories in which it may be placed.⁶⁶

⁶⁴ “The implications for peace [from a political economy perspective] are clear: if the violence of war serves a multiplicity of social, economic, and political functions, we cannot expect it to disappear once a peace agreement is signed. When these functions are tied to distinct social and economic structures, they produce vested interests in the means of violence as a source of power and determinant of social relations” (Suhrke, 2011: 3).

⁶⁵ Notably, Geneva Declaration falls short of fully implementing its ‘unified approach’ because its work focuses expressly upon *armed* violence. While weapons clearly augment the ability to kill, many violent deaths (such as those by battery or strangulation, for example) do not involve such tools.

⁶⁶ With a similar orientation, one of the targets of the United Nations’ 2030 Sustainable Development Goals is to “significantly reduce all forms of violence and related death rates everywhere” (UN, 2018).

VI. Violence, Conflict, and Order

The arguments above suggest that the conceptual lens of 'war' does not capture crucial features of violent conflict in world order, especially today. The category is at the same time too big and too little. On the one hand, it embraces a wide variety of organized violence that has shifted and evolved over time and space. The term is so prevalent in discourse and thinking that it is often used interchangeably with the expressions 'conflict,' 'armed violence,' 'violent conflict,' 'organized violence,' and the like. In this sense, 'war' encompasses too many different things; a huge diversity of violence is often placed under a single heading of dubious unity. On the other hand, even broad conceptions of war overlook key forms of organized violence in the world today (such as the urban insecurity and organized crime mentioned above), and in this sense, the concept does not encompass enough.

All of the above is simply to argue that contemporary organized violence requires a more sophisticated and nuanced analytical approach than commonly employed. A fundamental property of any social system – from the family right up to world order – is the way in which it prevents, permits, enables, and restricts acts of violence, and the resulting character of what violence does occur. To truly understand such features, a systems-based approach to world order cannot take for granted the basic distinctions of established analyses: internal versus external, crime versus war, and war versus peace.

Fortunately, recent scholarship provides a more general framework by proposing that violence, conflict, and order are distinct concepts, yet none can be fully understood in the absence of the other two. As Kalyvas et al. (2008: 3) assert, the three concepts are joined by “a single enduring and fundamental meta-question: how order emerges, is sustained, challenged, destroyed, transformed, and recreated.” The query resonates palpably with the next Chapter’s discussion of systems, structures, and world order.

The Violence, Conflict, and Order (VCO) framework outlined below is a heuristic device; it organizes the analysis by identifying which factors and relationships are relevant, but lacks the fully-specified propositions of a theory. It provides a foundation for deeper theorization, however, by suggesting that the inter-relationships of violence, conflict, and

order can explain at least some of the characteristics, causality, and evolution of the organized violence afflicting the world today. None of the three concepts constitutes a discrete 'variable'; they are rather multifaceted phenomena that can be analyzed in a range of ways. The remainder of this section therefore distinguishes violence, conflict, and order conceptually, outlines their dimensions, and highlights some of their key interrelationships.

Violence is the “harm, suffering, or killing that people do on purpose”, or, more technically, “actions meant to activate nociceptive neurons [the pain transmitters of the human nervous system], damage tissue, or to cause death” (Fiske and Rai, 2015: 3). This definition emphasizes the *direct* or *physical* nature of violence, and thus excludes *structural* or *cultural* violence (Galtung, 1990). Within the VCO framework, these latter two concepts are better understood in terms of conflict and order.

Many of the statistics presented above focus specifically on violent *deaths*,⁶⁷ but violence (of course) has a much wider range of impacts. Countless victims are not killed, but rather injured, maimed, and traumatized. Violence also shatters social order by severing the trust and shared norms that hold communities together, and by overturning established forms of authority, governance, and conflict resolution. In so doing, it may also trigger displacement, famine, and epidemics, amongst other ills.⁶⁸

The *physical* impacts of violence also inflict *psychological* harms that can last much longer and affect more people than the direct victims. Indeed, it is the *intentionality* of violence – the evident desire of the perpetrator to hurt the victim – that distinguishes acts of violence from other sources of harm (such as accidents and infirmities) and multiplies its damage. As anthropologist Carolyn Nordstrom (2004: 59-60) explains, violence “is set in motion with physical carnage, but it doesn’t stop there. Violence reconfigures its victims and the social milieu that hosts them. It isn't a passing phenomenon that momentarily

⁶⁷ Many quantitative approaches to war and violence focus primarily on violent *fatalities* because they tend to be more consistently defined across time and place, more comprehensively tracked, and provide a loose proxy for other impacts of violence (for example: 2012: 244). Gutiérrez-Sanín and Wood (2017), however, contest and problematize such rationales and call for a more qualitative and multifaceted approach.

⁶⁸ In his critique of the decline-of-war literature, John W. Dower (2017: 5; drawing on United Nations statistics) notes that even as battle deaths have declined, levels of forced migration have increased by 75% over the past two decades, from 37.3 million in 1996 to 65.3 million in 2015. Dower (2017: 7) also argues that it is incredibly difficult to measure “violence in a different register: the damage that war, conflict, militarization, and plain existential fear inflict upon civil society and democratic practice.”

challenges a stable system... Violence becomes a determining fact in shaping reality as people *will* know it, in the future.” Trauma, cycles of revenge, and diminished inhibitions against the use of violence become essential facts of life. Although humanity can celebrate a long-term aggregate decline in violence (Pinker, 2011), statistics do little to capture the full range of its continuing devastation (Dower, 2017: 1-15).

Violence is thus a potent means with which to pursue conflict and destabilize social order (often in ways that elude the intentions of those exercising it). But violence can be *order making*, as well as *order breaking*. As explained above, Charles Tilly (1975: 42) famously proposed that in Europe, “war made the state, and the state made war.” Where violence is often understood as the antithesis of sociality, Alan Page Fiske and Tage Shakti Rai (2015) argue that much of it is *morally motivated* to create, conduct, protect, redress, terminate, or mourn the relationships that constitute social order.⁶⁹

The variability of violence concerns *who* is targeted, *by whom*, *how*, for what *purpose*, and with what *effect*. More specifically, particular outbreaks of violence can be compared and contrasted along a number of dimensions:⁷⁰

- *Perpetrators*: who inflicts the violence and how are they recruited, trained, and motivated?
- *Victims*: who are the targets of violence?
- *Purposes*: what is violence intended to achieve? (As distinguished from its actual effects).
- *Geography*: is violence concentrated (as in pitched battles) or diffused (as in broad zones of urban insecurity) in space and time?
- *Organization*: what relationships (such as hierarchy versus decentralized networks) link leaders and followers and enable the social cooperation necessary to deploy violence?

⁶⁹ Fiske and Rai base their (2015) psychological study of violence on the simple “observation that people often judge that to constitute or regulate crucial relationships they are morally required to hurt or kill another person, and that obligation makes sociocultural sense” (ibid: 2, italics removed).

⁷⁰ Gutiérrez-Sanín and Wood (2017) propose a similar conceptualization of ‘patterns of political violence’ that considers each armed group’s repertoire (the forms of violence it uses, including homicide, rape, and forced disappearance), its targeting of violence, the frequency of violent acts, and the techniques with which violence is carried out (such as the type of weaponry used).

- *Means*: what types of weapons, technology, and tactics do perpetrators use to inflict violence?

Although violence often erupts from conflict, it is not necessarily so. Violence without conflict may occur in rioting (at least until the police arrive) or in acts of psychopathy, for example. Some analysts have even begun to study violence in terms of its own micro-social dynamics, independent of conflict (for example: Collins, 2008).

Conflict concerns the incompatibility of desired ends pursued by social actors. It is often defined as a clash of interests that need not involve any hostility when parties jointly respect shared rules (for example: Fisher, Ury, and Patton, 1991). This conception would include sports, and could also be characterized as ‘competition’. But conflict often lies much deeper than actors’ interests, implicating the divergent worldviews, moral systems, and conceptions of ‘the good’ that underpin their particular interests (Baghai, n. d.). The parties dispute even basic rules of permissible interaction. Conflict thus involves both the distribution of goods (interests) but, more fundamentally, differing conceptions of what are worthy and legitimate goods (values). Conflict concerning the latter generates the deepest hostility as parties deny the moral legitimacy of each other’s ends, and, at the extreme, aspire to terminate each other’s very existence (Homer-Dixon: n. d.). Conflict can therefore be conceived to form a spectrum with competition:

Figure 10: Competition versus Conflict



Any conflict in history can be placed on this spectrum. With common understandings of national interest, the balance of power, the legitimacy of conquest, might as right, and war as a basic mechanism by which the international system functioned, European statesmen of the 'Old World Order' lie towards the competition end of the spectrum (Hathaway and Shapiro, 2017: xv). Recent violence between Israel and Palestine, in contrast, sits toward the conflict end owing to the parties' irreconcilable narratives concerning the basic nature of the conflagration (Kelman, 1999).

Conflict, however, does not necessarily erupt in violence; it may be managed through negotiation and other non-violent means, or simply persist within the social structure of a society. Chenoweth and Stephens (2011) even demonstrate that during the twentieth century political conflicts waged through *non-violent* civil resistance were nearly twice as likely to achieve some or all of their political goals than were campaigns that used violence.

Order, as elaborated in Chapter Two, refers to a state of affairs exhibiting regular behaviour. In the social realm, it generally encompasses the recurring patterns of coordination, cooperation, and organization among agents. Chapter Two elaborates upon this understanding of order by situating it in a *systemic* ontology and emphasizing the dense and recursive causal relations that generate *structure* as the underlying source of observable patterns.

Social order that is appraised as 'good' or desirable is not devoid of conflicts, but manages them through legitimate political procedures that prevent them from erupting into violence. A realistic approach to peacebuilding thus aspires "to cultivate political processes and institutions that can manage group conflict without violence but with authority and, eventually, legitimacy" – to channel conflict from outbreaks in violence into non-violent forms of political competition (Cousins, 2001: 12).

In this sense, the frequent application of the term 'post-conflict' to societies that have signed and implemented peace agreements is erroneous.⁷¹ The conflict persists, but has (ideally) evolved into non-violent manifestations through institutionalized procedures.

⁷¹ The term 'post-war' is more accurate.

But even the best institutions rest upon a background threat of violence (within their policing, judicial, and corrections systems, for example) to enforce their order.⁷²

In sum, conflict can be managed peaceably by the social order of a society, or it can erupt into violence; violence can advance conflicts in ways that create, destroy, sustain, or reconfigure order; and social order generally includes embedded conflicts and often depends on violence, whether tacit or overt. The core premise of Chapter Three is that particular characters of violence, conflict, and order coevolve with the broader structural features of world order, as identified in Chapter Two. Where much of the present chapter identified problems with the concept of war and the state-centricity employed by established approaches to violent conflict, the VCO framework provides an alternative approach that distinguishes violence (as a general phenomenon) from war (as one kind of violent conflict), that can countenance forms of social order that diverge from widespread assumptions of Weberian statehood, and that can help to endogenize change in world order.

⁷² As Popitz (2017: 40) asserts, “In whatever fashion... social orders may have emerged historically... violence can be limited and can be *only* durably limited, thanks to social institutions... But social orders that lay limits on violence also do not simply spirit violence away. Rather, they themselves need violence—a violence inherent in order itself—if they are to contain violence and be able to defend themselves... The social order is a necessary condition of the containment of violence—violence is a necessary condition of the preservation of the social order.”

CHAPTER TWO:

A Complex Systems Ontology of World Order

I. Towards a Complex Systems Ontology of World Order

This second chapter builds a *complex systems ontology of world order* that aspires to overcome the ontological, disciplinary, and conceptual problems noted of other approaches in Chapter One. The framework developed below elucidates the causal connections between the system structure of world order and the changing interrelations of violence, conflict, and order – the subject of Chapter Three.

Ontology concerns the most fundamental components of reality. Underpinning any and every theory – whether consciously or not – lays a set of assumptions about what most basic ‘things’ constitute the world (Wendt, 1999: 5; DeLanda, 2006: 7). “All theories presuppose basic ontology from which all other considerations follow. No ontology, no theory” (Wight, 2006: 2). Such premises should therefore be carefully scrutinized; they are, however, inherently difficult to ‘prove’ or ‘disprove’ because they are so foundational – and indeed *proto-theoretical* – in nature. As James Rosenau (2006: 7) explains:

We can articulate the logic of our initial premises and we can marshal evidence in support of them, but our conclusions are bound to be a function of our points of departure. Thus, even if we agree on the empirics of the human condition, we may still differ enormously on what they signify because we proceed from different ontological and epistemological [assumptions].

The ontology developed below depends upon concepts of *order*, *systems*, and *structure*. These three terms are widely – and even interchangeably – used throughout the social sciences because they seem to capture basic intuitions about the nature of social reality. This chapter, however, defines them very specifically to play particular roles in the analysis, as summarized in Table 3 and elaborated below. In short, order denotes a regular state of affairs at a given place and time; systems are collections of elements, interconnections, and collective behaviours that exhibit order over time; and structure involves the underlying causal mechanisms that generate the emergent properties that constitute order.

Table 7: Order, Systems, and Structure

	Definition:	Analytical Role:
Order	A <i>state of affairs</i> that exhibits regular patterns of behaviour. 'World order' refers to those recurring patterns of behaviour at the planetary scale that connect all (or the majority) of humanity.	<i>Descriptive:</i> The concept of order provides a 'snapshot' of the social regularities that obtain at a certain time and place. These patterns are the <i>observable effects</i> of the causal mechanisms conceived here as structure.
Systems	<p>A system is a collection of <i>elements</i> whose <i>inter-connections</i> produce <i>emergent properties</i> that persist through time. The trio encompasses the <i>processes</i> or <i>dynamic equilibrium</i> that make up order over time.</p> <p>A <i>complex adaptive system</i> is a population of <i>agents</i> that behave according to <i>internal rules</i> (schemata) and are subject <i>selective pressures</i> arising from their interactions with other agents and their environment.</p>	<i>Ontological-Methodological:</i> A systems lens emphasizes the interconnections between a whole population of elements (rather than the properties and interactions of particular elements) as the source of key behaviours and outcomes. It thus elaborates the ontological parts that produce order. The complex adaptive systems approach emphasizes the role of <i>rules</i> in the constitution of actors and the regulation of their interactions with other agents and the environment.
Structure	Structure is an <i>emergent property</i> that arises from synchronous cycles of top-down and bottom-up causality between an aggregate phenomenon and its parts. A structure consists of <i>things</i> and the <i>relationships between things</i> , but understood as two sides of the same coin insofar as things are (in part) constituted by their relationships to other things (agents and structure are mutually constitutive) and made up of interrelations of smaller things (layers of emergent building blocks).	<i>Ontological-Explanatory:</i> An understanding of structure as an emergent phenomenon explains the order observed within a system in terms of the complex causal mechanisms that produce them.

II. Order and Systems

Order is a broad and descriptive term encompassing any state of affairs that exhibits regular patterns of behaviour.⁷³ In the context of social reality, order denotes more

⁷³ This conception follows the *Oxford English Dictionary's* definition 14b of *order* as "Formal, regular, methodical, or harmonious arrangement in the position of the things contained in a particular space or area, or composing any group or body." Similarly, Robert Cox (1996: 149) invokes Hedley Bull to propose that "Order is whatever pattern or regularity of interaction is to be found in any social situation."

specifically the recurring patterns of coordination and cooperation among individuals that create regularity over time, so that some actions or behaviours are more common than others (Hechter and Kabiri, 2008: 45). *Disorder*, in contrast, occurs when social relations vary so wildly that no regularities appear. The *observable patterns* of an order are not causally efficacious in themselves; they are rather the *products of structure*, conceived here as the recursive causal mechanisms that reproduce (and sometimes transform) those visible regularities. Used in explanation, order thus represents a ‘snapshot’ of the patterns most prominent within a system at a given moment of time.

Systems provide the ontology and methodology with which to examine the dynamic processes that underpin order. The term ‘system’ is commonly used to refer to the highest level of analysis, and systemic accounts indeed focus on *whole populations* of interacting units. But “Systemic analysis is distinguished by what does the explaining – complex organized systems – not level of analysis” (Donnelly, 2011: 163). Systems thinking travels to any scale, from single-celled organisms to the ecosphere, and often traces the causal connections between multiple levels; but wherever employed, a systemic account focuses on the nature of the system *as a system* to explain its behaviours.

Defined broadly, a system is a collection of interrelated elements whose interactions produce collective behaviours, or some sort of whole, that persist amidst variable conditions.⁷⁴ A system thus involves three sorts of things: *elements*, *connections*, and *emergent properties* (Meadows, 2008: 11).⁷⁵ *Elements* (or ‘units’ or ‘actors’) are the entities that interrelate within the system. *Connections* are transfers of energy, material, and/or information amongst elements. *Complex* systems feature dense *interconnectivity* in which the action of any one element affects others in ways that feedback upon the first, producing cyclical patterns of causation and co-evolutionary processes of development (Jervis, 1997a:

⁷⁴ There appears to be a broad consensus around this definition. The *Oxford English Dictionary* similarly defines a system as a “group or set of related or associated things perceived or thought of as a unity or complex whole.” Donella Meadows (2008: 2), a foundational figure in the study of complex systems, likewise defines a system as “a set of things—people, cells, molecules, or whatever—interconnected in such a way that they produce their own pattern of behavior over time.” And general systems theory defines a system as “a collection of interacting elements that together produce, by virtue of their interactions, some form of system-wide behavior” (Mitchell, 2009: 297). See also: Jervis, 1997a: 46; Meadows, 2008: 11, 13.

⁷⁵ Meadows (2008: 11) lists “*function or purpose*” in place of *collective properties*, but this paper uses the latter because it countenances a wider variety of ‘features of the whole,’ whereas function and purpose often lie in the eye of the beholder.

56-64). Elements are thus highly *interdependent* insofar as the functioning of each depends (in part) on its relationship to others.

Such thick interconnectivity generates *emergent properties* at the scale of the whole. At a minimum, systems display regular patterns that recur over time. *Complex systems*,⁷⁶ however, generate novel aggregate behaviours that arise from unit interactions but are not possessed by the units themselves (Sawyer, 2001; de Haan, 2006; Elder-Vass, 2010).⁷⁷ Such emergent properties may include critical transitions, self-organization, synchronization, and evolution, amongst others. These phenomena are highly ordered yet arise from decentralized interactions rather than central planning. Beyond these behaviours, a maximalist conception of a system depicts it as a *collective entity* that tightly integrates its constituent parts into an overarching, coherent, and acting unity.⁷⁸

Systemic explanations feature elements, connections, and collective properties, but connectivity is, in an important sense, *primary*. Each element is shaped by both by the interconnection of parts *within* it, and the relations *between* it and other elements. Things treated as a unit at one scale (such as a self-conscious human person) are often an emergent entity generated by a system at a lower scale (such as a neural network). At the same time, the nature and behaviours of elements are also shaped through their interactions, as learning, socialization, and competition shape individual humans, for example. Colin Wight (2006: 168) thus maintains that “the intrinsic properties of social agents never manifest themselves independently of social context, but the social context, in large part, constitutes what properties an agent has”. The relations between units shape, in part, what each of those units *is* and how it behaves.

Further, the *character of system interconnectivity* is highly consequential to system behaviour and therefore a crucial focus of systemic inquiry. For example, Scheffer et al. (2012) examine a range of different systems and find that those with highly

⁷⁶ By Melanie Mitchell’s (2009: 13) definition, a complex system is “a system in which large networks of components with no central control and simple rules of operation give rise to complex collective behavior, sophisticated information processing, and adaptation via learning or evolution... [or alternatively] a system that exhibits nontrivial emergent and self-organizing behaviors.”

⁷⁷ In a paradigm example, birds form a flock that has collective flight dynamics different from those of its constituent flyers, as witnessed in a murmuration of starlings.

⁷⁸ James Lovelock’s Gaia hypothesis provides a clear example of such holism by arguing that the planet Earth is a unified complex system “comprising all of life and all of its environment tightly coupled so as to form a self-regulating entity” (Lovelock, 1991: 12).

interconnected, homogenous units are prone to drastic and abrupt transitions whereas those with less connected, heterogeneous units tend to change more gradually. Similarly, Homer-Dixon et al. (2015) argue that the increased connectivity, homogeneity, and material throughput of global systems increasingly foster 'synchronous failures' marked by drastic non-linearity, the combination of multiple stresses, and the rapid cascade of impacts throughout the system (see also: Helbing, 2010, 2013, on "hyper-risks"). And finally, the *density* and *recursivity* of causal connections are the source of a system's emergent behaviours (Homer-Dixon et al., 2013: 342; Arthur, 2014: 17), particularly its development of structure, as explained further below.

Such dramatic and dynamic behaviours recurrently arise within a particular class of systems: *complex adaptive systems*. The elements of such systems are specifically conceived as *agents*, as autonomous actors that interact with each other and their environment. Each agent possesses a *schema* – a collection of rules and heuristics that define self and surroundings, anticipate events and consequences, and prescribe appropriate behaviour (Gell-Mann, 1997: 8). These agents are subject to *selective pressures* exerted by the environment and other actors.

At the scale of the agent, selection enables the fittest to thrive and propagate their schemata while the unfit perish. But when agents possess self-consciousness and exercise self-reflection, selection also operates at the level of the schematic rule. Each agent can evaluate the rules they employ to achieve their goals, and revise and expand their schema by learning, experimenting, and emulating others. In this way, agents select particular rules (or sets of rules) for their fitness, enabling some rules to flourish while eliminating others from the system entirely.

"Because the individual parts of a complex adaptive system are continually revising their ('conditioned') rules for interaction, each is embedded in perpetually novel surroundings (the changing behaviour of the other parts)" (Holland, 1992: 20). So long as it enjoys sufficient resources and avoids a catastrophic mass extinction, the system continually changes itself rather than reaching a final form. Its unpredictable evolutionary paths are a crucial emergent property of complex adaptive systems, generated by the totality of agent interactions.

Systems, as this short overview only begins to suggest, provide a rich framework of analysis, but of course, one not without its challenges and critiques. Not every subject is aptly treated as a system, and even when they are, several pitfalls recurrently beset such accounts. Michael Mann (1986: 1) presents a particularly succinct counterpoint to systemic conceptions of social reality: “Societies are not unitary. They are not social systems (closed or open); they are not totalities. We can never find a single bounded society in geographical or social space. Because there is no system, no totality, there cannot be ‘subsystems,’ ‘dimensions,’ or ‘levels’ of such a totality.” The statement captures two recurrent critiques of ostensibly ‘systemic’ approaches: their holism and their delineation of system boundaries.

Sceptics of holism raise three problems with systems thinking: overestimating a system’s integration, mistakenly imputing causal powers to a unified whole, and overstating the mutual constitution of social entities. Exemplifying the first, Manuel DeLanda warns against “the postulation of a world as a seamless web of reciprocal action, or as an integrated totality of functional interdependencies” (2006: 19). Others, however, argue that “the world system is more a single ‘system’ than ever before, the structure and dynamics of which only a truly systemic perspective can fully grasp” (Albert and Cederman, 2010: 4).⁷⁹ The amount of coherence, interdependence, and unity within a purported ‘system’ can be overestimated (Gilpin, 2001), but ultimately remains a question for empirical investigation.

Critiques of systemic holism also decry the tendency to attribute causal powers to the whole, and especially the notion of *society* as a unified entity that acts causally on its constituents. Just as systems thinkers are wary of reductionism, others are skeptical of the ‘top-down’ causation implied by systemic approaches. These concerns, however, focus on the extremes – the individual and society as a whole – when the important social entities exercising causal powers occupy a broad and diverse intermediary scale (DeLanda, 2006:

⁷⁹ Hedley Bull (1977: 19-20) argues even more broadly that: “since the late nineteenth century and early twentieth century there has arisen for the first time a single political system that is genuinely global. Order on a global scale has ceased to be simply the sum of the various political systems that produce order on a local scale; it is also the product of what may be called a world political system.”

32; Elder-Vass, 2010: 6-7).⁸⁰ The particular structures and collective actors within a social system more plausibly exert causal efficacy than does the system acting as a totality.⁸¹ In some instances, however, the system (though not ‘society’) *can* be understood to act as a whole, as when certain dynamics of natural selection emerge from the interactions between entire populations of organisms and their environment.

Finally, the holism of systems thought may emphasize *internal* relations between elements to the exclusion of *external* ones.⁸² In the extreme, such views propose that *all* properties of elements are *relational* – that each element is molded solely by its relationship to others in a process of *mutual constitution*, and has no *intrinsic* properties that would enable it to form *external* relations with other elements (DeLanda, 2006: 9).⁸³ By implication, there are *no* social things, only social relations; but this perspective leads to ontological incoherence (Donnelly, 2019: 919). As suggested above, however, this issue is resolved by acknowledging that elements have both intrinsic and relational properties, and ontology involves both substance and process (*ibid*). Social entities acquire some of their properties from their own internal organization, and some from their relationship to other social entities.⁸⁴ DeLanda (2006: 10) thus distinguishes “the properties defining a given entity from its capacities to interact with other entities.”

⁸⁰ David Elder-Vass (2010: 82-83) proposes that “most of the powers that have usually been attributed to societies belong to somewhat smaller and more clearly definable social entities: structures at an intermediate level between individual and society that can have more specific effects.”

⁸¹ Daniel Nexon (2010: 106, 108) critiques the totalistic view: “In the absence of neatly demarcated and well-integrated patterns of transaction, it makes little sense to appeal to overarching regulators, master logics, or other traditional systems-theoretic mechanisms of structural reproduction... At best... ‘system’ denotes a series of bounded dynamic interactions. Processes, in this case, of interaction, *not* ‘the system,’ act upon the world.”

⁸² This critique is often levelled against Anthony Giddens’ structuration theory, as well as linguistic approaches to social structure; for examples, see: Wight, 2006: 137-163; DeLanda, 2006: 9-10.

⁸³ These terms originate with Roy Bhaskar, who proposes that *externally* related objects can each exist in the absence of the other (they interact, but maintain their unique, separable essences when they do). *Internal relations* imply that each object would not be what it is unless related to the other in a particular way (mutual constitution of objects) (Wight, 2006: 169-70). Wight (2006: 168) observes that “if all relations are internal, then the social relations within which agents are embedded constitute that agent; in effect, the structuralist solution. Alternatively, if all relations are external, then the powers agents possess are derived solely from their intrinsic properties, and the external universe is a mere environment in which interaction takes place; in effect, the individualist solution.” He resolves the dilemma by proposing (like Bhaskar and DeLanda) that social entities have *both* relational and intrinsic properties.

⁸⁴ As elaborated in the layered view of emergence presented below, however, the intrinsic properties (and relational potentials) of a social entity are themselves emergent from the intrinsic and relational properties of the elements that constitute that entity, and each of these elements in turn features intrinsic and relational properties emergent from the interrelations of its parts, and so on.

The three facets of the holism critique (unity, causality, and internality) represent significant errors to which systemic thinking is vulnerable. Each issue, however, can be carefully addressed and avoided; none represents an inherent or insurmountable problem of systemic thinking altogether. The risks of holism notwithstanding, systemic approaches presume that there is greater analytical insight to be gained by envisaging some form of wholeness rather than an amorphous multitude of relationships. As Sylvia Walby (2009: 55) argues: “The old concept of social system [as employed by Karl Marx, Emile Durkheim, and Talcott Parsons, for example] has been widely discredited. The attempt to build social theory without (at least implicitly) using the concept of the social system has failed. Complexity theory offers a new toolkit with which a new paradigm in social theory is being built.”

This paradigm, however, confronts a second, inescapable problem: to delineate the boundaries of the system in question. Boundary specification is a recurrent challenge for systems theorists because complex systems are (by definition) open to inputs (energy, materials, and information) from their surrounding environment, many are subsystems nested in broader systems, and different systems often interact with each other. On the one hand, the system boundaries should follow *clusters* of relations in which the interconnections of included elements are markedly more dense than (or qualitatively distinct from) their connections with elements outside the proposed demarcation. More specifically, Geoffrey Herrera (2006: 14) argues that a “particular conception of a system is useful to the extent that its choice of inside and outside (1) captures a coherent set of interrelations and (2) allows meaningful statements about activities within the system and changes to it without depending on ad hoc relations with the environment.”

On the other hand, the specification of system boundaries frequently depends on the question being asked, and in this respect remains (unavoidably) a somewhat arbitrary imposition of the analyst that demands careful, context-specific justification. Determining “the boundaries of any given system is simultaneously a theoretical and an empirical enterprise” (ibid: 15). Systems very often lack clear boundaries. For critics (such as Mann, quoted above), this fact represents proof against the existence of a system whereas for system thinkers it is instead a *condition* of their existence. The former see the problem of

border demarcation as a flaw in systemic thinking, but for the latter, it simply reflects the messy nature of social reality.

II. World Order as a System

For those who study international relations, global governance, world politics and the like, the scope and definition of their fields are today quite ambiguous. The variety of subject headings in present use demonstrates the confusion. They generally combine an adjective from the left column of Table 8 with a subject from its right column.

Table 8: Field Headings

Adjective:	Subject:
-International	-Politics
-Transnational	-Relations
-World	-Affairs
-Global	-Governance
	-Order
	-Society
	-Studies
	-Systems

The ambiguity is not trivial because each composite term implies certain assumptions and faces certain limitations. *International relations*, for example, focuses on the exchanges between state governments on the presumption that states are the sole or primary elements of human relations writ large (for example: Wendt, 1999: 7-15), whereas the growing fields of *global governance* and *world politics* consider the multitudinous interrelations of a plurality of actors (Dingwerth and Pattberg, 2006; Cerny, 2010).

But even the terms *politics* and *governance* can mislead. Most broadly, politics concerns the operation of power. International relations theory benefits from a restrictive understanding of power as coercion (and its material underpinnings), but more sophisticated approaches reveal the operation of power in *all* human affairs (for example: Barnett and Duvall, 2005; Mann, 1986), including those usually distinguished from the field of ‘politics’ (such as economics, discourse, technology, social constructs, and culture). It is therefore difficult to discern just what *is not* politics, and the presumption that politics is somehow autonomous from the rest of social life is a dubious one (Denemark, 1999: 47).

Similarly, the term *governance* often implies *deliberate* and *purposive* efforts to regulate issues in a polycentric way (for example: Welch, 2013; Goldin, 2013), but the regularities that emerge are frequently *not* products of intentional design in any straightforward manner. Yet global governance, and similar terms all share a broad but amorphous concern with “those routinized arrangements through which world politics

gets from one moment in time to the next,” as James N. Rosenau (1992: 5) describes ‘global order.’⁸⁵

Definitional issues such as these are far from resolved, but this thesis adopts the concept of ‘world order’ because it is particularly conducive to the analysis of systems (as discussed above) and structures (as discussed further below).⁸⁶ As employed here, world order denotes what social organization exists at the largest, most encompassing scale of human interaction.⁸⁷ For the majority of human history, world order was not planet wide, but rather fragmented into different regions with unique forms of social organization and little or no interaction with each other.⁸⁸ Immanuel Wallerstein, following Fernand Braudel, understands this condition as one of multiple ‘world-systems’ that did not span the entire globe, but each representing a space and time of integrated relationships, activities, institutions, and culture that constituted *a world in itself* (Wallerstein, 2004: 17).

In more recent centuries, however, world order has expanded to integrate once disparate regions into a single, transplanetary world order encompassing virtually all of humanity.⁸⁹ Only in this period does world order fully realize Hedley Bull’s (1977: 19) classical definition as “those patterns or dispositions of human activity that sustain the elementary or primary goals of social life among mankind as a whole”, or capture social organization at the broadest – planetary – scale of “the human species viewed as one population” (Modelski, 2000: 25).

⁸⁵ Or, stated differently, these various fields all focus on the basic question of “what makes the world hang together in the international relations sense?” that John Gerard Ruggie (1998: 1) asks in his work on the ‘world polity’.

⁸⁶ Notably, this chapter prefers the term ‘world order’ over ‘world system’ because world-systems theory has already used the term ‘world-system’ very specifically to focus on the division of labor between core and periphery as the most fundamental structure of the world system (Wallerstein, 2004; Denmark, 2000), whereas the present analysis does not make such a presumption.

⁸⁷ Similarly, Dingwerth and Pattburg (2006: 188) propose that the ‘global’ in global governance can refer to “the top-level scale of human activity or the sum of all scales of activity.”

⁸⁸ Buzan and Little (2000: 98) similarly posit that “the historical record suggests that international systems range from very small, through subcontinental and continental, to global in scale, and that almost all of history is dominated by sub-global systems.”

⁸⁹ Wallerstein dates this period to five hundred years ago when the advent of capitalism in Europe spurred the creation of a single, global world-system. Other world-systems theorists, however, trace a “continuous history and development of a single [capitalist] world system in Afro-Eurasia for at least 5,000 years” (Frank and Gills, 2000: 3). Buzan (2014: 28), in contrast, points to the nineteenth century as “the beginning of what we might call ‘the Western-global-era,’ an era which not long empowered the West vis-à-vis ‘the rest,’ but also set loose revolutions in terms of both material capacities and ways of thinking. These revolutions are still spreading and intensifying, and [Anthony] Giddens is quite right to argue that what we now talk about as ‘globalization’ is in fact the ongoing outward spread of modernity.” See also: Buzan and Lawson, 2015.

The definition of world order employed here allows for this variable range of *integration* and *fragmentation* through time. Given the critique of holism addressed above, the amount of coherence within world order should not be overestimated. The degree of 'systemness' in the world remains an empirical question (Giddens: 1984: 165), but one that is aptly pursued with the concept of world order. By acknowledging a range of integration and fragmentation, the concept of world order becomes *transhistorical*, able to countenance a variety of past, present, and possible future forms of order (whether feudal, international, imperial, regional, or global, for example) without taking for granted particular units, such as the state (Cox, 1996: 148-9; Sinclair, 1996: 7-8). The manner in which governance activities (such as legal administration, organized violence, and tax collection) are institutionalized represents a variable feature of world order, so that any distinctions between inside and outside, domestic and foreign, are empirical questions.

Further, the notion of world order permits both *structure* and *agency* in its analysis (though this thesis focuses primarily on structure). For some (such Cox, 1996 or Waltz, 1979), world order is highly structural in nature, stemming ultimately from the organization of economic production or conditions of anarchy. For others (such as Kissinger, 2014), world order arises from the decisions, ingenuity, and institutional designs of talented diplomats who craft and maintain key principles, rules, and institutional bodies (such as the Bretton Woods institutions).

Finally, although world order concerns the highest scale of human interactivity, this definition should not dissuade investigation at smaller scales, particularly insofar as world order shapes the institutional forms of units and societies, and local events (such as wars) amplify to affect broader patterns of world order. World order, in this sense, is *multiscalar* (Bull, 1977: 21).

Thus defined in a way that is *transhistorical*, acknowledges a range of *integration and fragmentation*, permits both *structure and agency*, and remains attentive to *inter-scalar* relationships, the concept of world order resonates deeply with systemic thinking, particularly as characterized by Albert and Cederman (2010: 9-10):

systems theories strive to account for large-scale social forms by uncovering their structural logic and the processes that (re)generate them. In this sense,

systems-level theorizing helps us to understand phenomena in world politics in terms of a more wide-ranging historical and geographic context than is usually the case in today's IR theorizing.⁹⁰

Situated within the tripartite understanding of a system introduced above, world order involves a coevolving multitude of actors employing diverse and variable schemata in highly interdependent connections that produce notable collective properties, including global inequality, hegemonic transitions, and economic crises. But to understand world order as a system in a way that provides novel insight and rigorous explanation requires much more. The remainder of this chapter pursues three particular tasks in order to better examine world order.

First, a systemic ontology of world order must consider the dynamic interplay between units and systems, particularly the processes by which the interaction of units of differing internal characteristics generates systemic forces that reshape those very units through co-evolutionary processes, while at the same time generating inequalities of power and differentiated functions. A complex systems approach should elucidate the changing schematic rules that render individuals into agents, enable those agents to act collectively as organizations, and enables those organizations to assemble into even larger scale social agents with emergent causal powers.

Second, a systems ontology of world order should highlight ways in which the character of interconnectivity shapes system behaviours. More specifically, it should explore the ways in which schematic rules, as media of connectivity, enable, constrain, and shape the connections between agents, and how increases in the 'interaction capacity' (or what Durkheim termed 'dynamic density') of the system can cross critical thresholds to produce qualitative transformations of actors and their relations.

Finally, a systems ontology of world order must identify and explain emergent properties within the system, such as its structural inequality, processes of unit formation, and the ways in which worldviews, institutions, and technologies take on a life of their own.

⁹⁰ Albert and Cederman (2010: 10) elaborate: "It should be noted that the understanding of systems theories used here can accommodate quite a variety of approaches. However, based on the definition given above, they all share a common substantive interest in an international or world system (or society) and thus an (albeit not exclusive) interest in what is usually referred to as *macro*-level phenomena as well as an understanding that processes on the systemic level cannot be reduced to the properties and interactions of parts of the system."

Section V below takes up this agenda to elaborate a full systems ontology of world order. That account, however, requires a closer analysis of the schematic rules that provide the most basic building blocks of social order (pursued in Section III), and the dynamic, emergent nature of social structure (pursued in Section IV). World order is ultimately a very broad and general concept; a deep engagement with ideas of systems and structures lends greater specificity to its analysis. Before turning to these topics, the remainder of this section specifies the systemic boundaries of world order by situating it within the ecosphere as its broader environment.

Defined as what social organization exists at highest and most encompassing scale of human interactivity, 'world order' may be considered too widely encompassing by some, and not broad enough by others. World order may constitute a *single* system,⁹¹ or it may be better understood as a series of overlapping systems. Buzan and Little, (2000: 73-74), for example, disaggregate world order into military, political, economic, socio-cultural and environmental systems, but propose that these sectoral systems interlock within a "full" international system. It may also be the case that *regions* are more tightly interconnected within themselves than as a global amalgam (for example, Katzenstein, 2005). In such circumstances, world order is at most a loose collection of smaller-scale and more particular systems. And yet the very notions of regions or sectors implicitly suggest the existence of some broader 'social whole' into which they aggregate (Albert and Buzan, 2013).

For others, world order may *not be large-scale enough* in its boundaries to illuminate crucial phenomena. Some dismiss as "artificial and arbitrary" any distinction made between human systems (such as world order) and the natural environment in which they are embedded because the two are inextricably joined as 'social-ecological systems' (Berkes et al., 2003: 3). Others treat humans and their habitats as distinct yet

⁹¹ World systems theorists propose several sets of criteria that can help identify the boundaries of a systemic whole. For Frank and Gills (2000: 5), these include "(1) extensive and persistent trade connections; (2) persistent or recurrent political relations with particular regions or people, including especially center-periphery-hinterland relations and hegemony/rivalry relations and processes; and (3) sharing economic, political, and perhaps also cultural cycles." For Modelski (2000: 26), "the minimum conditions of world system [are] common identity, solidarity, collective action, and a resource base."

deeply – and increasingly – intertwined systems (de Vries and Goudsblom, 2003).⁹² The present ontology adopts this approach by understanding world order as human social organization that exchanges inputs and outputs with its broader material environment.

That environment is the *ecosphere*, encompassing the totality of living organisms and the media in which they live – the air, water, soil, and sediment.⁹³ It includes the energy and material resources (known and undiscovered, tapped and potential) with which human technologies construct social order. It also provides the stable conditions and critical life support systems that allow social order to exist. World order – or human existence more generally – can thus be considered a sub-system of its broader ecospheric environment. In many particular instances, however, humans have reconfigured particular (and extensive) parts of the ecosphere to human control (for example, in the creation and maintenance of farmland), and thereby rendered these parts of the ecosphere subsystems of world order that are governed specifically by institutions and technologies.

And yet, such ‘control’ is clearly illusory. The anthroposphere (the total collection of human activity)⁹⁴ has grown within the ecosphere to levels that can seriously alter and disturb it, but ultimately not in predictable, manageable, or desirable ways. The present is “a ‘no analogue’ state in which human actions have driven major planetary support systems beyond the bounds of what is observable in the paleo-climatic record” (Young et al., 2006: 307).⁹⁵ The effects of present interactions include climate change, biodiversity loss,

⁹² The boundary between world order and the ecosphere remains a debatable one, but the exponential growth of interactions between humanity and its environment is unassailable. Johan Goudsblom (2003) argues that these relationships constitute ‘socio-ecological regimes’ that undergo phase transitions within human history, beginning with the domestication of fire (150 000 – 1 500 000 years ago), to agrarianization (10 000 years ago), to industrialization (250 years ago), and potentially into a fourth regime today. Each transition involved a fundamental technological advance that intensified human impacts upon the ecosphere, as well as a transformation of the basic patterns of social organization to greater levels of complexity, and the reconfiguration of human psychology.

⁹³ This conception follows LaMont C. Cole’s (1958: 85) definition of the ecosphere as “the sum total of life on earth together with the global environment and the earth’s total resources”, mirroring Vladimir Verdansky’s original definition of the biosphere as all life and life-supporting systems. For a discussion of the origins, multiple meanings, merits, and limitations of these terms, see Huggett, 1999. Huggett concludes that the term ‘ecosphere’ is best suited (over the terms ‘biosphere’ and ‘Gaia’) to capture “the total ecosystem – the totality of living organisms and the inorganic environment that sustains them” (ibid: 427-8).

⁹⁴ Raupach and Crandall (2010) define the anthroposphere as “Human societies, cultures, knowledge, economies, and built environments”.

⁹⁵ Indeed, some argue that the Earth has over the last hundred years entered a fundamentally new era – the anthropocene – in which human activities have become a significant influence on even the *geology* of the planet (Steffen et al., 2016).

intensified natural disasters, and resource scarcity – problems that threaten the very anthroposphere that generates them (see, for example, Barnosky and Hadly, 2016). Such catastrophes and unintended effects make clear that world order is vulnerable to the broader, often capricious, processes of the ecosphere. Accordingly, the ontology proposed below treats the latter as the environment of the former.⁹⁶

⁹⁶ Erika Cudworth and Stephen Hobden (2012: 174) adopt a similar approach that “allows for analytical separation between social and natural systems and can account for the distinctive features of the social, while also allowing for inscribed complexity in both human and non-human systems and the possibility of overlapping, interrelating, and coconstituting qualities of social and natural systems.”

III. Schematic Elements of Social Ontology: Beliefs, Rules, and Procedures

The complex adaptive systems framework, with its focus on agents and their schemata, highlights *rules* as the most fundamental elements of social ontology, the most basic ‘stuff’ of social reality. Rules “endow an array of alternative behaviors with meanings and social consequences among which we are motivated to choose. Rules do not determine what we shall do but open up a field of possibilities that we may do” (Wight, 2006: 148). The schema of a self-conscious and reflexive human being provides numerous considerations for such decision-making, including definitions of self and other, models of how the world is versus how it should be, guidelines for appropriate conduct, expectations of others’ behaviour, and strategies for manipulating the material environment.

These diverse functions suggests that schemata may involve more than ‘rules’, or that the term ‘rules’ fails to capture the full range of schematic contents.⁹⁷ Various authors employ alternative terminology to depict the elements of schemata, such as ‘heuristics,’ “generalizable procedures” (Giddens, 1984: 21), “social practices” (Elder-Vass, 2012: 86), or “collective practices” involving rights, obligations, and positions (Lawson, 2012: 360-370). These expressions reflect a key analytical challenge: to develop a plausible typology of schematic elements that elucidates the ways in which they operate, combine, and change, without neglecting the complex variety of human social behaviours.

This section proposes three types of schematic elements: beliefs, rules, and procedures.⁹⁸ These components correspond (respectively) to the sustainability literature’s (Beddoe et al., 2009) understanding of human civilization in terms of its

⁹⁷ For example: “the term ‘rules’ is probably not quite the right word, since it tends to imply something like formally stated prescriptions—the sorts of things spelled out in statutes, proverbs, liturgies, constitutions, or contracts. What I mean to get at is not formally stated prescriptions but the informal and not always conscious schemas, metaphors, or assumptions presupposed by such formal statements... Because of this ambiguity about the meaning of the word ‘rules,’ I believe it is useful to introduce a change in terminology. Henceforth I shall use the term ‘schemas’ rather than ‘rules’” (Sewell, 1992: 8).

⁹⁸ These schematic elements might be best conceived as different types of ‘practices’ to emphasize their *enactment in time* as a crucial feature of their operation. In Adler and Pouliot’s (2011: 4) definition, “practices are socially meaningful patterns of action, which, in being performed more or less competently, simultaneously embody, act out, and possibly reify background knowledge and discourse in and on the material world.” This conception resonates with structuration theory, as explained further below.

worldviews, institutions, and technologies (WITs):⁹⁹ worldviews are collections of fundamental *beliefs* about the (moral and physical) nature of existence, institutions are constituted by jointly understood *rules* of appropriate social interaction, and technologies consist of *procedures* that transform energy, matter, and information to fulfill human purposes.¹⁰⁰

The subsections below (using the WITs headings) define beliefs, rules, and procedures as distinctive elements of human schemata that aggregate to form worldviews, institutions, and technologies, respectively. Each of the latter (WIT) trio performs essential social functions that help explain peoples' deep and enduring attachment to their particular beliefs, rules, and procedures.

The next section (on structure) develops the analysis further by contending that beliefs, rules, and procedures (BRPs) operate at multiple scales of social activity. Each individual holds in their mind a unique and changing collection of BRPs; they share some of these with others in a way that enables them to act collectively as a social organization (such as a corporation or government); different organizations may share sets of BRPs to amalgamate their actions to an even higher scale of social agency (such as an intergovernmental organization), and so on. In this way, beliefs, rules, and procedures are the fundamental building blocks of social ontology. Collections of BRPs tend to take on a life of their own, as their nature as schematic elements conditions the ways in which they combine, develop, change, and ultimately produce worldviews, institutions, and technologies as emergent, supra-agential social entities that exercise causal power within world order.

⁹⁹ The triad of worldviews, technologies, and institutions mirrors Robert Cox's (1996: 97) conception of a 'historical structure' as "a particular combination of thought patterns, material conditions, and human institutions which has a certain coherence amongst its elements."

¹⁰⁰ The terms 'beliefs,' 'rules,' and 'procedures' are used here for the sake of clarity to distinguish the schematic element involved in worldviews, institutions, and technologies (respectively). They could each be understood as a distinct *type of rule*, but this would create a confusing and problematic formulation of 'rules' as a rule type. This framework thus refers only to institutional rules explicitly as 'rules'.

Worldviews

A worldview encompasses a person's most fundamental and deeply held *beliefs* about the nature of existence,¹⁰¹ concerning particularly the *way the world is*, the *way the world ought to be*, and their *place within the world*.¹⁰² Every individual possesses a worldview that reflects his or her own experiences and dispositions. Crucial parts of their worldview, however, emerge and develop through social interaction as important schematic 'modules' that are (more or less, but not exactly) shared among individuals as parts of their broader, unique, personal worldview (Milkoreit and Mock, 2014). These common belief-sets are of three types, each concerning a fundamental aspect of existence: *lay ontologies* provide an internal mental map of how the world is, *ideologies* describe the way the world should be, and *identities* define a person's place within the world.¹⁰³

A *lay ontology* is a person's working understanding (or mental model) of the basic parts of social and material reality, and the relationships between them. Scientific study provides the most reliable perceptions of the physical world, but many hold beliefs about

¹⁰¹ "In a typical dictionary definition, *belief* refers to a mental state that involves acceptance, trust, and confidence in something offered (but without rigorous proof) as true or real or imbued with goodness. That is, a belief makes a representation with respect to truth, reality, or goodness, thus providing some guidance for behavior" (Saucier, 2013: 922).

¹⁰² This definition draws upon that of Beddoe et al., (2009: 2484): "Worldviews are broadly defined as our perceptions of how the world works and what is possible, encompassing the relationship between society and the rest of nature, as well as what is desirable (the goals we pursue). Our worldview is unstated, deeply felt, and unquestioned. These unconscious assumptions about how the world works provide the boundary conditions within which institutions and technologies are designed to function." Similarly, Johnson et al. (2011: 138) define worldviews as "the socially constructed realities which humans use to frame perception and experience. A worldview involves how an individual knows and thinks about what is in the world, and worldviews influence how he or she relates to the persons and things in the environment." The definition used here also reflects Meadows' (2008: 162-3) conception of a "paradigm" as "The shared idea[s] in the minds of society, the great big unstated assumptions... or deepest set of beliefs about how the world works."

¹⁰³ Just as WITs are one of several possible ways in which to conceptualize the social ontology, so too can the 'sub-ontology' of worldviews use various distinctions to define core components in a productive manner. Johnson, et al. (2011), in their "psychology of worldview," set out six components: ontology (including metaphysics, theology, and cosmology); epistemology (what we can know); semiotics (language and symbols used to describe the world); axiology (proximate goals, values, and ethics); teleology (ultimate goals); and praxeology (social norms and sanctions as informed by the forgoing). Chiu, Leung, and Hong (2011), considering culture more broadly, distinguish *lay theories* about what is true, *values* concerning what is important in life, and *norms* that set out the right thing to do. And Homer-Dixon (forthcoming) profiles different ideologies by their answers to fifteen fundamental ontological questions concerning what is and what ought to be. The three categories lay ontologies, ideologies, and identities are used here because they are particularly amenable to the conception of belief types within schemata, and because they enable an appropriate amount of brevity.

supernatural forces at work as well. The social world, in contrast, features much more mutable and varied 'social facts'. These are "facts that are produced by virtue of all the relevant actors agreeing that they exist" (Ruggie, 1998: 12); they are widely shared definitions of the basic components of social reality, such as 'person', 'the state', 'money', and 'property'. Individuals tend to invoke extant social facts in their interactions because they anticipate these categories to be intelligible to others, and expected by them.¹⁰⁴ People also tend to sort experiences into the categories available to them; in so doing, they further reproduce their overall lay ontology. But individuals can also challenge and change categorical boundaries by not conforming to them.¹⁰⁵

As Cox (1996: 98-99) argues, these "intersubjective meanings are broadly common throughout a particular historical structure and constitute the common ground of social discourse (including conflict)". *Ideologies* (what Cox terms 'collective images') are more particular. They set out multiple and often conflicting conceptions of *how the world ought to be*.¹⁰⁶ Ideologies rely upon lay ontologies, but stylize and (re-)interpret a particular selection of intersubjective meanings in order to diagnose the problems and injustices of the world as it stands, outline a particular vision of the way it should be, and prescribe actions by which to move from the former to the latter.¹⁰⁷ The third crucial part of a worldview is *shared identity*, which involves beliefs about the similarities and differences of people. These beliefs specify who is part of a group and who is not, alongside the sorts of behaviours and attributes group membership entails.

The distinction between lay ontologies, ideologies, and identities is ultimately a loose one. Ideology and identity in particular tend to fuse in practice because identities

¹⁰⁴ Cox asserts that such lay ontologies "are the shared parameters of our existence. Knowing them to be there means knowing that other people will act as though they are there" (quoted in Sinclair, 1996: 9).

¹⁰⁵ In his 'looping effect,' for example, Ian Hacking argues that people who are classified under a certain category (such as race) may change their personal behaviour in order to conform to the expectations associated with the category. But their behaviour may instead defy the definitional rules of the category shared in common knowledge. Such anomalies, when apprehended by sufficient numbers, cause the boundaries of the category itself to shift as people adjust their understanding of it. "Classifying changes people, but the changed people cause classifications themselves to be redrawn" (Hacking, 2004: 279).

¹⁰⁶ Homer-Dixon et al. (2013: 337) define ideologies as "systems of socially shared ideas, beliefs, and values used to understand, justify, or challenge a particular political, economic, or social order." While this definition includes lay ontologies as described above, the present analysis emphasizes the *normative* and *missionary* nature of ideologies.

¹⁰⁷ Conservative ideologies notably resist change in a way that suggests the world *is* as it *ought* to be, but nonetheless prescribe actions to maintain it as such and expand those aspects perceived as most virtuous within it.

generally involve a prospective vision of a better world and ideologies help define the boundaries and characteristics of groups. The three types of beliefs together form a worldview with at least some degree of unity and coherence.

The core beliefs of a person's worldview are deeply held and resistant to change because they fulfill fundamental psychological needs. Jost et al. (2008: 171), for example, suggest that ideologies fulfill "basic human motives to understand the world, avoid existential threat, and maintain valued interpersonal relationships" that are based upon a "shared reality". Terror management theory (Becker, 1973; Solomon et al., 1991) emphasizes the second of these three needs as a key source of intransigence in worldviews. The theory posits that every human faces a fundamental conflict between their desire to continue living as a unique, self-conscious person and their knowledge of their inevitable death, creating an existential anxiety as a basic driver of behaviour. To repress this otherwise overwhelming terror, people construct and participate in elaborate cultural systems that provide a sense of immortality, whether symbolically, through their contribution to something more meaningful and enduring than their own existence, or literally through spiritual beliefs in an afterlife (Goldenberg et al., 2009: 766).

Accordingly, challenges to core beliefs may be experienced as *existential* threats insofar as they undermine hopes of immortality. People "need to maintain faith that their cultural worldview is objectively correct and valid – or they risk losing their protection against the threat of death" (Vaes et al., 2010: 751). Such vulnerability to the threat of a meaningless and ephemeral existence can motivate hatred and violence against those who challenge a person's worldview.¹⁰⁸ Hayes et al. (2008: 502) thus conclude that "wars and intergroup conflicts can be understood as a means of reducing thoughts and concerns about one's own vulnerability and mortality by bringing death to those people who threaten one's anxiety-buffering conception of reality." And Jost et al. (2008: 181-2) similarly argue that alternative worldviews may challenge the core beliefs

upon which a web of interpersonal relationships depend. The presence of any opposing worldview may, therefore, lead people to become extremely

¹⁰⁸ Though it does not logically address the doubts, "aggression against another who attacks one's views can serve to reassert one's own faith in one's worldview, the criticisms be damned!" (McGregor et al., 1998: 591).

defensive about their ideologies; at that moment, they are protecting not only their own beliefs but also the integrity of the shared reality on which their valued relationships are based. This fact may help to explain the fierceness with which individuals and groups strive to avoid, repel, and even eradicate those who endorse competing ideological convictions.

Worldviews also play a crucial social function by enabling levels of trust, altruism, and collective action that could never result from self-interest alone (Mann, 1986). Francis Fukuyama (2011: 442), for example, argues that “Religious beliefs help to motivate people to do things they would not do if they were interested only in resources or material well-being, as [demonstrated by] the rise of Islam in seventh-century Arabia.”¹⁰⁹ Worldviews ultimately highlight the *ideational* forces that have driven continuity and change through the history of world order.

Institutions

Institutions are the jointly understood *rules* of appropriate social interaction that enable collective coordination. More precisely, institutions are “the rules of the game in a society or... the humanly devised constraints that shape human interaction”, which include formal rules (constitutions, laws, and contracts), informal constraints (customs, norms, and codes of conduct), and mechanisms of enforcement (North, 1990: 3). These “socially articulated and distributed” (Grief and Laitin, 2004: 637) rules “establish systemic patterns of prescribed, proscribed, and permitted relations and interactions and particular mechanisms by which interactions may, must, or must not occur” (Donnelly, 2009: 75). More specifically, institutions may refer to specific rule-defined organizations (such as a government or company), but also to the broader regime of rules that regulate interactions between organizations, as well as among individuals.

Institutional rules are generally of two types: *constitutive* rules define the social ‘things’ that are governed (such as private property, or personhood) while *regulative* rules

¹⁰⁹ Of course, “not everyone has a ‘religion’ [but] every individual (e.g., a humanist, a secularist, etc.) has some particular systemic understanding of what is, what can be known, what is valued, what ought to be ultimate goals, and how to act. We contend that the term worldview precisely captures the notion that all humans think about themselves and their relation to others and try to make sense of the world” (Johnson et al., 2011: 140).

specify the ways in which they properly relate. The former often codify the social facts contained in a particular worldview, and the latter may articulate its moral principles. There is thus considerable overlap between worldviews and institutions, which renders *informal* institutions particularly resistant to change because they are so entwined with internalized worldviews.¹¹⁰ Finally, a mixture of constitutive and regulative rules creates *organizational roles* by defining an identity and specifying its proper relation to other roles (generally in terms of rights and responsibilities).

Institutions regulate many aspects of social life, including kinship, economy, politics, law, and religion, as well as day-to-day interpersonal interactions. Rules create common guidelines for behaviour around which expectations converge and actions normalize. They thereby enable extensive coordination and cooperation among people. In this way, restrictions upon behaviour (ironically) increase the possibilities for action, both collective and individual.

As Francis Fukuyama (2011: 16) notes, “institutions are ‘sticky’; that is, they persist over time and are changed only with great difficulty.” Their tenacity reflects their crucial social function of coordinating interaction and collective agency, and also their self-reinforcing nature: rules are difficult to change when each person expects others to abide them, knows that those others expect themselves to abide them, and knows that others know that the person knows they expect him or her to abide them, and so on. (This dynamic is explored further in the discussion of structuration theory below).

Technology

Technology consists of the *procedures* by which humans harness natural phenomena in order to fulfill their purposes (Arthur, 2009: 50-1).¹¹¹ It is “the programming of nature, the

¹¹⁰ “Although formal rules may change overnight as the result of political or judicial decisions, informal constraints embodied in customs, traditions, and codes of conduct are much more impervious to deliberate policies” (North, 1990: 6).

¹¹¹ W. Brian Arthur (2009: 29) defines a technology as “a means to fulfill a purpose: a device, or method, or process.” Within this definition, however, institutions (as outlined above) would also qualify as technologies. He thus makes a distinction between *physical technologies* (what are generally thought of as technologies, and the usage employed in here), which are based on the capture of physical effects, and *social technologies*, which are based on the capture of organizational or behavioral effects. Arthur argues that the latter are best treated separately (ibid: 54-56). Eric Beinhocker (2011: 408-9) similarly defines “social technologies” as “methods

orchestration and use of nature's phenomena... it is nature organized to serve our needs" (ibid: 215, 201). More specifically, technology involves *hardware* – an essential connection to the physical world represented as a natural law or regularity – and *software* – the procedures used to direct the captured phenomenon towards a specific task. 'Capture' generally entails the extraction, transformation, and application of matter, energy, and information for a purposive end.

The most important function of technology is to augment the physical and social capabilities of humans. Once people gain such powers (such as cellular communication), it is hard to give them up, as earlier technologies seem deficient by comparison. Means of communication, transportation, and violence are especially important insofar as they increase the "interaction capacity" of social systems (Hererra, 2006: 26-7; Buzan and Little, 2000: 80-84). Humans relate to each other by manipulating the physical world around them. But technologies often require a great deal of cooperation to function, and a large number of users to be useful. In this respect, technology requires complementary institutions. Technology also enhances scientific knowledge of the environment, thereby (re-)shaping worldviews, while the values embedded in worldviews shape human relationships to nature and the tasks to which natural phenomenon are applied. Technologies ultimately highlight the *material* dimensions of social existence.

and designs for organizing people in pursuit of a goal or goals", which are distinct from "physical technologies" as "methods and designs for transforming matter, energy, and information from one state into another in pursuit of a goal or goals".

IV. Social Structure as Emergence

One of the most important justifications for a systemic perspective (on any topic) is the widespread view that systems have *structures* that affect the system's constituent units and steer its overall development (Jervis, 1997b: 5). Structure plays an indispensable role in much social scientific explanation,¹¹² but remains a perennial source of contention. Disagreement abounds over even the most basic questions: *What is social structure? How do systems acquire structures? And how do structures exert causal power upon their constituent parts?*

Structure is often understood broadly as *persistent patterns of aggregate behaviour*.¹¹³ A pattern alone, however, lacks the *causal efficacy* that is attributed to structures and at the core of their analytical significance. Persistent patterns are better understood as the *observable effects* of structure in operation rather than structure itself. The visible regularities of social systems are, therefore, referred to here as *order*.

To better capture the relationships that *generate* an observable order, many conceive structure using a spatial analogy as the 'arrangement,' 'organization,' 'placement,' 'ordering,' 'positioning,' or 'configuration,' of units.¹¹⁴ Biology and ecology, for example, enjoy such an understanding of structure as the spatio-physical embodiment of organisms—as the infrastructure traversed by their vital processes (Capra, 1996: 81, 98, invoking Maturana and Verela, 1980). In the social realm, however, the spatial analogy can hinder as much as it helps: the relevant 'space' is a social (as well as physical) one involving myriad meanings that far exceed three dimensions (however defined) and complicate spatial notions such as 'higher and lower,' 'greater and lesser,' 'equal and unequal'. David Elder-Vass (2012: 88) points out that:

¹¹² As William J. Sewell, Jr. (1992: 3) posits, "the notion of structure does denominate, however problematically, something very important about social relations: the tendency of patterns of relations to be reproduced, even when actors engaging in the relations are unaware of the patterns or do not desire their reproduction."

¹¹³ For examples and a critique of this view, see: Wight, 2006: 127-29.

¹¹⁴ Waltz (1979: 99) provides a prime example of such analogical thinking: "What emerges [when all but structure is stripped away] is a positional picture, a general description of the ordered overall arrangement of a society written in terms of the general placement of units rather than in terms of their qualities." Similarly, Jack Donnelly (2009: 79) posits that "Structural analysis... specifies order and explains outcomes by the arrangement of the parts of the system."

While ordinary material entities are structured by strongly spatially constrained relations, social entities are not... [The latter] depend not only on spatial but also on *intentional* relations between their members. In other words, they depend upon relations and commitments to interact in certain ways that are represented in the mental properties of their members: in their beliefs and dispositions.¹¹⁵

Many would agree that the spatial and (especially) intentional interactions of individual agents produce higher-level social structures that feedback upon agents to enable and constrain their actions in ways that reproduce those very structures.¹¹⁶ By this understanding, social structures are not ossified objects but *ongoing processes* that shape, and are shaped by, agents. The ontological challenge is to detail the *mechanisms* of such processes in ways that render these sorts of statement more than empty tautologies.

Given these considerations, this section conceives social structure as an *emergent property* of the particularly “dense and recursive causal connections” at the heart of complex systems (Homer-Dixon et al., 2013: 342). Causality within complex systems is deeply *interactive*; high interconnectivity ensures that a multitude of different factors combine to generate events and behaviours, and together these causes produce a joint effect different than the results they would generate in isolation from each other (or if their separate effects were summed). Even more importantly, complex systems feature *recursive causality* in the form of feedback loops (both positive and negative)¹¹⁷ unfolding in iterative cycles of cause and effect. This section argues that such dense and recursive causality generates structures as emergent properties of social systems.

¹¹⁵ Fritjof Capra and Pier Luigi Luisi (2014: 136-137) similarly observe that “human systems exist not only in the physical domain but also in a symbolic social domain. While behavior in the physical domain is governed by the ‘laws of nature,’ behavior in the social domain is governed by rules generated by the social system itself.” See also: *ibid*: 307, 311, 320.

¹¹⁶ W. Brian Arthur (2015: 3), for example, proposes that “Complexity is about formation—the formation of structures—and how this formation affects the objects causing it... this means examining in detail how individual agents’ behaviors together form some outcome and how this might in turn alter their behaviors as a result.”

¹¹⁷ Negative feedbacks are self-cancelling or self-equilibrating: when one variable moves away from equilibrium, it triggers events that restore it to equilibrium. Positive feedbacks are self-amplifying: an increase in a variable triggers events that further that increase and thereby produce runaway growth. Meadows (2008: 34) argues that feedbacks are particularly essential to a complex system because they enable it “to cause its own behavior”.

The first subsection below explains the process of emergence by highlighting three of its essential features: synchronic cycles of upward and downward causation, the layering by which one emergent entity becomes a 'building block' for higher scale emergence, and the energy flows that sustain emergent phenomena (thermodynamics). The ensuing subsections examine three types of emergent social structures that are central to the systems ontology of world order:

- Emergent social actors: groups of people acting in unison to exercise collective causal powers that none possess individually. This understanding of emergence builds upon the 'critical realism' of David Elder-Vass, who understands emergence as the irreducible *causal efficacy of groups*.
- Emergent social relations: the self-reproducing opportunities and constraints on action that emerge from the interaction of agents with differing identities, interests, and capacities. This subsection draws upon political economic analyses to conceive *incentive structures*, embedded in *structures of meaning*, as an emergent property.
- Emergent schematic assemblages: collections of beliefs, rules, and procedures that shape their own development, forming loose, supra-agential social entities such as ideologies, identities, and institutions. This understanding of emergence builds upon Anthony Giddens' theory of *structuration*.

Emergence

Emergence "is the core concept of complexity" thinking (de Haan, 2006: 194) and the defining feature of complex systems (Holland, 2014: 85; Homer-Dixon, 2010: 2). It occurs when the decentralized interactions of elements produce novel, higher-level properties *different* from those of the constituent units (Elder-Vass, 2010: 4; Lawson, 2012: 348).¹¹⁸

¹¹⁸ Jonathan Lawhead (2015: 3) expresses this definition more formally: "a feature *P* of a system *S* can be said to be *novel* in this sense [of emergence] when (1) *P* is distinct (in some sense) from the features of the constituents of *S* (even in aggregate) and (2) *P* nevertheless *depends* in some sense on the features of those constituents." This definition differs from the common, but erroneous, description of emergence as phenomena in which 'the whole is greater than the sum of its parts.' Instead, "the whole is *different from*, not *greater than*, the sum of the parts" (Jervis, 1997b: 12-13).

Emergence thus entails “qualitative novelty” in which the whole gains causal powers that are not possessed by its parts (Wagner, 2016: 97). Commonly cited examples include vortices, tornados, Bénard convection cells, flocks of birds, human self-consciousness, and evolution by natural selection. More broadly, emergent phenomenon encompass: *emergent entities* able to act or exercise causal power, such as collective social organizations, worldviews, institutions, and technological domains (as explained further below); *emergent properties* such as global economic inequality (the so-called north-south gap); and *emergent behaviours* such as self-amplifying financial crises within the global economy. This subsection explains the process of emergence by exploring three of its essential features: the *upward and downward causation* that constitutes it, the *layers* that compound it, and the *energy flows* that sustain it.

In the *upward causation* of emergence, unit level interactions generate and sustain the higher-level phenomenon. The emergent property *supervenes* upon – depends upon – the lower-level relationships of its constituent units (Sawyer, 2001: 555-56). At the same time, emergent properties have some autonomy from unit-level states due to their *multiple realizability*: the same higher-level behaviour can supervene upon a variety of different unit-level arrangement (ibid: 556-58; de Haan, 2006: 295).¹¹⁹ An aggregate phenomenon that corresponds to only a single unit-level state is, therefore, not an emergent one. Instead, emergent properties persist amidst a (circumscribed) range of unit-level changes (including the entry and exit of units) and shifting boundary conditions (Elder-Vass, 2010: 33).

The *downward causation* of emergence occurs when the aggregate level phenomenon restricts the behaviours of its constituent units in a way that maintains the higher-level property. Stated differently, the interaction of parts produces a collective-level behaviour that reinforces those very unit relationships that generate the aggregate phenomenon. The “source of emergence is the organization of the parts: the maintenance of a stable set of substantial relations between the parts that constitute them into a particular type of whole” (Elder-Vass, 2010: 20). ‘Top-down’ causation sustains such

¹¹⁹ Some theorists of emergence use the term *wild disjunction* to refer to the significant differences between unit-level states upon which the emergent property can supervene (Sawyer, 2001: 557-58).

organization, which constitutes a crucial feature of the whole that is not possessed by individual parts, but arises only from their collective relations.¹²⁰

In what de Haan (2006) terms the ‘emergent conjugate’, the emergent phenomenon at the higher level places a behavioural parameter on its constituent parts. Downward causation thus entails a form of *constraint* upon the units, so that their range of possible behaviours is more limited when organized into the emergent structure than it would be otherwise (Lawhead, 2015: 7-8, 12; DeLanda, 2006: 34-35). This simplification of unit-level behaviour maintains the very organization that generates it and enables novel behaviours and causal capabilities at the aggregate level. In these synchronic cycles of upward and downward causation, unit interactions generate aggregate structures that constrain unit behaviour in ways that reproduce those structures. The result is a dynamic ‘lock-in’ of structure.

Fritjof Capra (1996: 168-72) provides a rudimentary example of emergence within a complex *physical* system by explaining the formation of a vortex when a drain opens in a tub of water.¹²¹ Initially chaotic flows of water through the hole converge, through largely stochastic events, into a rotary motion that accelerates. At a critical threshold, the “force of gravity pulling the water down to the drain, the water pressure pushing inward, and the centrifugal forces pushing outward balance each other in a stable state... The acting forces are now interlinked in self-balancing feedback loops that give great stability to the vortex structure as a whole” (ibid: 170). In its upward causation, the vortex is composed of no more than a (constantly changing) collection of water molecules (the units) and the transfer of kinetic energy between them (connection). In its downward causation, the resulting vortex creates a configuration of forces that restrict the movement of each molecule to those behaviours that reproduce the structure and draw new water molecules into it. So long as the water continues to flow (at a sufficient rate), the vortex persists as a

¹²⁰ Stated differently, it is the relational capacities of the parts, only realized as a population, that enables their emergent organization, rather than their intrinsic properties, which are evident when they are considered individually. As Lawson (2012: 351-352) contends, “the organization of the lower level phenomena is itself always a novel phenomenon, emerging along with any higher level totality. In other words, the relational-organisation itself must be regarded as a higher (not lower) level feature, and indeed a causal property of the emergent totality or entity.”

¹²¹ Tornadoes are a much more dramatic example of vortices, which involve many factors in addition to those at play in the bathtub example.

robust and dynamic structure with qualities and behaviours distinct from those of its components.

Dave Elder-Vass uses the term *morphostatic* processes to refer to the actual causal mechanisms that couple unit-level interactions and emergent phenomena in a way that maintains the latter.¹²² Such processes are unique to each type of emergent phenomenon, but they can be studied and known. As Elder-Vass (2010: 66-67) explains:

Causal mechanisms are processes that depend upon interactions between the parts, interactions that only occur when those parts are organized in the particular *relations* that constitutes them into wholes that possess this emergent property... Although emergent properties, and thus real causal powers, can therefore be explained, they cannot be explained away. They exist only when the relevant type of whole exists, hence they are causal powers of this type of whole and not of its parts. This means that emergentist ontologies can resolve the problem of reductionism: they allow higher-level properties to be explained scientifically (an *explanatory reduction*), but they do not allow them to be replaced with properties of the parts in causal explanations (an *eliminative or ontological reduction*).¹²³

Emergent properties are *epistemologically reducible* insofar as they can (at least hypothetically) be explained by examining the interactions of parts, and without violating the natural laws by which the parts behave. But the emergent phenomenon is nonetheless a real, novel object with properties and causal powers different from those of its parts. It is in this sense *ontologically and causally irreducible* to its parts.

As a consequence, the process of emergence generates a *layered* ontology constituted by successive levels of emergence.¹²⁴ Entities that emerge at one level interact to produce emergent entities at a higher level, which become the building blocks of

¹²² Elder-Vass also uses the term *morphogenetic causes* to refer to those processes that bring about the emergent entity in the first place. More specifically, morphogenesis encompasses the process by which favourable conditions arrange the parts in a way in which synchronic cycles of upwards and downwards causation occur, as when the forces of gravity, water pressure, and centrifugal acceleration reach a balance that enables a vortex to form, in the example above.

¹²³ Elder-Vass (2010: 193) therefore argues that the “relational concept of emergence, then, has the twin benefits that it provides a justification for treating the emergent properties of higher-levels as causally effective in their own right, while at the same time allowing us to explore the ways in which these properties are produced as a consequence of the properties of the parts and the way in which they are arranged to form this particular sort of higher-level entity.”

¹²⁴ Some authors (for example, Wagner, 2016: 80; Pratten, 2013: 251) depict this emergent ontology as “stratified,” but this term can mislead insofar as it suggests a rigid hierarchy of levels.

emergent phenomenon at an even larger scale, and so on (Elder-Vass, 2010: 192; Arthur et al., 2014: 92, 94). The interactions of sub-atomic particles create atoms with emergent physical properties; atoms interact to produce molecules with emergent chemical properties; complex molecules inter-relate to form organisms; and organisms interact to produce ecosystems that feature evolution as an essential emergent behaviour (Christian, 2004; Holland, 1995: 36). Each layer hosts properties, behaviours, and causal powers that are not held by its constituent parts, but these novel qualities do not violate the rules and laws governing the underlying layer. The higher level involves new features of reality that are *unique from, consistent with, but irreducible to* the nature of their parts (Kauffman, 2008; Lawson, 2012: 372).¹²⁵ Each layer thus requires its own particular method of study (Elder-Vass, 2010: 197; Miller and Page, 2007: 45; Lawson, 2012).

Levels can be “identified by characteristic types of entities [exhibiting] qualitative differences in complexity, organization, spatial scale, or social aggregation” (Donnelly, 2019: 907). These levels are ontological, rather than methodological, to be found empirically rather than taken for granted. “Levels of organization are ‘in the world’ – more levels of being than levels of analysis” (ibid: 910). *Social* reality also involves layers of emergence, but their arrangement is more complicated than the hierarchy of physical-material levels. Donnelly (2019: 907) proposes that “an international system has multiple levels.” Some theorists propose that social systems form ‘nested hierarchies’ at different levels of social reality. Delanda (2006: 5-6), for example, proposes several overlapping layers of ‘assemblages’ between individuals and states:

interpersonal networks and institutional organisations are assemblages of people; social justice movements are assemblages of several networked communities; ... cities are assemblages of people, networks, organizations, as well as of a variety of infrastructural components... [and] nation-states are assemblages of cities, the geographical regions organized by cities, and the provinces that several such regions form.

¹²⁵ For example, Kauffman (2008: 141, 143) posits that “the evolution of life violates no law of physics but cannot be reduced to physics... The deep potential implication is that laws may emerge on higher levels where no laws exist on lower levels.” Along these lines, Paul Thagard (2019a; 2019b) argues that sociological theories should be consistent with psychological theories, which should be consistent with neurological theories, which should be consistent with organic chemistry. Each level introduces new behaviours, regularities, and causal effects that are irreducible to the level below and therefore require a distinctive analytical approach, but can be reconciled with knowledge of the levels below it.

Wagner (2016: 80, 87-89) similarly understands world politics as “a complex set of nested systems” (ibid: 87) at the international, regional, and national levels. Each involves unique emergent properties, is not reducible to the level below, but interacts with other levels.¹²⁶ Others (Joseph, 2010: 62), however, repudiate such depictions of the traditional IR levels of analysis as emergent layers:

emergence should not be about how the international is emergent out of the national (or domestic) as many opponents of neorealism might argue, but that national (or domestic) and international are both emergent out of underlying social conditions. The task of the social theorist is to make the case for what these social relations might be and the influence that they might have on international politics.

Sylvia Walby (2009: 64-69) provides one such approach by arguing that economy, polity, violence, and civil society are overlapping but non-nesting social systems that each take the other three as its environment. These four ‘institutional domains’ interact with ‘regimes of inequality’ (such as gender, class, and ethnicity, also conceived as social systems) to produce ‘complex inequalities’ at the intersections.

While emergent layers of social reality may in some cases be nested or hierarchical, Elder-Vass prefers to conceive them as “interleaving” – as overlapping in more complex ways. While material entities (such as an atom) can only be part of one higher-level entity at a time, humans do not face such rigid spatial constraints, and may participate in multiple emergent social entities simultaneously (Elder-Vass, 2012: 88). Where authors such as Wagner conceive “distinct ontological levels, based on the principle of composition” (by which the entities of the lower level compose the higher level), Elder-Vass (2012: 89) argues that “the intentional nature of the relations that produces social entities from human parts permits a kind of branching of the compositional structure that is not possible for most ordinary physical structures of composition.”¹²⁷

¹²⁶ “The state, for example, is a ‘subsystem’ of the international one, and operates within its environment.” (Wagner, 2016: 87-88).

¹²⁷ Elder-Vass (2012: 89) continues: “Nevertheless, this inter-influencing happens through a process in which each structure exerts a downward causal influence on a lower level which is also the lower level of the other structures affected. The intra-level influence thus appears to operate through downward influences on the

Instead of a higher-level social entity (such as the state) acting upon a lower level social entity (a community) that then acts upon a person, Elder-Vass proposes that the individual person is affected by the downward causation of multiple social entities at multiple scales at the same time, and must choose how to navigate and prioritize these various demands. His approach resonates with Walby's (2009) depiction of complex intersectional inequalities, as summarized above. Similarly, Arthur et al. (2014: 94) contend that the "level" structure of entities and their associated action processes is not strictly hierarchical, in that the component entities may be part of more than one higher-level entity, and entities at multiple levels of organization may interact" (see also: DeLanda, 2006: 10).

Alongside causality and layering, *thermodynamics* represent a third essential feature of emergent phenomena. At a glance, the second law of thermodynamics – the universe's natural tendency toward increasing entropy – would seem to rule out such complex emergent entities as humans, civilizations, and ecosystems. But as Erwin Schrödinger (1944; see also: Gell-Mann, 1997: 18) first pointed out, pockets of complex structure actually increase overall entropy production by more rapidly and efficiently dissipating energy gradients (differences in pressure, temperature, and chemical potential). In the right circumstances, an increasing flow of energy through units with the right intrinsic and relational properties creates instability followed by their self-organization into emergent structures that better handle energy throughput.¹²⁸ In this way, complex patterns of order – including life and society – constitute *dissipative structures* (Capra, 1996: 86-89) that

shared lower level. Top-down causation continues to be important, but in a somewhat different way than we generally find in the 'natural' sciences."

¹²⁸ Bénard cells provide a common, basic example of this phenomenon, as explained by chemist and physicist Ilya Prigogine. When a layer of liquid is heated from below, it at first passes randomly up through the molecules of the liquid. If the flow of heat increases past a critical threshold, however, the molecules self-organize into hexagonal convection cells that transfer heat more efficiently through the coherent movement of large numbers of structured molecules (Capra, 1996: 86-89; see also: Capra and Luisi, 2014: 158-163). In a more complex example, ecologists Eric D. Schneider and James J. Kay (1994: 635) assert that ecosystems "develop more complex structures with greater diversity and more hierarchical levels... in a way which systematically increases their ability to degrade the incoming solar energy... any adaptive strategy or mechanism which enhances survival is only economical if its net effect is to increase the energy degradation ability of the ecosystem... Biological growth, ecosystem development and evolution represent the development of new dissipative pathways." Similarly, Axel Klieidon (2004) argues that the emergence and evolution of the biosphere on Earth produces a state of 'maximum entropy production' within the bounds of available energy and materials.

require a continuous flow of high quality energy to sustain their structure far from thermodynamic equilibrium (Homer-Dixon, 2006: 54).¹²⁹

Thermodynamics have important implications for social structure. As Joseph Tainter (1988: 91) argues, “Energy flow and sociopolitical organization are opposite sides of an equation... [that] must evolve in harmony.” More specifically, the *quality* of energy resources “fundamentally influences the structure and organization of living systems, including human societies” (Tainter et al., 2003: 2). The ‘quality’ of an energy supply refers to its ‘energy return on investment’ (EROI), the ratio between the amount of useful energy that can be extracted from that source and the amount of energy spent to extract it. High-gain (high EROI) systems “capture large amounts of energy at little cost”; resources are abundant and concentrated, and do not require high levels of organization to capture (as in the illicit drug trade, for example). “Low-gain [low EROI] systems may capture even more energy [than high gain ones], but because they must capture it from more extensive sources, [much greater] organization is required to aggregate resources” (ibid: 4). The administrative demands of tax collection provide a good example.

High quality energy flow is a necessary (but insufficient) condition for emergent phenomena to arise and persist far from thermodynamic equilibrium. The emergent structure – as a condition of its own continued existence – facilitates ongoing access to high quality sources of energy. Many organisms, for example, expend considerable energy to manipulate and modify their environments in ways that aid their metabolism, survival, and reproduction (Capra and Luisi, 2014: 141).

This aspect of thermodynamics resonates with political economy approaches to social organization insofar as money (very roughly) acts as a proxy for energy (as a means with which to do work), and any social organization must accumulate those resources that enable it to persist and access resources in the future. Taxation by the state, for example, must collect sufficient revenues to pay for the administrative network that assesses,

¹²⁹ Some authors (Lawson, 2012: 357; Pratten, 2013: 270) make a distinction between emergent entities that are far from equilibrium and require inputs from their environment to endure, and those at an equilibrium (or in an energy well) that retain their stability so long as they are protected from any environmental disturbances because there is not enough ambient energy to disrupt them (for example, atoms held together in a lattice to form a solid object). The present ontology considers only the former to be emergent in any significant or interesting way, because far from equilibrium systems involve the types of iterative and synchronic causation detailed above, which render them dynamic and able to change themselves.

collects, and aggregates taxes, as well as to maintain the social conditions that enable tax collection to recur, such as public safety, infrastructure, business regulations, and popular assent to fiscal practices. The manner in which an emergent social structure collects its resources represents a key, material-organizational feature of those structures.¹³⁰

An important implication of such thermodynamics is that a decrease in available energy quality over time often compels the system to pursue greater complexity and higher efficiency to capture increasingly scarce, dispersed, and lower quality deposits. In such circumstances, the marginal problem-solving utility of each addition of social complexity begins to decline while the energy required to sustain that complexity grows increasingly costly. As a consequence, the resilience of the emergent social organization recedes, and, without a reinfusion of high-gain energy, it may collapse (Tainter, 1988; 2003).

¹³⁰ Lawrence (2012), for example, argues that Mexican drug trafficking organizations have a systemic advantage over state enforcement agencies because the former are a high-gain system of social organization, whereas the latter are a low-gain one.

Emergent Collective Agents

David Elder-Vass argues that social structure and the effects attributed to it are best understood as *social entities* – groups of people – exerting *emergent causal powers*. Within these entities, people act “both as an individual and as a part of a structure. In such cases the structure acts *through* the person and the person *implements* the structure’s causal power” (Elder-Vass, 2010: 28). People in this way enact a ‘group self’ (Ellemers, 2012).¹³¹ This section first builds upon Anthony Giddens’ (1984) structuration theory as the *mechanism* by which individuals act as collective agents, then elaborates upon Elder-Vass’s (2010: 144-168) analysis of *organizations* as social entities with emergent causal powers.

Structuration theory proposes that structure and agency are not dichotomous opposites but rather that they *constitute one another* through recursive social interactions between reflexive agents and jointly understood social rules. The approach aptly captures the emergence of shared rules, norms, and practices through diffuse and decentralized social contact.

From childhood onward, an individual acquires (through instruction, observation, experimentation, and instinct) a vast repertoire of *social practices* – heuristics (or loose formulas) by which to achieve their intentions when interacting with others and with their environment (by successfully communicating ideas or influencing others’ behaviour in desired ways, for example). People *reflexively monitor* their practices as they identify the nature of a situation, anticipate the expectations and practices of others, select the heuristic that seems most appropriate (or likely to achieve their goals), and evaluate the outcome. They constantly update (and frequently expand) their practices, especially as they encounter new and uncertain situations, experiment with the heuristics to be applied in a given situation, and see their actions yield unintended consequences.

Over repeated social interactions (and interactions with the environment), certain heuristics become *widely shared*, present in the schemata of many individuals. This shared

¹³¹ “The group self is that part of people’s self-view that is based on the groups to which they belong. Rather than implying a loss of self, this indicates a (temporary) transformation of the conception of self from an individual to a group level, at which collective concerns become more important than individual differences... [they] think, feel, and act as group members... When the group self is activated, this connects the group’s actions and achievements to one’s personal experiences and emotions” (Ellemers, 2012: 848-9).

knowledge constitutes a common set of expectations about what social practice is appropriate in a given situation and what responses will result. Each actor knows the appropriate practice, expects others to know the appropriate practice, expects others to know that they know the appropriate practice, and so on. In structuration theory, structure therefore consists primarily of shared practices that manifest in the myriad routines of day-to-day life.¹³² These practices are variously negotiated, contested, interpreted, altered, and confirmed in social interactions from which their shared content emerges. In the complexity terms used above, these 'shared practices' (or social 'rules') corresponds to an agent's schema as a collection of shifting beliefs, rules, and procedures that follow the structuration logic.

To achieve their purposes socially, individuals act by these common practices in anticipation that others will understand them, expect such behaviours, and respond in the anticipated manner. Each time an individual successfully does so, they reaffirm the validity of that practice as a part of the shared knowledge that they and others can apply in the future; when unsuccessful, heuristics may be revised. Social structure thus consists of jointly understood and mutually expected practices upon which individuals draw to enable successful social interaction; whenever they do so, they reproduce and re-entrench those practices as structure. Hence, "the structural properties of social systems are both *medium* and *outcome* of the practices they recursively organize" (Giddens, 1984: 25, emphasis added).¹³³ Decentralized social interactions recurring in self-reflective iterations produce a shared yet shifting body of knowledge that *enables* wide-ranging coordinated action but also *constrains* individual behaviour, following the processes of emergence discussed above.

¹³² Elder-Vass (2010: 122-23) provides a similar account of informal institutions in which "each member of the group that enacts this practice, which I shall call the *norm circle*, holds a normative belief or disposition endorsing the practice. This does not necessarily entail that each member of the group is morally committed to the norm as representing a just standard of behavior; it entails only that they are aware at some level that they are expected to observe it and will face positive consequences when they do so, or negative ones when they do not." Importantly, Elder-Vass emphasizes the causal efficacy of the group – particularly in its ability to enforce the norm – as the key emergent property, not the norms themselves.

¹³³ Lawson (2012: 363) echoes Giddens formulation by arguing that "Collective practices are both condition and consequence of the individual practices they facilitate. Their mode of being is precisely that of being reproduced and/or transformed through the individual practices or activities they facilitate; they are inherently processual."

William H. Sewell, Jr., (1992) provides additional nuances to structuration theory by addressing two recurring critiques of Giddens' formulation: its inability to explain structural change, and the ambiguous role played by resources. Change, Sewell argues, can come about exogenously when life turns out new, uncertain, and unanticipated situations in which individuals must experiment in order to establish appropriate actions, often by attempting to apply a rule pertaining to a different type of situation. But change can also be endogenous to structuration in two ways. First, there are few if any heuristics shared over all of humanity; different people often have differing schemata that produce conflicts and unintended consequences within their interactions, prompting schematic modifications. Even elements within a single person's schema may clash in practice, prompting him or her to adjust their practices accordingly. Second, individuals are often very conscious of the rules they and others follow, and can deliberately (through persuasion, coercion, or inducement) attempt to change the rules and the outcomes they generate.

Conscious attempts to alter schemata draw upon *resources*, which in Giddens' account encompass anything that can serve as a source of power in social relations and enable one person to alter (or maintain) the rules followed by others in advantageous ways. Sewell (1992: 9, emphasis added) refines this broad and ambiguous conception into two types of resources:

Nonhuman resources are objects, animate or inanimate, naturally occurring or manufactured, that can be used to enhance or maintain power; *human resources* are physical strength, dexterity, knowledge, and emotional commitments that can be used to enhance or maintain power, including knowledge of the means of gaining, retaining, controlling, and propagating either human or nonhuman resources.

Non-human resources add a crucial *material* dimension of structuration to supplement the *virtual* dimension of inter-subjective schemas.¹³⁴ Echoing the discussion of thermodynamics above, Sewell (ibid: 13, 19) posits that "If schemas are to be sustained or reproduced over time... they must be validated by the accumulation of resources that their

¹³⁴ Elder-Vass (2017a, 2017b) similarly stresses the role of non-human material objects within social entities, constituting "socio-technical entities... [with] powers that depend on both human and non-human material parts and the relations between them" (2017a: 99).

enactment engenders... Structures, then, are sets of mutually sustaining schemas and resources that empower and constrain social action and that tend to be reproduced by that social action." Structuration, as an emergent process, requires both ideational coordination and supportive material flows.

Two additional critiques recur in discussions of structuration theory, but can be resolved by revising Giddens' arguments. First, the contention that structure and agency constitute one another can be understood as an instance of the holistic fallacy (discussed in Section I above) if it allows only *internal* relations between the two. But of course, structure and agency are not *only* constituted by one another; each involves both internal and external relations, intrinsic and extrinsic properties.

Second, Giddens treats rules as deeply subjective and voluntaristic in their effects. For example, he asserts that structure "has no existence independent of the knowledge that agents have about what they do in their day-to-day activity" (Giddens, 1984: 26). Rules (and hence social structure) only exist in the moment they are enacted and insofar as an agent is consciously aware of them and chooses to follow them. This implies that they have no *collective* reality *outside* the mind of an individual and his or her *subjective judgment* of what they are. Rules for Giddens "have no existence other than they gain through agential instantiation. Structures then, for Giddens, are properties of agents... and the totality of social being" is reduced "to phenomenological/psychological phenomena" (Wight, 2006: 154, 144).¹³⁵ A more convincing and structural approach would treat shared repertoires of practices as an emergent phenomenon that has an objective existence and (at least somewhat) autonomous causal effects. The section below on 'emergent schematic assemblages' pursues this argument further.

Elder-Vass's discussion of social organizations helps to link the everyday practices highlighted in structuration theory to the emergence of higher-level social forms and collective agency. Like many others, Elder-Vass explicitly distances himself from structuration theory (while acknowledging similarities in his thinking) due to the faults

¹³⁵ Elder-Vass (2010: 138) makes a similar criticism: "Giddens' strategy for reconciling structure and agency, then, seems to allow some sort of causal effect to structure, but at the same time to deny a distinct ontological status for structure by seeing it as 'virtual' except in those moments when it appears as a property of human individuals... It would seem that he reconciles structure and agency, not as the distinct causal powers of inter-related types of entity, but as different aspects of human individuals."

and ambiguities of Giddens' formulation. With the above amendments, however, structuration theory aptly complements Elder-Vass's account of social organizations, as demonstrated below.

Broadly speaking, an organization is a group of people enjoined in the recurrent pursuit of a common purpose by channelling their actions through specialized roles and sustaining "a continuing commitment to the organization as such" (Elder-Vass, 2010: 152). Roles specify the activities, responsibilities, entitlements, and proper relationships (including chains of authority) of organizational members (see also Lawson, 2012: 360-370 on 'collective practices' in organizations). Such rules are often formalized in legal-rational documents (articles of incorporation, contracts, and codes of conduct), and in the directives issued by those in authoritative roles. But just as importantly, organizational members also follow *informal* rules in the routines and practices they acquire through experience (Capra and Luisi, 2014: 316-319).¹³⁶

In the language of the complex adaptive systems literature, the schema of each organizational member includes a mental representation of what the organization *is* (including its purposes and values), *how to act* within it (including its roles and interests), and the relevant *environment(s)* in which the organization performs. Each member's schema involves his or her own fluid understanding of these formal and informal rules, and constitutes the unit-level emergent conjugate (de Haan, 2006: 298).

Individual agents, however, are self-reflexive; they each update and alter their schema by evaluating the results they achieve, experimenting with schematic heuristics, influencing the behaviour of their peers, and actively attempting to change organizational rules (through formal or informal channels). They "perceive the emergent behavior and are able to alter their interactions accordingly, which is in effect equivalent to downward causation" (ibid: 297). Members of organizations (and social systems more broadly) constitute a *reflexive* form of emergence insofar as they can use language to "distinguish 'self' from 'other' and in doing so reflexively distinguish and interact with their environment... [This ability] greatly increas[es] the scope and complexity of the emergent structures which are possible" (Goldspink and Kay, 2007: 48).

¹³⁶ Institutional rules, formal and informal, are generally underpinned by common worldviews (beliefs) and shaped by the capacities provided by technological procedures.

An organization exists, in an objective sense, as a *dynamic equilibrium* set of rules formed by the interaction of each member following their own understanding of these rules – a sort of averaged agglomeration of schemata. Emergence occurs when the interaction of members' schemata produce “coordinated interaction” (Elder-Vass, 2010: 155) that enables the organization to act as a coherent, collective entity and achieve outcomes that none of its members could, individually or jointly, if they were not ordered in this way. Hence “those properties that the individual acquires by occupying their role are essentially properties of the organization localized in the individual... the role incumbents have the effects that they do when acting in these roles only because they are organized into this organization” (ibid: 158). By constraining individuals' behaviour, the rules of their schemata create an emergent social entity with collective causal powers.¹³⁷ Any such organization – whether a business firm, a military formation, a government office, a non-governmental organization, or other – can in this way achieve goals that individual members cannot.

Social entities (such as organizations) are emergent social structures exercising collective agency. The term *entity*, however, should not be misinterpreted to suggest that organizations are reified objects. A social *entity* must be understood as ongoing dynamic processes, “a *relatively stable* actualisation of a feasible emergent organisation or system of underlying processes” (Lawson, 2012: 357).¹³⁸ “Stability or persistence, in this context, means that the processes endure through some significant changes in their environment. Persistence is here seen as a relative quality; it hinges on whether the organised process lasts for a longer time-span than other processes in its surrounding environment” (Pratten, 2013: 268). The various ‘units’ (collective social agents) of world order must therefore be understood as ongoing processes of cohesive organization – as emergent social structures.

¹³⁷ Manuel DeLanda (2006: 38) elaborates on this point: “Thus social assemblages larger than individual persons have an objective existence because they can causally affect the people that are their component parts, limiting them and enabling them, and because they can causally affect other assemblages at their own scale. The fact that in order to exercise their causal capacities, internally as well as externally, these assemblages must use people as a medium of interaction does not compromise their ontological autonomy any more than the fact that people must use some of their bodily parts (their hands or their feet, for example) to interact with the material world compromises their own relative autonomy from their anatomical components.”

¹³⁸ Similarly, Pratten (2013: 267) proposes that “entities are certain kinds of persistent, cohesive process.”

Emergent Relational Structure

The previous subsection argued that collective social agents are made up of internal processes of organization (structuration) that generate emergent causal powers. Interactions with other collective actors are just as formative, but implicate agents' *relational* (external) properties. This subsection focuses on emergent *social relations* between agents as a form of social structure composed of differentiated social positions.¹³⁹ If these interrelations are so dense that social agents act as a coherent whole, then this account of social relations simply elaborates upon the above discussion of actor emergence.¹⁴⁰ But when multiple agents retain some autonomy and separation, then social relations emerge *between* collective social actors, establishing a relational social structure that is irreducible to the agents themselves

The political economy literature generally understands social relations (and social structure more broadly) as a configuration of *incentives*, the costs and benefits actors perceive of possible actions given their relational positions and unequal resources. These incentives derive not from any particular actor but from joint actions that respond to and recreate them. Political economy, however, depends upon a rational choice framework; tends to take for granted (treat exogenously) actors' identities, interests, and capacities; and emphasizes the reproduction of social structures. Constructivism, in contrast, suggests that social relations *constitute* identities and interests, involve values and roles, and may thereby allow greater potential for transformation and change.

The discussion of emergent social relations below combines these elements of political economy and constructivism to argue that social relations involve an incentive structure, embedded in a structure of shared meaning, to which actors respond based on rational self-interest, logics of appropriateness, and/or in pursuit of their values. In the

¹³⁹ As Lawson (2012: 368) defines it, "a *social relation* is just (or is first and foremost) an accepted set of rights and obligations holding between, and connecting, two or more positions or occupants of positions. Social interaction can be understood as the contingent actualisations of such social relations." The spatial analogy, discussed above, is most relevant, useful, and recurrent in such conceptions of social structure as actors' relative positions.

¹⁴⁰ This is to say that collective social actors (such as a state) are constituted by the relational properties of collective social actors at a smaller scale (such as sub-state classes, civil society organizations, and identity groups), though bound firmly enough to maintain the higher level collective social actor (the state) as a coherent whole (or unit).

process, social agents constitute, reproduce, and (sometimes) transform each other's identities, interests, and capacities. This process of mutual constitution is an emergent social structure maintained by self-reinforcing patterns of interaction. This is "a conception in which the causal powers of human beings qua social beings are the positional powers and properties of emergent social systems or set of organisations-in-process, organisations in which the human individuals are socially situated, and through which they are themselves continually formed and transformed" (Lawson, 2012: 375). Persistent inequality between actors in their access to decision-making, wealth, and/or status is a significant emergent property of social relations.

Joshua Cohen and Joel Rogers (1983) provide a helpful example of self-reproducing social relations in their explanation of the persistence – and popular consent to – the vast inequalities of American society. Its basic system structure of *capitalist democracy*, they argue, privileges the interests of the capital class because its private investments are essential to the production that generates worker wages and taxes for public spending. The relatively small capital class also enjoys greater access to political decision-making due to its immense capacities for coordinated lobbying. The much more populous and diverse working class, in contrast, faces a major collective action problem, wields limited resources, and suffers chronic economic uncertainty (on this point, see also: Olson, 1982).

In these circumstances, the working class finds greater incentive to pursue particularistic, short-term material gains, rather than long-term structural transformations that could jeopardize current well being, and whose outcome is deeply uncertain. Workers thus use their political rights to (try to) improve their material circumstances, but only to an extent that does not jeopardize the profitability that ensures continued private investment by capitalists. This tacit bargain represents a dynamic equilibrium that satisfies, to a better extent than conceivable alternatives, the interests of both classes. Attempts to deviate incur costs that act as negative feedbacks to restore the equilibrium. Excessive demands by the working class may prompt a withdrawal of capital and consequent loss of employment, while excessive exploitation of labour may provoke political backlash against the capital class (though the capital class retains the upper hand in any such negotiations).

By responding to incentives such as these, actors reproduce their own identities, interests, and capacities, as well as their relative positions. These social relations "take

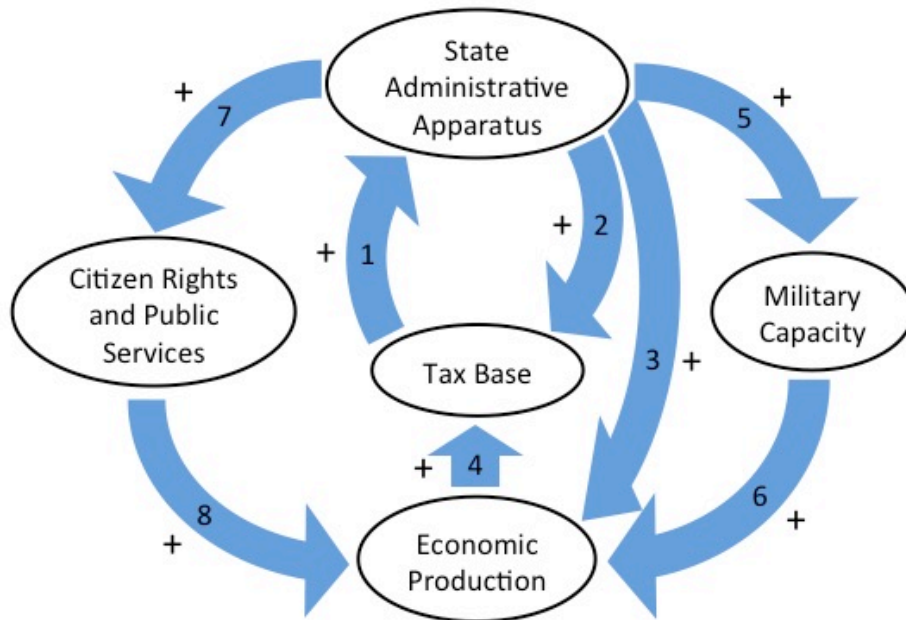
many different people with diverse motivations and effectively bend them to engage in certain shared patterns of consensual behaviour with which they will at least partly identify and which they find at least in some measure rewarding” (Cohen and Rogers, 1983: 71). Thus “capitalist democracy is in some measure capable of satisfying the interests encouraged by capitalist democracy itself, namely, interests in short-term material gain” (ibid: 51-2). Structural change can only occur when the system’s foundational conditions of material accumulation fail, though such circumstances offer no guarantee of transformation.¹⁴¹

Where accounts such as Cohen and Rogers’ emphasize the *reproduction* of social relations through negative feedbacks, the explanation of European state formation discussed in Chapter One exemplifies *transformative* social relations driven by positive feedbacks.¹⁴² The transformation of a feudal Europe hosting diverse political units and overlapping forms of authority into a system of national states was not planned or intended; the national state emerged as shifting conditions (particularly military and economic competition) stimulated changes in social relations and, consequently, to the identities, interests, and capacities of the actors relating. The diagram below (in a very simplified and stylized way) depicts the positive feedbacks underpinning the transformation. Each arrow implies that changes in one area of activity (and to the actors engaged in it) stimulated growth and alteration in another sector, together generating cycles of positive feedback.

¹⁴¹ Writing in 1983, Cohen and Rogers proposed that the key domestic and international accords of the American system were eroding, yet the structure they describe persists three decades later and has survived global financial crises and a worldwide protest movement (Occupy Wall Street). The Trump presidency, however, may yet shatter these underlying accords irreparably.

¹⁴² Indeed, one of the shortcomings of many political economy accounts is their tendency to explain the reproduction of actors (such as classes or states), but not their origins. The account of state formation provided by Tilly (1985; 1990), Spruyt (1994), and other historical sociologists address this gap.

Figure 11: Positive Feedbacks Driving European State Formation



- 1) The efficient extraction of taxes from society requires bureaucracy and administration.
- 2) Tax revenues help to expand, rationalize, and professionalize the state's administrative bureaucracy, enabling it to tax more efficiently and effectively. A class of meritocratic civil servants replaces the notables who were once allowed collected taxes as a personalistic favour of the ruler.
- 3) The rationalized bureaucracy of the state gains an active interest in economic production, and increasingly provides laws, administration, and enforcement measures favourable to growth and technological progress.
- 4) Economic growth increases the tax base, providing revenue to further expand state capacities.
- 5) Government revenues support a growing military capacity, the need for which provides a key incentive to further increase tax revenues.
- 6) Improving military capacity protects economic activity from predation, and creates a state monopoly of taxation and of (legitimate) violence. A professional military

replaces the mercenaries of the past to better defend national borders and assert expeditionary force, while a specialized police force (backed by judicial institutions) develops to provide internal security, maintain law and order, and thus enable economic growth (which generates the taxes that pay military and police salaries).

- 7) Administrators and legislatures face demands for rights and services from various segments of society, who increasingly identify as *national citizens* bearing certain responsibilities and entitlements.
- 8) The state develops an increasing interest in the quality of its population, and has incentives to provide rights and services (particularly education, health care, and dispute resolution) that enable citizens to better contribute to economic growth. With the onset of the industrial revolution, peasants became workers, thereby developing a new identity with distinctive interests and capacities.

These self-reinforcing positive feedbacks propelled a major institutional transformation by reconstituting the identities, interests, and capacities of different segments of the population, while simultaneously reconfiguring their relationships and altering worldviews, institutions, and technologies. The process eventually reached an equilibrium in modern national statehood, checked by the military power and economic competition of rival states. Continued economic growth, however, remains a crucial feature (and perhaps a core requirement) of modern statehood.

In both the political economy and state formation examples presented above, the incentives and unequal positions of actors arise largely from a set of institutional rules (in the context of particular worldviews and technologies) that are themselves causally efficacious (Wight, 2006: 152). Cohen and Rogers' definition of 'capitalist democracy' thus involves several sets of rules: "private property, labor markets, and private control of investment decisions on the one hand, and such formal organizations of political expression as political parties and regular elections on the other" (1983: 49). And European state formation depended significantly on rationalized (secular) legal and bureaucratic rule making, alongside changing beliefs and growing technological capacities. The next subsection thus focuses on emergent assemblages of beliefs, rules, and

procedures that form the worldviews, institutions, and technologies that constitute key social entities and a third type of emergent social structure.

Emergent Schematic Assemblages

Section III above argued that beliefs, rules, and procedures are foundational to social ontology. This section builds further upon Giddens' structuration theory to argue that these basic schematic elements combine to form emergent assemblages (worldviews, institutions, and technologies, respectively) that have endogenous dynamics of persistence and change, and which exercise causal power within world order as *emergent social entities in themselves*.

More specifically, schematic assemblages generate *positive network externalities*: their value to each individual who uses them increases with each additional user because the collection thereby enables coordination and cooperation with a larger number of people. These benefits stem neither from the particular contents of the beliefs, rules, and procedures rules nor the merits of those contents, but rather from the number of agents who use them, and thus the possibilities for social interconnection that a schematic assemblage thereby creates.¹⁴³

The content of existing worldviews, institutions, and technologies does, however, create *combinatorial constraints* that limit which beliefs, rules, and procedures can be added and the ways in which elements can be rearranged while remaining coherent. In complexity language, existing beliefs, rules, and procedures create an *adjacent possible* – a limited set of future possible arrangements that can be readily reached from the existing one. While exogenous shocks provide one source of change, this section argues that worldviews, institutions, and technologies each have their own *endogenous sources of stability and change* and can indeed *change themselves* over time following their own internal logics. Key among them are processes of *self-organization* in which decentralized interactions produce collective coordination in schematic assemblages in ways that are not (or mostly not) planned and controlled. Together, combinatorial constraints and

¹⁴³ David Singh Grewal (2008) refers to this dynamic as *network power*. He argues that all networks (economic, technological, informational, political, etc.) require a particular *standard of interaction* (set of rules and protocols) in order to enable interconnection. Any such standard has an *intrinsic* quality – the merits of its particular framework of coordination – and an *extrinsic* quality – the number and importance of the users to whom it grants access. A sphere of activity may feature multiple standards, each connecting its own network, but often one standard will prevail over others based on its extrinsic qualities (not because it is the best standard, but because it connects the most – or most important – users).

endogenous developmental dynamics produce *path dependencies* in each schematic assemblage. Table 9 below summarizes these various arguments.

Table 9: Characteristics of Worldviews, Institutions, and Technologies

	Worldviews	Institutions	Technologies
Definition	Fundamental beliefs about the nature of existence	Jointly understood rules of appropriate social interaction	Transformations of matter, energy, and information to fulfill a purpose
Schematic Elements	-Beliefs about how the world is (lay ontology) -Beliefs about the way the world should be (ideology) -Beliefs about one's place in the world (identity)	-Constitutive rules -Regulatory rules -Organizational roles	-Procedures of phenomenon capture (of energetic and material effects)
Functions	-Stave off existential terror (provide ontological security) -Enable group trust, cooperation, and altruism	-Enable high degrees of coordination and cooperation -Expand individual and collective agency	-Enable humans to manipulate physical reality to their purposes
Emergent Schematic Assemblages	-Collective identities -Ideologies	-Organizations with collective agency -Regimes of broadly shared rules, norms, and ways of doing thing	-Technological domains
Network Externalities (Lock-In Effects)	-Reassurance of group consensus	-Increasing returns to usage -Increasing costs of switching	-Increasing returns to usage -Increasing costs of switching
Combinatorial Constraints (The Adjacent Possible)	-New beliefs must be emotionally and conceptually coherent with existing schemata	-New rules must be consistent with (not contradict) existing rules	-The order in which phenomena are captured and combined
Endogenous Sources of Development and Self-Organization	-Homophily creates intra-group convergence and inter-group divergence of worldviews -Co-adaptation of contending collective identities defined in opposition to one another	-Expanding niche creation -Self-undermining processes (declining marginal returns to social complexity; erosion of parameters; adaptive lag) -Darwinian selection of institutional forms -Evolution of particular rules or policies (experimentation, emulation, learning)	-Niche creation (combinatorial evolution) -Structural deepening

Worldviews

The shared beliefs that make up a worldview create ideologies and identities as emergent schematic assemblages – social entities – that follow the logic of structuration. Ideologies and identities exist in the minds of individuals as a “cognitive construct” of what that identity or ideology is (Milkoreit and Mock, 2014: 169). The construct is a network of concepts and associated emotions that defines an individual’s personal understanding of the identity or ideology. It draws upon authoritative statements (such as key tracts and the pronouncements of prominent representatives) and interactions with others who identify with the identity/ideology. In social exchange, the cognitive constructs of other adherents influence the social construct of a group member, while that member’s cognitive construct also shapes those of others.¹⁴⁴ The emergent identity or ideology is an aggregation (some sort of average or loose, shifting consensus) of individual cognitive constructs. In this way, identities and ideologies are “the emergent properties of interaction between networks of mental representations at the individual level and networks of social communication at the group level” (Homer-Dixon et al., 2013: 343).¹⁴⁵

As argued above, identities and ideologies sustain peoples’ basic ontological security, and this function helps explain the durability of core beliefs. The *shared* character of worldviews augments the safety they provide by generating a crucial network externality: the more people who share a worldview, the more reassurance each feels about its truth and validity, and thus the greater security it offers. McGregor et al., (1998: 591) assert that

¹⁴⁴ “Individuals acquire and change group-related beliefs through interactions with other people and with other elements of the group, for instance, certain spaces and office buildings, the use of collective resources and property, or the experience of events. This process of social communication and physical-sensory interaction works both ways: a group member not only receives information about the group and develops an understanding of the group as a collective entity, she also contributes to other people’s mental representations and experiences of the group” (Milkoreit and Mock, 2014: 168).

¹⁴⁵ More specifically, “If we construe ideologies as complex systems, we have (at least) two levels of systems embedded in each other. At the individual level, the elements are ideas, beliefs, and values, whose interactions give rise to a person’s understanding of society, which in turn guides individual political behavior. At the group level, the elements are individual minds whose interactions give rise to discourses and power dynamics, which in turn guide collective action and societal change. We thus conceive of an ideological system as a network of minds, where minds are networks of concepts” (Homer-Dixon et al., 2013: 343).

Although treated by the individual as absolute reality, the cultural worldview is a fragile social construction in need of constant validation from others. Consequently, the existence of others who share one's worldview bolsters faith in that world view, thus increasing its effectiveness as an anxiety buffer, and the existence of others who do not share one's worldview threatens one's faith in it, thus reducing its effectiveness as an anxiety buffer.

While the most fundamental beliefs in shared worldviews are resistant to change, others are more flexible, yet face combinatorial constraints. To provide ontological security and an effective guide to action, shared worldviews must maintain a certain level of emotional and conceptual coherence (Thagard, 2006). Changes and additions to the rules must be (to some extent) compatible with existing beliefs, especially the most fundamental ones, and people will adjust their worldviews to maintain such consistency. In this way "the existing ideological structure of a person's mind creates a path dependency for configurations of ideological content that are possible in the future" (Homer-Dixon et al., 2013: 351).

At the social level, collective identities have dynamics unique to those functioning at the individual level, though rooted in people's need for cognitive-affective coherence. Through the mechanism of *homophily*, individuals

tend to organize themselves in groups of people so that the similarity of people within groups and their dissimilarity across groups are maximized... hence, as individuals who belong to the same subgroup of society and feel attached to each other communicate about political issues, they will tend to mutually adapt their cognitive-affective belief systems [to each other]. Individuals whose views are too discrepant from the predominant views of the group will be motivated to split from the group and rather affiliate with other people who think and feel more like themselves, to avoid the psychological tensions brought about by social interactions that disconfirm one's own identity (Homer-Dixon et al., 2013: 352).

Individuals often "tune" their beliefs to those with whom they share important relationships and "anti-tune" their views from relations that could threaten their worldview (Jost et al., 2008: 173). As a result, homophily produces twin dynamics of intra-

group convergence and inter-group divergence of worldviews.¹⁴⁶ Shared ideational systems tend to form segregated clusters. These arrangements foster the aforementioned network externality *within* groups while avoiding the potential challenge posed by alternative worldviews *between* groups.

The convergence of worldviews within groups stems, in part, from the readiness of members to “endorse and enforce” the rules of identity and ideology, similar to the emergent causal power that Elder-Vass (2010: 115-43) attributes to ‘norm-circles’ (groups of people who jointly recognize a norm or set of norms).¹⁴⁷ In his account, it is this commitment

that makes a norm circle more effective than the sum of its members would be if they were not part of it. The members of a norm circle are aware that its other members share that commitment, they may feel an obligation to them to endorse and enforce the norm concerned and they have an expectation that the others will support them when they do so. In other words, the members of a norm circle share a *collective intention* to support the norm, and as a result they each tend to support it more actively than they would if they did not share that collective intention (ibid: 123).

The emergent causal power of the group thereby fosters “the tendency to increase conformity by its members to the norm” (ibid: 134).

The divergence of worldviews involves a co-adaptive dynamic between them. A group’s identity often specifies both who its members are, and who they *are not*. One group’s identity includes its contrast and opposition to other identities. The virtues of an in-group are often celebrated by projecting its negative characteristics – the Jungian shadow – upon an enemy other (Keen, 1986). In the extreme, the most intractable identity-based conflicts involve a “negative interdependence” between identities in which the assertion of one identity is tied to the negation of the other in a zero-sum struggle for validity wherein each perceives the existence of the other as an existential (Kelman, 1999;

¹⁴⁶ “The recent division of the American public sphere into two echo chambers, each deaf to the other’s arguments, is a perfect illustration” of homophily in networks (Ferguson, 2017: 71). The degree of convergence and divergence, of course, shift over time, and in this respect may be considered important variables of social systems.

¹⁴⁷ Elder-Vass’s account of norm-circles is intended to explain informal social institutions (norms), but also explains the diffuse maintenance of social identities, thus revealing a significant (and unavoidable) overlap between worldviews and institutions (particularly informal ones).

Ignatieff, 1998: 34-71).¹⁴⁸ As a result, collective identities may adapt to one another, as an in-group adjusts its worldview in response to new statements and actions of an out-group, which may then provoke reactionary changes in the self-definition of the out-group.

Definition of the self adjusts to shifting perceptions of the other.

Through homophily and co-adaptation, the development and change of worldviews involve multidirectional feedbacks between constituent beliefs and social structure.

“Networks of social communication are required to create the cognitive construct of the group in the minds of members individuals; yet those networks are themselves generated and formed by the presence and content of the cognitive construct” (Milkoreit and Mock, 2014: 169). But ultimately, less is known about the dynamics of ideological change than about technological change and – especially – the development of institutions.

Institutions

Sets of institutional rules bind individuals into emergent social actors with collective agency (as explained above). They also generate broad regimes that facilitate interactions between social agents by provided jointly acknowledged norms of behaviour. As a standardized mode of conduct, a set of rules (such as the trade rules of the World Trade Organization) becomes more valuable to each of its users as the total number of users grows. The rules create greater possibilities for transaction even if their particulars are, for many, less desirable than other conceivable rule sets. Increasing returns to usage thus represent a form of positive feedback and a network externality that helps explain long periods of institutional stability and resilience (Pierson, 2004). The counterpart positive feedback is the *increasing cost of switching* to alternative institutional arrangements, which mounts over time.

Pierson (2004: 24-27) and North (1990: 95) explain these rising costs by applying to institutions W. Brian Arthur’s (1989) four mechanisms of technological ‘lock-in’: the large *fixed costs* of creating a new institution; the *learning effects* that accumulate as actors

¹⁴⁸ “In the Israeli-Palestinian conflict, as in other existential conflicts between identity groups, each group is to a considerable degree defined and shaped by the conflict. Its relationship to the conflict is a central part of the group’s self-definition and worldview” (Kelman, 1999: 592-3).

master a particular framework; the *coordination effects* that derive from complementarity with other institutions; and the *adaptive expectations* generated when an institution produces particular certainties. The costs of switching also grow when institutional rules help expand the resource inequalities that underpin their origins – those who benefit most can increasingly guard institutions from change. Finally, the human psychological disposition towards rule following endows institutional rules with “often transcendental meaning and value” (Fukuyama, 2011: 7).¹⁴⁹ These factors bolster people’s commitment to existing institutions with disincentives to shift to alternatives, thereby reflecting and maintaining the network externality.

These two types of positive feedback, when they operate, ensure that institutional change is incremental and restricted by initial conditions. This gradualism and path dependency arise from a key combinatorial constraint by which the nature of institutional rules (and especially *formal* institutional rules) shapes their own development: their inherent aspirations for *consistency*. Institutional rules aspire to bring regularity to a diverse multitude of human relationships. They make a society “legible” by codifying and enforcing standards of practice, by necessarily simplifying wide-ranging and complicated activities into discursively articulable rules (Scott, 1998). To function, such rules must retain a high degree of rational coherence – they cannot contradict one another. Accordingly, Lon Fuller’s (1969) eight internal virtues of law include clarity, knowability, and non-contradiction.¹⁵⁰

The endogenous requirement of rational consistency prompts the expansion and refinement of institutional rules to eliminate contradictions, ambiguities, voids, and all other sources of possible confusion.¹⁵¹ Such concerns become especially apparent when different institutional realms encounter and interact with one another (Thelen, 1999: 383). As rules are added and refined amid such situations, they create further possibilities of interaction, contradiction, and confusion that then require more rules and revisions. The

¹⁴⁹ While the liberally minded understand rules as instrumental, mutable human conventions, others invest them with moral and even cosmological value as the inviolable glue that binds a society together against forces of chaos and evil (Haidt, 2012: 3-31).

¹⁵⁰ Fuller proposes that these are *moral* virtues of the law, but his positivist critics view them instead as virtues of *efficacy*.

¹⁵¹ The process is similar to the notions that “the law works itself pure” and has “its own ambitions” (Dworkin, 1985), although such statements may mislead by implying that the rules themselves have agency.

result is a self-expanding dynamic of *niche creation* in which filling one niche generates additional niches to be filled (Arthur, 1993: 2-5).

The rich scholarly literature on institutions identifies additional endogenous dynamics of their development and change that stem from the basic nature of these rules. Some authors focus on *gradual* institutional change, arguing “that institutional change is overwhelmingly incremental” (North, 1990: 89). The increasing returns to use and increasing costs of switching identified by Pierson (and explained above) help account for such slow and path dependent change. Other authors, however, propose that “incremental shifts often add up to fundamental transformations” (Mahoney and Thelen, 2009: 2).

Many analysts focus instead on patterns of *discontinuous* change in which long periods of equilibrium are interrupted by *critical junctures*. The latter are moments of openness and contingency in which multiple futures are possible. Once a course is set, however, it becomes locked in by positive feedbacks that produce gradual and path dependent change (Pierson, 2004). Such *punctuated equilibrium* accounts suggest complex systemic dynamics of institutional change in which “Institutions take on a life of their own and become genuinely independent causal forces in shaping further institutional development” (ibid: 131). Accounts such as Pierson’s, however, fail to explain how these positive feedbacks cease to operate so that institutions decay and a new critical juncture opens up.¹⁵²

While exogenous shocks can produce such ruptures, institutions can also experience self-undermining processes that are endogenous to their development. Joseph Tainter (1988) argues that the expansion of ‘social complexity’ eventually faces diminishing marginal returns, becoming increasingly costly while providing less and less problem-solving utility. Institutions become increasingly rigid, brittle, and overwhelmed so that an exogenous shock that would have been easily managed earlier in their lifespans can trigger their collapse.

Similarly, Grief and Laitin (2004: 639) propose that “An institution, by reinforcing or undermining itself, indirectly influences its rate of change by defining the size of an

¹⁵² On this issue, Pierson (2004: 164-5) merely posits that “Developments unfavorable to institutional reproduction must reach a critical threshold level that makes reform possible” by reducing the costs of change.

external change in parameters required to render behaviour associated with it to cease being self-enforcing.” These authors argue that a self-enforcing institutional equilibrium can undermine itself by changing the boundary conditions (such as the identities, capacities, wealth, and beliefs of actors) upon which it is based.¹⁵³ Institutions collapse suddenly when actors habituated to existing rules eventually appreciate the change in conditions. Institutions also tend to change more slowly than social conditions, producing an *adaptive lag*. As Fukuyama (2011: 16-17) explains, institutions “created to meet one set of conditions often survive even when those conditions change or disappear, and the failure to adapt properly entails political decay”.

Institutions also experience evolutionary dynamics that generate aggregate patterns of change and self-organization. When whole institutional organizations (such as the state) are understood as the unit of selection, periods of significant variation and competition are rare, but do exist. As described in Chapter One, Tilly (1985; 1990) and Spruyt (1994) examine such processes to explain why the multitude of unit types that marked Europe’s first millennium AD converged into a small handful of national states by the end of its second millennium.

More often, particular rules (or sets of rules bundled as policies) are the unit of selection in institutional evolution. Organizations monitor the strategies, models, and policies pursued by others and often emulate those rules that appear desirable (such as harm reduction programs in place of a ‘war on drugs’, or the application of Results Based Management to project development in government, the private sector, and civil society). The variety of rules is a key part of the selective environment insofar as the success of any one policy depends on its interactions with alternative policies employed by other actors. The resultant evolution is a collective learning process, often subject to increasing returns of usage, and perhaps favouring convergence upon a particular set of rules in a given area.

In these ways, institutions steer their own development; agency, however, remains indispensable, particularly to establish rules, interpret them, enact them in practice, enforce

¹⁵³ Grief and Laitin refer to such boundary conditions as ‘quasi-parameters’ because in the short term of individual transactions they are treated as exogenous (taken for granted) while over the long-term they change endogenously. Jack Knight (1992: 145) similarly argues that institutional change arises from “changes in the distributional consequences of the rules or the relative bargaining power of the actors”, which may be endogenous to institutional dynamics (as suggested by Grief and Laitin) or derive from exogenous causes.

them, and change them. Institutions have distributional consequences that allocate benefits unequally. They are, accordingly, highly contested by various actors pursuing different interests and goals, wielding uneven resources. Jack Knight (1992) thus argues that the rules reflect the balance of power in society more broadly (see also: Mahoney and Thelen, 2009).

The increasing switching costs described above are not automatic. Those who benefit most from existing arrangements actively maintain them (Mahoney and Thelen, 2009: 9). But rules may yet emerge as unintended outcomes of such strategic interactions, especially when they involve a multitude of actors negotiating a wide range of issues (ibid: 22-23; Pierson, 2004: 115-19). And the endogenous processes explained above can foil the intentions of institutional designers. Finally, while Knight argues that powerful actors strategically shape institutions, Pierson (2004: 131) argues that institutions *create powerful actors* by aiding (selecting for) those individuals and organizations best adapted to the rules.

Technologies

The individual technologies of an era do not develop in isolation from each other; they form, in aggregate, an emergent entity known as a *technological domain*. A domain is a whole body of technology (such as electrification, railroads, and information technology) that shares a common theory and draws upon common components, practices, knowledge, combinations, and ways of thinking (Arthur, 2009: 70). Arthur (ibid: 145) argues that:

domains are more than the sum of their individual technologies. They are coherent wholes, families of devices, methods, and practices, whose coming into being and development have a character that differs from that of individual technologies. They are not invented; they emerge, crystallizing around a set of phenomena or a novel enabling technology, and building organically from these. They develop not on a time scale measured in years, but on one measured in decades—the digital domain emerged in the 1940s and is still building out. And they are developed not by a single practitioner or a small group of these, but by a wide number of interested parties.

The emergence of a domain also represents a mutual accommodation between the new technology and the social institutions of the economy. Existing enterprises tend to select some aspects of the new technology, change certain aspects of themselves to exploit it, and create incentives for the technology to develop in some directions rather than others (ibid: 155).¹⁵⁴ In this way, the economy experiences considerable path dependence alongside waves of Schumpeterian ‘creative destruction’ as emerging domains displace old ways of doing things (ibid: 155-6).

Although a wide variety of technologies could fulfill any given function, some enjoy increasing returns to usage and increasing costs of switching (explained above in their application to institutions) so that only a small fraction of the designs that presently could achieve human ends are actually used. The reduction produces a network externality by allowing a greater number of people to connect and coordinate using a manageable set of interaction standards.

In W. Brian Arthur’s (2009) account, technology develops and changes through capture, combination, and accumulation. A technology captures a natural phenomenon, new technologies combine such captured phenomena in novel ways, and these combinations can combine with other captured phenomena and even capture additional phenomena. Technology thus develops in “a process of self-creation: new elements (technologies) are constructed from ones that already exist, and these offer themselves as possible building-block elements for the construction of still further elements” (ibid: 167). Each new technology creates a multitude of possibilities for combining with existing technologies, enabling exponential growth.

The combination of technologies to create new technologies, however, involves constraints and path dependence. The order in which technologies are discovered and combined defines the adjacent possibilities into which they can further develop.

A novel technology emerges always from a cumulation of previous components and functionalities already in place... novel technology [is] the

¹⁵⁴ More specifically, the economy “emerges from its technologies. It constantly creates itself out of its technologies and decides which technologies will enter it. Notice the circular causality at work here. Technology creates the structure of the economy, and the economy mediates the creation of novel technology (and therefore its own creation).” (Arthur, 2009: 194).

culmination of a progression of previous devices, inventions, and understandings that led up to the technology in question... if technologies had appeared by chance in a different order, the technologies built from them would have been different. (Arthur, 2009: 124, 170).

Although it does feature periods of variation and selection, technological development is primarily a form of *combinatorial evolution*, not Darwinian evolution. The endogenous dynamic of *niche creation* drives the process. Technology “creates new opportunity niches that call forth fresh combinations which in turn introduce yet further technologies—and further problems [for technology to solve]” (ibid: 199). More specifically, new combinations of technologies create opportunities for further combinations in three ways (ibid: 175-6). First, a new technology creates niches for additional technologies to improve its performance (such as additional sub-assemblies that improve the fuel efficiency of automobiles). Second, new technologies create new human needs that create opportunities for additional developments (such as the software and hardware that enable instantaneous internet communication). Technology and the scope of human need expand together.¹⁵⁵ Finally, technologies generate unanticipated problems (such as climate change) that require novel technological solutions.

Arthur (2014: 7) further argues that the growth of technology through exponential niche creation acts as a source of positive feedback, runaway growth, and non-equilibrium in the economy:

It follows that a novel technology is not just a one-time disruption to equilibrium, it is a permanent ongoing generator and demander of further technologies that themselves generate and demand still further technologies. Notice again the self-reinforcing nature of this process. The result is not occasional disruption but ongoing waves of disruption causing disruptions, acting in parallel across the economy and at all scales within the economy.

¹⁵⁵ There is a circular causality between technological invention and human needs, and an ongoing debate over the primacy of technological supply versus demand. From the supply perspective, an apparent human need drives the discovery of a new technology to fulfill it. Necessity is the mother of invention. In the demand perspective, something is invented (often by curiosity and tinkering) and its applications are conceived later. Jared Diamond (1999: 239-64) is a prominent exponent of the latter view, contending that “inventions in search of a use include most of the major technological breakthroughs of modern times, ranging from the airplane and automobile, through the internal combustion engine and electric lightbulb, to the phonograph and transistor. Thus, invention is often the mother of necessity” (ibid: 242-3). For Diamond, the widespread acceptance of a new invention arises not from its inherent potentials so much as a given society’s perception of some use for it at a given historical juncture.

Technolog[ical] change breeds further change endogenously and continually, and this throws the economy into a permanent state of disruption.

Structural deepening constitutes a second endogenous dynamic in the development of technology, one akin the declining marginal returns on complexity faced by institutions. The complexity of a given technology tends to increase over time “as functions and modifications are added to a system to break through limitations, to handle exceptional circumstances, or to adapt to an environment itself more complex” (Arthur, 1989: 7). Eventually, however, this structural deepening reaches a point at which further complexity yields little improvement. Inventors then attempt to harness an alternative natural phenomenon (or phenomena) to perform the same task, but better. The alternative may breach a series of performance barriers, but eventually its structural deepening will face diminishing marginal returns, and the cycle repeats. The costs of structural deepening are a significant dynamic of technological development, but are even more severe for social institutions.¹⁵⁶

¹⁵⁶ “Structural deepening enables a technology to improve, often considerably. But over time it encrusts the new technology with assemblies and subassemblies needed for superior performance. This may not matter greatly with physical methods and devices. Once development costs have been amortized, the cost may simply be that of materials or space used or weight added. But for other ‘nontechnological’ purposed systems the burden can be considerable. Systems such as military organizations, legal arrangements, university administrations, and word-processing software may also purchase improved performance by adding subsystems and subparts. Think of the steady increase in the complexity of just one legal arrangement, the tax code. But the cost of these ‘improvements’—in the form of complication and bureaucracy—does not amortize. It is ongoing, and such overhead may be difficult to get rid of when circumstances no longer require it” (Arthur, 2009: 137-8).

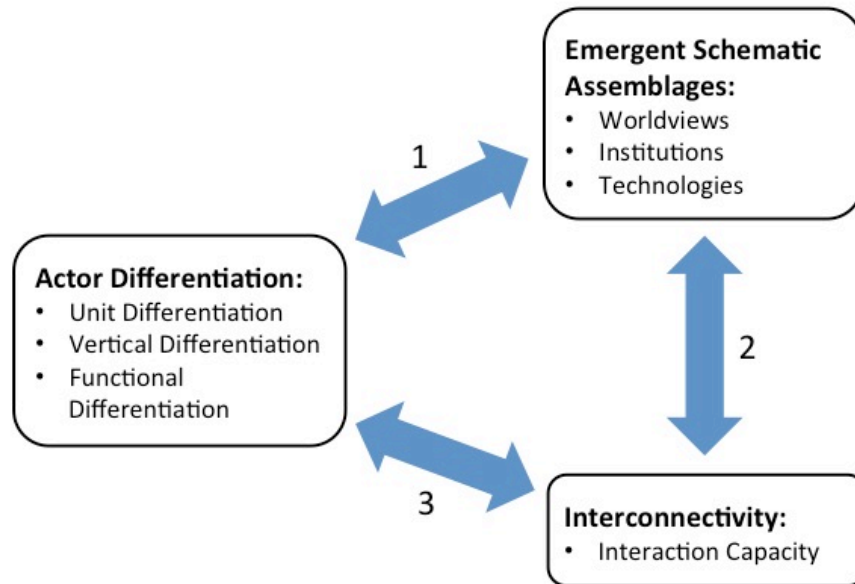
V. The Assembled Complex Systems Ontology of World Order

The previous sections of this chapter connect a variety of ideas to provided the foundations of a systemic social ontology: the nature of systems *as systems* as the source of systemic explanation; complex adaptive systems thinking about agents that act according to mutable schemata under selective pressures; the nature of emergence, particularly as applied in the critical realist sociology of David Elder-Vass; Anthony Giddens' structuration theory (revised and updated) as a crucial mechanism of social emergence; the incentive structures of the political economy literature embedded in the structures of meaning highlighted by the constructivist literature as the source of emergent social relations; and the sustainability literature's understanding of human civilization as worldviews, institutions, and technologies, elaborated with complexity concepts such as self-organization, network externalities, and combinatorial constraint.

This final section applies these ideas to the study of world order. It builds especially upon the work of Jack Donnelly (2012; 2011; 2009) and Barry Buzan (2014; Buzan and Albert, 2010; Buzan and Little, 2000) on the structural features of the various international systems in human history.¹⁵⁷ Following the tripartite understanding of systems presented above, this assembled ontology of world order highlights processes of actor differentiation (elements), interaction capacity (interconnection), and schematic assemblages (emergent properties). Systemic explanation, as demonstrated in Chapter Three, emphasizes the relationships between these key features of world order as a system, as represented in Figure 12.

¹⁵⁷ Donnelly (2012) outlines six core structural aspects of international systems: stratification, functional differentiation, unit differentiation, norms and institutions, geotechnics, and polarity. The framework outlined here elaborates upon the first five categories, subsumes polarity under vertical differentiation (stratification), moves beyond a specifically *international* lens, adds a greater role for ideation (worldviews), and highlights key emergent properties. The contrasts between the present analysis and the work of Buzan and his colleagues are spelled out further below.

Figure 12: The Systems Ontology of World Order



Actor differentiation, interconnectivity, and emergent schematic assemblages are the key components of system structure, but systemic thinking should also highlight the interactions between these elements as they shape the system and its behaviours. The arrows in Figure 12 thus propose:

- 1) The differentiation of social agents draws upon extant worldviews, institutions, and technologies, and in the process agents can reinforce or alter those broader schematic assemblages.
- 2) Worldviews, institutions, and technologies shape the interaction capacity of the system, and that interaction capacity enables novelty and alteration in the emergent schematic assemblages.
- 3) The interaction capacity of the system shapes the differentiation of actors by enabling and constraining their interrelations, while the nature of these actors affects the interaction capacity of world order.

The first subsection below connects the three forms of emergent social structure discussed above to three forms of actor differentiation to explain the structural bases of units and their relations. The second subsection turns to interconnectivity, arguing that increases in interaction capacity can produce phase changes of social structure and cascading forms of crisis driven by runaway positive feedbacks. The third and concluding section ties these arguments back to emergence as the core concept of this ontology.

Actor Differentiation

Donnelly (2009: 73) succinctly delineates three forms of actor differentiation: “‘Who counts’ (unit differentiation) ... how or how much ‘those who count’ count (vertical differentiation) and what ‘those who count’ do (functional differentiation).” This conceptual triad illuminates the nature, relations, and variety of collective social actors in world order.

Unit differentiation refers to the processes and principles upon which different actors define their boundaries and distinguish themselves from each other as (at least somewhat) autonomous social agents. In the terms used above, it refers to those emergent processes that produce a collective social agent with an identity, interests, and capacities that distinguish it from other such actors, with which it can interact. Buzan (2014: 238) similarly refers to *segmentary differentiation* by which the units of a system tend to divide into like kind, but it is also possible that multiple modes of unit differentiation maintain a variety of different kinds of collective actors (Donnelly, 2011: 159). As Donnelly (2011: 158) explains, “different types of units act and interact in systematically different ways, making segmentation or unit differentiation – the definition of the identities of boundaries of groups – structurally central.” Illustrating this point, Ruggie (1986; 1998) traces the transformation from the multiple overlapping forms of segmentation operant in feudal Europe to exclusive territorial sovereignty as the primary principle of unit differentiation in modern Europe.

Unit differentiation pertains not just to states, but to other collective agents of world order as well (including multinational corporations, global civil society groups, intergovernmental organizations, and supragovernmental organizations). Processes of differentiation are part of the system structure of world order insofar as the interactions between collective actors shapes and reshapes the nature of those very actors, through processes such as competition, selection, emulation, and learning. As suggested above, these relational processes of segmentation within world order interact with the more localized and particularistic (‘bottom-up’) organizational structures that are often unique to a given actor.

Vertical differentiation refers to the hierarchical relationships between agents. “Systems become ranked when either formal or informal inequalities establish positions associated with politically significant unequal access to goods, services, opportunities, or protections” (Donnelly, 2009: 59). Buzan (2014: 238-9) refers to vertical differentiation as ‘stratification’, which may implicate inequalities of status and also “in access to basic resources (class)”, whereas Donnelly (2009: 55) proposes that “political rank is primarily a function of authority and (material) coercive capabilities.” World order may be unranked (anarchy), singly ranked (one overarching hierarchy), or multiply ranked (a heterarchy in which different ranking systems apply to different spatial, functional, or relational domains) (ibid: 50-64). These various possible dimensions of vertical differentiation suggest that anarchy and hierarchy are not a simple dichotomy separated by the presence or absence of world government. Instead, the purported ‘anarchy’ of world order hosts myriad relations of hierarchy and authority between different types of actors involved in various realms of activity.

Vertical differentiation is a particularly complex process because it concerns the multifaceted nature of power, the relationship of power to structure, the changing sources of power, and the varying ends it can achieve (Buzan and Lawson, 2015; Naím, 2013). “At [the] most general level, power means the ability to get the outcomes one wants... more specifically, power is the ability to influence the behavior of others to get the outcomes one wants.” (Nye, 2004: 1-2). As Steven Lukes (2005 [1974]) famously argues, power can take on multiple forms or ‘faces’, including: power as the ability to influence *decision-making*; power as the ability to *set the agenda* and thereby determine which issues are and are not subject to decision-making, and the range of options considered to address those that are; and power as the ability to *shape the preferences* (goals and desires) of other actors in ways that procure desirable outcomes (such as willing compliance to domination). In addition to these different forms, power also operates in *multiple spheres* of social life, including military, political, economic, and ideological domains (Mann, 1986).

Inequalities can be just as complex and multifaceted as power (Walby, 2009). Economic inequality can be measured on a common scale, but other forms of inequality

(such as ethnicity, race, nation, gender, and sexuality) involve more profound issues of *difference*. As Sylvia Walby (2009: 21) queries,

when is something a positively valued difference and when is it inequality? This issue lies at the heart of many disputes about what constitutes progress; what to some is a reduction of a negatively valued inequality, to others might constitute a reduction in a positively valued practice. Rather than forcing a choice, it is better to recognize that most social relations contain both inequality and valued differences.

Power is not so central to the present ontology as it is in others (for example: Mann, 1986) because it is largely conceived here in terms of *social structure*, as two sides of the same coin. Broadly, the power of agents can be understood as *intentional causal efficacy*, and the power of structure as *unintended causal efficacy*, with the two forming a spectrum. In the middle lie 'structural capacities' – powers that are "structurally determined: that is, they depend on the position of the actor in question occupies in prevailing social structures" (Callinicos, 2004: xx). In his critique of structuration theory Colin Wight (2006: 152) similarly proposes that:

The important question, however, is who, or what, possesses these [authoritative and allocative] capacities? Clearly, it is not individuals as individuals that possess these capabilities, but rather individuals as socially positioned agents/actors, or incumbents of social positions. In other words, the capability that is derived by authority or allocation is attached to social positions that are relationally defined and governed by rules. They are, in effect, the causal properties of those relationally defined positions and not the causal properties of the individuals who occupy these positions.

In conceptions such as these, power and inequality are dependent variables and the inquiry centres on the uneven ways in which social structure creates and distributes power within a given social order.

Vertical differentiation has historically involved "conquest and empire, hegemony, a privileged position for great powers, and a division of the world into core and periphery, first and third worlds or, before 1945, 'civilized,' 'barbarian,' and 'savage.'" (Buzan, 2014b: 238). The notion of core and periphery in particular originated to distinguish rich industrial northern countries from poor, dependent southern ones (Wallerstein, 2004), but

the geography of this vertical differentiation has changed with the global economy: “The North is generating its own internal South; and the South has formed a thin layer of society that is fully integrated into the economic North. The social core and the social periphery cut across national boundaries” (Cox, 1996: 531). Chapter Three details these long-term developments in the reproduction and evolution of inequality.

Functional differentiation encompasses the distribution of various functions amongst the units of a system. It concerns which functions the main governance actors perform, and which functions distinguish hierarchical rankings. Indeed, vertical differentiation “and functional differentiation... are closely correlated: strong and weak, rich and poor, and privileged and despised actors tend to do different things. And causation runs in both directions” (Donnelly, 2012: 629). In world-systems theory, for example, core states monopolize leading-edge economic sectors to maximize profits, while peripheral states squeeze the profit margins out of older production processes. This division of labour has the net effect of transferring surplus value from periphery to core (Wallerstein, 2004). Similarly, dominant imperialist states and subordinate collaborator states are not simply more and less powerful units of the same kind, but have different functions within an imperial arrangement (Cox, 1996: 106).

The functional differentiation of states also varies in important ways depending on which activities they perform, and which functions are fulfilled by other actors. The functional scope of statehood concerns “the range and depth of state intervention in domestic social and economic affairs” (Ruggie, 1986: 147), which has undoubtedly changed over the past centuries. More recently, Saskia Sassen (2006) argues that wealthy states have over the last few decades *denationalized* by shifting their functions from Keynesian arrangements based upon national integration towards functions meant to enable global markets and facilitate transnational flows of capital and investment. As a corollary, many once public services are now the domain of private actors and civil society.

Similarly, Buzan (2014: 243) asserts that the functional differentiation that developed within modern states is increasingly replicated in global governance with the growth of the global economy, proliferation of communications and transportation infrastructure, expansion of international law, growth of intergovernmental functional

organizations, and the work of global civil society and private sources of authority. He (ibid: 240) ultimately argues that the lens of differentiation

puts into context the debates in IR about the nature and direction of the contemporary international system which seems to contain elements of all three forms, with the dominant segmentary one (territorial states, sovereign equality, anarchy) being questioned by both stratificatory elements (the return of empire, the privileged position of great powers, hegemony, core-periphery) and functional ones (globalization, deterritorialization, a world society of transnational actors, an increasingly autonomous global economy).

The three forms of emergence outlined in Section IV are the key structural mechanisms underpinning the three processes of differentiation. Broadly speaking, unit differentiation involves 'internal' emergent processes that generate collective social agents, while the emergent relational structure between such actors propels their vertical and functional differentiation by shaping their roles, identities, interests, and capacities. In practice, of course, these processes proceed simultaneously and intersect with one another. Schematic assemblages transcend agents, but provide the beliefs, rules, and procedures of which collective social actors are formed – generally in modules or clusters such as identities, ideologies, institutional templates, and technological domains. Collective social agents adopt and adapt such assemblages, and in so doing, reproduce or alter worldviews, institutions, and technologies.

Interconnectivity

The quality and quantity of transplanetary connections are a crucial feature of any world order. Buzan and Lawson (2015: 69; see also: Buzan and Little 2000: 80-84) dub such attributes 'interaction capacity,' defined as "the physical and organizational capability of a system to move ideas, goods, people, money and armed forces across the system."¹⁵⁸ It involves the "speed, range, and carrying capacity of physical systems (e.g. caravans, ships,

¹⁵⁸ The term 'interaction capacity' mirrors Emile Durkheim's conception of 'dynamic density' as – "the quantity, velocity, and diversity of transactions" (quoted in: Ruggie, 1986: 148). Durkheim further proposed that "growth of the volume and dynamic density of societies modifies profoundly the fundamental conditions of collective existence" (ibid).

railways, aircraft) and social systems (norms, rules, and institutions) for transportation and communication”, alongside their associated monetary and environmental costs (Buzan and Little, 2000: 12).¹⁵⁹ In the complexity terms used above, interaction capacity concerns the ability of shared worldviews, institutions, and technologies to overcome the obstacles to communication and transportation created by the biosphere and the sheer diversity of peoples. This subsection explores two ways in which interaction capacity affects system structure: phase shifts in network structures, and runaway positive feedbacks.

As an essential *systemic* source of structural transformation in world order, several authors suggest that increases in the *volume* of interconnection within a system can pass thresholds at which occur *phase changes* (also known as critical transitions)¹⁶⁰ in the organizational forms of units and the structure of their interrelations. Quantitative changes in connectivity produce qualitative changes within and between collective social agents as they seize the opportunities created by increases of interaction capacity. Network thinking elucidates such transformations.¹⁶¹

Buzan and Little (2000: 98), for example, note that the meagre interaction capacity of the classical world relied upon *linear networks* between regions and civilizations. Exchange occurred only through a certain sequence of nodes, such as those of the silk roads carrying goods from China to India to the Middle East and to Europe, in a linear route determined by geography. “Massive increases in interaction capacity”, however, “have

¹⁵⁹ Geoffrey Herrera (2006: 26-27) similarly examines the impact of technological change on the interaction capacity of world order: “Systemic technologies are those that shape the time and space environment of international politics. They address questions such as how quickly can actors reach locations on the globe or each other; how much matter, or how many people, can be moved by what means, at what cost, at what speed, and how far; how viable is the governance of what size political space, by what kind of political entity? Such technologies are systemic, not unit characteristics, even though they may be possessed by individual actors, because they shape the interaction environment in which international actors find themselves. They are irreducible to characteristics of the actors alone.”

¹⁶⁰ “Generally in complex systems, phenomena do not appear until some underlying parameter of the model that depicts the intensity of adjustment or degree of connection passes some point and reaches some critical level. The overall behavior then undergoes a *phase transition*” to, for example, chaotic behaviour or alternative equilibria (Arthur, 2015: 14). See also: Scheffer, 2009.

¹⁶¹ A network is simply a collection of nodes (which may be considered agents or units) and the links between them, representing some form of connection or transfer. All complex systems involve networks, and complex networks often exhibit the collective and emergent behaviours that define complex systems (Barabási, 2009). Simple networks, however, lack such emergent properties. Hence, all complex systems are networks, but not all networks are necessarily complex systems. Importantly, a network perspective focuses upon the position and connection of a node relative to others rather than its intrinsic properties. In this way, it “inverts the neorealist view of international structure as a distribution of capabilities; capabilities in the networked view rely on connections to other members of the network” (Kahler, 2009: 12).

obliterated linear systems from the modern international system” (ibid), replacing them with myriad network forms of much greater interaction capacity.

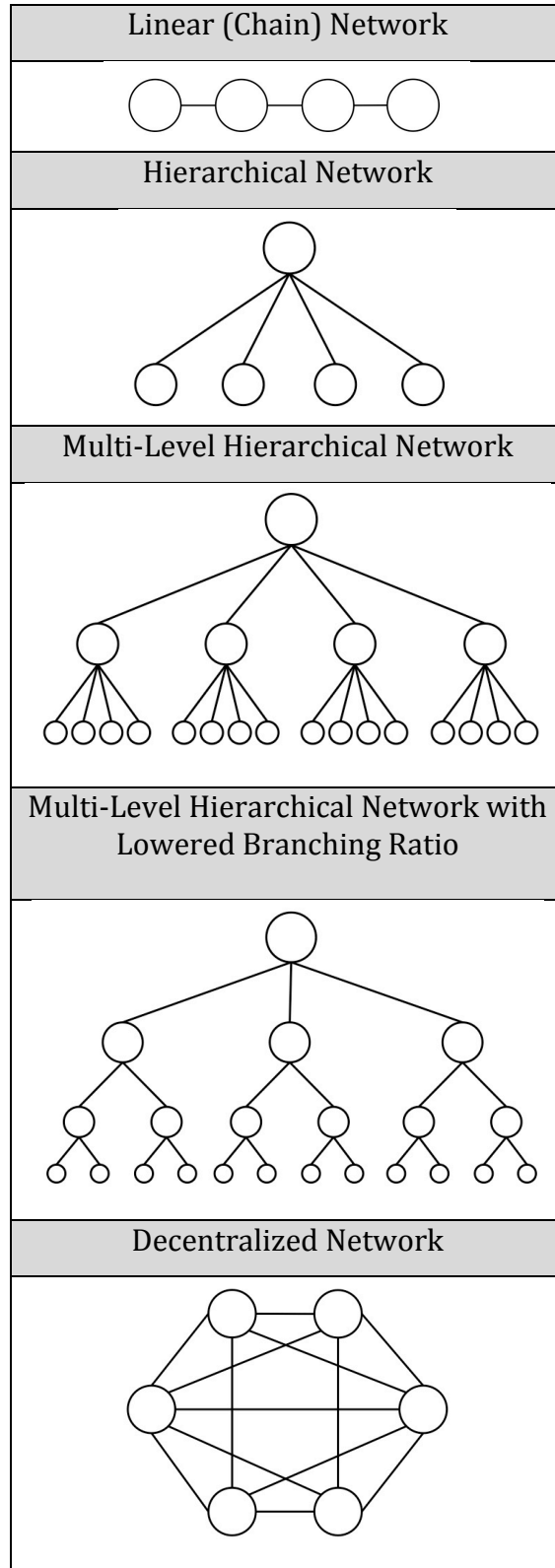
Yaneer Bar-Yam (1997: 782-825) explains more recent transformations of *hierarchical networks* into *decentralized networks*. He argues that the exponential growth of human interconnectivity has over the last few decades overwhelmed the capabilities of traditional hierarchies in many spheres of life, and consequently fostered the growth of decentralized networks with greater interaction capacity (Manuel Castells makes a similar argument; see: 2010a; 2009a).

In a hierarchical network, information, matter and/or energy are transferred from the lower nodes to the top (control) node, which processes these incoming flows and sends outgoing flows back to the lower nodes. In an ideal type, lower nodes do not make exchanges directly amongst each other; they link indirectly through flows to and from the control node at the top.¹⁶²

An increased volume of flow (generally driven by technological advances that increase the capabilities of nodes) may overwhelm the control functions of the top node, but the hierarchical network structure can compensate in two ways. First, it can add layers of nodes (such as middle managers) who process the flows from the nodes below them and pass on only the most important (and often truncated) flows to the top node. The top node sends general instructions down to the management layer, which elaborates upon them before passing them further down. Second, as the operations performed by each node intensify, each management node will connect to fewer nodes below it in order to better focus its control functions and avoid overload (in technical terms, the branching ratio of the network declines). In these ways hierarchical networks can adjust to the challenges and opportunities generated by growing interaction capacity.

¹⁶² Johan Galtung’s (1971) structural theory of imperialism provides an example of hierarchical network structure in its “feudal interaction structure” between central and peripheral nations.

Figure 13: Network Ideal Types



These two strategies, however, can only increase the interaction capacity of a hierarchical network so far. Hierarchy requires that node functions are simple enough that they can be effectively controlled from above, but at a certain threshold, the complex operations performed by nodes outstrip top-down direction. Lateral linkages then replace vertical command and control functions, and the centralized hierarchy morphs into a decentralized network with much greater interaction capacity.¹⁶³ This model spreads to other organizations as they recognize its greater performance potential, especially in competitive settings. And relations between organizations also become networked in a more decentralized manner (for example, production that was once vertically integrated within one corporation may be divided into multiple operations that are each subcontracted to decentralized manner (for example, production that was once vertically integrated within one corporation may be divided into multiple operations that are each subcontracted to external specialists). Figure 12 above illustrates the transition.

In this way, Bar-Yam (1997: 815) establishes “a connection between increasing global interdependence, increasing complexity, and the breakdown of hierarchical control in political and economic systems.”¹⁶⁴ His argument explains “why control structures ranging from communism to corporate hierarchies could not perform the control tasks required of them in current times” (ibid: 813). In these ways, interaction capacity influences the structure of world order by shaping organizational forms and the patterns of relationships between actors. The illicit global economy and transgovernmental networks provide important examples of Bar-Yam’s ‘complexity transition’ within contemporary world order.

¹⁶³ More precisely: “At the complexity transition, it becomes impossible to exercise control so the management effectively becomes divorced from the functional aspects of the system. Lateral interactions that replace the control function must be introduced... As such mechanisms are introduced, layers of management can be removed. Over the course of the transition, the hierarchy exercises control over progressively more limited aspects of the system behavior” (Bar-Yam, 1997: 812). Of course, this transformation from hierarchical networks to decentralized ones is just one (idealized) example of the effects interaction capacity can have upon the organization of units and relations between them. Networks in world order can adopt a multitude of configurations that are much more complicated than the ideal types discussed here.

¹⁶⁴ “The change from hierarchies to networked systems is a specific and dramatic indicator of many changes that are taking place. It suggests that the present changes are more significant than those of the industrial revolution. We will show that these changes are related to an increase in complexity of the collective behavior of human beings and the related emergence of civilization as a complex system.” (Bar-Yam, 1997: 797).

Moisés Naím (2005) argues that the rapid growth of global interconnectivity (facilitated by technological advance and neoliberal economic policies) has propelled a major transformation of organized criminal activity from hierarchical to decentralized network structures:

Since the early 1990s, global illicit trade has embarked on a great mutation. It is the same mutation as that of international terrorist organizations like al-Qaeda or Islamic Jihad—or for that matter, of activists for the global good like the environmental movement of the World Social Forum. All have moved away from fixed hierarchies and toward decentralized networks; away from controlling leaders and toward multiple, loosely linked, dispersed agents and cells; away from rigid lines of control and exchange and toward constantly shifting transactions as opportunities dictate. (ibid: 7).

The hierarchy that featured in Pablo Escobar’s Medellín Cartel or Hollywood mafia movies has become obsolete; decentralized networks enjoy much higher interaction capacity and have used it to expand illicit trade to “a point it had never reached before—in terms of geography, profits, and the share of the world’s population that it touches” (ibid: 219).¹⁶⁵

Organized crime is just one of many contemporary challenges to world order that gain potency from their networked organization and transnational sweep. Issues that were once ‘domestic’ today have cross-border dimensions that cannot be addressed by any one government alone; “Networked threats require a networked response” (Slaughter, 2004: 2). Anne-Marie Slaughter thus argues that governments have begun to transform their own network structures to adapt to new realities.

In traditional hierarchies, the various ministries, departments, and offices of one government would generally relate to their counterparts in another government indirectly through the executive and/or foreign ministry. Today, specific branches of government have increasingly formed ‘transgovernmental networks’ in which they cooperate directly (and often informally) with corresponding sections of other governments and in

¹⁶⁵ Michael Kenney (2007: 25-47) offers an even more detailed treatment of these network transitions.

supranational bodies to address problems that demand concerted action.¹⁶⁶ Such networks, Slaughter (2004: 264) maintains, “are indeed the ‘institutions of globalization’ and far better suited to global governance in an age of globalization and information.” Many cities have created similar networks to cooperate on common urban problems, such as climate change (Betsill and Bulkeley, 2006).

Slaughter highlights transgovernmental networks of police investigators, financial regulators, judges, and legislators. The enforcement networks combating organized crime, terrorism, and similar threats, however, remain largely hierarchical to their own detriment. Their large-scale, multi-level, bureaucratic nature creates rigidities, constraints, and lags that starkly contrast with the decentralized sprightliness of their nemeses (Naím, 2005: 182; Kenney, 2007: 79-133).¹⁶⁷ As Michael Kenney (2007: 216) concludes,

enforcement networks face significant limitations in the degree to which they can decentralize their decision making and quicken information flows... Even the flattest, most fluid enforcement networks still operate within the bounds of law and bureaucratic responsibility; trafficking networks do not. For this reason, enforcement networks will remain taller, more centralized, and less agile than their illicit adversaries, and this is not likely to change.

Increases of interaction capacity can generate phase changes to new equilibria, but heightened interconnectivity can also produce distinctive forms of crises – those driven by runaway positive feedbacks – as a major source of endogenous disruption to world order. As Ian Goldin (2013: 41, 10) remarks: “In the two decades since the fall of the Berlin Wall, fundamental political, economic, and technological changes have led to a step-change in global interconnectivity... [and this] Increased interconnectivity and complexity has engendered a new cascading form of risk.” He argues that contemporary hyper-connectivity generates the crucial challenges of the 21st century, which feature unexpected

¹⁶⁶ Transgovernmental activity was first defined by Keohane and Nye (1974: 43) as “sets of direct interactions among sub-units of different governments that are not controlled or closely guided by the policies of the cabinets or chief executives of those governments” (quoted in Slaughter, 2004: 10).

¹⁶⁷ Naím (2005: 182) outlines two organizational obstacles to better enforcement against organized crime: “One is that bureaucracies tend to be organized in rigid hierarchical fashion, making them less nimble in sharing information and coordinating efforts with others outside their vertical lines of command. The second is their dependence on standard operating procedures... These standards create stability, predictability, transparency, and homogeneity in government operations. But they are also the source of much rigidity and slow down the response time to unanticipated circumstances.”

shocks, contagion, positive feedback loops, tipping points, unpredictability, and cascading crises.

Naím (2013: 11) summarizes many important escalations of interconnectivity as “three revolutionary transformations that define our time” by shifting the nature of power:

- “the *More* revolution, which is characterized by increases in everything from the number of countries to population size, standards of living, literacy rates, and quantity of products on the market;
- the *Mobility* revolution, which has set people, goods, money, ideas, and values moving at hitherto unimaginable rates toward every corner of the planet (including those that were once remote and inaccessible);
- and the *mentality* revolution, which reflects the major changes in mindsets, expectations, and aspirations that have accompanied these shifts” (ibid; see also 51-75).

These revolutions have heightened interaction among humans around the globe, and also between humans and the ecosphere. Growing populations require greater amounts of energy and material from the planet’s ecosystems to fulfill their (largely material) expectations of the ‘good life.’ In so doing, people introduce immense amounts of waste material and low-quality energy (entropy) back into ecosystems. The result is vast disruption to climate, landscapes, and biodiversity (Homer-Dixon et al., 2015: 3).

As a consequence of increasing interconnections between human and biospheric systems, Homer-Dixon et al. (2015) forecast increasingly frequent ‘synchronous failures’ that are “more biophysical in origin, more inter-systemic in manifestation, more global in scope, and more rapid in development. Together, these four properties increase the risk that future crises will involve irreversible system flips on human timescales that have enormous repercussions for humankind.” Examples may include financial crises, droughts and food shortages, pandemics, energy scarcities, and more frequent extreme weather events.

A crucial feature of such crises is their tendency to ‘self-amplify’ – to grow through positive feedback loops – as a consequence of the dense and tightly coupled interconnectivity of world order. More specifically, Homer-Dixon et al. (ibid: 3) suggest that worldviews, institutions, and technologies are becoming increasingly homogenized to enable greater interconnectivity, and these heightened interrelations in turn encourage further homogenization, thereby ramping up the risks of cascading crises and its potential to spill-over into multiple spheres of life.¹⁶⁸

Emergent Properties

The identification and explanation of the emergent properties of world order are implicit in the foregoing sections. In several senses, this ontology is *emergence all the way down*. Collective social actors are emergent entities shaped, in part, by systemic processes of differentiation. Similarly, worldviews, institutions, and technologies are emergent entities that often defy the control of any actor or group of actors. Critical transitions, runaway crises, and evolutionary dynamics are important emergent behaviours of world order. And inequality is a persistent emergent property. The structure of world order is an emergent phenomenon stemming from the dense and recursive causality that animate it as a complex adaptive system.

The next chapter applies this ontology and develops it even further to propose that there are at least three sets of *structural conflicts* in world order that emerge, evolve, and erupt into violence depending on the broader configurations of worldviews, institutions, and technologies, as well as changes of interaction capacity, within the system. The analysis demonstrates that emergent systemic features create conflicts concerning unit differentiation (unit formation and transformation) and vertical differentiation (hierarchical relations) that generate violence of varying character depending on their broader historical context.

¹⁶⁸ In illustration, Homer-Dixon et al. (2015) trace the multiplicative interactions between the 2008 global financial crisis and the concurrent rise and collapse of oil prices, and between this energy crisis and a food crisis that saw prices double in just two years. The collection “could be considered a single three-system instance of synchronous failure” (ibid: 10).

CHAPTER THREE:

Structural Conflicts of World Order

Chapter One of this thesis argued that the academic literature (particularly International Relations and Comparative Politics) does not adequately elucidate the systemic nature of world order, capture the variable forms of violent conflict within it, nor consider the ways in which transformations in the former may relate to changes to the latter. Chapter Two drew upon the complex systems literature to develop a broader ontology of world order to help identify its causal relations to contemporary armed violence. The present chapter returns to the core research question of this thesis: How do changes in the system structure of world order (re-)shape the nature of violent conflict? The ensuing account responds to the shortcomings of existing disciplinary approaches (as critiqued in Chapter One) by drawing upon the ontological foundations developed in Chapter Two in order to propose an alternative theoretical framework with which to understand the coevolution of violent conflict and world order. It makes two major arguments to do so.

First, this chapter contends that there are three major types of conflicts embedded in the structure of world order that erupt into violence of kinds that vary with the broader conditions of a given era (particularly its worldviews, institutions, technologies, interaction capacity, and unit types). These sets of conflicts have unfolded over centuries and across the globe, driven (in part) by systemic influences overlooked in state-centric and methodologically nationalist approaches. This chapter depicts its conflict types as emergent properties of world order, and particularly its *differentiation* into unit types (unit differentiation) and into unequal or hierarchical relational positions (vertical differentiation).¹⁶⁹

The framework centres on differentiation in order to stress the role of violence and conflict in the formation, transformation, and mutual constitution of collective social actors. In this way it connects violent conflict to social order, arguing that the former can be order-making as well as order-breaking. The concept of differentiation additionally highlights the co-constitution of unit and system insofar as systemic processes shape units, and the resulting character of the units affects systemic processes. These three sets of structural

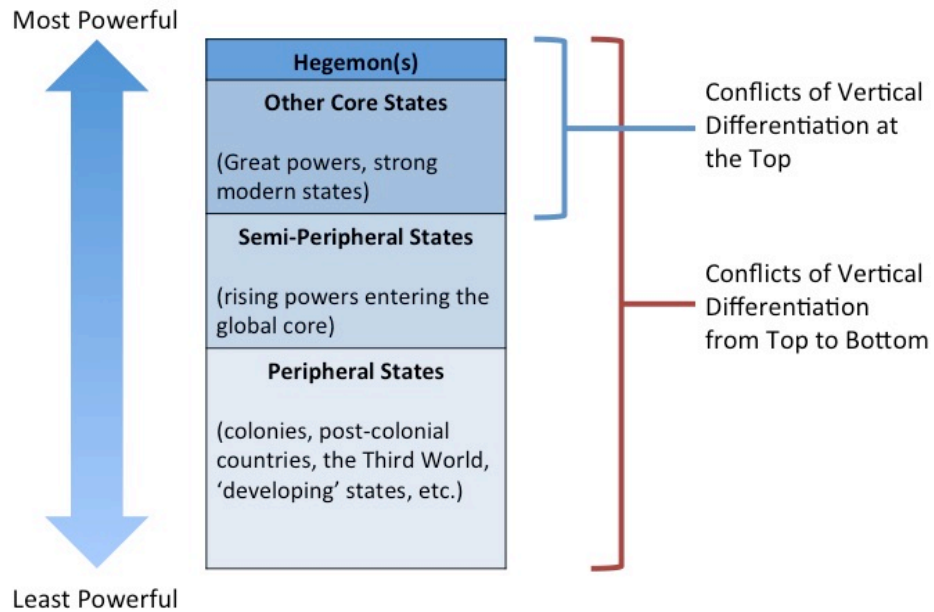
¹⁶⁹ Functional differentiation remains a central feature of world order, but for convenience is here subsumed into unit differentiation and vertical differentiation because the segmentation of actors depends upon functions they perform, and hierarchical positions can generally be distinguished by the different functions they entail.

conflicts, finally, unfold simultaneously and intersect with one another in specific instances of violent conflict.

- *Conflicts of Unit Differentiation* concern the *formation* or *transformation* of collective social actors, particularly the ways in which world order shapes the possible forms of political organization that can emerge in a given era, and consequently affects the struggles between individuals and groups pursuing different institutional models and visions of political community within a (nascent) unit.
- *Conflicts of Vertical Differentiation at the Top* concern the *rivalry* between the most powerful actors to uphold, contest, and revise the basic rules of world order in ways that serve their particular interests, maintain their power, yet provide broadly-based stability. This conflict thus resonates with the concepts of 'hegemonic stability' and 'global governance'.
- *Conflicts of Vertical Differentiation from Top to Bottom* concern the *reproduction* of inequality between the most and least powerful actors in world order as the former seeks to maintain beneficial ties to the latter while containing the threats perceived to emanate from such areas. These interactions are commonly referred to as the 'north-south conflict,' 'core-periphery relations,' or 'combined and uneven development'.

Figure 14 below adapts Wallerstein's categories of states to clarify the distinction between conflicts of vertical differentiation 'at the top' and conflicts of vertical differentiation 'from top to bottom'. This diagram is, of course, a gross oversimplification because it presents power as a single dimension and ignores non-state actors. It is included only to avoid confusion between the two conflicts of vertical differentiation.

Figure 14: Two Types of Conflicts of Vertical Differentiation

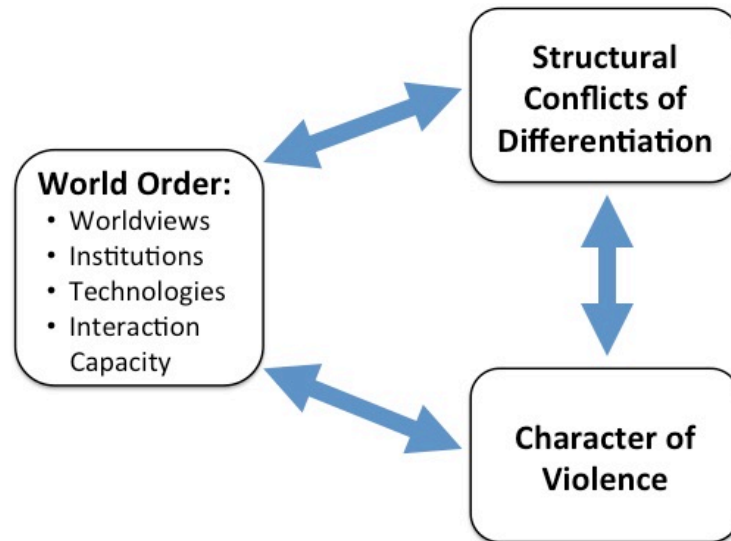


The sections below explain the development of each type of structural conflict by drawing upon the systems ontology developed in Section Two, and by synthesizing a narrative of each conflict set's history and causality that elucidates the key macro-trends of violence identified in Chapter One (Table 5). The analysis emphasizes unit differentiation as, in some respects, primary of the three conflicts. The two conflicts of vertical differentiation add additional layers of complexity onto processes of unit formation and unit transformation by highlighting *relational* dynamics that (in part) constitute actors. Processes of vertical differentiation reshape those actors thus differentiated, and therefore constitute major systemic influences upon unit formation and transformation, as well as the violence that often attends them.

The second core argument of this chapter is that world order and violent conflict are entwined in a distinctly *co-evolutionary* relationship. The account contends that organized violence is a major source of change in worldviews, institutions, technologies, and unit types; and that such alterations wrought by violence often proceed to reshape the causes and characteristics of future violence. More specifically, this chapter relates changes in worldviews, institutions, technologies, and the interaction capacity of world order, on the one hand, with, on the other hand, the evolution of the structural conflicts of

differentiation, their eruption into violence of a particular character, the formation and transformation of units, and the further changes to the system structure of world order that result. Figure 15 summarizes these crucial interrelations.

Figure 15: The Co-Evolution of World Order, Structural Conflicts, and Violence



The relationship between Figure 15 and the core concept of differentiation requires further clarification. In large part, unit and vertical differentiation are the *outcome* of all the interrelations represented in the diagram, which act in a cyclical fashion to shape and reshape units and their relative positions. More precisely, differentiation appears in Figure 15 in conjunction with ‘structural conflicts’ because the formation and transformation of units depends largely on conflicts between sub-unit constituents and the conflicts between units, as influenced by the particular features of the world order they inhabit. The differentiation of actors (into unit types and unequal positions) is inherently conflictual; it advantages some over others depending on the broader context of world order and the character of violence at human disposal.

Figure 15 shares many components with the systems ontology of world order presented in Figure 12 of Chapter Two, but is not intended to be an extension of the earlier diagram in a straightforward way. Where Figure 12 sets out key elements of system

structure, Figure 15 relates key system features to conflictive unit differentiation and violence of varying character. These diagrams pursue different (albeit related) goals: to specify the systems ontology of world order, and to explore the relationships between world order, conflicts of unit (trans-)formation, and violence, respectively.

Each element of the co-evolutionary process depicted in Figure 15 is treated sometimes as a *dependent* variable (to account for its origins), and at other times as an *independent* variable (to account for its effects). The methodology thereby follows Herrera's (2006: 41) study of the transformative effects of technology on international systems, which first explains the ways in which world order produces a systemically relevant change (such as a new technology or institutional model), and then examines the effects of that change on world order (such as its impact on war fighting).

Further, the co-evolutionary framework proposes that the myriad worldviews, institutions, and technologies active in world order, alongside the multitude of interactions they enable across the globe, create a *selection environment* that acts on unit types, and upon worldviews, institutions, and technologies. Those collective actors best able to maintain ideational coherence and extract the material resources needed to sustain themselves far from thermodynamic equilibrium are more likely to flourish, but in so doing alter the fitness landscape and drive further selective processes. In this manner, Chapter Three attempts to endogenize unit formation and systems change while connecting these processes to macrorends of violent conflict.

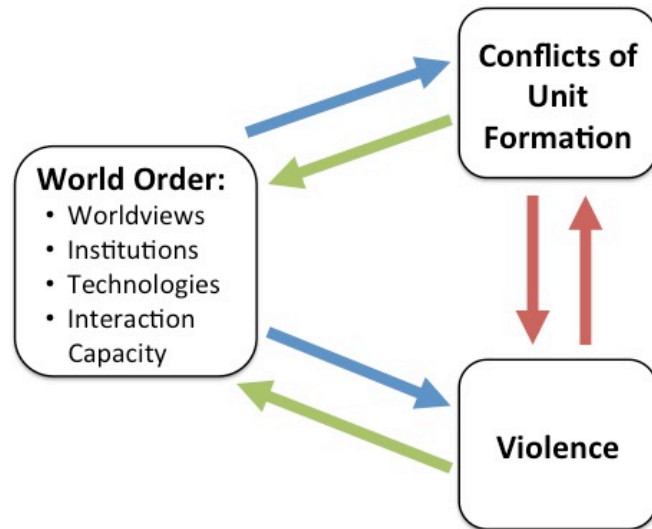
I. Structural Conflicts of Unit Differentiation

How do the systemic features of world order shape and reshape the very actors that constitute it? When does this process generate violence, and of what character? This section examines the interrelations of structural features of world order, the conflicts that drive the formation and transformation of unit-types (unit differentiation), and the violence that often accompanies these processes. Three pairs of interconnections are most relevant.

First, the structural features of world order – its prevalent worldviews, institutions, technologies, and its interaction capacity – create opportunities and constraints that render some unit types more viable than others (top blue arrow in Figure 16). The context of world order thereby conditions the realm of possibility open to individuals and groups vying to shape and control the unit-types that emerge (including their regime type, institutional models, ruling ideology, and notions of community). System structure shapes unit differentiation.

Hendrik Spruyt (1994: 61-76) provides a general account of the way in which such transformative conflict can unfold.¹⁷⁰ He proposes that major changes in social, economic, and/or political spheres – captured in the present framework as big shifts of worldviews, institutions, technologies, and interaction capacity – alter the distribution of power, influence, and resources between various social actors (such as commercial traders, feudal

Figure 16: Conflicts of Unit Formation, Violence, and World Order



This diagram adapts Figure 15 (above) to highlight the interrelation of world order and violence with unit differentiation. The latter is presented as 'conflicts of unit formation.'

¹⁷⁰ Philip C. Cerny (2010: 85-110) applies Spruyt's framework in a more generalized way to elucidate changes in the nature of governance associated with globalization.

lords, religious authorities, and specialists in violence). The structure of incentives changes, prompting agents to form new alliances while shifting their identities, capacities, and interests in the process. The emergent relational structure between social actors binds their coalition into larger scale unit-types (such as city-states, empires, and national states) that compete with each other to gain from shifting conditions. This competition selects for the fittest arrangements (in the case of modern Europe, the national state prevailed over alternatives as the unit-type best able to mobilize force and generate wealth, for example).

Of course, such conflicts do not always erupt into violence; but when they do, the nature of contending actors shapes their use of violence, and the prevalent modes of violence are a crucial aspect of the fitness landscape explored by emerging units (red arrows). The dynamics of unit formation influence the nature of their attendant violence, and the (often unpredictable) course of violence reshapes the conflict of unit formation. The features of world order also influence the character of violence – its organization, weaponry, legitimating ideology, and so on – available to disputants (lower blue arrow). And finally, processes of unit formation and their attendant violence can generate new identities, ideologies, institutional models, and technologies that spread widely to become new structural features of world order (green arrows).

This section elucidates these co-evolutionary dynamics by integrating, critiquing, and elaborating upon four studies of macrotrends in war highlighted in Chapter One: Andreas Wimmer's emphasis on the 'national principle' as a change in *worldview*; Anne Hironaka's world polity account of the diffusion of state *institutional models*; Hironaka and Oona Hathaway and Scott Shapiro's focus on the post-WWII prohibition of wars of territorial conquest enacted by international *institutions*; and Stathis Kalyvas and Laia Balcells's investigation of the shifting *technologies* employed in rebellion.

As mentioned in Chapter One, this thesis highlights these accounts because they overcome many of the limitations noted of the IR and Comparative Politics literatures. These authors trace causal linkages between world order and the changing nature of violent conflict through their connections to unit formation. Further, these accounts move beyond the 'new versus old wars' and 'greed versus grievance' debates of the 2000s; they use greater rigor than earlier inquires to identify and explain shifting trends in the nature of violent conflict. They provide a nuanced, complex, and wide-ranging picture of

continuity and change that resonates palpably with the complex systems ontology of world order applied here.

The analysis below demonstrates that each of these accounts indeed concerns the role of worldviews, institutions, and technologies as structural features of world order that are systemic in their origins and effects. None of these accounts, of course, is without its flaws. The value added of the theoretical approach developed here is its ability to interweave and improve upon these studies to provide a more convincing and comprehensive exposition of the sources and evolution of violent conflict within world order.

From European State Formation to the World Wars

Each of the four studies examined here proposes, in some way or other, that “a deep-seated change in the way in which states are formed” (Hironaka, 2005: 6) shapes the types of violence to which they are prone.¹⁷¹ Most of these (and other) authors contrast the conditions of state formation in early modern Europe with those pertaining more recently to the rest of the world, and elucidate the consequences of such divergences for violent conflict. The present subsection therefore summarizes processes of European state formation as they unfolded over the past half-millennium, while the next subsection contends that the worldviews, institutions, and technologies that emerged from this process shaped subsequent unit (trans-) formations and their attendant violence in the decolonization that followed World War II.

In Charles Tilly’s famous dictum, “War made the state and the state made war”, but European state formation actually involved three distinct forms of organized violence: interstate war, internal pacification, and colonial conquest.

As discussed in Chapters One and Two, technological advancements in early modern Europe (a revolution in military affairs in Tilly’s account, a surge of commercial trade in Spruyt’s) escalated military and economic competition between the various unit types on

¹⁷¹ Hironaka (2005: 2), for example, explains the “dramatic historical increase in the length of civil wars by emphasizing changes in the international system that have literally transformed the type of states that exist in the world.”

the continent (including city states, kingdoms, trade leagues, and empires). Spruyt argues that these conditions fostered new alliances between secular wielders of force and the growing burgher class of traders to produce territorially based protection – the national state – that was most conducive to shared commercial gain. Tilly argues that wars between units compelled some rulers to develop the administrative, legal, fiscal, and social institutions that constitute modern statehood in order to negotiate with subject populations for the men and materials demanded by increasingly destructive wars.

These complementary accounts suggest that technological change (amongst a host of other relevant factors) produced military and economic competition that fostered new alignments between various sub-unit social groups. In some cases, these changes produced national states that outperformed, eliminated, and replaced the other unit types of Europe.¹⁷² The approximately 1000 assorted political entities in Europe at the end of the first millennium CE gradually converged (with some exceptions) into a few dozen national states by the end of the second millennium. Where the early modern period featured frequent but small wars, later centuries featured fewer but much more destructive wars as diverse units merged into large national states and armies grew in their size and capabilities (Pinker, 2011: 231).

These international wars embodied many of the archetypal features of ‘war’ discussed in Chapter One: they were fought between professional, hierarchical militaries in direct, concentrated confrontations intended to achieve limited political goals within mutually understood norms of conduct (including declarations of war and peace treaties).¹⁷³ The total war unleashed by Napoleonic France ruptured this pattern in pursuit of a universal empire on the continent, but ultimately galvanized the great powers to restore institutional limitations upon wars throughout the nineteenth century. Territory was the most common issue at stake in the wars between the Treaty of Westphalia and the

¹⁷² As Tilly (1990: 58) succinctly puts it, “the increasing scale of war and the knitting together of the European state system through commercial, military, and diplomatic interaction eventually gave the warmaking advantage to those states that could field great standing armies. States having access to a combination of large rural populations, capitalists, and relatively commercialized economies won out.”

¹⁷³ As Kalevi J. Holsti (2018: 189) puts it: “The European interstate wars of the seventeenth through twentieth centuries were characterized by the Clausewitzian distinctions between combatants and civilians and between clearly identified armed forces fighting for known political objectives achieved through violent means to force an enemy to surrender. The dividing line between war and peace was clearly demarcated. Peace ended with declarations of war, and war ended with formal peace conferences.”

First World War (Holsti, 1991: 306-311), encompassing the populations, crops, and materials crucial to the prevailing agrarian technological regime. Anne Hironaka (2005: 2, 7) suggests that the frequent alterations of territorial borders wrought by such wars strengthened European states because they helped match sovereign territorial holdings with actual governance capacity – rule it or lose it.¹⁷⁴

As interstate wars consolidated national boundaries, state institutions grew to increasingly penetrate the territories and communities within those borders in order to extract the resources required of international war. War selected for those states best able to mobilize their resources onto the battlefield by building strong institutional organization. To do so, rulers employed a different repertoire of violence. In what Steven Pinker (2011: 31-58) calls the ‘pacification process’ (and others generally refer to as ‘statebuilding’), governments centralized their rule and augmented their extractive capacity by gradually disarming the population, imposing common laws and administrative procedures, and monopolizing taxation. In James C. Scott’s (1998) terminology, these measures rendered society ‘legible’ – easier to monitor, control, and plan from the centre.

The extension of direct rule, however, put state forces in conflict with many autonomous and peripheral communities and elites who resisted integration, sometimes by mounting rebellions, insurgencies, and even civil war-like campaigns to secede or gain control of the central regime (Newman, 2013: 146). The statebuilding process – then and now – “is inherently coercive and it encounters recalcitrant outlying resistance which must be subjugated” (ibid: 150). The violence could be most severe when it was single-sided, pursuing an exclusive national identity through ethnic cleansing, violent displacement, and inter-communal conflict (ibid: 146).¹⁷⁵

When successful, the violence of statebuilding (or ‘pacification’) forged in the national government a Hobbesian leviathan – an ultimate authority with a monopoly on the

¹⁷⁴ Actual state survival was not as common a stake as realists would suggest in the period between the Peace of Westphalia and the First World War, in which time its salience declined as war became an institution of limited objectives between established states that recognized each other’s right to exist (Holsti: 1991: 14, 306-308, 318-320).

¹⁷⁵ As Newman (2013: 146-147) details, “The consolidation of the state has also been a process of fundamental social and cultural transition, and often an unwelcome one, particularly for outlying regions with distinct identities, and among communities and elites which are not represented in the statebuilding project. This generated opposition and mobilized insurgency as a result of the material interests it directly threatened, and as a result of the alienation generated through the process of change.”

legitimate use of violence and the powers to adjudicate, resolve, and punish disputes. Pinker (2011: 681) estimates that the earliest leviathans reduced the rate of violent death five-fold by suppressing feuds and raiding, while the consolidation of the rule of law in sovereign European states reduced the rate another thirty-fold by decreasing homicides. And by creating better organized, equipped, and professionalized military forces, statebuilding processes reduced the portion of society that died in war, even as war became more destructive.

Successful statebuilders developed great ‘infrastructural power’¹⁷⁶ while national integration supported the notion of national community with a sense of common heritage and shared destiny. Economic, political, social, and cultural activities were increasingly conceived, organized and clustered in a national-territorial manner. But pacification also concentrated an immense amount of power in the hands of central governments.¹⁷⁷ Robert Jervis (2011: 58) thus disputes Pinker’s optimistic characterization of the leviathan by arguing that “a strong government can kill, and a decline in homicide can be more than compensated for by an increase in state-sponsored killing.”

Wars of imperial conquest and colonization represent the third form of organized violence implicated in European state formation. Empires expanded the international military conflicts of Europe over the oceans. Exploitation of the colonies and colonized provided the labour and materials that subsidized national integration of the metropole (Sassen, 2006, 82-88; Buzan and Lawson, 2015: 30-32). “Mercantilism encouraged states to make war to expand territorial control and market size, while war, by expanding the markets under unified sovereign control, helped sustain mercantilism. These forces fed each other, encouraging greater amalgamation of territory under sovereign control” (Hathaway and Shapiro, 2017: 340).

¹⁷⁶ Michael Mann (1988: 5) defines infrastructural power as “the capacity of the state to actually penetrate civil society, and to implement logistically political decisions throughout the realm”. But infrastructural power goes both ways, enhancing state control while also enabling civil society to make claims on the state (Mann, 2008: 356).

¹⁷⁷ As Pinker (2011: 58) explains: “When it came to violence, then, the first Leviathans resolved one problem but created another. People were less likely to become the victims of homicide or casualties of war, but they were now under the thumbs of tyrants, clerics, and kleptocrats. This gives us the more sinister sense of the word *pacification*: not the bringing about of peace but the imposition of absolute control by a coercive government.”

Europeans fought colonial wars against non-state (or non-European state-like) polities in colonial territories, and often inflicted genocidal, one-sided violence against native populations (Moses, 2008). Conquest often met local resistance, rebellions, and revolts, but colonial governments expanded their control by patronizing some ethnic groups to dominate others (indirect rule through a strategy of divide and conquer) or advancing pacification processes like those consolidated at home.¹⁷⁸ As further detailed in Section III below, violence was endemic to colonialism.¹⁷⁹

For Andreas Wimmer, these conquests constituted the first ‘wave of war’ in which periods of profound change in the basic units types of world order – the nineteenth century incorporation of other types of polities into European empires – created a surge of organized violence. The second wave occurred largely during the twentieth century as the subjects of imperial rule sought to break up these empires and found nation-states in their place.¹⁸⁰

In sum, the development of national states in Europe involved positive feedbacks with (at least) three types of violent conflict: interstate conflict, internal pacification, and imperial conquest. Each of these three drove the consolidation of national states and improved their fitness relative to other unit-types, and this growth of national states increased their capacity to mount each of these three types of violence. National states were best able to extract and mobilize the resources required to sustain and expand their social complexity. As the next subsection elaborates, these processes of European state formation generated important structural features of world order: nationalism as a powerful worldview, the national state institutional model as most fit, and improved technologies of production and destruction.

¹⁷⁸ Indeed, pacification at home can be understood as a form of internal colonization, but one that integrated the periphery into the national polity, whereas colonization and pacification abroad maintained colonies in a subordinate relation to the metropole.

¹⁷⁹ This dimension of state formation (empire) is often underemphasized in the IR literature. Similarly, one incisive critique of Pinker’s work finds him “virtually silent about Europe’s bloody colonial adventures... This is a pretty serious omission both because of the scale of the slaughter and because of the way it troubles the distinction between savage and civilized” (Kolbert, 2011).

¹⁸⁰ More precisely, this second wave involved a series of waves that each followed the collapse of an empire: first the Spanish empire in the New World, then the post World War I breakup of the Ottoman empire, followed by the emergence of nation states from French and British rule in the Middle East and Asia, then the dissolution of European colonies in Africa beginning in the 1960s, and finally the break-up of the Soviet Union in the early 1990s (Wimmer, 2013: 88).

The positive feedbacks driving European state formation, however, reached a critical threshold with the mechanized total violence of the World Wars. These global conflagrations generated a host of new international organizations – most notably the broad collection of United Nations (UN) bodies – that promoted three international norms that would crucially shape ensuing processes of unit formation: decolonization, the sanctity of existing territorial borders, and the prohibition of interstate war (wars of territorial conquest, or ‘wars of aggression’). These international institutions favoured colonial independence, but strictly within territorial boundaries that had been established arbitrarily long before. The costs of major international war became especially prohibitive with the advent of nuclear weapons, as discussed in the Section II below. But other forms and sources of violent conflict followed instead.

Figure 17 below modifies the Conflicts of Unit Formation diagram from above to summarize these connections between European state formation, the evolution of violent conflict, and the consequent features of world order that went on to shape very different processes unit formation and violent conflict in the latter half of the twentieth century.

Figure 17: World Order, European State Formation, and Violent Conflict

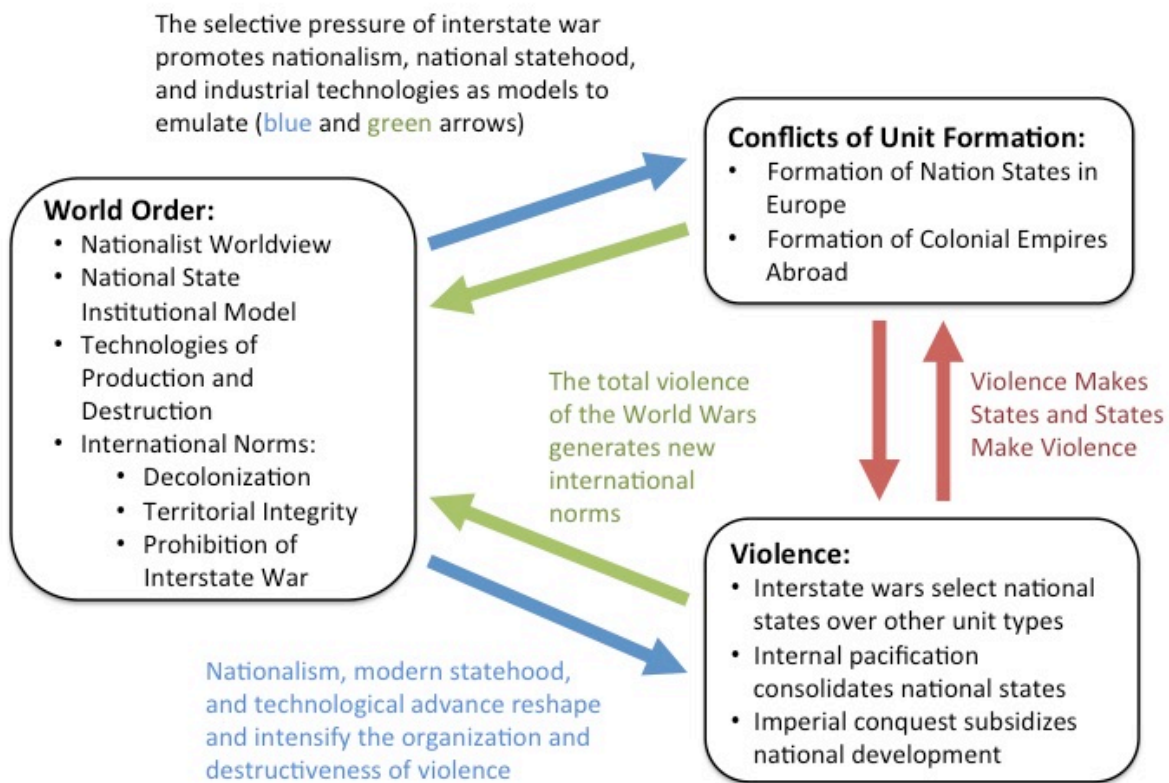


Figure 17 presents all of the key variables and relationships explored in this section together in one diagram. Subsequent figures highlight particular factors and relationships from this collection, as identified and explained by the authors reviewed in this section.

Decolonization and the Wars of Post-Colonial States

This subsection focuses on the structural features of world order that emerged from European state formation (identified in Figure 17 above) and their consequences for subsequent violent conflict. It first demonstrates that these factors aptly fit the WITs framework and are part of the system structure of world order. It explains their development within the processes of European state formation described above, then elucidates their causal influences upon wars of the post-WWII world. Resultant trends include a slew of wars of national liberation against empires, civil wars and genocide/politicide in post-colonial countries, and militarized international interventions amidst a sharp decline in interstate wars (and especially wars of territorial conquest). The

remainder of this subsection explains, critiques, connects, and expands the causal mechanisms proposed by the selected authors to connect such violent conflicts to world order.

Andreas Wimmer (2013; 2018) stresses the historical gravity of the *national principle* – “the idea that people should be self-ruled, that ethnic like should be governed by ethnic like” (ibid, 2013: 2) – as the crucial causal connection between war and unit formation. From the nineteenth century onwards, aspiring political leaders around the world noticed that those powers that first implemented the national principle (Great Britain, the United States, and France) outperformed their peers militarily and economically. Moreover, the efficacy of the national principle apparently stemmed from its justice: it fostered deep identification between masses and elites in an implicit social contract by which citizens exchanged their obedience and taxes for political participation, public goods, and the pursuit of a common national destiny.¹⁸¹ Political entrepreneurs in the colonies exercised selective pressure by choosing to build their campaigns upon the national principle as more fit (in both material performance and legitimacy) than competing political foundations, such as dynasticism, imperial universalism, and theocracy.

Although Wimmer frames the national principle in institutional terms, it is more accurately understood as a change in *worldview* with deep implications for institutions. He focuses solely on the formal declaration of the national principle as the legitimating basis of a state’s independence (in its constitution, for example),¹⁸² but not whether such pronouncements actually shape institutional structures and practices.¹⁸³ Nationalism is first and foremost a way of understanding the world (including people’s rights and responsibilities) through one’s belonging to a group of common ancestry and shared fate, so that such ties (and dividing lines) are more salient than those of class, dynasty, or

¹⁸¹ In this way, the national principle fostered a transition from the coercion of pacification and early statebuilding into more consensual and legitimate relationships.

¹⁸² In his quantitative analysis, Wimmer treats nation-state formation as a discrete moment in time when a country gains its independence and proclaims the national principle as the foundation of rule.

¹⁸³ “Our definition of the nation-state focuses on principles of political legitimacy, rather than their effective realization... The extent to which citizen rights are effectively granted to the entire population is also not of concern for our definition of nation-statehood” (Wimmer, 2013: 86-87). In this sense, the national principle may be so institutionally superficial as the “Democratic People’s Republic” in North Korea’s formal country designation.

religious authority.¹⁸⁴ “The idea of the nation as an extended family of political loyalty and shared identity provided the ideological framework that reflected and justified this new compact” between rulers and ruled (Wimmer, 2013: 4). While nationalism does indeed provide basic institutional foundations, it is (as demonstrated further below) *ethnic* nationalism as an *identity* and *ideology* that links the creation of nation states to war in Wimmer’s account.

Anne Hironaka, in contrast, does focus more closely on the institutional arrangements that rendered post-colonial states susceptible to war. The transition from colonial domination to independent statehood was a hurried one; following WWII the number of post-colonial states in the world rose from 30 to 120 (Hironaka, 2005: 36), and no less than three-dozen states achieved independence in Africa and Asia between 1945 and 1960 alone (Hathaway and Shapiro, 2017: 347). These new states looked to their former imperial rulers, to other Western nation-states, and to international organizations for the institutional designs with which to establish governmental departments, distribute governance functions among offices, expand legal and administrative networks, and pursue appropriate policy priorities.¹⁸⁵ By quickly adopting the institutional arrangements of Western states, these nascent governments sought to build their legitimacy at home and secure diplomatic recognition abroad. The latter enabled access to international development aid and military assistance, both of which further advanced Western institutional models in these post-colonial settings (Hironaka, 2005: 12).

Hironaka considers the state institutional template a *systemic* part of the postwar ‘ecology of states’ by situating it in the ‘world polity’ – a global “level of cultural and organizational formation that operates as a constitutive and directive environment for states, business enterprises, groups, and individuals” (Boli and Thomas, 1999: 3). The theory can easily overestimate the consensus and unity of the world polity and

¹⁸⁴ Wimmer (2013: 200) suggests that ethnicity is the most obvious focal point, or salient ‘social fact’ even for those who are themselves not strongly attached to the identity/ideology, but know that others are: “ethnicity is not an aim in itself, but both the organizational means through which individuals struggle to gain power, as well as a perceptual framework through which they define their interests and identify the alliance partners they can take for granted.” The national principle thus provides “the organizational means through which [people] struggle to gain access to state power and its public good” (ibid: 173).

¹⁸⁵ Leaders also looked abroad for the appropriate political-cultural scripts of government, such as the national principle.

underemphasize its inequities of power,¹⁸⁶ but it nonetheless captures the Wendtian notion of ‘common knowledge’ – a shared (even if heterogeneous) realm of cultural and institutional understandings upon which actors draw to define their organizational structure, identity, and interests, altering or maintaining the content of the world polity in the process.¹⁸⁷ The institutional template is a shared “cognitive and ontological model of reality... [specifying] the nature, purposes, technology, sovereignty, control, and resources of nation-states” (Meyer et al., 1997: 149). The state model, understood as a structural feature of world order, helps to explain the considerable isomorphism of states (at least in their formal institutional arrangements) “in the face of enormous differences in resources and traditions” (ibid: 145).¹⁸⁸

Against this view, Wimmer adamantly maintains that the spread of the national principle is *not systemic* in nature.¹⁸⁹ His regression analysis (2013: 73-74) finds that nationalists were most likely to successfully found a nation state in territories where nationalists had long been mobilizing the population, where the imperial centre was relatively weak, and where another nation state had recently formed nearby, offering a model of success and potential alliance. Wimmer thus emphasizes *local* and *regional* processes of contagion instead of global systemic dynamics. He associates the very terms ‘global’ and ‘systemic’ with world polity theory, but misunderstands it to postulate the

¹⁸⁶ Indeed, critics would point out that the content of the world polity is primarily Western, shared mostly among core nations, and that it excludes other sources of knowledge.

¹⁸⁷ The process mirrors the understanding of worldviews and institutions as emergent supra-agential assemblages that follow a structuration logic, as described in Chapter Two.

¹⁸⁸ Meyer et al (1997: 151-152) develop their World Polity Theory from “a number of empirical observations about contemporary nation-states. First, nation-states exhibit a great deal of isomorphism in their structures and policies. Second, they make valiant efforts to live up to the model of rational actorhood. Third, and partly as a result of the second observation, they are marked by considerable, and sometimes extraordinary, decoupling between purposes and structure, intentions and results. Fourth, they undergo expansive structuration in largely standardized ways. The generality of these observations makes sense only if nation-states are understood as, in part, constructions of a common wider culture, rather than as self-directed actors responding rationally to internal and external contingencies.”

¹⁸⁹ “Local and regional processes not coordinated or causally produced by global social forces can thus generate a global outcome: the almost universal adoption of the nation-state form over the past 200 years. As in epidemiology, processes of contagion follow established networks of political relationships and communication that span the entire world. The logic of contagion is purely local, however, and produces a decentralized pattern of diffusion, all the while generating the illusion of a systemic process when seen from a global point of view” (Wimmer, 2013: 22).

deliberate, centralized, and top-down imposition of unit type, missing the nuances and multi-directionality of the approach.¹⁹⁰

A follow-up study by Xue Li and Alexander Hicks (2016) re-examines the global diffusion of the nation-state. They find that the local and regional factors Wimmer emphasizes account well for the spread of the nation-state model until 1945, but after the Second World War, world polity processes became dominant, operating in the contacts between political leaders of colonial and post-colonial states with intergovernmental organizations (particularly the UN), with international non-governmental organizations, and with other governments.¹⁹¹ Li and Hicks further argue that the nation-state template shifted “the balance of power between metropolitan states and colonies by encouraging decolonization processes. Thus, in the post-WWII world, a world cultural nation-state template reshapes power configurations” by providing a viable goal toward which erstwhile colonies could mount unit transformations (ibid: 602).

Even if World Polity theory is not a convincing mechanism of systemic processes, the decentralized diffusion mechanisms that Wimmer identifies are congruent with complex systems thinking. As Elisabeth Wood (2013: 234) emphasizes, processes of diffusion ultimately depend upon the *interdependence* of units, an essential feature of systems. The local mechanisms of diffusion Wimmer highlights *are* systemic causal dynamics, not evidence of their absence. Most importantly, Wimmer depicts world order as a selective environment in which different unit types compete in their military, political, and economic performance, as well as in their legitimacy. In a shifting set of conditions (extant worldviews, institutions, and technologies), the nation-state model proved most fit. Political leaders’ pursuit of such arrangements saw the nation-state flourish while other

¹⁹⁰ Wimmer (2013: 21) indeed presents a straw-person summary of John Meyer’s work on the world polity: “A hegemonic world culture holds a monopoly on the definition of legitimate statehood and forces more and more state-builders all over the world to adopt the nation-state form, independent of local political conditions.” As demonstrated in subsection three’s discussion of neoliberalism, statebuilding, and peacebuilding, however, world order *does* feature a significant amount of forceful, top-down imposition of institutional models upon poor and post-war countries.

¹⁹¹ As Li and Hicks (2016: 602) conclude: “Compared to the 1816 to 1945 period, the post-WWII era sees a discernible role of the world polity as a force driving nation-state creation... As a part of world culture, a nation-state template enhances nation-state legitimacy and advances nation-state creation across the world in the post-WWII era.”

unit types and legitimating principles declined towards extinction. Despite his own objections, Wimmer's account of nationalism is systemic in nature.

Finally, the prohibition of international war, first proposed in the 1928 Kellogg-Briand Pact (the General Treaty for Renunciation of War as an Instrument of National Policy), then formalized in the UN Charter and embedded in the post-war international peace and security architecture,¹⁹² became another crucial institutional feature of world order that shaped unit-formation and its attendant violence (Hathaway and Shapiro, 2017). The experience of total war and fear of its recurrence provided ample impetus for the prohibition. But by outlawing territorial aggression and refusing to recognize secessions, the norm entrenched the existing territorial borders of the world (technically, those that had existed at the time of the Peace Pact in 1928). In this way, newly independent post-colonial states inherited borders drawn arbitrarily by former European empires with inadequate reference to the divisions between extant political and cultural communities. The prohibition of war ruled out the interstate wars that had driven statebuilding in Europe. Consequently, "the international system has locked the problem of states into specific territorial arrangements and perversely created conditions that encourage lengthy civil wars in recently independent states" (Hironaka, 2005: 7).

The national principle, the state model, and the proscription of interstate wars generated important changes and trends in the character of war over the twentieth century, carefully detailed by these authors (as summarized in Table 5 of Chapter One). Using his own dataset of wars occurring between 1816 and 2001, Wimmer (2013: 2; see also: Wimmer and Min, 2009) finds that ethno-nationalist civil wars made up just a quarter of all wars at the beginning of the period (with wars of conquest, inter-state wars, and other types of civil war accounting for another quarter each), but by the end ethno-nationalist civil wars encompass three-quarters of all ongoing wars. He links this trend to the founding of states according to the national principle by demonstrating that "wars break out [roughly] twice as frequently during the immediate years around nation-state

¹⁹² The UN Charter prohibits "the threat or use of force against the territorial integrity or political independence of any state."

creation compared with several decades before or afterward” (ibid: 127).¹⁹³ In the decade preceding its independence, a nascent nation state is more likely to experience *secessionist wars* in which nationalist movements attempt to win territorial control from another actor (empire or state). In the four decades following independence, the new nation state is at high risk of *interstate war* and *non-secessionist civil war*. The probability of civil war peaks in the second decade after independence (ibid: 135).

Anne Hironaka (2005: 1) notes that the number of ongoing civil wars grew exponentially after 1945. She attributes the surge to the fact that civil wars became almost three-times as long (an average of 4 years) as they were in the preceding half-century. Civil wars in post-colonial settings tended to be particularly drawn out affairs, and thus accumulated in time so that by the 1990s, roughly 20 civil wars raged in the average year (ibid: 2).

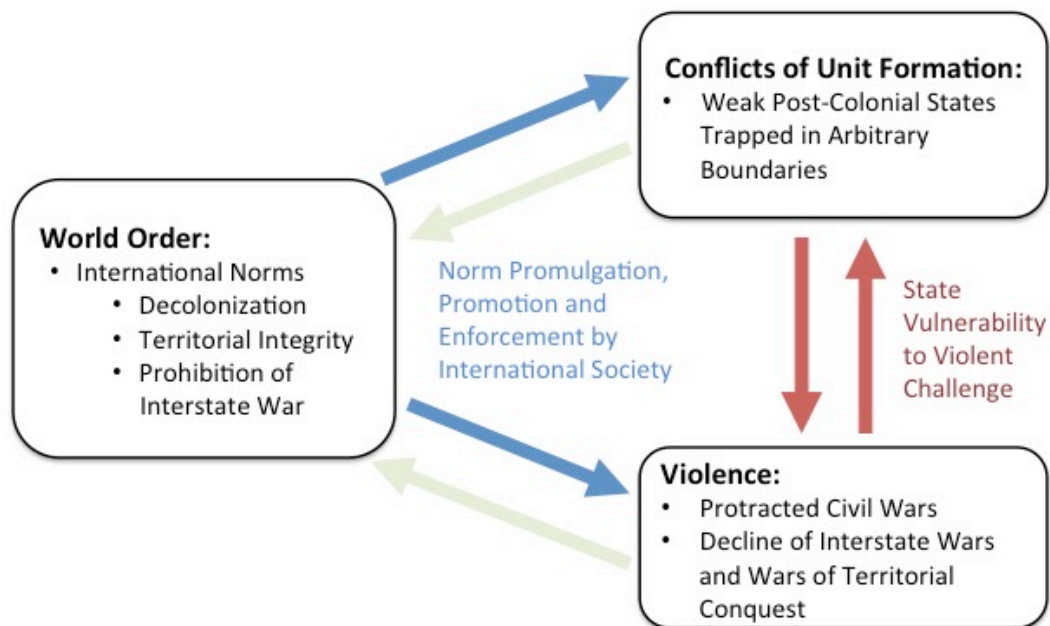
Hathaway and Shapiro (2017: 418) conclude that the Kellogg-Briand Pact was a clear success insofar as “interstate war has declined precipitously and conquests have almost completely disappeared.” In their accounting, the period from 1816 to 1928 saw an average of 1.21 territorial conquests per year, transferring an annual average of 295 486 km² in changes that were generally regarded as legitimate practices of international relations. From 1928 to 1948, there was a yearly average of 1.15 conquests of 240 739 km². This is not much of a reduction, but most of these territorial changes were deemed illegitimate and later reversed. After 1948, however, there was an annual average of 0.26 conquests of 14 950 km², and these diminutive efforts were generally not regarded as legitimate by the international community (Hathaway and Shapiro, 2017: 313-319).

Of course, interstate wars did occur in the post-WWII period, but Hathaway and Shapiro argue that these were not the wars of aggression and conquest that prevailed in the Old World Order; instead, they tended to be disputes over borders that were ill defined at the time of the Peace Pact or somehow muddled in the haste of decolonization. But, like Hironaka, the authors (Hathaway and Shapiro, 2017: 368-369; see also: 368, xiii-xix) ultimately conclude that by

¹⁹³ Fearon and Laitin (2003: 85) similarly find that “the odds of civil war onset are estimated as 5.25 times greater in the first two years of a state’s existence than in other years, a huge effect.”

opting for outlawry, we have traded a world of *interstate* war for one of *intrastate* war, a world where only the strong can survive for one in which failed states can survive as well... The decline of interstate war and territorial aggression by the New World Order has thus led to a corresponding increase in failed states and intrastate war. That, too, is the result of changes set in motion by the Peace Pact of 1928.

Figure 18: International Norms, Weak States, and Intrastate War (Shapiro and Hathaway, and Hironaka)



Shapiro and Hathaway, as well as Hironaka, argue that post-WWII international norms of decolonization, territorial integrity, and the prohibition of interstate wars set the parameters of post-colonial state formation in ways that tended to foster protracted civil wars rather than interstate wars. These authors are less attentive to the way that post-colonial state formation and its violence fed back to reshape world order (hence the green arrows in Figures 16 and 17 are faded in the diagram above).

Although these authors each highlight different aspects of world order, they all invoke similar causal pathways to link the national principle, state blueprint, and prohibition of international aggression (respectively) to the wars accompanying unit formation in the second half of the twentieth century. The explanations, in various ways, centre on the discrepancy between the nation-state models to which post-colonial rulers aspired, and the poorly suited contexts in which they pursued such ideals. As Wimmer

(2013: 22) contends, “the global rise of the nation-state seems to be quite detached from a state’s capacity to directly rule over a territory.” Similarly, Hironaka (2005: 12) highlights the “disparity between world-level model and empirical reality” by arguing that “Although states are organized around a common set of blueprints or models, weak states often lack the capacity to carry out these world-level models effectively.”

More specifically, Hironaka (2005: 12) argues that in the haste of independence, new leaders often attempted to transplant “wholesale... Western-style governance practices” and the “trappings of modern Western states”.¹⁹⁴ These arrangements, however, had developed organically over centuries in Europe, where they were bolstered by the extensive systems of administration, taxation, and social integration demanded by the selective pressure of interstate war. Post-colonial states often lacked the resources and institutional depth necessary to achieve nation-statehood, especially among the diverse and disparate communities and territories contained within their haphazard borders. The international norm against aggression forestalled the sorts of interstate warring that had fostered state strength in Europe, and the international commitment to existing borders prevented alterations that might better match political identities and governance capacities.¹⁹⁵ Consequently, states generally cannot die, nor fragment.¹⁹⁶

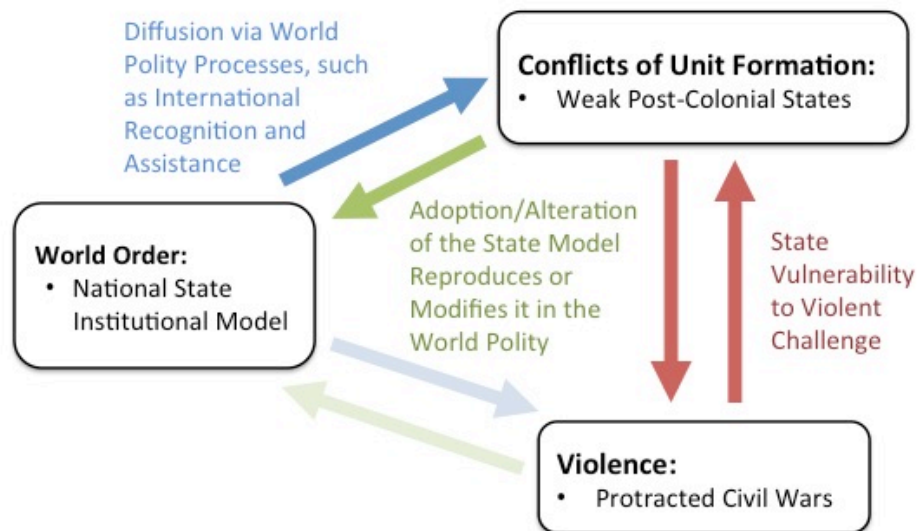
¹⁹⁴ Similarly, Buzan and Lawson (2015: 177) depict the post-WWII era as a ‘Western-global’ order that “emerged from the expansion of Western international society to planetary scale, if only in the sense of being sovereign equals. The price of independence, or for those not colonized the price of being accepted as equals by the West, was the adoption of Western political forms and the acceptance of the primary institutions of Western international society: the market, the legalized hegemony of great power management, positive international law, and suchlike.” Henry Kissinger (2014: 6-7) also proposes that the “Westphalian system spread around the world as the framework for a state-based international order spanning multiple civilizations and regions because, as the European nations expanded, they carried the blueprint of their international order with them. While they often neglected to apply concepts of sovereignty to the colonies and colonized peoples, when these peoples began to demand their independence, they did so in the name of Westphalian concepts. The principles of national independence, sovereign statehood, national interest, and noninterference proved effective arguments against the colonizers themselves during the struggles for independence and protection for their newly formed states afterward.”

¹⁹⁵ Contra Hironaka, Steven Pinker (2011: 258-260) argues that the commitment to arbitrary borders produced *less* violence than would have been the case had they been subject to revision. “The borders may have made little sense, the governments within them may not have deserved to govern, but rationalizing the borders by violence was no longer a live option in the minds of statesmen. The grandfathering of boundaries has been, on average, a pacifying development” (ibid: 259). The point, however, remains highly debatable because it is based inherently on counterfactual scenarios.

¹⁹⁶ Even the quintessential failed state (Somalia) remains a *de jure* sovereign state that receives considerable international support to rebuild its *de facto* sovereignty, while Somaliland (in the north of Somalia) is a *de facto* functioning state, but not internationally recognized as such because it remains within Somalia’s colonially established borders.

With scant national integration, these states generally depended on international recognition alongside international economic and military support to maintain their sovereignty (ibid: 2). As what Robert Jackson (1990) famously dubbed “quasi-states”, their *de jure* sovereignty masked their lack of *de facto* sovereignty. Newly independent governments were often unable to channel political conflicts into institutionalized processes, to monopolize violence, or to carry out authoritative decision-making over their lands and peoples. This weakness enabled opponents that were organized around regional and ethnic identities to mount sustained violence in attempt to capture the *de jure* state and its attendant benefits. But even when such efforts succeeded, persistent state weakness left control unstable and tenuous, generating particularly prolonged civil wars. Hironaka (2005: 47) ultimately concludes that “the ‘ethnic’ aspect of civil wars is spurious; the real effect is due to the structural weakness of the state.”

Figure 19: State Templates, Decolonization, and Protracted Civil Wars (Hironaka)



Hironaka argues that world order features an institutional model of national statehood that diffused to post-colonial states (through emulation and international assistance, for example) that were unable to realize it, and thus remained vulnerable to rebellion and civil war. As a key world polity dynamic, each time a country adopted the state model, it either reproduced or altered (by creating variations and additional options) that model in the world polity, as depicted by the green arrow.

Hironaka aptly explains the war-prone conditions facing newly independent states after the Second World War by emphasizing the norm of territorial integrity (the fixity of borders) and growth of the world polity. Her account, however, does not adequately explain when and why such conditions produce civil wars, or not. Latin American countries gained their independence in the nineteenth century, fought international wars, and changed their borders many times, but still suffer weak national institutions and a tendency towards civil war. The explanation of these cases must lie elsewhere.¹⁹⁷ Further, when the international community (or colonial powers) *did* permit changes to international boundaries after World War II – such as the partitioning of India and Pakistan, Israel and Palestine, and Cyprus – the results were not necessarily strong states, but often brutal wars (Lebow, 2006).¹⁹⁸ Similar results pertain to more recent international support for secession in the breakup of the former Yugoslavia and the independence of Kosovo, Eritrea, and South Sudan.

The underlying problem in Hironaka's account – and in the discourse of state weakness more generally – is its emphasis on the institutional arrangements that *are not in place* (modern Western statehood), rather than those that *are*, and the ways in which the latter tend towards conflict and violence. In the space between the ideal of nation statehood provided by the world polity and local conditions ill suited to realize the model, opportunities opened for alternative processes of political formation. Wimmer provides a more nuanced account of such politics by placing much greater emphasis on the role of nationalism and ethnicity in the connection between limited state capacities and war.

The national principle constituted a potent rallying cry that “motivate[d] and enable[d] political entrepreneurs” in colonized areas “to fight secessionist wars against [the] ‘alien rule’” of foreign empires (Wimmer, 2013: 23-24). The global diffusion of

¹⁹⁷ Wimmer notes this problem in Hironaka's account in footnote 33 on pages 34-35, but otherwise does not engage with her arguments.

¹⁹⁸ Richard Ned Lebow (2006) notes that Hironaka's account has “an element... of ‘damned if you do and damned if you don't,’ which is attributable in part to earlier patterns of colonial rule, and in some cases, settlement. All of these conflicts [involving partition], and the civil wars that Hironaka describes, are also the result of self-serving and irresponsible choices made by indigenous leaders and elites. This dimension of the problem is equally worthy of discussion, because not all weak states have been consumed by civil wars, while some seemingly stronger states have.” In this way, he suggests that elite politics and local leadership mediate the connection between weak state institutions and war. Indeed, Hironaka emphasizes the structural context of world order, whereas Wimmer emphasizes the role of local agency, but both are clearly important causes of war.

nationalism simultaneously rendered the imperial domination of other peoples increasingly illegitimate, as captured in norms of decolonization. “The motivations and nature of war changed accordingly”; wars of imperial and interstate conquest declined, replaced by wars of national liberation that were often followed by “ethno-political conflicts over control of the [newly-independent] government” (ibid: 27-28).

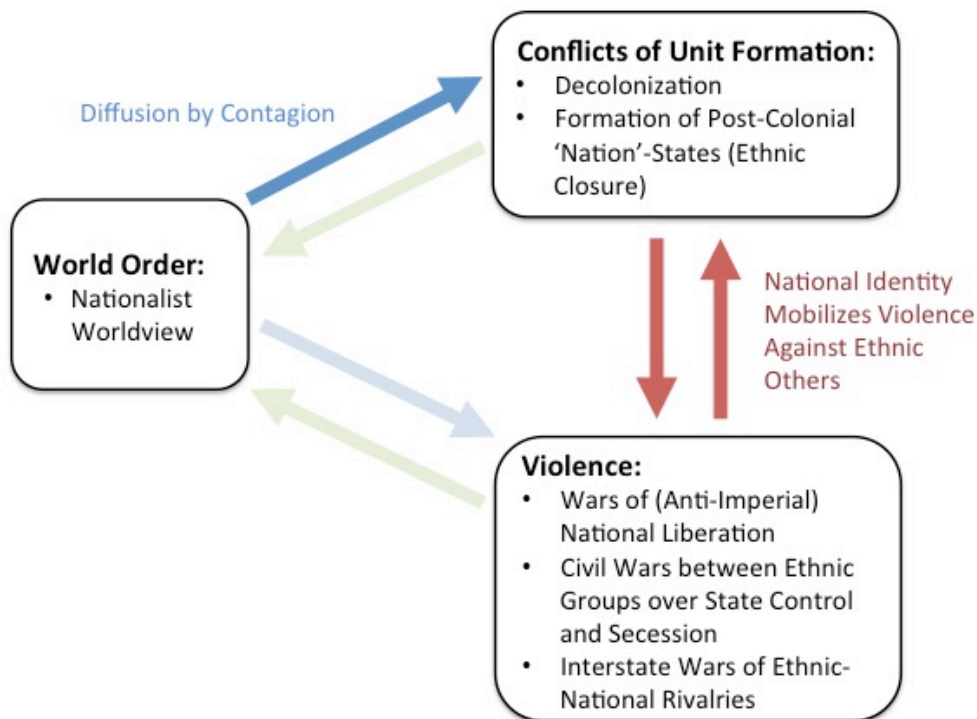
When nationalists successfully gained independence and pursued the national principle, their countries tended towards one of two broad developmental trajectories. Areas that were already centralized, well-resourced, and host to a rich civil society (based on voluntary association rather than ethnicity) generally managed to achieve an inclusive national identity and provide public goods, rights, and political participation to all segments of society.¹⁹⁹ Areas that were largely decentralized, poorly resourced, and lacking civic organization tended instead towards an exclusionary national identity based on a particular ethnicity. “Such states lack the resources for universal provision of public goods as well as the non-ethnic political alliances on the basis of which encompassing alliance networks could be built” (ibid: 117).²⁰⁰

This latter trajectory is termed ‘ethnic closure’ and produces war in two ways. First, those excluded from the patronage network of the ruling group have an incentive to rebel and fight for control of the state or to secede in order to improve their lot, often facing concerted government repression in response. Second, ethnic closure can generate interstate war over ethnically mixed territory or in support of co-ethnics disadvantaged by another government.

¹⁹⁹ In a subsequent article (2018: 151) Wimmer proposes “three long-term, slow-moving political processes encouraged ties of political alliance and support to stretch across ethnic divides: the early development of civil-society organisations, the rise of a state capable of providing public goods evenly across a territory, and the emergence of a shared medium of communication.” He further argues these conditions are more likely in areas that featured strong, centralized state structures before colonization and decolonization, enabling the nation-state to succeed there (ibid: 159).

²⁰⁰ Stated differently, “politicians rely on ethnic patronage networks when voluntary organizations to build and stabilize political coalitions are scarce across the entire citizenry. Politicians then use *ethnic* commonality – rather than other social categories and associated ties – to choose followers because the very principles of legitimacy of modern nation-states encourage them to favor co-ethnics over others, to ‘take care of their own people.’” (Wimmer, 2013: 202).

Figure 20: Nationalism, Nation-State Formation, and Ethno-Nationalist Wars (Wimmer)



Wimmer argues that the diffusion of nationalism spurred conflicts of unit transformation as colonies rebelled against empires to gain independent statehood, and as post-colonial states excluded certain ethnicities. Such conditions generated anti-imperial wars of liberation, civil wars, and interstate wars that in turn fed back upon unit formation.

Wimmer's argument mirrors the distinction Douglas C. North et al. (2009) make between 'limited access orders' and 'open access orders' to explain why some parts of the world are more prone to violence than others.²⁰¹ In limited access orders, "Personal relationships, who one is and who one knows, form the basis of social organization and constitute the arena for individual interaction" (ibid: 2). These authors estimate that 85% of the world's population lives in such settings, wherein economic growth is stunted, political participation limited, and law and property rights enforced unequally. Limited access orders are more prone to violent conflict because they depend on unstable coalitions in which rent distribution buys the compliance of specialists in violence.

²⁰¹ Dani Rodrik (2016) makes a similar argument about the infeasibility of inclusive liberal democracy in developing countries.

In open access orders, “personal relations still matter, but impersonal categories of individuals, often called citizens, interact over wide areas of social behaviour with no need to be cognizant of the individual identity of their partners” (ibid: 2). These settings have fully industrialized, enjoy high economic and political development, host vibrant civil societies, and feature the impartial rule of law. Violence is less likely to afflict open access orders because they can rely upon the state’s monopoly of violence and impersonal, consensual opportunities for association.²⁰²

Wimmer’s major advance is to quantitatively establish the causal connections between conditions that favour ethnic social organization (limited access orders) and war of particular characteristics. Indeed, he makes two major improvements over the existing International Relations and Comparative Politics literatures (as reviewed in Chapter One): he demonstrates that unit-level transformations (the creation of empires and their subsequent dissolution into nation-states) are a fundamental cause of war over the past two centuries, and that, amidst such transitions, intrastate and interstate wars have the same proximate causes (ethnic nationalism as the motivation for violence and organizational basis of politics).²⁰³ Periods “of institutional transformation are much more war-prone than periods of institutional stability because the stakes in the political struggle are particularly high and escalation into armed conflict therefore more likely” (Ibid: 110). “Once a nation-state is established,” it creates “new incentives to protest and rebel and new opportunities to pursue ethno-nationalist goals in civil and irredentist wars” (ibid: 141). The national principle ultimately proved a potent force with which to achieve independence from imperial rule, but a highly volatile one in many of the post-colonial states that resulted.²⁰⁴

²⁰² North et al.’s argument in turn mirrors Levy and Thompson’s (2011) contention that the trajectory of war in human history has split between the industrialized world, in which force became too destructive to use, and the agrarian world, where force remains ubiquitous (as discussed further below).

²⁰³ As Wimmer (2013: 110) summarizes: “the global spread of nationalism and their subsequent formation of nation-states are major causes of war during the past 200 years. Nationalism led to the often-violent creation of new states; these new nation-states often went to war with each other over ethnically mixed territory; and ethno-nationalist civil wars over who controlled these newly founded states haunted many of them decades after independence was achieved.”

²⁰⁴ Antony Anghie (2004: 205), in his discussion of the connections between imperialism and international law, echoes this point: “The nationalist struggles that led to the independence of Third World states did not conclude with decolonization. Rather, the Third World state itself became a site of conflict, as it often contained within its territory many different ethnic groups, some of which aspired to be independent peoples

These insights are highly novel, yet supported by the few studies that have seriously considered the causal linkages between domestic and international wars. Moaz Zeev (1989), for example, finds that states formed by revolution or that have experienced revolutionary regime change are more prone to international wars and militarized disputes than those that form and change more gradually. New revolutionary governments, he argues, fear that their position may be undermined from abroad, while other states fear the spread of the revolutionary spirit.²⁰⁵ In this way, “domestic political changes have system level effects” (ibid: 228).²⁰⁶

In the other direction, Gary Uzonyi (2018) finds that states experiencing international rivalry are more likely to commit genocides and politicides domestically. Rivalry increases the prevalence of hawkish politicians, the role of the military in state and society, and the regime’s perception of threat, thereby providing a *motive* to kill domestic opponents en masse.²⁰⁷ Rivalry also increases the likelihood of civil and international wars that provide the *opportunity* (as smokescreens) for the slaughter of the perceived enemy within. Finally, Cunningham and Lemke (2013) conduct regression analyses on multiple datasets and find that barriers to bargaining (information asymmetries, commitment problems, and issue indivisibility) explain the onset, duration, and outcome of civil wars just as well as they do international wars.

The biggest problems in Wimmer’s account, however, are his conceptualizations of nationalism and of nation-states. On the one hand, he defines nationalism in exclusively *ethnic* terms; yet those societies that most successfully realize the national principle with the creation of nation-states are those that are able to remove ethnic identity from politics by instead courting the voluntary, *non-ethnic* associations of *civil society*. In this way, Wimmer conflates *ethnic* nationalism (political community based on assumptions of shared

with their own state... These communities had joined together – with varying degrees of success and credibility – in opposing colonial rule. The advent of independence, however, directly posed the question of what factors united these disparate communities other than a shared opposition to colonial domination. Thus, the problem of cultural difference emerged once again, this time in the difference between the post-colonial state and the entity that sought to secede from it.”

²⁰⁵ Stephen M. Walt (1992) makes a similar argument.

²⁰⁶ Zeev (1989: 228) continues: “The significant relationship between these levels of analysis suggests that processes of political change spill over to higher levels of aggregation and that these spillover effects are dynamic: political changes within units have an impact on what happens to the system as a whole.”

²⁰⁷ Rival states are also more likely to support insurgents and/or terrorists in each other’s territory, and see politicians using international tensions as a diversion from domestic problems (Uzonyi, 2018: 477).

blood) with *civic* nationalism (political community based on shared citizenship and commitment to similar political principles, such as equality and non-violent dispute resolution).²⁰⁸ Civic nationalism tends towards peace and nation-statehood; ethnic nationalism leads in opposite directions.

Wimmer (2013: 108) argues that “wars between and within states are most likely to be fought during and because of the process of nation-state formation.” But given these problems in his conception of nationalism, it may be more accurate to contend that it is rather nation-state *non*-formation that causes war – the *absence* of nation-state institutions and shared commitments to political community in the midst of conflicting ethno-nationalist identities and their associated patrimonial arrangements. As Wimmer (2013: 72) himself proposes:

Many recently founded nation-states became thoroughly compartmentalized along ethnic lines because low state capacity and weak civil societies made the establishment of encompassing networks of political alliances difficult. Nation building remained a political ideal impossible to achieve, and ethnicity was politicized.

In the last sentence, Wimmer explicitly treats nation and ethnicity as opposing, exclusive terms in contradiction of his definition of nationalism as ethnically based (ibid: 2)!

As mentioned above, the quantitative analysis at the heart of Wimmer’s argument treats nation-state formation as a discrete moment in time at which a country gains its independence and proclaims the national principle as the foundation of rule (Wimmer, 2013: 130, for example). It thus focuses on nation-statehood in a *de jure*, rhetorical sense, but not in the *de facto* sense of actual institutional rules and practices (ibid: 86-97). Yet, in his argument, it is the latter that is most relevant to war, particularly when conditions are unfavourable to civic national institutional arrangements amidst the widespread ethnic nationalist mobilization of peoples. Indeed, many argue that the correspondence between nationhood and statehood is rare, and the depiction of the present as a “world of nation-

²⁰⁸ For a detailed treatment of this distinction, see: Ignatieff, 1998. Wimmer’s explicit focus on ethnic nationalism also creates a distinction between nationalist wars and revolutionary wars, thereby limiting the scope of his explanation. “Latin America’s civil wars are not well captured by [the] model” (Wimmer: 2013: 129). But the Marxist insurgencies of the Cold War era – from Vietnam to Guatemala – often mixed universalist revolutionary ideology with (civic and ethnic) nationalism, albeit tied to class.

states” (ibid: 25) deeply erroneous.²⁰⁹

The broader notion of ‘self-determination’ may more accurately capture the processes of identity formation and mobilization in post-colonial states than does the ‘national principle’, given the ambiguity between civic and ethnic forms of nationalism. The quest for self-determination led many colonies to statehood, but the ‘self’ to be realized by the transition remained deeply contested and indeterminate long after independence.²¹⁰ Of course, many contenders deployed a strictly ethnic definition of the ‘self’ properly entitled to govern. But others used alternative political, economic, and social divisions – class, most commonly – to define and mobilize the ‘true’ national self in civic (voluntary, non-ethnic) ways. Throughout the Cold War, revolutionary and counter-revolutionary doctrines often intertwined inextricably with local histories and ethnicity to produce unique forms of nationalism. Wimmer (and many others), however, treats non-ethnic ideologies as separate and distinct from nationalism (and further distinguishes ethno-nationalist civil wars from ‘other’ forms of civil war). He thereby underestimates the complexity of nationalist worldviews and limits his explanatory range (particularly concerning war in Latin America).²¹¹

²⁰⁹ In Wimmer’s definition (2013: 113-114), nation-states are “based on centralized bureaucratic forms of government,... ruled uniformly without an institutionalized differentiation between core and periphery, embrace the principles of the equality of citizens (replacing hierarchy), and govern in the name of a bounded national community rather than some universal principle.” Charles Tilly (1990: 3) conceives the nation-state differently as “a state whose people share a strong linguistic, religious, and symbolic identity. Although nation states such as Sweden and Ireland now approximate that ideal, very few European national states have ever qualified as nation-states. Great Britain, Germany, and France – quintessential national states – certainly never met the test.” For Tilly (ibid: 2), the present is a world of *national* states (not nation-states), which he defines as “states governing multiple contiguous regions and their cities by means of centralized, differentiated, and autonomous structures”.

²¹⁰ Indeed, Wimmer and Min’s (2009) characterization of civil wars as ‘intra-polity wars’ misses the key point; these wars arose from the lack of a common political community, not within one.

²¹¹ The wars for independence in nineteenth century Latin America generally stemmed from a schism in the upper classes of the colony between those who benefitted from mercantilist relations to the Spanish Empire (and thus identified as Spain), and those who preferred more liberal, free trade arrangements by which the colonies could control their own destinies and development as nations separate from Spain (the United States had a similar experience under the British Empire). The violent conflicts in Cold War-era Latin America, moreover, generally involved Marxist revolutionaries and conservative upper classes, both claiming to represent the true nation and its interests in contexts where class and ethnicity often overlapped.

The End of the Cold War

Where the authors examined above focus largely on the *sources* of violent conflict, Kalyvas and Balcells (2010; Balcells and Kalyvas, 2014) explore more deeply the *character* of the civil wars that often resulted. They argue that the transition from a Cold War international system to a post-Cold War order changed the prevalence of the different ‘technologies of rebellion’ employed in intrastate conflicts.²¹² Depending on the use of small arms versus heavy armour by the state and the rebels, these authors distinguish three types of civil war (alongside military coups as a fourth, non-war possibility) and determine their frequency during the Cold War (1944-1990) and Post-Cold War (1990-2004) periods, as summarized in Table 10 Below. Their dataset includes 147 civil wars.

Table 10: Prevalence of Civil War Types Distinguished by their Technologies

		Military Technology of the State:	
		High	Low
Military Technology of Rebels	High	<p>Conventional War Rebels directly confront the state using heavy weaponry such as artillery and armour, and tactics such as sieges and positional warfare.</p> <p>Cold War Prevalence: 27.72% Post-Cold War Prevalence: 47.83%</p>	<p>Military Coup Rebel groups that are militarily more powerful than the state generally mount a quick coup d’état and thus avoid war.</p>
	Low	<p>Irregular War Rebels cannot confront the state directly, and therefore operate in small bands in rural areas harassing the state; also referred to as insurgency or guerrilla warfare.</p> <p>Cold War Prevalence: 66.34% Post-Cold War Prevalence: 26.09%</p>	<p>Symmetric Nonconventional War (SNC) Conflicts involving weak or collapsed states, predatory militias, and low technology and training on both sides.</p> <p>Cold War Prevalence: 5.94% Post-Cold War Prevalence: 26.09%</p>

²¹² Kalyvas and Balcells use the term ‘technologies of rebellion’ in a broader way than the understanding of ‘technologies’ developed in Chapter Two. For these authors, technology includes ideologies and social organization, but weaponry is primary in their analysis, so their work is presented fairly here as an example of technological change within the WITs framework.

Importantly, the authors find that GDP/capita and other control variables have a negligible impact on the results. Further, “Rough Terrain and Ethnic War are not significant in any of the [statistical] models. This suggests that terrain and ethnic conflict are not associated with a particular technology of rebellion” (Kalyvas and Balcells, 2010: 426).

In a follow-up study, Balcells and Kalyvas (2014) incorporate a number of additional sources and factors into their dataset to identify the different tendencies of each type of civil war, summarized in Table 11.

Table 11: Relative Characteristics of Civil War Types

Civil War Type:	Duration:	Severity:	Civilian Victimization:	Outcomes:
Irregular	Longest Average of 113 months	Medium Average of 1258 battlefield deaths per month	Highest	Much more likely to be won by incumbents (the state)
Conventional	Relatively short Average of 40 months	Highest Average of 3038 battlefield deaths per month	Medium	Rebels and incumbents have roughly equal likelihood of victory
Symmetric Nonconventional (SNC)	Relatively short Average of 49 months	Lowest Average of 1015 battlefield deaths per month	Lowest	Most likely to end in draws (50% of them do)

Combined, these two studies reveal notable changes in the character of civil war. Most broadly, they find that irregular wars featured most prominently in the Cold War period (particularly in Asia and Latin America), but declined significantly thereafter. The end of the Cold War generated a spate of conventional civil wars (in former Soviet Republics) and witnessed the growth of ‘symmetric nonconventional (SNC) wars’ (particularly in sub-Saharan Africa).

Conventional civil wars, in which both sides deploy advanced military capabilities, tend to be the most devastating on the battlefield, but they are also relatively short and present rebels and incumbents with roughly equal prospects for a decisive victory. Irregular wars are less intense on the battlefield, but tend to have the highest rates of

civilian victimization, last the longest (more than twice as long as the other types, on average), and are more likely to see the incumbent state triumph in the end. These results confirm that “irregular wars are most likely the ‘dirtiest’ civil wars of all, targeting civilians and causing extensive humanitarian damage” (Balcells and Kalyvas, 2014: 1407). Even more significantly, the studies also demonstrate that irregular warfare is not a ‘paradigm’ of civil wars, nor “a ‘modular’ technology available to anyone, anywhere, anytime; rather, its availability is determined to an important degree by the properties of system polarity and the characteristics of the Cold War” (Kalyvas and Balcells, 2010: 416).²¹³

In the post-Cold War period, irregular wars were to some extent replaced by SNC wars in which both states and rebels use relatively low-tech weaponry, and which – contra Mary Kaldor’s (2012) ‘new wars’ hypothesis and Hironaka’s notion of ‘neverending wars’ – tend to be relatively shorter and less harmful to civilians (Balcells, and Kalyvas, 2014: 1402).

Kalyvas and Balcells trace the causes of these trends directly to the structure of world order, arguing that “the end of the Cold War has had a transformative impact on the way civil wars are fought... despite being domestic conflicts, civil wars are shaped in nonobvious, yet decisive ways by the international system” (Kalyvas and Balcells, 2010: 427). More specifically, they argue that the Cold War era featured a particularly robust form of insurgency linked to the superpowers’ provision of material support, revolutionary beliefs, and military doctrines to rebels and governments.

As a core dynamic of their ideological competition, the United States tended to provide material support and counterinsurgency doctrine to client states, while the Soviet Union and China tended to provide material support alongside revolutionary beliefs and doctrines of ‘people’s war’ to rebel groups. Such support bolstered the capacities of client governments, but offered an even greater boost to insurgencies, enabling them to mount sustained campaigns against states.²¹⁴ As John A. Nagl (2005: 24) observes: “The

²¹³ This point (to some extent) tempers the second part of Fearon and Laitin’s (2003: 75) definition of insurgency as “a technology of military conflict characterized by small, lightly armed bands practicing guerrilla warfare from rural base areas... [that] can be harnessed to diverse political agendas, motivations, and grievances.”

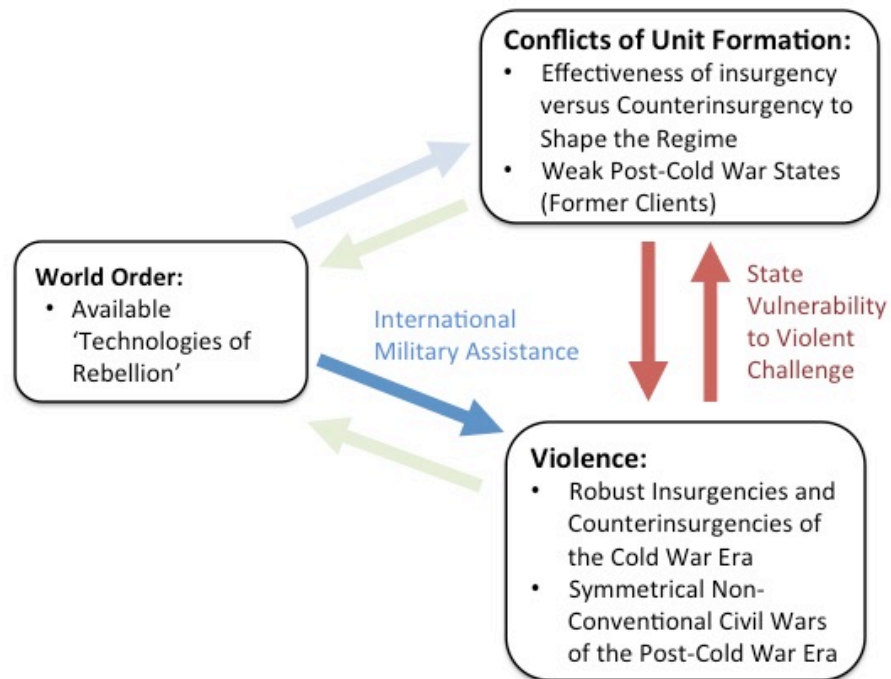
²¹⁴ Hironaka (2005: 19-28) too links the growth in quantity and duration of civil wars to the superpowers’ provision of material support and ideological frames to governments and rebels, alongside interstate

proliferation of portable and extremely effective killing machines in the wake of World War II dramatically increased the amount of firepower available to groups wishing to overthrow governments and continues to be a substantial problem today.”

The collapse of the Soviet Union ended massive flows of material aid to rebel groups and client governments while simultaneously discrediting ideologies of revolutionary change. Similarly, in the absence of bipolar ideological competition, “the United States lost interest in propping up client states in the developing world and divested itself from many weak states” (Kalyvas and Balcells, 2010: 421). Amidst these divestments, the end of the Cold War produced a short spate of conventional civil wars as armies of the former Soviet Republics (and Yugoslavia) split into well-armed factions that fought each other to form new post-Communist states (ibid: 422). Of more ongoing consequence, the end of superpower patronage to client governments and rebels saw “low-capacity states [face] daunting prospects as they became vulnerable to equally low-capacity rebels who were able to challenge them by foregoing the painstaking process of organization, mobilization, and state building required by robust insurgency” (ibid). Irregular civil wars were closely associated with the Cold War, but its end saw an increase in SNC civil wars.

interventions (by the superpowers, former colonial metropolises, or neighbouring states) on the side of one or the other.

Figure 21: Technologies of Rebellion in Civil Wars During and After the Cold War (Kalyvas and Balcells)



Kalyvas and Balcells argue that the technologies of rebellion provided to (or withheld from) client governments and insurgencies shape the type of civil war in which they engage, fostering the robust insurgencies and counterinsurgencies of the Cold War era, and the state weakness and low-intensity civil wars of the post-Cold War world.

A notable issue in Kalyvas and Balcells' analysis, however, is their definition of 'Symmetrical Nonconventional' civil wars, and the question of whether these are aptly considered wars at all. The category is something of a 'catch-all' for what are elsewhere termed 'low-intensity conflicts'. The civil war categories are based on a state-rebel binary – indeed, a paradigm of civil war – but many contemporary armed conflicts feature a wide variety of armed groups fighting states and each other in pursuit of diverse goals. Core aims are often more local (such as resource control) rather than to capture of the state or change the nature of its regime. Sven Chojnacki and Zeliko Branovic (2011: 105) thus propose:

One weakness of previous approaches has been that the analyses have remained state-centered and oriented solely toward conflicts between

governments and rebel groups. However, in areas of limited statehood, one can assume neither the presence of a state with a fully functioning regular army nor a dyadic conflict structure (state versus rebel groups). Instead, these areas are characterized by the fact that the state's control of the use of force is severely limited or has broken down and several entrepreneurs of violence compete as providers of security or perpetrators of insecurity.

Also of note, the data for Kalyvas and Balcells's first study goes only to 2004, and may therefore give insufficient consideration to the robust insurgencies (and in some instances conventional symmetric civil wars) that have escalated precipitously in Afghanistan, Iraq, and Syria. Renewed international military assistance (by the United States, Russia, and regional powers such as Pakistan) is a crucial feature of these violent conflicts. And to some extent, American patronage and military aid to client regimes persists in the post-Cold War era under the rubrics of the 'war on drugs' and the 'war on terror'.

Decolonization and Violence: A Synthesis

The contention that state formation in post-colonial countries was different than state formation in Europe in ways propitious to civil war is, of course, not a new one. What is new in the works considered here is their attempt to link the causation of these violent conflicts of state formation to systems of world order using thorough and comprehensive studies. Each of these accounts has problems and explanatory limitations, but nonetheless outlines plausible pathways by which world order shapes conflicts of unit formation and their violence through worldviews, institutions, and technologies. They can be synthesized in a way that recognizes both their merits and their faults (as summarized in Table 12 below).

Table 12: Advances and Limitations of Selected Literature

Authors:	Advances:	Limitations:
Wimmer	-Identifies two 'waves of war' over the past 200 years: one involving the creation of empires in the nineteenth century, and the second the dissolution	-Dismisses and misunderstands world polity theory and 'systemic' explanation. -Limits the concept of nationalism to <i>ethnic</i> nationalism, separate from civic

	<p>of empires in the twentieth century.</p> <ul style="list-style-type: none"> -Highlights nationalism as a potent motivation for wars of national liberation (decolonization), civil wars and international wars (nationalism as a common cause of <i>both</i> interstate and intrastate war). -Demonstrates that in different conditions, decolonization could lead to nation statehood or ethnic closure, thus setting out pathways of unit formation. 	<p>nationalism and other ideologies, when empirical examples combine the three.</p>
Hironaka	<ul style="list-style-type: none"> -Provides a world polity mechanism for the transmission of institutional templates of statehood to post-colonial states that were unable to realize them, particularly due to the international commitment to arbitrary colonial borders and the prohibition of interstate war. 	<ul style="list-style-type: none"> -Focuses on the institutions that were not realized (templates of modern statehood), but not the formative processes that arose instead. -Does not explain why interstate warfare in Latin America did not produce strong statehood. -Does not account for cases in which border changes yet produced violent conflicts.
Hathaway and Shapiro	<ul style="list-style-type: none"> -Identify international norms of territorial integrity and the prohibition of international war as parameters of state formation in post-colonial settings that produced weak states and internal (rather than external) violence. 	<ul style="list-style-type: none"> -Overemphasize the Peace Pact as the cause of change, rather than a crystallizing moment within broader developments of world order.
Kalyvas and Balcells	<ul style="list-style-type: none"> -Explain how the Cold War prevalence and post-Cold War decline of superpower patronage shaped the 'technologies of rebellion' used in civil war, and the resulting characteristics of different types of civil war. 	<ul style="list-style-type: none"> -Use the category 'symmetric non-conventional' civil war as a 'catch-all' that includes many violent conflicts that are poorly understood as 'civil wars'.
Common to all Authors	<ul style="list-style-type: none"> -Identify mechanisms by which world order shapes the nature of war through its effects on unit formation. -Understand unit formation as a continuous <i>process</i> that often involves violence, and generates a mutable diversity of state forms. -Contrast European state formation with divergent processes of unit formation in the twentieth century (all but Kalyvas and Balcells). 	<ul style="list-style-type: none"> -Underemphasize and underappreciate the prevalence of genocide and politicide as counterparts to war fighting.

The nationalist worldview provided a potent ideology by which to mobilize wars of national liberation to gain independent statehood from colonial empires – from the Latin American revolutions against Spain in the nineteenth century to Vietnam and Algeria (against France), Kenya and Rhodesia (against Britain), and Mozambique and Angola (against Portugal). Nationalism, institutional models of statehood, and international norms of territorial integrity provided the crucial *systemic parameters* for the transition from colony to independent statehood. These conditions created opportunities and constraints in which different social actors – including rival elites, ethnic groups, regions, and classes – conflicted with each other to claim sovereign statehood and determine the (uneven) distribution of its associated benefits. These structural conflicts of unit formation thus occurred at the intersection of systemic features of world order (what some may term ‘top-down’ forces) and local (‘bottom up’) conditions.

As explored above, a number of circumstances prevented many nascent post-colonial states from replicating the formation of strong national statehood that had preceded in Europe, which had generated the nationalist doctrines, institutional templates, and international norms to which new states aspired and had to conform. Many new states lacked the resources, centralization, and infrastructural power to realize the national state model. The prohibition of international war prevented the types of interstate competition that had generated these features in the European context. Post-colonial borders followed the arbitrary demarcations of former empires, now upheld by international recognition. But these lines on a map bound together a diversity of communities and groups. They united to fight against imperial domination, but once they gained independence, competition for power and limited resources exacerbated the differences between them.

On this point, Robert Egnall and Peter Haldén (2009) note a crucial difference between European and post-colonial state formation. In the former, elite groups negotiated their commitment to “a common polity that transcended their particular interests prior to the expansion of the state” into society, and “long before nationalism in the modern sense of the word emerged as a force for mobilization and cohesion” (ibid: 36, 38). Post-colonial states instead featured competing forms of nationalist mobilization by elites in the absence of a prior bargain between them. The demands of patronage to particular groups, as the basis of elite power, constrained elites’ ability to negotiate and compromise with each

other (Rapley, 2002: 92).

The lack of *de facto* statehood created other avenues to wealth, status, and power.²¹⁵ Multiple formative logics contended, conflicted, and co-existed, but these arrangements were often unstable and vulnerable to challenge. Control of formal, *de jure* state institutions gave ruling elites access to development aid, international loans, world markets, economic rents, military assistance, and international political support (legitimation). These goods could be distributed through patrimonial networks to secure the support of key leaders and demographics. Though such relationships were most often based on ethnicity, they could also be based on other forms of identity and ideology, such as class or party membership (as is common in Latin America, for example). In any case, patrimonial networks tended to feature traditional and charismatic forms of authority, rather than the rational-legal authority of modern Western states (Weber, 2004: 133-145). Such rule was in many cases indirect, a form of brokerage between the central government and local power-holders (sometimes referred to as ‘big men,’ ‘caudillos,’ or ‘warlords’).

The stability of governance, however, hinged on the government’s ability to distribute rents and privileges in ways that satisfied their recipients; disruption to these flows, or discontent regarding the perceived fairness of their relative distribution, could easily provoke a withdrawal of allegiance, the formation of new oppositional alliances, and even violent resistance. Exclusion from governmental patronage networks created a deep grievance for marginalized elites and their constituents. Such relative economic and political deprivation of groups (often termed ‘horizontal inequalities’) often incited armed opposition and insurrection aspiring to either change the regime or secede (Cederman, Gleditsch, and Buhaug, 2013), sometimes with the support of rival or co-ethnic governments.

The crucial point is that such conflicts and their associated violence constituted highly contested processes of unit formation. The IR literature in particular tends to treat interstate war as a conflict between stable units with established regimes, identities, and interests. Comparative Politics often treats civil war as a battle for control of a (pre-existing or taken for granted) state or government apparatus. But in reality, such units, institutions,

²¹⁵ Such areas are aptly depicted as ‘hybrid political orders’ that mix elements of modern statehood with other forms of authority, organization, and community.

and identities were often in flux and hotly contested. The results were wars *of formation* rather than wars *between or within* formations. They involved competing nationalist ideologies, each delineating the included from the excluded and proffering a vision of shared destiny to be realized through national statehood. They pursued divergent regime types, programs of national development, and conceptions of political community. Such designs were often mutually exclusive and demographically exclusionary in ways that overwhelmed the newly minted institutions of post-colonial states, culminating in civil war, genocide, and democide as recurrent features of the Cold War world order. Local and particular causes shaped each instance of violent conflict, but each was also affected by the worldviews, institutions, and technologies that structured world order. Individual conflicts of unit formation also involved systemic processes of unit differentiation.

The interplay of insurgency and counterinsurgency in many civil wars aptly illustrates this characterization. More than territorial control, the violence of these rival campaigns aimed to capture 'hearts and minds' and win public support for one or another vision of national development and political community. In this sense, both constituted programs of statebuilding.

Insurgency (or 'irregular' warfare, 'guerrilla' warfare, or 'asymmetric warfare') generally involves a rebel faction that is weaker militarily than its state adversary, but compensates by avoiding direct confrontation, hiding in difficult terrain, mobilizing nationalist and other ideological sentiments, and ensconcing itself within supportive local populations (Nagl, 2005: 15-16). As Mao Zedong proposed in his widely emulated doctrine of 'people's war,' "There are, of course, many other conditions indispensable to victory, but political mobilization is the most fundamental... The richest source of power to wage war lies in the masses of the people" (quoted in: *ibid*: 22-23, 21). Accordingly, insurgencies are much more than military organizations; their fundamental basis in popular mobilization involves them deeply in local governance and political organizing, wherein they often model the institutional arrangements they pursue at the national level (though their rule is frequently enforced with raw violence).

Insurgencies generally depend upon local support and gain it through ideological appeal; to the extent that these features adhere, insurgencies must bargain with communities by providing public services (including security from state security forces,

maintenance of public order, and the settlement of disputes) in exchange for logistical support, concealment, intelligence, and recruits. Even more fundamentally, insurgents aspire to attract people to their cause. The result is a 'bottom-up' form of statebuilding advanced through local negotiation with the aggrieved communities rebels claim to represent.

Consequently, insurgent "forces could no longer be defeated by mere defeat of the enemy army, as had previously been the case... [Instead, victory] required that the people be defeated as well—or at least persuaded not to fight on behalf of, nor even support, the insurgents" (Nagl, 2005: 25). Counterinsurgency, in theory, also aspired to win 'hearts and minds' by targeting violence exclusively towards insurgents while providing public goods (such as security) and governmental reforms to win the loyalty of the aggrieved populations. But, as Branch and Wood (2010) argue, counterinsurgency was generally pursued in those contexts least amenable to the strategy: where incumbent governments were unwilling to mount the reforms (such as land redistribution) sought by insurgents and their supporters. The interest of the ruling elite vis-à-vis large swathes of the population was negative: to *prevent* or *suppress* rebellion rather than *build* forms of inclusion and empowerment.

Counterinsurgencies also deployed nationalist ideologies, but oriented to an exclusionary status quo rather than societal change. With these weak ideational foundations, counterinsurgency campaigns readily devolved into mass violence against civilian populations – democide rather than war (Branch and Wood, 2010; Rummel, 1994). In a study of 147 wars (civil, international, and colonial) between 1945 and 2000, Valentino et al. (2004) find that mass killing is most likely to be perpetrated by governments facing a guerrilla insurgency that boasts significant popular support.²¹⁶ These authors (ibid: 375-376) "argue that far from the unintended but inevitable side effects of combat, the killing of civilians in times of war is often part of a deliberate policy of mass killing against noncombatant populations."²¹⁷

²¹⁶ "A high guerrilla threat increased the risk of mass killings by three times. High levels of civilian support increased the probability of mass killing by 27.9 times" (Valentino et al., 2004: 395).

²¹⁷ Valentino et al. (2004: 377) make a notable qualification to their findings: "Despite the incentives for targeting civilians during counterinsurgency warfare, it is important to recognize that most guerrilla wars never escalate to mass killing." This statement may be misleading insofar as the authors (ibid: 377-378)

The brutal violence of counterinsurgencies nonetheless constituted a form of statebuilding (Newman, 2013). Jacqueline L. Hazleton (2017) demonstrates that commonly cited cases of counterinsurgency ‘success’ (Malaya, Oman, and El Salvador) hinged upon inter-elite accommodations and the use of violence against civilians (to deter their support for insurgents). Popular support was irrelevant to the outcome, and promises of reform went unfulfilled. Successful counterinsurgency does not win hearts and minds, but is rather “the result of a violent state-building process in which elites engage in a contest for power, popular interests matter little to the outcome, and the government benefits from the use of force against civilians” (ibid: 81).

Counterinsurgent violence imposed from the top down a militarized administrative order to control populations and territory (forcibly creating ‘strategic hamlets’ or ‘poles of development’, for example). Military campaigns integrated hitherto remote and isolated territories and populations into national governance. But raw violence remained the primary basis of counterinsurgent ordering, deployed to terrorize, dominate, and sometimes even exterminate entire communities.²¹⁸

In this sense, counterinsurgency often constituted a form of internal colonization, and (like European imperial conquest in the nineteenth century, discussed below in Section III) pacification generally involved violent conquest as a prerequisite to governance from the centre. Raphael Lemkin, father of the very concept of genocide, proposed that:

Genocide has two phases: one, destruction of the national pattern of the oppressed group; the other, the imposition of the national pattern of the oppressor. This imposition, in turn, may be made upon the oppressed population, which is allowed to remain, or upon the territory alone, after removal of the population and the colonization of the area by the oppressor’s own nationals. (quoted in Moses, 2008: 9).

And as Martin Shaw (2007: 461) argues, “the problems of genocide and war are so intimately linked that we need to see them within a common frame... wars studies need to

define mass killing as “at least 50,000 intentional deaths over the course of five years or less,” a rather high threshold.

²¹⁸ Kaldor includes such strategic and tactical humanitarian atrocities as one of three defining characteristics of her contemporary ‘new wars’, but this sort of violence was widespread during the Cold War era and earlier.

be radically reconfigured, to recognize genocide as a major tendency of modern war.”²¹⁹ Genocide is thus linked to formative dynamics of establishing an included polity by attacking a threatening other. The prevalence of genocidal or politicidal violence amidst civil wars – and the distinction between one-sided violence and war fighting – is, however, largely absent from the accounts of Wimmer, Hironaka, Hathaway and Shapiro, and Kalyvas and Balcells, despite crucial linkages between such non-war violence and unit formation.

In sum, the worldviews, institutions, and technologies of the Cold War era enabled and constrained processes of unit formation in ways that in many cases generated civil wars, insurgency and counterinsurgency, genocide and politicide as core dynamics of these volatile developmental pathways. The types of bargaining between different social actors provide a key mechanism of unit formation in its various directions. In European state formation, rulers had to bargain with their populations to extract the means of war-making in a negotiation that “produced important features of European states: the relative subordination of military power to civilian control, the extensive bureaucracy of fiscal surveillance, [and] the representation of wronged interests via petitions and parliament” (Tilly, 1985: 185-6).

In contrast, post-colonial “states and military organizations receive their resources and legitimacy largely from without and [did] not therefore need to forge the kinds of mutual ties that constrained the relationships between European rulers and ruled” (Leander, 2004: 71). The crucial bargains underpinning institutional arrangements in post-colonial states were *externally* oriented, made with more powerful actors in world order. These ties included international recognition of their sovereignty and borders; superpower patronage through military and economic aid; economic assistance from international financial institutions; and the development projects of various donor governments, international organizations, and non-governmental organizations. Such arrangements enabled violent forms of ordering through the military domination of society and government repression of huge swaths of peoples. Ruling elites could use aid, state

²¹⁹ Shaw (2007: 468) continues: “This genocidal tendency of total war is increased when guerrilla war is involved. Guerrilla war is effectively a secondary type of total war, since [it] also involves the same tendencies towards total mobilization and destruction. Guerrillas often see national, ethnic or class groups supporting the existing state or occupier as enemies, while counterinsurgency frequently targets the civilian society mobilized by the guerrillas—indeed genocidal policies are often justified by claims about the resistance activities, real and imagined, of sections of the target population.”

revenues, and international market access to buy the loyalty of other elites rather than forming inclusive national states through bargains with subject citizens. And they could rely on external military aid to suppress challengers to the regime.

As elaborated in Section III below, national debt and consequent structural adjustment programs shocked and undermined such patronage networks by slashing public spending and public employment, introducing anti-corruption measures, opening countries to global market competition, and more generally attempting to minimize the state's role in economy and society. In some cases, the rapid dislocations associated with such transitions contributed to the outbreak of further civil war and mass violence. In other cases (as suggested in Chapter Four), hollowing out the state made it less attractive for those seeking power and social change, leading to alternative projects that include violence and insecurity as part of their status quo.

II. Structural Conflicts of Vertical Differentiation at the Top

Vertical differentiation concerns the development and reproduction of hierarchical positions between social actors in which they have unequal capabilities (powers) and enjoy an uneven distribution of costs, benefits, and status. As discussed in Chapter Two, the process is complex because power can take many forms (such as decision-making, agenda-setting, or preference-shaping – see: Lukes, 2005) and operates in multiple spheres (including military, political, economic, and ideological arenas – see: Mann, 1986). Inequalities can be just as complex and multifaceted (Walby, 2009). As discussed in Chapter Two as ‘emergent social relations’, the structure of these conflicts concerns the configuration of incentives and shared meanings that tend to create self-reinforcing patterns of relationships, unequal roles, and differentiated actor identities, interests, and capacities. These conditions are not reducible to particular policies or policy-makers, but rather constitute an emergent feature of world order.

As Andrew Hurrell (2005: 54) suggests, the modern state system has two faces: the hegemonic struggles of the core European powers, and the imperial relationships by which the core dominates the periphery. Power (vertical differentiation) thus concerns, on the one hand, hegemony and the balance of power, and on the other hand, global hierarchies. The discipline of International Relations, however, tends to focus on the former and ignore the latter.²²⁰ This Chapter recognizes both as structural conflicts of vertical differentiation in world order, the first as vertical differentiation ‘at the top’ in the struggle between the most powerful over the shape of global governance, and the second (in Section III below) as vertical differentiation ‘from top to bottom’ in the evolution of global inequality.

Within conflicts of vertical differentiation ‘at the top’, the most powerful actors each seek to shape to their greatest benefit the rules, norms, values, and other such arrangements that constitute the governance of world order. Such actors generally wield what Michael Mann (1986: 31) terms the “leading edge of power, where the capacity to integrate peoples and spaces into dominant configurations is most infrastructurally developed”. Of the three types of structural conflicts in world order, this is the one best

²²⁰ Indeed, Kenneth Waltz (1979: 72-73) and others (Levy, 1983: 2-3) contend that International Relations is centrally and inherently concerned with the relations between the Great Powers.

captured by conventional IR thinking, particularly in its theories of hegemony, hegemonic cycles, and power transitions (Gilpin, 1981; Keohane, 1984). The discussion of this more familiar set of structural conflicts is therefore more cursory and abridged than that of the other two, as it largely summarizes arguments that are already well established. (Sections I and III, in contrast, provide a much deeper application of the co-evolutionary framework to make more novel contributions on themes that are typically neglected by the IR literature).

Robert Gilpin (1981; 1988) most prominently captures the structural conflicts of vertical differentiation at the top as cycles of congruence and disjunction between the ‘distribution of power’ (military, economic, and technological capabilities) among leading states, and the ‘hierarchy of power’ – the institutionalized rules and values by which benefits are unevenly distributed according to ‘prestige’. In the equilibrium phase, the state (or states) with the greatest capabilities (the hegemon or hegemons) builds an international institutional order to regulate political, economic, and social relations in ways that serve its interests and preserve its predominance.²²¹ Other states benefit from the resulting stability and coordination, even if the specific rules do not maximize their interest satisfaction or fully reflect their values. Such benefits, alongside the hegemon’s disproportionate power, create an incentive for other states to support rather than challenge the international order. Wars tend to be limited, and are fought to preserve existing arrangements.

Over time, however, technological, economic, political, and social developments alter the relative capabilities and interests of states, so that they reassess their cost-benefit assessments of the established institutional order. As the gap between the distribution of power and the hierarchy of power grows, newly empowered states perceive themselves to be disadvantaged (or served unfairly) within existing arrangements. They have greater incentive to *challenge* the institutional order in pursuit of changes that better serve them. If the disequilibrium is not resolved by incremental institutional revisions that better reflect the altered distribution of power, then rising powers have an incentive to pursue

²²¹ Gilpin (1981: 29) asserts categorically that in “every international system the dominant powers in the international hierarchy of power and prestige organize and control the interactions among the elements of the system”.

revolutionary change, generally through a devastating hegemonic war that establishes a new leader, or re-establishes the existing one (if it is victorious). And the cycle repeats.

Because Gilpin contends that the essential dynamics of international relations have not changed since the Peloponnesian Wars, his theory raises the disturbing question of whether humanity inevitably faces a hegemonic war in the foreseeable future. But the relevant trend in organized violence is the relative infrequency of hegemonic wars, and the general decline of Great Power wars more generally.

For Gilpin (1988: 600-601), hegemonic wars are distinctive types of war because they involve all the states in the system, arise from the breakdown of one international order and the creation of another, and, given these stakes, tend to be unlimited in nature. “Such wars are at once political, economic, and ideological struggles... [They] are not merely contests between rival states but political watersheds that mark transitions from one historical epoch to the next” (ibid: 601, 605). Gilpin (ibid: 606-610), however, identifies only three hegemonic wars in the history of the modern international system. Each of these conflagrations involved (as cause and/or result) major changes in political, economic, and social arrangements that resonate with the worldview, institutions, and technologies framework.

Table 13: Hegemonic Wars and Transformations of World Order (Gilpin)

Hegemonic War:	Associated Changes:
Thirty Years' War (1619-1648)	<ul style="list-style-type: none"> -State sovereignty prevails over religious authority and Hapsburg empire as the basis of political organization. -National interest and the balance of power become the foundations of foreign policy (not religion). -Commercial capitalism replaces feudalism as the mode of production. -The technology, tactics, and organization of military force improve.
French Revolutionary/ Napoleonic Wars (1792-1815)	<ul style="list-style-type: none"> -Nationalist ideology and its transformation of warfare through the notion of peoples' war (the levée en masse). -Great power management through the Concert of Europe. -Expansion of global markets under British naval dominance.
World Wars (1914-1918; 1939-1945)	<ul style="list-style-type: none"> -Industrialization of warfare (alongside the persistence of nationalism) -Outlawry of interstate war and creation of international collective security institutions (the League of Nations then the United Nations). -Bipolarity stabilized by nuclear deterrence.

Gilpin makes two additional points about hegemonic wars that deserve further development. First, the structural instability that generates hegemonic wars arises from shifts in both the locus and the very *nature* of power (ibid: 603). Examples of the latter include the professionalization of military force within state institutions, the growth of nationalism as a motivational ideology, and the introduction of industrial technology to warfare. Second, the new hegemonic power tends to build a new order by promoting its domestic regime (institutions and worldviews) as the basis of both international order and of domestic orders elsewhere. But just as the hegemon reconfigures the nature of units and the relations between them, it simultaneously transforms its own nature to fulfill its leadership role. The transformations of world order through the multipolarity of the nineteenth century Concert of Europe and bipolarity of the Cold War substantiate these points and further elucidate the structural conflicts of vertical differentiation.

Over the nineteenth century, the five great powers (Austria, Britain, France, Prussia, and Russia) managed a multipolar system of governance that included: the authority to protect the 'common good'; a set of specified governance tasks including the prevention of revolution and large scale wars; institutions and decision-making rules centred on mutual consultations; and authoritative coercive acts intended to preserve the system (Holsti, 1992). British economic hegemony and naval superiority enabled impressive levels of interconnectivity in trade and finance. Wars occurred, but were generally limited by a shared commitment to the balance of power.²²² These wars were perhaps paradigmatic, fought between the professional armies of states to settle political (often territorial) disputes by operating as the extension of diplomacy. Intervention into the domestic affairs of other states maintained order by suppressing revolutions the Great Powers found threatening, but also transformed order as these imperial powers sought to bring their civilization to other parts of the world (Buzan and Lawson: 2015: 178-180).

²²² The balance of power concept, however, was not so prominent as some assume; states sought to balance a much wider array of interests. In his review of nineteenth century diplomatic correspondence, Paul Schroeder (1989: 136) found that the 'balance of power' was mentioned less frequently than the balance of other interests, including "the preservation of peace, the maintenance of treaties and legal rights, the preservation of the social order (or the status quo, the monarchical order, the political order, existing territorial boundaries, and the like), the prevention of revolution, the satisfaction of national interests, honour, or public opinion, upholding international law, [and] maintaining the unity of the powers or the concert."

The system broke down for a number of reasons. Prominent among them was the emergence of nationalist ideologies culminating in the creation of nine new *nation*-states in Europe that challenged its basic rules (Holsti, 1992: 51-2).²²³ German and Japanese leaders in particular perceived themselves to be thoroughly disadvantaged, if not threatened, by the prevailing arrangements, and therefore initiated total wars – the very conflagrations this governance system was intended to prevent – to radically refashion world order.

The Second World War generated several defining features of the ensuing Cold War order that shaped its attendant forms of violent conflict. The leading edge of power migrated east and west from Europe with the creation of two *superpowers*, defined by their unprecedented capacities and their consequent ability to influence human affairs around the globe. Within their exclusive blocs, the United States and the Soviet Union established competing systems of international governance that organized politics, economics, and social life of allied states. Alongside its containment strategy, the United States created a multilateral institutional order based on alliance, democracy, and trade that constrained and bound its power, but yet served its interests by integrating the west into a stable, open order that (to varying extents) benefited all (Ikenberry, 2002). Within its sphere of influence, the Soviet Union pursued central economic planning and authoritarian forms of politics that cemented the control of the party. But the Soviet system failed to keep pace of the economic and technological advances of the West, and of mounting demands for political reform. When President Reagan initiated an arms race that diverted resources from these problems, the Soviet Union collapsed alongside the bipolar world order (Hedatoft, 2009).²²⁴ The American-led liberal institutional order spread globally, but is today contested by rising powers (such as China, India, and Russia) as power has shifted east.

²²³ Holsti (1992: 53-5) also stresses the importance of technological change, as industrialization shifted statesmen's understanding of military power from the size of territory to rapidly advancing military technologies (such as railways and battleships) that created widespread uncertainty, insecurity, and a cult of the offensive at the same time as ideational systems were shifting from a cautionary approach to war to one that celebrated it as a moral good (social Darwinism).

²²⁴ A less triumphalist account proposes that the collapse of the Soviet Union arose internally from Gorbachev's belated decision to institute reform, which gained an uncontrollable momentum that produced an unintended political transformation.

While Gilpin suggests that another hegemonic cycle is inevitable, others argue that past cycles produced more linear and cumulative developments that may stave off another hegemonic war. John Ikenberry (2014b), for example, argues that each hegemon has learned from the experience of its predecessors in ways that enabled it to more fully elaborate the twin logics of statehood and liberalism, creating a long-term accumulation of knowledge, institutions, and hegemonic capacities. “[G]rand shifts in the character of states, societies, capitalism, technologies, violence, and ideas are not cyclical. They change and evolve over the centuries. As a result, the future is never simply a reproduction of the past” (Ikenberry, 2014b: 2-3). As a result, “the notion of rise and decline of international order misses the mark. There is evolution, accumulation, expansion, and path dependency operating in the background” (Ikenberry, 2014c: 105). World order has become more complex with each hegemonic iteration.

The decline of not just hegemonic war, but of Great Power wars more broadly, supports Ikenberry’s contention. As Jack S. Levy (1983: 130) finds: “There has been a relative absence of Great Power war in the nineteenth and twentieth centuries, when it has been under way only about one-sixth of the time. In the sixteenth, seventeenth, and eighteenth centuries, by contrast, Great Power war was under way about 80 percent of the time.” But as such wars have become less frequent, they have also become more and more severe (ibid: 136). Levy and Thompson (2011: 208) thus propose that

Industrialized states have reacted to the rapidly increasing human and economic costs of warfare by concluding that the possible benefits of warfare against other industrialized states are substantially exceeded by its likely costs. As a result, the probability of major power warfare between advanced industrial states has been significantly reduced.

The three broad explanations of this calculus are familiar and well rehearsed: the devastating costs of nuclear warfare (technology); the benefits of peaceful economic interdependence (institutions); and a decline of popular support for war and violence (worldviews).

It took the crucible of the Second World War for the United States to commit the vast resources and forge the novel institutional relationships between the state, industry,

and academia that were necessary to produce atomic weapons (Herrera, 2006: 115, 118-119, 191). Nuclear bombs represent not just a quantitative advance upon conventional explosives, but a *qualitative* change in the very nature of interstate security and military power.²²⁵ Herrera (2006: 183) argues that “they altered the interaction capacity of the international system by changing the role of force, time, distance, the meaning of the front, and mobilization.” As ‘absolute’ weapons (Deudney, 2014: 204), atomic bombs virtually guarantee the mutual destruction of those states that use them. Daniel Deudney (2014) makes the most comprehensive case for the transformative effects of nuclear weapons on world order, and their ability to forestall hegemonic and other interstate war. He makes three major arguments.

First, “nuclear weapons profoundly alter power and what it can accomplish” (ibid: 196). Nuclear deterrence effectively paralyzes the efficacy of military power between nuclear-armed states. It also makes exertions of conventional military force less likely between such states for fear of escalation.²²⁶ The notions of polarity and the concentration of military power as the foundations of hegemony make much less sense in such circumstances. Similarly, power “*balancing* ceases to matter much... Nuclear weapons, by making states secure against direct military encroachment and aggression, solve the problem that balancing was previously relied upon to address” (ibid: 213). Consequently, it is much more difficult to mount a challenge against a hegemon than in earlier eras.²²⁷ In this sense, American hegemony may prove more enduring than its predecessors. “[N]uclear weapons have altered the power transition dynamic by making great-power war less likely. If hegemonic war is taken off the table of history, the Gilpin vision of war and order building is decisively altered” (Ikenberry, 2014b: 14).

²²⁵ John Mueller (1988), in contrast, argues that the effects attributed to atomic weaponry actually arose from the experience of total war with conventional arms, but he underestimates the extent of qualitative change wrought by nuclear bombs.

²²⁶ “Most importantly, conventional forces, while not completely paralyzed, are substantially circumscribed, and come to play something closer to a policing role than an arbiter of great-power interstate disputes” (Deudney, 2014: 231-232).

²²⁷ “Encroachment, counterbalancing, hegemonic overextension, and power transitions are likely to be much less salient features of international politics in a nuclear world, making the overall international system less tumultuous and conflictual than in pre-nuclear times. With these problems reduced, hegemonic states and order in the nuclear era may persist much longer than in pre-nuclear times” (Deudney, 2014: 218).

Second, Deudney proposes that “a world secured by the effects of nuclear paralysis of war making is likely to favor a more liberal international order marked by various forms of openness to outside political, economic, and cultural influences” (Deudney, 2014: 212). Survival and independence are less at stake for states in a world of nuclear deterrence. Fears of openness and interdependence diminish as well, facilitating the spread of liberalism and democracy. If military power cannot generate the outcomes it once could, then economic and soft power become much more important facets of hegemony. “This suggests that the character of world politics may be appreciably more liberal due to these indirect effects of nuclear weapons” (ibid: 212). The technological capabilities of world order thereby shape domestic regimes and policies (unit differentiation) as well as their relative power (vertical differentiation).

Finally, Deudney argues that “further [nuclear] proliferation and possible nuclear terrorism challenge the non-use of nuclear weapons produced by deterrence” and could thus undermine the pacific effects of nuclear weapons outlined above (ibid: 231-232). Proliferation will further narrow the ability of the United States to achieve outcomes through its unparalleled military power, and non-state actors (particularly those that lack a defined territory) are much more difficult to deter from nuclear attack.

Herrera makes the further argument that the process of developing nuclear weapons fundamentally reshaped the United States and other leading states at the top of vertical differentiation.²²⁸ “If the Industrial Revolution pushed the state into the management of industry, the atomic age extended that reach into science” (ibid: 183). Nuclear-armed states directly promoted technological advance by managing a relationship between academia and industrial mass production (what President Eisenhower famously called ‘the military-industrial complex’, and others ‘the scientific state’ or ‘big science’). State-society relations changed accordingly, as “scientists, engineers, technicians, factory workers, bureaucrats, managers, and administrators” were all bound up “in the permanent planning and maintaining of a technology-based mobilization system with nuclear weapons

²²⁸ Herrera (2006: 119) proposes that “American postwar hegemony was built in part on this scientific-technological prowess and great power aspirations necessitated the acquisition of an analogous scientific-technological and industrial production apparatus.”

at its center” (ibid: 185-186).²²⁹ All states that wished to compete with the United States (including the Soviet Union and Great Powers) emulated this institutional model of technological innovation (ibid: 187).

Ultimately, Herrera (2006: 190) concludes that nuclear security in world order and such high-tech unit formation are mutually-reinforcing: “a highly technologically dependent international security sphere demands a sophisticated military-industrial complex at the domestic level, which in turn churns out new innovations and new military technologies, guaranteeing that the international security sphere will remain a high-technology race.”

Alongside nuclear weapons, international institutions of economic interdependence also raise the costs of major war. Scores of benefits would be forfeit by such disruption to global trade and finance. A wide range of Western thinkers have hypothesized the pacifying effects of commerce, including Adam Smith, Immanuel Kant, Jean-Jacques Rousseau, Karl Marx, Emile Durkheim, and Max Weber (Brooks, 2005: 1; Patomäki, 2008: 2). Most notoriously, Sir Ralph Norman Angell proposed at the cusp of the First World War that the economic integration of European states had grown so dense that war was unthinkable and militarism obsolete. Today, institutions of free trade and global economic integration may have finally realized Angell’s risky prediction.

Stephen G. Brooks (2005) notes that past arguments about economic integration focused especially on trade. He argues, in contrast, that the real – and novel – essence of global commerce today is the globalization of production – the far-flung and byzantine links of the value-chains employed by contemporary multinational corporations (MNCs). This form of commercial integration was conspicuously absent from the economic globalization preceding WWI. Such interdependence fosters peace among the great powers because it is much more cost-effective than territorial conquest, because leading military technologies can no longer be produced in autarchy (the disruption of vital supply chains to potential upstart powers would limit their ability to challenge the status quo), and

²²⁹ “Because the centerpiece of national security is the nuclear bomb—a weapon ‘used’ (in the deterrence sense) constantly during peacetime—the difference between wartime and peacetime becomes largely indistinguishable, at least as far as the state’s mobilization of social resources is concerned” (Herrera, 2006: 186).

regional economic integration can foster increasing cooperation among rivals.²³⁰ “No matter whether the ultimate goal is power, security, prestige, or wealth, the geographic dispersion of MNC production has structurally shifted the scales against any great power that tries to overturn the fundamental nature of the system through force” (ibid: 11).

With the recent populist backlash against economic interdependence, the proliferation of protectionist measures, and widespread fears of global depression, there is no guarantee that commerce will continue to pacify great power relations. Many perceive economic interconnection as a direct threat to their personal livelihoods, and the global economy could become more zero-sum in its competition for scarce resources and opportunities. The perceived costs weighing against major war could decline.²³¹ Others (Lund and Tyson, 2018), however, argue that globalization is not in retreat but rather entering a new phase in which digital technology (rather than trade) creates immense potentials for wealth creation that have just begun to open up. But the ultimate dilemma is that the pacifying effects of economic integration depend (at least within present worldviews) upon continued economic growth and rising material consumption, and consequently (given humanity’s carbon dependency), upon increasing ecospheric disruption and the intensification of climate change. These unintended effects are a growing source of conflicts that could become increasingly violent in years ahead.

Finally, the two World Wars stimulated a broad shift in the worldviews of Western publics in which war – once seen as a legitimate, virtuous, and honourable – was increasingly considered illegitimate, unjust, and barbaric. Indeed, in Steven Pinker’s (2011) account, the World Wars were a late but crucial phase in the long-term decline of human psychological proclivities towards violence and in the proliferation of more peaceable, humanistic values (the ‘better angels of our nature’). Others (Levy and Thompson, 2013: 416) argue that such shifts are secondary products of the increasing costs of war. In any

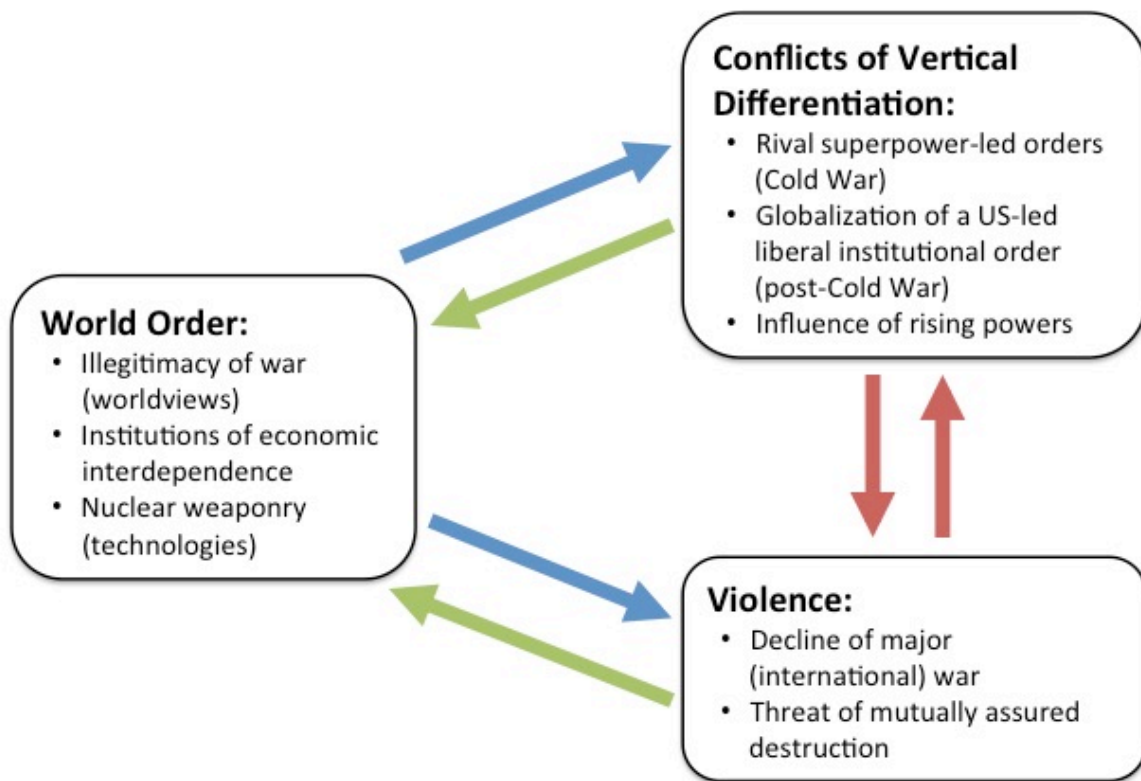
²³⁰ Conspicuously, Brooks’ initial list of leading states (2005: 210) does *not* include Russia or China, but he later applies his arguments to these increasingly relevant cases (ibid: 218-220).

²³¹ As Jervis (2002: 6) points out: “The liberal view assumes that actors place a high priority on wealth, that trade is a batter route to it than conquest, and that actors who gain economically from exchange are politically powerful. These assumptions are often true, especially in the modern world, but are not without their vulnerabilities.” Commercial peace requires that people continue to value consumption, and that the world economy can persistently satisfy materialistic demands.

case, the extent and durability of such attitudinal change remains highly uncertain, and many Western states retain highly militaristic values.

Figure 22 below summarizes the various arguments sketched in this section to link key features of the post-WWII world order to the hegemonic struggles over global governance (conflicts of vertical differentiation at the top) and the related decline of major power war.

Figure 22: Post-WWII Conflicts of Unit Differentiation at the Top



III. Structural Conflicts of Vertical Differentiation from Top to Bottom

Where structural conflicts of vertical differentiation ‘at the top’ concern the *rivalry* between the most powerful actors over global governance, a second set of conflicts of vertical differentiation concerns the *reproduction* of inequality between the powerful and the dominated – ‘top to bottom’ – at a planetary scale. These are conflicts between those who most benefit from the inequality of existing political, economic, and socio-cultural arrangements, and those who are subordinated by them, in a situation where the former yet depend on the latter and upon the continuation of structural inequality.²³²

As noted in the discussion of unit formation above, the consolidation and enrichment of European states were in many ways subsidized by the conquest and exploitation of other continents. Lamenting the inattention of peacebuilders to global structures of inequality today, peace researcher Geroid Millar (2019: 8) asserts that the

very lives lived by privileged citizens of secure Western democracies (with access to resources, technology, food, education, healthcare, transportation, insurance, etc.) is possible (and increasingly more so) only in so far as we benefit from the ability of corporations to access, appropriate, and control the land, labour and resources of those less privileged.²³³

This section traces such conflicts of vertical differentiation from the (late) colonial era to the inequalities of today, examining the various ways in which they have erupted in violence.

More specifically, the discussion below explores continuity and change in global inequality as it was institutionalized in European colonialism, the informal empires of the Cold War, and in the liberal internationalism that succeeded the Cold War. The analysis highlights the role of technological change in the evolution of the conflict through these periods, particularly (and respectively) the industrial revolution, Cold War technologies of

²³² Many refer to this structural conflict as ‘combined and uneven development’ to stress the interdependence of unequal positions (for example: Anievas and Matin, 2016).

²³³ Millar (2019: 8) continues: “There is nothing particularly surprising about this, and indeed different scholars have noted for some time the fundamentally unequal distribution of certain social commodities; such as justice, security, development, and peace.”

insurgency and counterinsurgency, and the developments in information communications technologies associated with globalization today.

Amidst these institutional and technological changes, however, the analysis below argues that a persistent worldview has guided the evolution of structural conflicts of inequality through these different eras. Often referred to as the 'civilizing mission', this ideology first bifurcates humanity into 'civilization and barbarism,' 'backwards (or 'traditional') and modern,' and later 'developed and underdeveloped' segments. It then proposes a moral obligation (alongside material interest) of the civilized parts of the world to bring their civilization to uncivilized peoples, thereby justifying the violence and exploitation involved in the relationship. As Mark Duffield and Vernon Hewitt (2009: 10) argue, the liberal, civilized, and modern identity of the global north is in part constituted by its contrast with an illiberal, uncivilized, and backwards south. At the same time, inequality creates a fear of difference on the part of the dominant – a fear that beneficiary privileges may be lost to revolt by the subjugated – which promotes defensive measures that further entrench the inequality and thereby maintains those fears of the 'barbaric' other in a self-reinforcing process of vertical differentiation.

Table 14 below summarizes these arguments about the evolution of inequality through different eras, and highlights the various forms of violence that accompanied it.

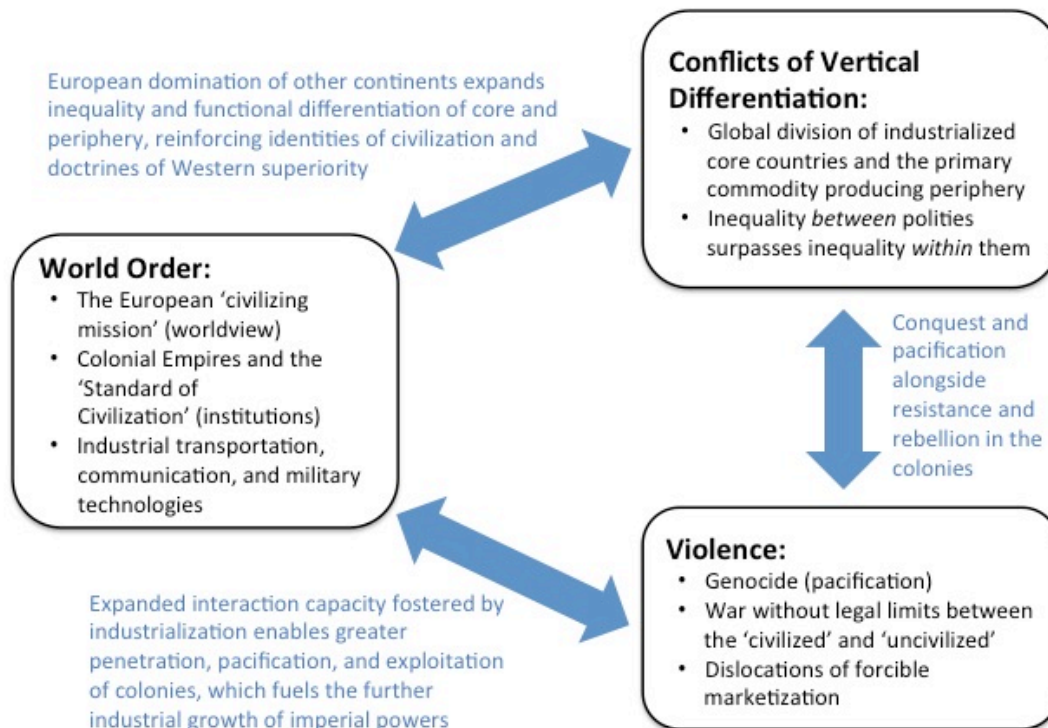
Table 14: Argument Summary of the Structural Conflict of Vertical Differentiation from Top to Bottom

Period:	Worldview:	Institutions:	Technologies:	Violence:
The Long Nineteenth Century (1792-1914)	The 'civilizing mission' in which the 'civilized' have a moral obligation to bring their civilization to 'barbaric' parts of the world.	Colonial empires of the European powers	Industrialization	-Wars of imperial conquest and colonial pacification (genocide)
The Cold War Era (1945-1991)	Marxism and modernization theory as universal models of development that can each save 'childlike' post-colonial societies from the opposing ideology.	Informal empires of the two Superpowers	Insurgency and counterinsurgency (small arms, helicopters, intelligence gathering, etc)	-Wars of national liberation -Proxy wars and direct interventions into civil wars -Genocide and democide
Contemporary Globalization (1970s-present)	Underdevelopment and failed states as international security threats (and humanitarian crises) demanding international intervention (peacebuilding and statebuilding).	Institutions of liberal internationalism, particularly neoliberal economics and international peace and stability operations	Revolution in information and communications technologies (ICT)	-Increasingly robust international peace operations (blurring of peace enforcement and war-fighting)
Emerging Trends (?)	The global north must fortify itself against the irremediable threats emanating from the global south.	Global containment	-Remote warfare (drones) -Urban design (walls, surveillance) -Barriers and borders	-Urban insecurity -Privatization of security -Small footprint operations (drone strikes and special operations)

The Industrial Revolution and European Empires in the Nineteenth Century

Inequality is a perennial feature of human history, evident wherever conditions enable the accumulation of surplus (Scheidel, 2017: 25-61). But as Barry Buzan and George Lawson (2015) convincingly argue, the nineteenth century generated a qualitative (as well as quantitative) change in the character of inequality by altering the very ‘mode of power’ at the leading edge of world order. They propose that the industrial revolution, the rationalization of European statehood, and ideologies of progress transformed the ways in which “power was constituted, organized, and expressed” (ibid: 1, 22) with momentous consequences.²³⁴ Buzan and Lawson’s account helps identify the changes in system structure (worldviews, institutions, technologies, and especially the exponential growth of interaction capacity) that accelerated global inequality, and the ways in which its institutionalization within colonial European empires bore distinctive violent conflicts.

Figure 23: Vertical Differentiation in the Nineteenth Century



²³⁴ This trio of social forces notably mirrors the worldview (ideologies of progress), institutions (rational statehood), and technologies (industrialization) scheme.

Industrialization revolutionized the interaction capacity of world order.²³⁵ The agrarian world featured relatively slow, low-volume, and costly forms of transportation and communication that relied primarily on sailing ships and horsepower. A thin global trade connected distant orders lightly. The nineteenth century transition from an energy regime based on plants and animals to one based on fossil fuels drastically increased interconnectivity over the planet. Steamships and railways enabled fast, high-volume, cheap, and regular mass transportation over land and sea while the telegraph fostered rapid global communication. The growth of intergovernmental organizations, multilateral diplomacy, and international non-governmental organizations provided the institutional infrastructure that facilitated these technological advances. Combined, these developments integrated the world (arguably for the first time in history) into a single order and intensified political, economic, military, and cultural contacts to unprecedented levels (Buzan and Lawson, 2015: 67-96).

Interaction capacity, inequalities of wealth and power (vertical differentiation), and the functional differentiation of world order fed one another. Railways enabled European empires to penetrate deep into continental interiors, and (with the aid of steamships and the telegraph) to integrate such regions into global markets. Military force could deploy more quickly, expansively, and intensely to support the colonization of distant lands and peoples. Europeans expanded “into the regions of Africa and Asia where new products could be sourced, a market for European goods found, and a place provided for settlement of the excess populations fostered by the burgeoning industrial and commercial societies of Europe” (Pejcinovic, 2013: 16-17). Colonial resources fed the growth of industrial economies, which in turn expanded global interaction capacity and enabled empires to further dominate and exploit their colonies in a positive feedback loop.

The process differentiated the world (vertically and functionally) into a core of powerful, industrialized, and centralized states (the European metropolises), and a periphery of dominated, primary commodity producing areas. While in previous centuries the inequality *within* polities around the world was generally greater than that *between*

²³⁵ As examples of qualitative change, the industrialization of physical infrastructure “overthrew many of the geographical constraints that shaped the international relations of the agrarian order” (Buzan and Lawson, 2015: 69) and railways in particular “broke forever the characteristic of the agrarian world that interaction capacity was higher on water than land, and much higher on sea than on rivers” (ibid: 73).

them, by the end of the nineteenth century “the inequality of nations was as profound as the inequality of classes. Humanity had been irrevocably divided” (Davis, 2002: 16). The world had long exhibited inequality, “but never was unevenness experienced on this scale, with this intensity, or in a context of such close, inescapable interdependence” (Buzan and Lawson, 2015: 9).²³⁶

The core and periphery constituted one another not only through material inequalities of production and force, but (particularly in the case of the core) in ideology and identity as well. Underpinning colonialism lay ‘the civilizing mission,’ “the grand project that has justified colonialism as a means of redeeming the backward, aberrant, violent, oppressed, undeveloped people of the non-European world by incorporating them into the universal civilization of Europe” (Anghie, 2004: 3).²³⁷ Rather than domination, Europeans conceived their colonialism as a form of *inclusion* that bestowed enlightened tutelage and promoted commerce to help peoples at more ‘primitive’ stages of development climb the ‘ladder of civilization’. In this view, imperialism was in the interest of the subjugated, even if they did not recognize it as such and would only accede to it when forced to do so (Pejcinovic, 2013: 117-142).²³⁸ Indeed, colonial resistance and rebellion seemed to Europeans only to confirm the superiority of ‘civilized’ people over ‘barbarians’, and to validate the mission of the former to civilize the latter.

Europeans institutionalized this worldview into international law as the ‘standard of civilization’ by which ‘civilized’ states (of Western Europe) enjoyed full sovereignty,

²³⁶ In addition to creating a single, global economy, new transportation and communication technologies “also made war and politics global, producing an integrated, hierarchical, global order” (Buzan and Lawson, 2015: 23). Further, the “small size of the core, combined with the extent of the gap between it and the periphery, underline just how extreme and narrow the new international hierarchy was” (ibid: 172).

²³⁷ Article 22 of the *Covenant of the League of Nations* (28 June 1919) reveals the persistence of this worldview into the twentieth century by dividing the world into independent states and territories not capable of self-government. For the latter “there should be applied the principle that the well-being and development of such peoples form a sacred trust of civilization”. Further, the “best method of giving practical effect to this principle is that the tutelage of such peoples should be entrusted to advanced nations who by reason of their resources, their experiences or their geographical position can best undertake this responsibility, and who are willing to accept it, and that this tutelage should be exercised by them as Mandatories on behalf of the League.”

²³⁸ Nineteenth century ‘ideologies of progress’ bolstered this view by suggesting that both core and peripheral societies could enjoy unending improvement. Buzan and Lawson (2015: 6-7) define such doctrines as “systematic schemas of thought, specifically modern liberalism, socialism, nationalism and ‘scientific’ racism, which were rooted in ideals of progress and, in particular, associated with Enlightenment notions of classification, improvement and control.”

'uncivilized' (or 'less civilized', or 'barbaric') states were granted only partial sovereignty (China, Japan, Iran, and the Ottoman Empire, for example), and the 'savage' parts of the world had no sovereignty (and were thus fair game for colonization, as occurred across Africa and North America). A rule-based order governed the relations between 'civilized' states, while no such restrictions applied in their relations to 'uncivilized' and 'barbaric' societies (Buzan and Lawson, 2015: 3, 42; Anghie, 2004: 61-62).

War between 'civilized' states was limited by principles of discrimination and proportionality, but violence between 'civilized' and 'uncivilized' peoples escaped such constraints (Buzan and Lawson, 2015: 174; Pejcinovic, 2013). While this period constituted the 'long peace' in Europe, Buzan and Lawson (2015: 184) note that "there was no 'long peace' in the periphery, but something more like continuous war."²³⁹ The violence associated with these colonial conflicts centred on the conquest and pacification of native peoples and territories, bolstered by the technologies of the industrial revolution and legitimated by the civilizing mission. Waves of settlers expanded imperial penetration and control into continental interiors throughout the nineteenth century. They enacted "a moral purpose for war that combined a strategic necessity concerned with defending or creating open and free market commerce with necessity understood in terms of a 'civilizing mission'" (Pejcinovic, 2013: 141). Violence drove vertical differentiation, and vertical differentiation justified violence.

The violence of conquest, rebellion, and pacification often spiralled into genocide. Indeed, A. Dirk Moses (2008) argues that colonialism has an inherent tendency towards genocidal violence "because resistance and its brutal suppression [were] inevitable" (ibid: 18). More specifically, he asserts that

the aim of the colonizer was not just to defeat military forces but also to annex territory and rule over a foreign people. War aims were not limited, as they customarily were in intra-European wars; they were absolute... [Consequently], the colonizer often ended up waging war against the entire population because it was difficult to distinguish between civilians and

²³⁹ Buzan and Lawson (2015: 184) further propose that a positive feedback drives this condition: "The bifurcation between war abroad and peace at home had major significance for the development of international order, reinforcing a sense of European cultural and racial superiority, which in turn facilitated its coercive expansions around the world." In this way, core and periphery were mutually constituted by force in a self-reinforcing manner.

combatants, especially when guerrilla-style resistance ensued... Colonial war could mean total war on a local scale (ibid: 26).

As another core source of imperial violence, Mike Davis (2002) highlights the forcible integration of colonies into global markets. He argues that marketization rapidly uprooted traditional systems of governance and resource management and thereby left indigenous populations particularly vulnerable to droughts and famines that killed 30-50 million people in the last quarter of the nineteenth century (ibid: 7). “Millions died, not outside the ‘modern world system,’ but in the very process of being forcibly incorporated into its economic and political structures” (ibid: 9). Although these deaths may be best understood as ‘structural violence’ (Galtung, 1990) than by the narrower definition of violence employed in this thesis, there can be little doubt that colonial powers advanced marketization through the direct threat and application of force.²⁴⁰

Decolonization and the Informal Empires of the Cold War

Decolonization in the Cold War era stemmed from both the Second World War and earlier developments. Total war had severely weakened the European imperial powers, sapping their ability to retain control of their colonies (as evidenced by their failed attempts to do so in Indochina, Algeria, Kenya, Angola, and Mozambique, for example). Nationalist doctrines of self-determination undermined the legitimacy of imperialism in metropolitan societies while rallying potent campaigns for independence in the colonies. The Second World War also saw the leading edge of power travel east and west from the Great Powers of Europe to the United States and the Soviet Union. Both superpowers espoused anti-imperial ideologies, and decolonization was a central purpose of the newly minted United

²⁴⁰ “If resistance to famine in the 1870s (apart from southern Africa) was overwhelmingly local and riotous, with few instances of more ambitious insurrectionary organization, it undoubtedly had to do with recent memories of state terror from the suppression of the Indian Mutiny and the Taiping Revolution. The 1890s were an entirely different story, and modern historians have clearly established the contributory role played by drought-famine in the Boxer Rebellion, the Korean Tonghak movement, the rise of Indian Extremism and the Brazilian War of Canudos, as well as innumerable revolts in eastern and southern Africa” (Davis, 2002: 13). Davis (ibid: 5) also quotes “nervous American consular officials” in China, who noted after a three-year drought that killed 8-10 million people that “were it not for the possession of improved weapons mobs of starving people might have caused a severe political disturbance.”

Nations (alongside the 'development' of post-colonial states).²⁴¹ Finally, institutions of free trade (outside the Soviet bloc)

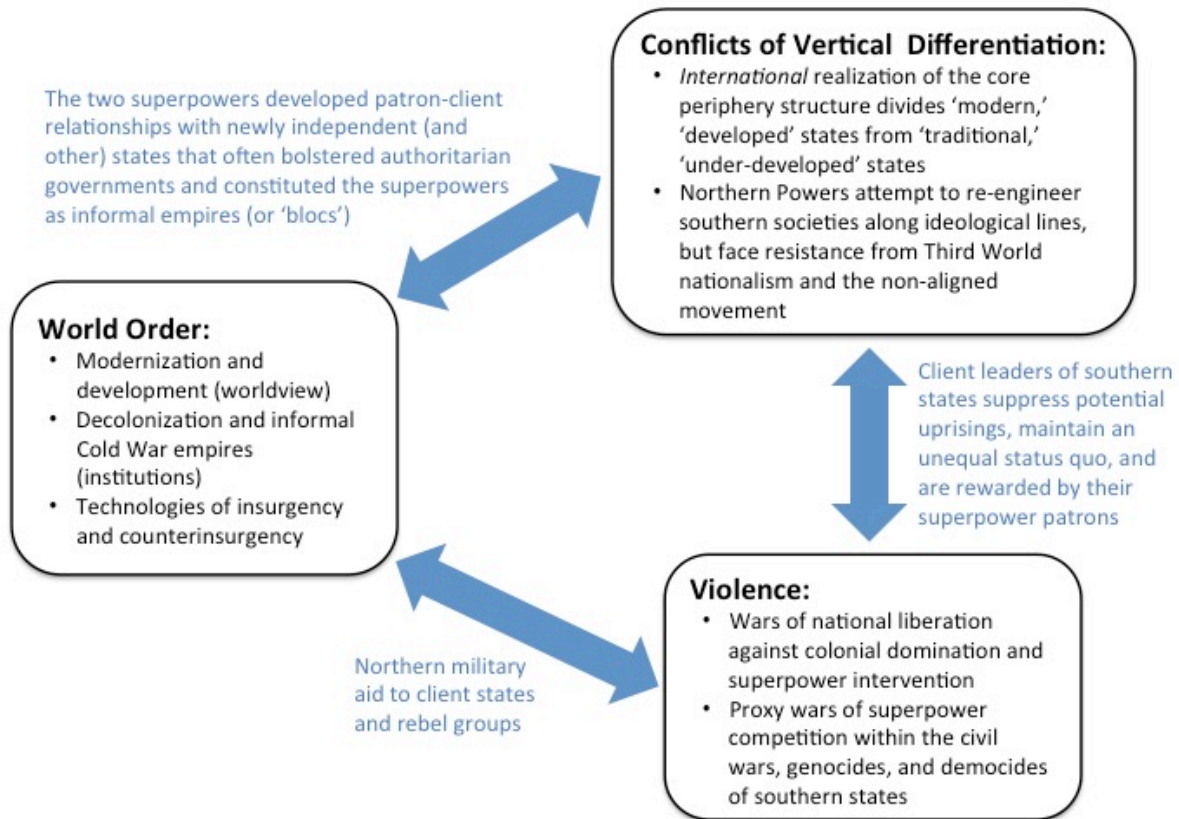
meant that states no longer needed to control territory to access markets. States that once maintained enormous empires to extract resources through privileged trading relationships could now gain the benefits of trade without the costs of controlling far-flung territories... Raw commodities, once obtained by colonization and extraction, now could be acquired through simple exchange (Hathaway and Shapiro, 2017: 344).

Such trade, however, continued to lock the periphery into primary commodity production at poor terms of trade with industrial core states, as captured by Raúl Prebisch's dependency theory and Immanuel Wallerstein's world systems analysis.

In the decades following WWII, decolonization produced a truly *international* world order for the first time in history. Hitherto 'uncivilized,' 'barbaric,' and 'savage' parts of the world gained formal sovereign equality with all other states. The transition, however, left the superpowers with a dilemma: both opposed European colonialism, but neither trusted the newly independent states to reliably govern themselves. The United States and the Soviet Union had to find new ways for the north to relate to the south, and they were remarkably similar in this regard (Westad, 2005; Duara 2011). Both superpowers feared that the childlike immaturity they perceived in these new states would render them susceptible to the false promises of the opposing ideology. In this way, the powerful still regarded the now *post*-colonial world as backwards and potentially dangerous.

²⁴¹ Chapters XI and XII of the United Nations Charter outlined a process of trusteeship for colonial societies that resembled the Mandate system of the League of Nations. The organization's promotion of decolonization, however, broadened into general support for national liberation movements. General Assembly Resolution 1514 (XV) of 14 December 1960 declared that "The subjection of peoples to alien subjugation, domination and exploitation constitutes a denial of fundamental human rights, is contrary to the Charter of the United Nations and is an impediment to the promotion of world peace and cooperation" (Article 1). General Assembly Resolution 3070 (XXVIII) of 30 November 1973 went so far as to reaffirm "the legitimacy of the peoples' struggle for liberation from colonial and foreign domination and alien subjugation by all available means, including armed struggle" (Article 2).

Figure 24: Vertical Differentiation during the Cold War



Revering their respective histories as universal models of human progress, both the United States and the Soviet Union sought to shape the internal affairs of post-colonial states in ways that would validate their ideology while securing political allegiance and access to key material resources. Marxist doctrine and modernization theory proposed 'stages of development' that echoed the European civilizing mission and justified paternalistic attempts to engineer other societies. The binary of 'civilization' and 'barbarism' became the difference between 'developed' and 'developing' (or 'underdeveloped') states. The Cold War thus featured an essential North-South dimension alongside its better-known East-West conflict. As in the nineteenth century, this 'long peace' between core powers involved considerable war and violence in the periphery. Odd Arne Westad (2007: 396-7) persuasively argues that

In a historical sense – and especially as seen from the South – the Cold War was a continuation of colonialism through slightly different means. As a

process of conflict, it centered on control and domination, primarily in ideological terms. The methods of the superpowers and their local allies were remarkably similar to those honed during the last phase of European colonialism: giant social and economic projects, bringing promises of modernity to their supporters and mostly death to their opponents or those who happened to get in the way of progress... These methods were centered on inducing cultural, demographic, and ecological change in Third World societies, while using military power to defeat those who resisted.

The United States and the Soviet Union avoided direct military confrontation, but instead competed for influence in postcolonial states by each promoting its own ideological model of development. They replaced European *colonial* empires with *informal* empires that reconciled imperialism to nationalism by forging patron-client relationships with Third World governments and opposition movements (Duara, 2011).²⁴²

In place of direct territorial control and administration, the superpowers bolstered their preferred regimes with military and economic aid in order to maintain their clients' Cold War allegiance while reshaping their internal affairs according to doctrines of modernity and progress.²⁴³ By the 1960s, however, the superpowers had grown frustrated by the apparent inability of Third World peoples to realize modern arrangements, and increasingly relied upon military aid as the means by which to maintain their client regimes in southern countries (Latham, 2010).²⁴⁴

In a reversal of the colonial policy of denying modern weaponry to the periphery, the pursuit of rival political agendas by the two superpowers, abetted by some former colonial powers and, after 1949, by the state socialist regime in China, pumped modern weapons and, up to a point, training to both client regimes and opposition movements throughout the

²⁴² Duara and others (Galtung, 1971) refer to these informal empires as 'neoimperialism'. "In its ideal expression, the Cold War represented a logical culmination of the new imperialism. Two superpowers sought to gain the loyalty of theoretically sovereign nation-states that would be militarily dependent upon the hegemonic power and subject to its political, economic, and ideological strategies" (Duara, 2011: 461).

²⁴³ "While recognized as worthy ideals, these designs were often shot through with paternalism, national interests, and covert racist prejudices that constantly produced contradictions and tensions" (Duara, 2011: 464).

²⁴⁴ Latham (2010: 275) further notes that the "combined American and Soviet turn away from ambitious, open-ended visions of decolonization to a more immediate emphasis on coercion, force, and control in the mid-to-late 1960s intersected with the passing away of the first generation of postcolonial leaders. As non-aligned nationalists were replaced in coups by military juntas or revolutionary regimes, the Third World became increasingly polarized."

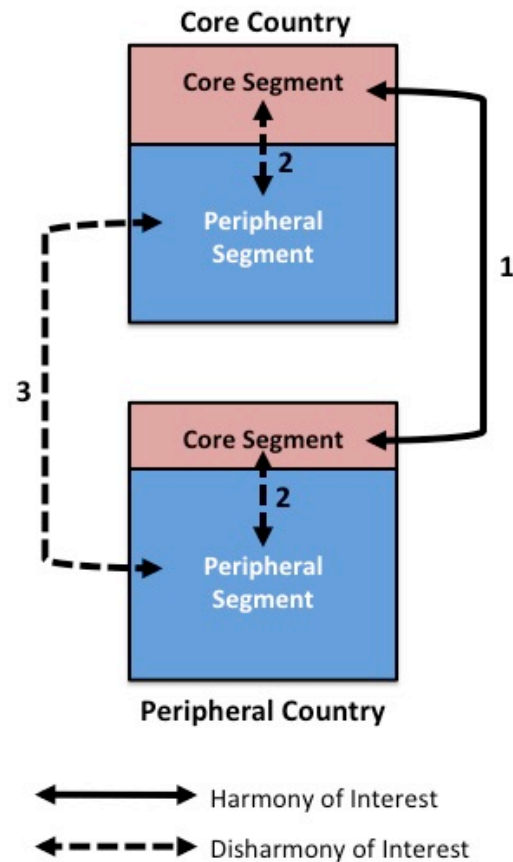
Third World. (Buzan and Lawson, 2015: 216-217).

The superpowers, along with China and the former European colonial powers, provided the military materiel (including small arms, helicopters, and communications technologies), doctrines (including insurgency and counterinsurgency, popular mobilization, intelligence collection, and the use of terror), and advisors to client regimes. These transfers enabled the insurgencies, counterinsurgencies, violent statebuilding, and democides noted above in Section I. In exchange for such assistance, client governments assuaged their patrons' fears of underdevelopment by quelling any threats arising from the inequalities and exclusions of their own societies, and accepted their country's peripheral position within an unequal world economy.

In this way, structural conflicts of vertical differentiation from top to bottom intersected with structural conflicts of unit formation. Patron-client relationships reproduced both the unequal structural relations between core and peripheral states alongside the internal inequalities of both kinds of societies. Johan Galtung's (1971) structural theory of imperialism aptly captures the mutual constitution involved.²⁴⁵

- 1) Through military aid, economic assistance, and international political support, the ruling elites (core segment) of the core country support a cadre of like-minded ruling elites (core segment) in the peripheral

Figure 25: Johan Galtung's Structural Theory of Imperialism



²⁴⁵ For the sake of consistency, this discussion uses the terms 'core' and 'periphery' instead of Galtung's 'centre' and 'periphery'.

country as a 'bulkhead' of imperial influence. The latter facilitate unequal trade relationships by exporting cheap raw materials and importing manufactures from core countries.

- 2) Both core and peripheral countries experience an internal conflict of interest (if not values) between their core segment and their peripheral segment. In core countries it generally concerns the political and economic privileges of the capital class over the labouring masses, as explained by Cohen and Rodgers (1983; summarized in Section IV of Chapter Two above). In peripheral states the conflict may involve such economic inequalities alongside more severe forms of social and political exclusion, disenfranchisement, and repression of the peripheral segment by the unrepresentative core segment.
- 3) The level of inequality between core and periphery segments in the peripheral country is greater than between those segments of the core country. This situation produces a net transfer of value from the peripheral country to the core country that benefits the peripheral segment of the core country. The latter therefore has a distinct interest in maintaining the inequalities within the peripheral society and between core and peripheral countries.

These informal, 'neoimperial' arrangements of the Cold War thus co-constituted the *intrastate* and *interstate* characteristics of core and peripheral societies. Prasenjit Duara (2011: 469-70) notes the recurring consequences for Third World peoples:

perhaps what was most unique to this period was the type of nation-state that emerged in much of the 'developing world': an undemocratic, authoritarian, if not military, ruling structure committed in varying degrees to building a developmental nation-state... the superpowers sought to preserve or acquiesce in the dominant groups that had formed the client nation-state, often because any change or destabilization might strengthen the other side. Thus these new states were frequently built upon the suppression of old and new aspirations.

Through such patron-client relations, many civil wars in the Third World became proxy wars of core states supporting their respective clients against alternative programs of development and reform.

Cold War neoimperialism, however, brought the superpowers into conflict with nationalist leaders (such as Gamel Abdel Nasser in Egypt and Jawaharlal Nehru in India) and local populations pursuing their own visions of development and modernity, often by playing the superpowers off one another to gain their desired forms of support. Through initiatives such as the Non-Aligned Movement and the New International Economic Order, the Third World sought to resist the imposition of East-West rivalry from the north so that they could carry out their own national projects (Anghie, 2004: 196-244). "Above all, they rejected the ideological rigidity of the Cold War and insisted on the right to define freely their own paths to progress in a world of different social systems" (Latham, 2010: 258-9). But such resistance did not always succeed; the superpowers often bolstered client regimes that were at odds with the aspirations of their populations, though conflict between patron and client recurred even under these arrangements (Streeter, 2009: 203).

This articulation of the North-South conflict also contained its own unique type of violence in the form of direct Northern military intervention into Southern societies. This violence included unsuccessful attempts of former European empires to reassert control over their erstwhile colonies, and also direct military interventions by the superpowers in intrastate conflicts, particularly the United States in Vietnam (1965-1975) and the Soviet Union in Afghanistan (1979-1989). All such examples featured an internationalized form of counterinsurgency, but all ultimately failed. Echoing Kalyvas and Balcells' (2010) argument about the robust insurgencies of the Cold War, Buzan and Lawson (2015: 217) highlight the role of military technologies to explain such outcomes:

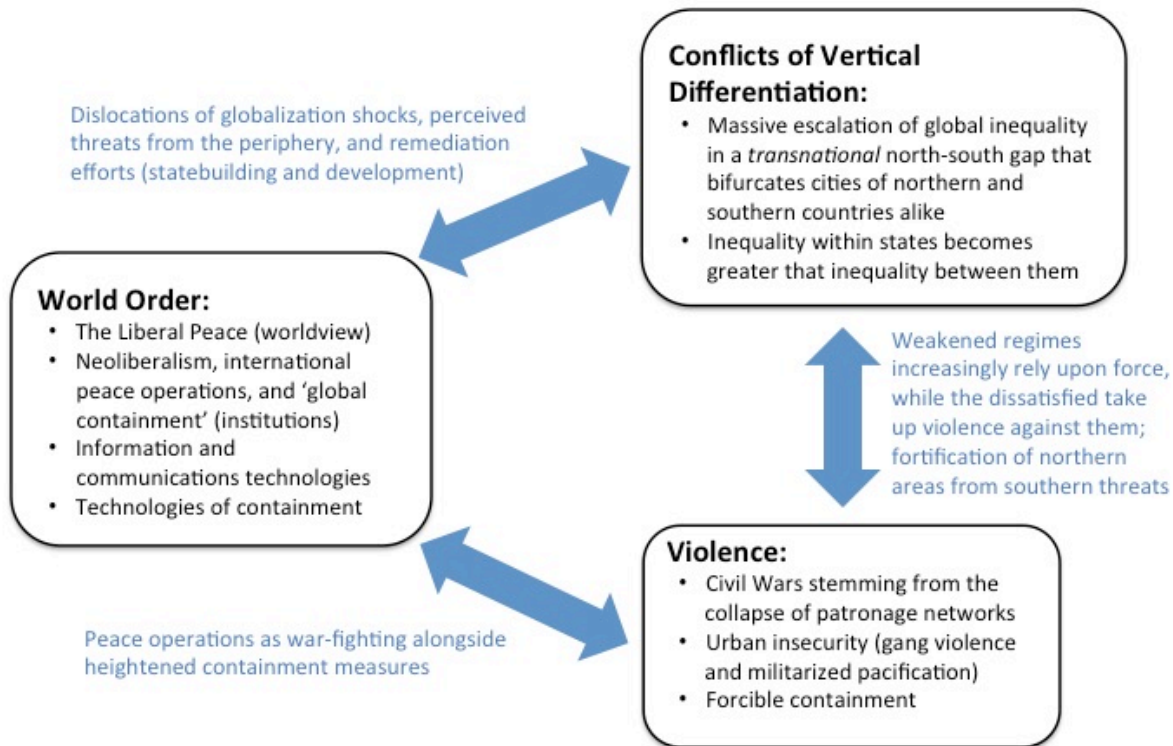
light infantry weapons such as the AK-47 assault rifle, mortars and rocket-propelled grenades transformed the military balance between core and periphery. These weapons were simple to maintain and use. Their widespread availability, along with the spread of tactics and training for deploying them, increased the difficulty for outside powers of holding territory against determined local opposition... Although the core retained a considerable superiority in its command of sophisticated military technology, it lost ground, literally, in its capacity to occupy foreign territory and impose systems of governance.

Globalization, Liberal Internationalism and the End of the Cold War

The collapse of the Soviet Union and termination of the Cold War allowed the American-led liberal institutional order to expand as a central feature of contemporary globalization. As the supposed 'end of history,' triumphalists such as Francis Fukuyama (1992) argued that the ideological conflicts of the past had ended with the selection of liberal capitalist democracy as the universally superior institutional model that would, often by its own momentum but sometimes with help, spread around the world. Three key institutional features replaced Cold War-era informal empires to manage structural conflicts of vertical differentiation (from top to bottom) and their shifting violence: neoliberalism, international peace operations, and the 'new global containment'. These three programs often conflict with and react to one another in ways that suggest a yet unstable and unsettled world order. Each has significantly altered the dynamics of vertical differentiation, unit differentiation, and their associated violence.

Neoliberalism replaced Keynesianism as the global economic 'rules of the game' in a transition that began in the 1970s to spread globally, culminating in the founding of the World Trade Organization (WTO) in 1995. The End of Cold War bipolarity also enabled a series of increasingly robust international peace operations (including 'humanitarian interventions' and 'stability and reconstruction' missions) aiming to ameliorate violent conflict by transforming affected countries. But amidst the significant social dislocations wrought by neoliberalism and the often disappointing results of international peace operations, world order today includes a growing number of (frequently illiberal) 'containment' measures that use acute applications of force (such as drone strikes, private security companies, and bordering technologies) to shelter the rich beneficiaries of contemporary globalization from the perceived threats posed by those marginalized by globalization. This subsection examines the development and interaction of these three features, and concludes by considering the ways in which climate change could reconfigure conflicts of vertical differentiation by dividing areas with the resources to cope with environmental disasters from those unable to do so.

Figure 26: Globalization, Vertical Differentiation, and Violence



The term 'globalization' refers to the increasingly numerous, rapid, diverse, and intensified connections that stretch human activity to the global scale (Young et al, 2006: 308). The process is hardly new, but each historical period of globalization has distinctive characteristics (see, for example: Brook, 2008; Osterhammel, 2014). Beginning in the 1970s and accelerating after the Cold War, the present phase features digital information and communications technology (ICT) and a liberal pedigree – particularly in its neoliberal economic doctrine – as its key distinguishing attributes. Together, neoliberalism and ICT have generated an unprecedented surge of global interconnectivity that Dani Rodrik (2011) terms "hyper-globalization."

In the first decades of the Cold War era, the United States, its western allies, and international organizations (such as the International Monetary Fund and World Bank) promoted Keynesian economic arrangements in both 'developed' and 'developing'

countries.²⁴⁶ These institutional rules enabled states to actively regulate their national economies in pursuit of high employment, poverty reduction, wealth redistribution, social safety nets, class compromise, and economic growth as the foundations of stability (Rodrik, 2011: 67-88). Keynesian arrangements thereby sought to avoid the turmoil of the laissez-faire economics that contributed to the Second World War, and to provide a broad-based improvement in living standards (understood as growing material consumption) that could forestall popular support for communist revolution. By generating such measures, Walter Scheidel (2017: 8-9) argues that the two world wars were among the greatest levellers of inequality in all human history:

The physical destruction wrought by industrial-scale warfare, confiscatory taxation, government intervention in the economy, inflation, disruption to global flows of goods and capital, and other factors all combined to wipe out elites' wealth and redistribute resources. They also served as a uniquely powerful catalyst for equalizing policy change, providing powerful impetus to franchise extensions, unionization, and the expansion of the welfare state. The shocks of the world wars led to what is known as the 'Great Compression,' [a] massive attenuation of inequalities in income and wealth across developed countries.

In the 1970s, a flood of global liquidity stemming from the Vietnam War and OPEC oil shocks overwhelmed Keynesian arrangements with the 'stagflation' crisis, which included simultaneous high inflation, high unemployment, and stagnant economic demand. These conditions created a critical juncture in the institutional development of the world economy. As elites around the globe found their wealth in jeopardy, they successfully advocated neoliberal economic doctrine to resolve the calamity and restore their position (Harvey, 2005; Manbiot, 2016).²⁴⁷

As an ideology, neoliberalism holds that the unconstrained operation of the market provides the optimal organization of human affairs. Where Keynesianism encouraged

²⁴⁶ In the 'developing' world (the Third World), Keynesian institutions were often referred to as the 'developmental state,' which used government planning and interventions into the (still market-based) national economy to shape its trajectory. See: Rapley, 2002.

²⁴⁷ Neoliberal ideology originated with Friedrich Hayek's (1944) book *The Road to Serfdom* and Ludwig von Mises (1944) book *Bureaucracy*. Supported by various millionaires and their foundations, Hayek established the Mont Pelerin Society in 1947 to promote neoliberal doctrine. The organization helped create a transnational network of think tanks, academics, businessmen, journalists, and activists ready in the wings to promote neoliberalism as the solution to the economic turmoil of the 1970s (Manbiot, 2016; Jones, 2012).

states to actively steer economic development, neoliberalism portrays the state as a source of corruption and inefficiency better kept out of the economy as much as possible. As one critic (Manbiot, 2016) depicts the doctrine:

Neoliberalism sees competition as the defining characteristic of human relations... Inequality is recast as virtuous: a reward for utility and a generator of wealth, which trickles down to enrich everyone. Efforts to create a more equal society are counterproductive and morally corrosive. The market ensures that everyone gets what they deserve.²⁴⁸

Core neoliberal policies thus seek to remove all barriers to trade, minimize state intervention in the economy, slash taxes for the rich, free global capital movements, and privatize once public services and enterprises.

With the support of American President Ronald Reagan and British Prime Minister Margaret Thatcher, neoliberal ideology became entrenched in the institutional rules of the International Monetary Fund (IMF), the World Bank, and (later) the WTO. Low inflation replaced high employment as the chief policy goal, governments reduced their social welfare spending and focused instead on creating a good business climate for foreign investment, and economic decision-making became the preserve of expert technocrats rather than democratic deliberation (Harvey, 2005; Peet, 2003).

Parallel developments in information and communications technology (ICT) boosted neoliberal economics by amplifying the interaction capacity of world order both *quantitatively* by increasing the density of interconnection, and also *qualitatively* by enabling decentralized, network structures of organization in politics and the economy.²⁴⁹ New ICT provided the dense interconnectivity required by market relations, which in turn stimulated further developments in ICT.²⁵⁰ The resultant surge of interaction capacity

²⁴⁸ Though cast in terms of economic efficiency, it is important to note that neoliberalism is also a deeply *political* ideology given its emphasis on individual self-sufficiency and self-responsibility. As Aihwa Ong (2006: 4) argues, these features require people “to self-manage according to market principles of discipline, efficiency, and competitiveness” in order to find a productive place within the neoliberal economy. Neoliberalism thereby empowers those who can do so, and marginalizes those who do not fit this conception of individualism (ibid: 21-2).

²⁴⁹ Manuel Castells (2010a: 7) depicts ICT as an “entirely new technological paradigm” that has reconfigured social organization into a “network society” (see also: ibid: 20, 41).

²⁵⁰ Castells emphasizes that the turn to neoliberalism and the advance of ICT were separate developments, but “when business engaged in its own restructuring process, it took advantage of the extraordinary range of

helped advance finance as the key driver of wealth creation (replacing industrial production),²⁵¹ but also rendered the global economy more vulnerable to crisis (as occurred in Southeast Asia in 1997, Argentina in 2001-2, and the world in 2008, for example).

Neoliberal economic institutions spread around the world, actively promoted by some governments, accepted by others as the condition of participation in global trade, and imposed on many poor and indebted countries through the ‘structural adjustment programs’ of international financial institutions and the aid conditionality of northern donors (Demmers et al., 2004: 14). The arrangements restored growth to the world economy (though at lower rates than enjoyed in the Keynesian period) but simultaneously ended the ‘great compression’ with a sharp escalation of economic inequality.²⁵²

Where the industrialization and imperialism of the late nineteenth century saw inequalities *between* nations grow greater than those *within* them (Davis, 2002: 15-16), neoliberalization has more recently reversed the trend. Today the inequality between countries is closing (particularly due to the rise of middle classes in China and India), while inequality within nations has risen precipitously and regained its pre-eminence (Milanovic, 2016: 5; Bourguignon, 2016). As a corollary, inequality amongst humanity as a whole has risen steeply to a Gini coefficient of 0.70 – “a figure so high that no country is known to have ever reached it” (Bourguignon, 2016: 11-12).

technologies that were available from the new revolution, thus stepping up the process of technological change, and hugely expanding the range of its applications. Thus, the decision to go global in a big way, while being facilitated by government policies of deregulation, liberalization, and privatization, would not have been possible without computer networking, telecommunications, and information technology-based transportation systems. The network enterprise became the most productive and efficient form of doing business, replacing the Fordist [hierarchical] organization of industrialism” (Castells, 2010a: 21). In this way, ICT and the neoliberal economy expanded together in a positive feedback loop.

²⁵¹ As Saskia Sassen (2014: 9) notes: “Finance in itself is not new—it has been part of our history for millennia. What is new and characteristic of our current era is the capacity of finance to develop enormously complex instruments that allow it to securitize the broadest-ever, historically speaking, range of entities and processes; further, continuous advances in electronic networks and tools make for seemingly unlimited multiplier effects.” Sassen (ibid) further notes that in 2005 the notional value of outstanding derivatives was US\$630 trillion, fourteen times the annual global gross domestic product (GDP), which is “a major departure from the Keynesian period, when economic growth was driven not by the financialization of everything but by the vast expansion of material economies such as manufacturing and mass building of infrastructures and suburbs” (ibid: 9-10).

²⁵² Indeed, the course of global inequality in the twentieth century followed a general U shape, from the era of robber barons before the world wars, to the great compression in the three decades following the world wars, to the restored inequalities of neoliberal globalization (Inglehart, 2016: 2).

Neoliberalism has produced a wide and growing gap between those who can find desirable opportunity in the high-tech, finance-driven global economy, and those who cannot. It tends to concentrate immense riches in the hands of a few through a positive feedback in which wealth begets greater opportunity to gain more wealth. As a recent Oxfam (2018) study found, “Eighty two percent of the wealth generated last year [2017] went to the richest one percent of the global population, while the 3.7 billion people who make up the poorest half of the world saw no increase in their wealth.”²⁵³ Focusing on the hyper-wealth of the top one percent, however, can mask another, perhaps even more consequential, facet of global inequality: the one fifth of the global population most privileged by the opportunities of global interconnectivity control 80-to-90 percent of the world’s annual income and personal wealth, while most of the other four-fifths are relegated to the ‘majority margins’ (Rogers, 2017: 180-181).

Buzan and Lawson (2015: 197-239) hail such recent trends to signify that the gap between core and periphery, north and south, is presently closing. A more plausible and convincing interpretation, however, is that global inequality is *transforming* from an *international* gap between core and peripheral countries to a *transnational* divide between the beneficiaries and losers of neoliberal globalization. Once peripheral or developing countries have improved their position relative to the richest nations, but done so (as have ‘wealthy’ nations) by enriching a very small minority of elites while marginalizing the majority of their populations. The North-South divide now cuts across once ‘southern’, ‘peripheral’, or ‘developing’ countries, as well as ‘developed’, ‘core,’ or ‘northern’ ones. Indeed, the split can be traced right across global cities, as discussed further below.

Structural conflicts of vertical differentiation today divide those who benefit from the increasing inequalities of neoliberal globalization from those who suffer its dislocations. Recent studies have found a *negative* relationship between levels of global interconnectivity and the outbreak of civil war (Barbieri and Reuveny, 2005; Hegre et al., 2003). As Karl Polanyi (1944) suggests, however, it is not the level of interconnectivity *per*

²⁵³ Similarly, Inglehart (2016: 3) notes that “Today, large economic gains are still being made in developed countries, but they are going primarily to those at the very top of the income distribution, whereas those lower down have seen their real incomes stagnate or even diminish. The rich, in turn, have used their privilege to shape policies that further increase the concentration of wealth, often against the wishes and interests of the middle and lower classes.”

se, but *sudden changes* in the amount of interaction – what Mark David Neiman (2011) terms ‘globalization shocks’²⁵⁴ – that link neoliberal inequalities to violence. The *disembedding* of economy from society effected by marketization can create acute dislocations across multiple spheres of life (see also: Sandbrook, 2011; Sandbrook and Romano, 2004):

Economic Dislocation: The rapid liberalization of trade (including the elimination of existing subsidies and protections) benefits some economic sectors while impairing others; the quick introduction of foreign competition can undermine the livelihood of millions even as it creates new opportunities. As Hartzell et al. (2010: 339) argue in their study of IMF structural adjustment policies: “it is processes that systematically create new economic winners and losers rather than particular levels of economic openness that have the potential to generate conflict.” In the turmoil of financial (and other) crises, foreign investors often buy up local businesses at rock-bottom prices and thereby displace resident entrepreneurs (Klein, 2007). And it is often the poor and uninsured who are most economically vulnerable to the effects of climate change and environmental degradation.

Political Dislocation: Internationally driven institutional reforms, such as democratization and statebuilding, often (by intention and/or effect) alter extant political structures and local systems of governance in poor societies. Such efforts can disrupt the balance of power between key social actors, undermine existing bases of authority, change the nature of public services, violate tacit state-society bargains (such as patrimonial networks), and unleash power struggles amongst elites. Reforms often reduce public employment and expenditures, remove

²⁵⁴ In Nieman’s (2011: 267) definition, a “globalization shock is a dramatic increase or decrease in the level of interactions that a state experiences with the global community. Such a shock disrupts traditional domestic relationships and puts strains on status quo relationships. Sudden shocks of globalization may introduce unfamiliar social concepts that undermine traditional religious values.... Globalization shocks may also impact the economic sector by rendering some markets or sectors suddenly obsolete in the face of cheaper, higher quality foreign goods. In such a scenario, employees of that sector would suddenly find themselves unemployed.”

economic policy from democratic politics, and reorient policymaking to aid global economic flows (Demmers, et al., 2004).

Socio-Cultural Dislocation: Neoliberalism involves a particular conception of personhood with implications for peoples' understanding of themselves and their relationship to others. The doctrine depicts humans as autonomous individuals driven by rational (material) self-interest (the so-called *homo economicus*). Many communities, in contrast, have long centred upon collectivist and socially embedded understandings of the self. Redefined in terms of their labour, individuals are required to sort themselves within the fluctuating demands of the market. The latter often involves migration and other problems that disrupt existing networks of trust, reciprocity, support, and cooperation (Sandbrook, 2011: 419). Even more fundamentally, neoliberal reforms may disrupt established systems of meaning, authority, and proper conduct.²⁵⁵ Indeed, Polanyi understood the shocks of liberalization to affect first and foremost the cultures within which people are embedded (Block and Somers, 1984: 66-7).²⁵⁶

Several studies link neoliberal dislocations of these sorts to violence. Examining the 1970 to 1999 period, Caroline A. Hartzell et al., (2010: 339) “identify an association between the adoption of IMF programs and the onset of civil war. This finding suggests that IMF programs to promote economic openness unintentionally may be creating an environment conducive to domestic conflict.” Nieman (2011: 263, 284) similarly demonstrates “that increasingly dramatic changes in the level of global integration are associated with an increased risk of civil war onset... An increase of one standard deviation

²⁵⁵ Sandbrook and Romano (2004: 1013), for example, argue that “neoliberal globalization is not just a matter of economics; it also threatens entire ways of life. The global penetration of the mass media and the values, images and tastes they purvey, have a powerful impact upon non-Western cultures. Television, films, popular music and advertising, industries dominated by US mega-corporations, pervade the world. These industries transmit a possessive individualism that fragments tightly knit communities; propagate consumer tastes that influence the dress, language, food and attitudes of young people; popularize notions of sexual, gender and authority relations that often clash with local notions of virtuous behavior; and reflect a secular, narcissistic outlook usually in conflict with sacred worldviews defended by local elites.”

²⁵⁶ Ingrid Creppell (2011: 455) refers to such harms as ‘normative threats’ that portend “a change in one’s way of life or in the patterns and rules one expects to govern relationships... Humans care as much about losing their particularistic forms of existence as they care about death itself.”

in the globalization shock variable results in an increase of 28% in the likelihood of a civil war onset.”

As detailed above, many post-colonial states were unable to realize the nation state model to which they aspired, and developed instead exclusive patrimonial networks that distributed international assistance and economic rents to key elites to maintain allegiances, while marginalizing (and even repressing) other groups. Cold War superpower patronage provided crucial resources to these governance institutions. Many client governments, however, racked up considerable international debt, suffered market shocks and economic crises, and saw little choice but adopting neoliberal policies proffered in international structural adjustment programs.

Neiman further argues that globalization shocks lead to violence when they generate social discontent and overwhelm the ability of institutions to manage adverse impacts. Dani Rodrik (1999) similarly contends that global economic shocks are especially devastating in countries with existing social conflicts and weak institutions. More specifically, the transition to neoliberal economics in many cases undermined the patronage networks that had earlier maintained domestic stability, and thereby created incentives for violence.

In some cases, rival elites sought to capture state institutions in order to build their own patronage networks, often by mobilizing those groups that were excluded from previous arrangements. Elites that had once depended upon government patronage had to find other opportunities to maintain their power. Many became much more predatory upon communities and local leaders; others skirted state authority to bring profitable goods – both licit and illicit – to global markets. At the same time, the ‘losers’ of globalization saw declining opportunity costs to participation in violent revolt, and ample benefits to violent mobilization (Hartzell et al., 2010: 341). And leaders of states in crisis were tempted to instigate ‘diversionary warfare’ by “creating internal scapegoats for problems and target[ing] ethnic or social minorities in an effort to avoid more general unrest” (Nieman, 2011: 270). Sandbrook and Romano (2004: 1008-1009) aptly summarize these perilous links between neoliberal dislocation and violence:

distributional shifts, new forms of insecurity, and external shocks demand strong, coherent states to take decisive defensive actions and mediate domestic conflicts; yet these new tensions, combined with externally influenced austerity programmes and anti-state ideologies, challenge the legitimacy and coherence of already weak states. The rise of tensions and grievances, coupled with an increasingly ineffective and unpopular regime, provide an opening for violent protest movements. Although competition-induced creative destruction may augment global efficiency, this goal is often achieved at the immediate cost of greater uncertainty and upheaval.

In these ways, the neoliberal institutions of world order had (and continue to have) a profoundly destabilizing effect upon ongoing processes of unit formation. Structural adjustment in particular could undermine patronage networks, exacerbate inter-elite and inter-group conflicts, and incentivize violence in the form of rebellion and predation. Chapter Four, in a similar vein, argues that socio-cultural dislocations associated with globalization have produced *global* identity conflicts attended by terrorist violence, including the rise of the Islamic State and resurgence of white nationalism amidst a broader anti-immigration xenophobia.

Alongside the spread of neoliberalism, the end of the Cold War enabled a reinvigorated United Nations and its partners to mount a surge of peace operations with increasingly broad mandates, spanning from conflict prevention to peacekeeping to peacemaking to peace enforcement to peacebuilding (United Nations [UN], 1992).²⁵⁷ Whereas classical peacekeeping simply monitored a military ceasefire, the more robust missions following the Cold War sought to deliberately *transform* war-torn societies and their basic institutions in order to redress the root causes of violent conflict.²⁵⁸

²⁵⁷ As defined by the UN's 1992 *An Agenda for Peace* report, Peacebuilding entails "action to identify and support structures which will tend to strengthen and solidify peace in order to avoid a relapse into conflict" including such measures as "disarming the previously warring parties and the restoration of order, the custody and possible destruction of weapons, repatriating refugees, advisory and training support for security personnel, monitoring elections, advancing efforts to protect human rights, reforming or strengthening governmental institutions and promoting formal and informal processes of political participation." In "the largest sense" peacebuilding involves efforts "to address the deepest causes of conflict: economic despair, social injustice and political oppression." (UN, 1992: paragraphs 21, 55, and 15).

²⁵⁸ Indeed, the UN's *Agenda for Peace* report (1992: paragraph 59) recommends that the organization develop new forms of "technical assistance" in order to support "the transformation of deficient national structures and capabilities, and for the strengthening of new democratic institutions... There is an obvious connection between democratic practices - such as the rule of law and transparency in decision-making - and the achievement of true peace and security in any new and stable political order. These elements of good governance need to be promoted at all levels of international and national political communities."

International peacebuilding (as well as international ‘stability’ and ‘reconstruction’ missions in Afghanistan and Iraq) thus pursued democratization and neoliberal structural adjustment programs as the institutional foundations that could rectify the presumably *national* causes of these wars.

The peace operations carried out over the 1990s, however, revealed that rapid democratization and neoliberalization could easily *endanger* peacebuilding efforts.²⁵⁹ Roland Paris’s (2004) review of international peacebuilding missions indeed found that democracy and structural adjustment programs could hastily unleash political and economic competition (dislocations) in settings without the institutional capacity to manage these conflicts peaceably. *Statebuilding* – efforts to create strong Weberian statehood – thus became the third pillar of international peacebuilding and broadened its agenda to include even more expansive institutional reforms (sometimes referred to as the ‘good governance’ agenda, or ‘institution-building’). The trio has come to be known broadly as the ‘liberal peace’ (Paris, 2010), but the tensions between statebuilding and neoliberal structural adjustment – the first tending to expand the state while the latter aims to restrict it – remain (de Soto and Castillo, 2016). Meanwhile, even the IMF itself has recognized that austerity and deregulated capital flows tend to increase inequality to levels that stymie the organization’s core goal of economic growth (Ostry et al., 2016).

Today a wide variety of international organizations and likeminded non-governmental organizations implement projects in development, human rights, humanitarian relief, and institutional reform that seek to reshape societies of the global south using liberal templates. Paris traces the ideological continuity of such actions with the colonial past by proposing that peacebuilding is “a modern version of the mission civilisatrice” (2002: 638). International peace operations represent “a new phase in the ongoing and evolving relationship between the core and the periphery of the international

²⁵⁹ Noting the contradictions and cross-purposes of structural adjustment and the consolidation of peace in post-war El Salvador, Alvaro de Soto and Graciana del Castillo (1994) famously remarked: “It was as if a patient lay on the operating table with the left and right sides of his body separated by a curtain and unrelated surgery being performed on each side.” In a recent follow-up (de Soto and del Castillo, 2016: 223), they conclude that the problem remains, and that “Judging from the record of the past quarter of a century, and despite the resources (military and financial) allocated to this purpose, the UN seems no better able to play an effective role in the reconstruction of war-torn countries today than it was at the end of the Cold War.”

system, with the core continuing to define the standards of acceptable behaviour, and international peacebuilding agencies serving as ‘transmission belts’ that convey these standards to the periphery” (ibid: 653-654). Peacebuilders promote liberal market democracy in ‘less-developed states’ via: provisions in the peace agreements they facilitate; the expert advice they provide on peace implementation; aid conditionality on political and economic reforms; and through their performance of governing tasks (proxy governance).

In sum:

peacebuilding missions are not merely exercises in conflict management, but instances of a much larger phenomenon: the globalization of a particular model of domestic governance—liberal market democracy—from the core to the periphery of the international system... Without exception, peacebuilding missions in the post-Cold War period have attempted to ‘transplant’ the values and institutions of the liberal democratic core into the domestic affairs of peripheral host states... [L]ike European colonialism a hundred years ago, today’s peacebuilding operations convey norms of acceptable or civilized behavior into the domestic affairs of less-developed states (ibid: 637-638).

Paris ultimately argues that liberal interventions are benign in comparison to the colonial and neoimperial past. Others, however, find greater continuity (see especially: Hewitt and Duffield, 2009). Antony Anghie (2004), for example, traces the civilizing mission from the era of European colonialism right up to the ‘good governance’ agenda that advances neoliberal policies in former colonies. This historical evolution of the north-south conflict is bound together by

the great imperial narrative in which ‘we’ are civilized, peace-loving, democratic, humanitarian, virtuous, benevolent, and ‘they’ are uncivilized, violent, irrational, backwards, dangerous, oppressed, and must therefore be sanctioned, rescued and transformed by a violence that is simultaneously defensive, overwhelming, humanitarian, and benevolent. (ibid: 317).

Indeed, a central theme of post-Cold War liberal internationalism is the so-called ‘security-development nexus’ in which the northern parts of the world construed the very underdevelopment of southern areas as a threat to global security (Duffield, 2001).

“Whether the threat is tribal anomie, nationalism, communism, or terrorism, it is related to the [perceived] risks and consequences of poverty, backwardness and social breakdown”

(Duffield and Hewitt, 2009: 12). ‘Weak’ and ‘failed’ states demand saving, both for the sake of their own populations, and for the safety of wealthier nations (for example: Helman and Ratner, 1992; United States, 2002).

As a result, international peace operations (and related interventions) have become increasingly robust (de Coning and Peter, 2019). Where blue helmets once deployed to help make and monitor a peace agreement, they are increasingly “operating in environments with no peace to keep. They are struggling to contain or manage conflict and to keep alive the prospects for a resumption of a peace process” (UN, 2015: 12). Such ‘peace enforcement’ operations more and more resemble war-fighting missions. As the 2015 Report of the High-Level Panel on Peace Operations (UN, 2015: para. 121) recognizes:

it is the prerogative of the Security Council to authorize United Nations peacekeeping operations to undertake enforcement tasks, including targeted offensive operations, and that it has done so in the past, as in Somalia in 1993 and in the Democratic Republic of the Congo in 2013. Those mandates involve a shift from tactical decisions regarding the proactive and pre-emptive use of force to protect civilians and United Nations personnel from threats to a fundamentally different type of posture that uses offensive force to degrade, neutralize or defeat an opponent.²⁶⁰

Where peacebuilding and statebuilding efforts aspire to address the root causes of violence, peace enforcement increasingly uses its own forms of counter-violence in an attempt to steer the conflagration in favour of some actors (those ostensibly committed to liberal peace) rather than others (‘spoilers’ of various kinds). In stark contrast to their peacekeeping forebears, contemporary peace enforcement missions intervene in the absence of any peace settlement, actively support host governments, shape domestic affairs, and use offensive force against non-state actors deemed unfit for peace processes.²⁶¹ One critic (Evans, 2010: 421) is perhaps hyperbolic, yet identifies a core

²⁶⁰ The panel notably ventures that the “United Nations may see more, not less, of those situations in the future” (UN, 2015: 12).

²⁶¹ As Metaja Peter (2019: 37) comments of UN peace enforcement missions in the Democratic Republic of Congo, Mali, and Central African Republic: “Enforcement peacekeeping manifests itself through two inter-related developments: (a) in enforcement of political solutions through support of a government’s state-building ambitions in its attempts to extend state authority amid an ongoing conflict, and (b) in enforcement of military victories through offensive use of force. As targets of peacekeeping actions are non-state actors that enjoy little international legitimacy due to their appalling human rights and war crimes records, no

conundrum of contemporary international peace enforcement: “the more peace is commanded, the more war is declared in order to achieve it.”

Peacekeeping originated as a tool of conflict management and after the Cold War expanded into a tool of conflict resolution, but with peace enforcement, it “has now come full circle and is again increasingly used to manage and contain, not resolve conflicts” (Peter, 2019: 26). Séverine Autesserre (2019: 101) sketches the astonishing expanse of these renewed efforts to protect the global north from the violence and turmoil of the south:

In nearly 50 conflict zones around the world, some one and a half billion people live under the threat of violence. In many of these places, the primary enforcers of order are not police officers or government soldiers but the blue-helmeted troops of the United Nations. With more than 78,000 soldiers and 25,000 civilians scattered across 14 countries, UN peacekeepers make up the second-largest military force deployed abroad, after the U.S. military.

‘Peace enforcement’ is just one example of a larger, ongoing transition in the management of global inequality. Liberal internationalism aims to ameliorate the threats perceived to emanate from the global south by *transforming* those societies along liberal lines. Immense outlays of blood and treasure, however, have not produced the desired results in recent interventions, whether in Afghanistan, Iraq, or the Democratic Republic of Congo. There are indications that northern segments of the world, chastened in their ambitions, have begun to favour instead measures intended to *contain* the dangers of the south through stricter border regimes and acute applications of force. Interventions may use much narrower and targeted applications of violence – such as drone strikes and special forces missions – to eliminate the most pernicious elements of southern societies (as perceived from the north) without attempting to transform the broader context from which they arise. As Paul Rogers (2017: 173) comments:

Boots on the ground may have been replaced by remote-control warfare, but the solution is seen in Western security circles almost entirely as the use of

comprehensive peace agreements with them are sought before peacekeepers are deployed, something that is in stark contrast with multidimensional peacekeeping developed after the end of the Cold War.”

intense and persistent military force, with little attention paid to the underlying reasons why the wars have developed. It appears more and more to be a case of keeping the lid on, rather than of turning down the heat

A growing 'global containment' seeks to *supress* potential spillovers from south to north. The strategy also relies upon increasingly strict border enforcement, walls, and other barriers to migration to prevent southern populations from carrying their (perceived) danger northwards.²⁶² As Mark Duffield argues (2007: 30), globalization spawns "a need to police international circulation, that is, to separate 'good' circulation – such as finance, investment, trade, information, skilled labour and tourism – from the 'bad' circulation associated with underdevelopment: refugees, asylum seekers, unskilled migrants, shadow economies, trafficking, drugs and terrorism."

Key features of this phase of conflicts of vertical differentiation from top to bottom are readily visible in urban geography, particularly when wealthy areas of global economic interconnection lie in close proximity to, but fortified from, expansive slums of dispossessed peoples. Northern and southern zones bisect cities in 'northern' and 'southern' countries alike.

Denis Rodgers (2007), for example, argues that neoliberalism has displaced large groups of rural poor into the slums of Central American cities. Where previous waves of rural-urban migration (particularly in the history of the industrialized north) arose from the attraction of growing economic opportunity in cities, contemporary flows are driven by push factors to urban settings marked by stagnant or negative economic growth and high unemployment (see also: Rapley, 2002: 95; Davis, 2004). As a UN Human Settlements Programme Report (2003: 46) notes, "Instead of being a focus for growth and prosperity, the cities have become a dumping ground for a surplus population working in unskilled, unprotected and low-wage informal service industries and trade." Such cities now host both the winners and losers of globalization in more proximate yet less equal arrangements than ever before.

These conditions create a conflict wherein the northern segment of cities (that is, those who flourish in the global neoliberal economy) seeks to protect itself from the

²⁶² Consequently, about eighty percent of the world's refugees remain in the global south (Sassen, 2014: 61).

violence and instability perceived of southern segments (that is, those who are excluded from the global neoliberal economy) in order to safely continue to enjoy the economic opportunities created by the opening of 'underdeveloped' societies to global flows. A primary challenge for the global north is therefore to manage this dispossessed 'surplus humanity' (Rodgers, 2007) or 'superfluous life' (Selmezci, 2012) in ways that prevent it from disrupting the licit global interconnections from which it is excluded. The urban proximity of north and south has therefore produced *bifurcated* cities wherein slums are segregated from northern sectors through the fortification of the neighbourhoods, businesses, clubs, restaurants, malls, airports, and highways of the wealthy. Saskia Sassen (2013: 67) thus argues that the opening of national borders to certain parts of the economy and society coincides with "new types of [urban] borderings that are transversal and impenetrable."

Northern areas of these cities can generally count on public services – including justice and policing – to a greater extent than others as city and state officials attempt to maintain the attractiveness of such zones to foreign investment. The rule of law is most developed here. But rich, globally connected elites, recognizing the still poor capacity of public security forces and their persistent corruption, rely primarily upon extensive private security arrangements ranging from gated communities to armed guards to create fortified northern enclaves. The spatial division also employs novel forms of cooperation between public and private security personnel that are simultaneously formal and informal in nature (Abrahamsen and Williams, 2011: 172-216).

Southern parts of cities experience a very different social order wherein state neglect enables (even requires) governance by informal non-state actors "who enjoy far more effective and durable control of urban territory and are often the main providers of essential services like jobs, security, and protection" (Malcusio and Briscoe, 2015: 5). In many cases, such arrangements include grassroots community-based organizations committed to solving shared problems and jointly benefitting communities. But such areas also feature violent gangs as their primary order-makers (and -breakers). As Agnese Malcusio and Ivan Briscoe (*ibid*: 8) elaborate:

Ranging from Latin America to Asia, gangs have become a social model, especially for young people, where being a member of a gang defines identity and status within the community... While their role is recognized and their autonomy respected by some, they consolidate their control over society through a narrative of fear and intimidation, where violence is the cornerstone of the new order.

As a result of these arrangements, urban slums experience high levels of human insecurity and diffuse social violence (Humansecurity-cities.org, 2001). Gang wars, protection rackets, intimidation, vigilantism, social cleansing campaigns, and other forms of violence recur commonly in such spaces. Violence, however, also results from the periodic incursions of the police and state security forces as they attempt to forcibly contain the instability of these slums and prevent them from threatening northern urban spaces. While the state is generally unable (or unwilling) to provide security to poor communities, it does mount patrols and raids by police and soldiers operating in highly militarized ways to enforce the divide (Rodgers, 2007: 11). Vanda Felbab-Brown (2014: 94) observes that

Responses to urban crime have increasingly come to approximate urban warfare. From Colombia's Medellin to Jamaica's Kingston to Brazil's Rio de Janeiro to Mexico's Ciudad Juarez, governments have resorted to using heavily armed police or actual military forces to retake territories [in] urban slums with minimal state presence, essentially governed by criminal or insurgent groups.

Ultimately, containment measures reproduce the very inequalities and identities that generate the perceptions of southern threat that provoke northern defensive actions.

The north-south divide across cities represents one recent manifestation of the conflict of vertical differentiation from top to bottom. Climate change could see this structural inequality evolve into yet another geographical configuration. As a recent UN Human Rights Council (2019:1) report warns:

Climate change will have devastating consequences for people in poverty. Even under the best-case scenario, hundreds of millions will face food insecurity, forced migration, disease, and death. Climate change threatens the future of human rights and risks undoing the last fifty years of progress in development, global health, and poverty reduction.

Continued climate change “would be especially damaging for many of the weakest parts of the tropics and subtropics – societies that would be least able to cope with such evolving crises” (Rogers, 2017: 14). Food shortages in particular will “add greatly to domestic economic and social pressures, hardship, suffering, resentment and anger, especially in states already on the economic margins and least well equipped to cope” (ibid: 191). Rogers (ibid: 192) ultimately concludes that

if climate change is not prevented, the prognosis is for a progressive decline in the viability of many parts of the Global South. It is deeply ironic that the impact on these regions is likely to be far greater than that on the countries of the northern and southern temperate latitudes, which would be far more able to cope, given their greater economic resources.

The UN Human Rights Council (2019: 6) echoes these sentiments:

Perversely, the richest, who have the greatest capacity to adapt and are responsible for and have benefitted from the vast majority of greenhouse gas emissions, will be the best placed to cope with climate change, while the poorest, who have contributed the least to emissions and have the least capacity to react, will be the most harmed. The poorest half of the world’s population—3.5 billion people—is responsible for just 10 percent of carbon emissions, while the richest 10 percent are responsible for a full half. A person in the wealthiest 1 percent uses 175 times more carbon than one in the bottom 10 percent.

As an extension of the global containment logic, the global north, having the resources to cope with and adapt to climate change, may increasingly fortify itself from a global south that remains exposed and vulnerable to the worst effects of a warmer Earth. The UN Human Rights Council (2019: 14) thus warns of “a climate apartheid scenario in which the wealthy pay to escape overheating, hunger, and conflict, while the rest of the world is left to suffer.”

CHAPTER FOUR:

Organized Violence Beyond States and War

Chapter Three suggests that much – but certainly not all – violent conflict over the last two centuries can be meaningfully understood as war – as a clash between specialists in armed violence pursuing political goals. Moreover, statehood and state formation – as aspirations or practices – provided a key organizing logic in such conflicts, though in highly variable ways. The present Chapter argues that recent changes in world order associated with globalization are generating violent conflicts that are not ‘wars’ but are just as deadly, and which are challenging statehood by forming other forms of social order. The case studies below constitute significant departures from several of the trends and mechanisms explored above; they represent recent variations of the structural conflicts of world order emanating from contemporary globalization. The examples therefore suggest – however speculatively – possible future trajectories of violent conflict in world order.

The Sections below examine the recent proliferation of violent organized crime (particularly in Mexico and the Democratic Republic of Congo) and reactionary fundamentalist resistance to global cosmopolitan modernity (particularly salafi jihadist movements and the Islamic State). Organized crime contests vertical differentiation at the top (the efficacy of rule making in the global economy), while fundamentalism contests vertical differentiation from top to bottom (as a reaction to cosmopolitan modernity). For each example, the analysis will consider its causal relations to contemporary globalization, the manner in which armed actors challenge, transfigure, or reject national statehood as a basic organizing logic, and how the attendant violence compares to more established conceptions of war and warfare. These alternative patterns of violence are forging alternative types of actors, and vice versa. Table 15 below summarizes these various contentions.

These case studies further demonstrate the failings of established disciplinary approaches (as discussed in Chapter One) and portend an even more tumultuous world order in the near future. While we *can* celebrate a long-term decline in war (Goldstein, 2011; Pinker, 2011), the trend may mask a more insidious evolution of violent conflict into forms other than war that elude our theoretical and policy-making frameworks while exacerbating deadly violence in world order.

Table 15: Summary of Case Study Arguments

	Drug Violence in Mexico	Illicit Mining in DRC	Islamic State and Salafi Terrorism
Structural Conflict	Vertical differentiation at the top – rulemaking for the global economy.	Vertical differentiation at the top – rulemaking for the global economy.	Vertical differentiation from top to bottom – Jihad vs. McWorld.
Causal Relation to Globalization	<ul style="list-style-type: none"> -Facilitated by institutions of a neoliberal global economy, and its transportation and communications technologies (ICT). -Transnational organized crime is a key part of globalization – its dark side. 	<ul style="list-style-type: none"> -Facilitated by global demand for minerals and raw resources. -Economic devastation of national debt and structural adjustment create propitious environments for illicit resource extraction. 	<ul style="list-style-type: none"> -The cosmopolitan modernity embedded in global mass media. -Heightened intercultural contacts facilitated by ICT. -Social media as an effective means of mobilization.
Relationship to Statehood	<ul style="list-style-type: none"> -Rebellion of criminal networks against state subordination. -Failure of state to provide licit economic opportunities. 	<ul style="list-style-type: none"> -Elites keep the state weak in order to safeguard their personalistic, feudal bases of power in areas of resource extraction. 	<ul style="list-style-type: none"> -Islamic State is a religious empire (territorial manifestation) and transnational resistance identity. -A reaction to the failure of modern statehood in the Middle East (and its tensions with Islam).
Character of Violence	<ul style="list-style-type: none"> -Civil war levels. -Violence is a means of market regulation and competition among DTOs. -Violence is a method of lobbying government. 	<ul style="list-style-type: none"> -Insecurity, as part of business as usual, prevents state control and development projects that could jeopardize resource extraction. -Violence between entrepreneurial elites and their followers over resource control. 	<ul style="list-style-type: none"> -Spectacular acts of terrorist violence exploit mass media to have much greater effects than their direct physical impacts. -Violence as an end in itself, as confirmation of identity, commitment, and moral goodness.

I. The Global Economy and Violent Organized Crime

The liberalization of trade and finance, bolstered by advances in ICT and worldwide transportation, have created a densely interconnected global economy rife with opportunity, but encumbered by a core dilemma: the same technologies and institutions that facilitate licit economic activity are readily exploited by illicit actors engaged in highly profitable crime that threatens the rule of law required by legal commerce. The torrential amount of cross-border traffic required by global production chains leaves inspectors “needle-in-a-haystack” odds of discovering contraband (Flynn, 2003: 113) while the exponential growth of yet under-regulated financial flows expedites money laundering as the backbone of criminal economies (Castells, 2010b: xx-xxii).

Globalization has a “dark side” (Heine and Thakur, 2011). Or as David M. Luna (2015), the US Senior Director for National Security and Diplomacy Anti-Crime Programs in the Bureau of International Narcotics and Law Enforcement Affairs, puts it, “illicit trade is an obstacle to shared prosperity... breeding corruption and siphoning capital and human resources away from productive economic activity.” Transnational organized crime has a paradoxical relationship to the ‘rules of the game’ in the global economy. On the one hand, it depends on the effective prohibition of certain types of exchange (illicit drugs, irregular migrants, black market arms, among others) to create a high ‘risk premium’ (profit margin) for those willing to make such transactions illicitly. On the other hand, criminals must circumvent the effective legal enforcement, and they frequently employ violence and corruption to do so. Organized crime generally requires a stable social order in which to operate, but easily saps governments’ ability to provide it. Similarly, organized crime *depends upon yet undermines* the global rule of law.

The result is a basic conflict between those actors who set the rules of the global economy (and benefit from their observance) and those who jeopardize these gains by skirting the rules with violence and criminality. In this way, non-state criminal actors have, in effect, imbricated themselves in a structural conflict of vertical differentiation at the top by attempting to reshape the practical application of the rules and by undercutting the ability of powerful decision-makers to implement policies (such as the prohibition of narcotics) and realize their goals (such as growing the licit global economy). Organized

crime is hardly new, but the context of contemporary globalization has generated these more profound implications. Indeed, the end of the Cold War “was a monumental event that fused with the processes of globalization to trigger an exponential rise in the shadow economy” (Glenny, 2004: xii),²⁶³ which today accounts for as much as fifteen percent of global economic turnover (Luna, 2015).²⁶⁴

Globalization has expanded the reach and opportunities available to organized criminal groups. More crucially (and qualitatively), this context has enabled many to ‘grow out of’ their subordinate relationship to states in ways that have escalated the violence arising from criminal activity. Mexico provides a prime example of these developments.²⁶⁵

The Drug War in Mexico

Prior to the 1990s, the Mexican drug trade was based on the systematic collusion of drug trafficking organizations (DTOs) and corrupt government officials. The latter regulated the drug market by dividing key trafficking routes and enforcing rules of conduct among criminal groups, thereby maintaining relatively low levels of violence (Snyder and Duran-Martinez, 2009; Astorga, 2004). This arrangement, however, disintegrated amidst the institutional reforms required by Mexico’s entry into the North American Free Trade Agreement and the global economy, alongside the Institutional Revolutionary Party’s 2000 loss of power after 71 years in government. Around the same time, successful American interdiction efforts closed the long-established trafficking routes from South America to Florida across the Caribbean. Drugs consequently began to surge through the Central American Isthmus to reach American markets over the Mexican border.

²⁶³ Glenny (2004: xiii) continues: “One group of people, however, saw real opportunity in this dazzling mixture of upheaval, hope, and uncertainty. These men, and occasionally women, understood instinctively that rising living standards in the West, increased trade and migration flows, and the greatly reduced ability of many governments to police their countries combined to form a gold mine. They were criminals, organized and disorganized, but they were also good capitalists and entrepreneurs, intent on obeying the laws of supply and demand. As such, they valued economies of scale, just as multinational corporations did, and so they sought out overseas partners and markets to develop industries that were every bit as cosmopolitan as Shell, Nike, or McDonald’s. The title of this book [*McMafia*] reflects this global reach, as criminal corporations aspire to penetrate markets the world over, mirroring the global goals of legal entities such as McDonald’s.”

²⁶⁴ Glenny (2004: xv) makes an even higher estimate of 15-20 percent.

²⁶⁵ Colombia, Brazil, and Central America provide similar examples of this relationship.

The end of state regulation coincided with the opening of new opportunities in the global economy to produce what Juan Carlos Garzón (2012: 1) terms the “rebellion of criminal networks,” which is “marked by efforts of various criminal factions to break out of a state of subordination (internal and external), establish links to the global economy, raise levels of profit, reduce the number of intermediaries, diversify products and investments, and, to the extent necessary, reconfigure the legal as well as institutional order.” Mexican (and other) organized crime groups have shed the *national* institutional arrangements that prevailed in earlier decades in order to go global.²⁶⁶

The ‘rebellion’ has altered the nature of organized crime groups in at least two ways. First, they have grown from largely national networks to increasingly transnational ones in order to most effectively exploit global markets. Where Mexican DTOs were once the intermediaries between South American producers and American distribution networks, they have gained increasing control over hemispheric drug traffic by increasing their presence in the United States and Central America, while maintaining durable ties to South America, West Africa, and Europe.

Second, the violence of the drug trade has escalated precipitously. The Mexican government has not only ceased its illicit market regulation, it (especially after 2006) has also mounted a concerted crackdown on the DTOs with massive deployments of soldiers and police. In response to these conditions, DTOs have developed their own military wings to vie for market share with competing groups and to repel state enforcement efforts. The fitness landscape has shifted in ways that reward DTOs’ capacity for devastating violence. The spiralling escalation has witnessed sophisticated operations that feature military-grade weaponry and produce “levels of violence and insecurity bordering on civil war” (Lessing, 2012: 46).²⁶⁷ As the US Drug Enforcement Agency has stated, the Mexican drug

²⁶⁶ Pablo Escobar provides another example of such a ‘rebellion’ with his devastating attacks on Colombian state and society, but his organization was relatively small and localized in comparison to those who exploit the global economic openings that followed the dissolution of Escobar’s Medellín cartel.

²⁶⁷ As former US Drug Czar Barry McCaffrey (2008) explains: “The outgunned Mexican law enforcement authorities face armed criminal attacks from platoon-sized units employing night vision goggles, electronic intercept collection, encrypted communications, fairly sophisticated information operations, sea-going submersibles, helicopters and modern transport aviation, automatic weapons, [rocket propelled grenades], Anti-Tank 66 mm rockets, mines and booby traps, heavy machine guns, 50 cal sniper rifles, massive use of military hand grenades and the most modern models of 40mm grenade machine guns.” The military wings of

trade has made a “transition from the gangsterism of the traditional narco hit men to paramilitary terrorism with guerrilla tactics” (quoted in: Turbiville, 2010: 124).

The sharp escalation of violence serves two broad purposes. First, it regulates market shares and provides the basis for DTO competition, particularly when rival groups cannot reach stable agreements. Violence has thereby filled the void left by the decline of state regulation, and much of it occurs as turf wars between competing organizations.

Second, violence against the state aims to coercively reshape government policies and behaviours. As a form of lobbying, DTOs often use violence to compel leaders to change their policies (by reversing military deployments in counternarcotics operations, for example). The DTOs also use violence to intimidate enforcement officials into aiding criminal activities rather than fulfilling their lawful duties (by leaking crucial intelligence about counternarcotics operations, for example) (Lessing, 2013). For its part, the Mexican government’s unconditional, militarized offensive against the DTOs has only escalated the violence associated with organized crime.²⁶⁸ Many communities have responded by organizing self-defence militias and vigilante groups who fight the DTOs where state security forces are either deficient or unwelcome (Grillo, 2016).

In these ways, criminal violence against the state aims to coercively influence its policies and behaviours, but not conquer it in the way the politico-ideological insurgencies of the Cold War did (Lessing, 2013: 7). State capture is unnecessary, costly, and unsustainable for criminal organizations that only require specific changes in state behaviour, but otherwise prefer the state to function well enough to provide a stable and predictable environment. Violence is a key component of illicit market economic relations (rather than strategy for political-ideological change); it represents ‘business as usual’

the DTOs recruit defectors and veterans from the Mexican military who sometimes have specialized training in counterinsurgency and counternarcotics.

²⁶⁸ The inevitability of such violence remains an open question. Benjamin Lessing (2013) argues that states can reduce the violence associated with organized crime and its enforcement by cracking down selectively on the most violent groups, and thereby attempting to reshape the fitness landscape by incentivizing more clandestine and less violent behaviour. In 2008, this approach successfully reduced the violence afflicting the favelas of Rio de Janeiro, but in ways that illustrate the core conflict of this VCO complex. The strategy does not aim to eliminate crime, but only its associated violence; it amounts to a tolerance of, if not tacit collusion with, less violent criminal organizations. It reduces violence by enforcing the law selectively, maintaining space for criminality and official corruption, and contravening international drug policy (which focuses primarily on eliminating the flow of drugs from producer and transit countries). In order to reduce the violence associated with the dark side of globalization, state authorities in this way sacrifice the stable rule of law upon which the licit flows of the global economy depend.

rather than a bounded departure from peace. In these ways, drug violence defies traditional notions of war, even as it approaches their intensity (see figures presented in Section V of Chapter 1).

The order created by this violent conflict derives primarily from the requirements of illicit economic activities. Organized crime groups are first and foremost clandestine transnational networks of exchange, based in webs of official corruption, integrated into global finance through money laundering, and exercising violence according to the demands of competition and protection.

Economic prerogatives, however, at times also encourage DTOs to provide governance in areas neglected by the state but useful for illicit activities, whether in urban slums or remote rural areas. In such settings, criminal organizations provide a limited amount of administrative order by setting and enforcing rules and adjudicating disputes; and at a relatively minimal expense, DTOs can also provide much needed goods and services that buy the loyalties of poor communities. Some even romanticizes criminal groups (in 'narcocorridos', for example) as Robin Hood-like figures. More importantly, recruitment and public support for DTOs indicate a widespread frustration with government inability to provide economic opportunities in the licit economy. This broader conflict thus features a uniquely non-state form of social order bound up in criminality. The opportunities and social order provided by the DTOs, however, ultimately rest on very arbitrary and demonstrative acts of violence.

In sum, transnational criminal networks challenge the logics of statehood and war. They have managed to expand out of their longstanding subordination to (corrupt) state authority. They do not seek state capture in pursuit of political or ideological aspirations; they rather try to compel authorities to behave in particular ways when acting in the narrow set of government duties that pertain to the illicit economy. Violence is not a means to a proximate goal but an ongoing source of illegal market regulation and political lobbying that will likely persist so long as the Mexican government is unable to reign in criminal groups.

Violence and Illicit Resources in the Democratic Republic of Congo

Whereas the criminal organizations detailed above are particularly prominent in Latin America, the illicit global economy manifests somewhat differently in Africa. In what are sometimes referred to as ‘self-perpetuating war economies’, illicit regimes of resource extraction flourish, often masked as ‘failed states’ and ‘civil wars’. The order associated with this conflict generally has two facets – the ‘shadow state’ (Reno, 1998) and non-state systems of violent resource extraction. Violence in the mineral-rich east of the Democratic Republic of Congo (DRC) provides the most pressing example of such arrangements today.

During the Cold War, control of the state provided many elites of post-colonial societies with avenues to wealth and power insofar as they could take advantage of superpower patronage and international loans to enrich themselves and maintain their support networks. These arrangements largely disintegrated with the end of aid from superpower patrons, structural adjustment programs that reduced state resources, and liberal international programming that challenged longstanding power structures with reform. As a result, many elites needed to find new sources of revenue and new bases for their continued power. At the same time, the expansion of the global neoliberal economy provided ample opportunity to bring natural resources and primary commodities into global supply chains through illicit arrangements enabled by the ubiquitous supply of cheap arms and unemployed youth willing to use them.

With fewer resources to go around and greater international scrutiny of their distribution, many states (particularly in sub-Saharan Africa) have been hollowed out as a vehicle for elite enrichment and for the social transformations once sought by revolutionaries and reformers. The result is the ‘shadow state,’ comprised of clandestine “structures and networks where real power lies, but which hide behind the façade of formal state institutions and which, rather than challenging these institutions, are parasitic on them, exercise power through them, and also manipulate the way they function” (Zaum, 2012: 129). Under the veneer of *de jure* statehood and the rule of law, elites protect their hold on power by abusing state positions to “control markets and use their ability to regulate access to these resources through naked force and selective enforcement of the law to enhance their power” (Reno, 2005: 128). In their official position, corrupt elites can

keep the state weak and the rule of law incomplete in order to safeguard the illicit structures of resource extraction at the heart of their wealth and power.

The conflict in DRC hosts around 50 Congolese armed groups and at least five foreign ones (Stearns, 2014: 158), many of whom are directly involved in the illegal mineral trade of the country's eastern provinces. Several of these armed groups – including factions of the Congolese armed forces – have ties to corrupt elites who utilize them to illegally control and tax the extraction and transportation of the region's mineral wealth. Given the hollow nature of the state, elites utilize armed groups to create 'fiefdoms' of illegal resource extraction that provide a basis of wealth and power autonomous from the state. Their official position can be used corruptly to safeguard this arrangement, while this autonomous basis of power can help protect their position in government.

The violence and insecurity inherent in the process represent not a form of disorder, but rather "the emergence of an alternative system of profit, power, and even protection" (Keen, 2000: 22). Violence is the indispensable counterpart to the economic bases of such orders. Armed groups fight each other for access to key mining areas, but persistent insecurity is also an essential part of the business climate. It impedes the rule of law and application of state authority, it prevents forms of licit economic development that could displace illegal activities, and it keeps local populations impoverished and dependent upon armed actors.²⁶⁹ The insecurity generated by one armed group provides a ready excuse for another to violently displace it and take over its operations, providing its own 'protection' in an extortionary racket.

Violence is thus part of a self-perpetuating economic system. By keeping the state weak and exploiting generalized insecurity, elites maintain local bases of wealth and power by exporting resources directly onto global markets. As John Prendergast (2012) of the ENOUGH project summarizes: "There will be no peace in Congo as long as ruthless interests

²⁶⁹ The non-governmental organization Global Witness (2012: 21) reports: "In North and South Kivu, members of the national army – made up in part by poorly integrated former rebels – make millions of dollars per year through controlling mine sites and mineral transportation routes. The involvement of the military in eastern DRC's minerals trade is deeply problematic for several reasons. It is against Congolese law and communities living in mining zones controlled by the military are frequently subject to extortion and serious human rights abuses. Moreover, military control of the minerals trade creates instability and insecurity across the region, which in turn hinders efforts to formalise DRC's mining sector and attract responsible investment."

can make immense profits from the extraction of minerals and other resources, with the connivance of regional governments. Corrupt Congolese officials have no interest in justice or army reform because they reap windfalls from mafia-like smuggling and land grabbing.”

As with the criminal organizations of Latin America, the state does not provide the organizing logic of this conflict. In this case, the state is left hollow and weak in order to enable alternative, criminal patterns of order linked to global supply chains. Similarly, the violence associated with resource extraction is not intended to capture the state for the sake of implementing a socio-political vision of social change; rather, elites and their armed groups use violence to maintain bases of wealth and power autonomous from the state (while corrupting the state in order to do so). In this sense, such violent conflicts do not resemble civil wars with political agendas and state capture as the end goal. As John Mueller (2004: 22) comments, such systems

are likely to become more like a business than a war in the sense that, because the perpetrators are profiting from the enterprise, they may have little interest in ending it... Warfare, if that is what it is called, then becomes a continuous way of life, routine and self-perpetuating, and these kinds of low-intensity wars may be scarcely differentiable from high-intensity crime.

II. Cosmopolitan Modernity versus Reactionary Fundamentalisms

Where the 'dark side of globalization' conflict revolves around illicit markets, a second global conflagration centres on identity-based ideologies forged through global interconnectivity. Mass media – television, the internet, and now social media – fosters an essentially *cultural* dimension of globalization by connecting once disparate people and enabling them to transmit and contest information, events, and beliefs far and wide. But like globalization's economic and political dimensions, its cultural features are hardly neutral, nor equalizing. They favour some conceptions of human nature, proper human relations, and 'the good' over others.

More specifically, the last three decades of globalization have been deeply intertwined with an identity (or ideology) termed here 'global cosmopolitan modernity'. Benjamin Barber (1996) defines global modernity as "the secular, scientific, rational, and commercial civilization created by the enlightenment as defined by both its virtues (freedom, democracy, tolerance, and diversity) and its vices (inequality, hegemony, cultural imperialism, and materialism)." At their foundation, liberal doctrines of markets, democracy, and rights conceive humans to be rational, self-interested individuals, eschewing religion and other traditional bases of authority in favour of individual liberties, scientific reason, and material values.

While some celebrate global cosmopolitan modernity for its progressive dynamism, others experience it as a source of insecurity, uncertainty, and dislocation. Many perceive mass media in particular to convey a corruptive form of American-led cultural imperialism, transmitting a possessive individualism, Western consumer tastes, and liberal attitudes toward gender, sexuality, and authority relations (Sandbrook and Romano, 2004: 1013; Stern, 2003: xix, 40-1, 56).

The cosmopolitan ideal of common humanity masks persistent human differences; those holding identities, worldviews, and values that diverge from global modernity often feel denigrated (as 'backwards') and marginalized by globalization and its liberal orientation. As Manuel Castells (2009a: xxi-xxii) explains of the recent rise of religious fundamentalisms:

Large segments of people that are economically, culturally, and politically disenfranchised around the world do not recognize themselves in the triumphant values of cosmopolitan conquerors... and so they turn to their religion as a source of meaning and communal feeling in opposition to the new order. A new order that not only fails to benefit most of the poor on the planet but also deprives them of their own values, as they are invited to sing the glory of our globalized, technological condition without the possibility of relating to the new lyrics. What follows is not only marginalization but something deeper: humiliation.

The result is a structural conflict of vertical differentiation from top to bottom (particularly its hierarchy of prestige) between those who identify with and benefit from the advance of global cosmopolitan modernity, and those who feel alienated, belittled, and threatened by it. The latter contest their perceived stigmatization by asserting what Castells calls a 'resistance identity', which reverses the value judgment by asserting the superiority of the denigrated identity. Resistance identities thus foster "exclusion of the excluders by the excluded" (Castells, 2009b: 8-9).

Many such reactionary movements can be deemed 'fundamentalist' insofar as they oppose modernity by attempting to (re-) ground social life in something sacred and transcendent, whether religion, race, or nationality (Ruthven, 2007: 5-6; Stern and Berger, 2015: 242). Barber (1996) characterizes this conflict as "jihad versus McWorld,"²⁷⁰ while Mary Kaldor (2012: 11) similarly argues that her 'new wars' "can be understood as conflicts between exclusivism and cosmopolitanism."

This broader conflict manifests itself prominently in the growth of salafi jihadist terrorism, and more specifically in the motivations of those who practice it by joining al Qaeda, the Islamic State, and their various affiliates. Motives are multiple, diverse, and complex, ranging from the desire for adventure to material incentives; there is no such thing as 'the terrorist mind' (Nesser, 2010; Sterman, 2016; Stern, 2016). Nonetheless, the conflict between global modernity and reactionary fundamentalism is a widely recurring theme in studies of terrorist motivations.

²⁷⁰ Barber specifies that the conflict is "between the forces of disintegral tribalism and reactionary fundamentalism I have called Jihad (Islam is not the issue) and the forces of integrative modernization and aggressive economic and cultural globalization I have called McWorld (for which America is not solely responsible)".

Many supporters and recruits of Islamic fundamentalism live in direct contact with networks of global modernity, whether within Western states or in the global connections of non-Western societies. For some, the associated cosmopolitan worldview not only fails to provide a sense of meaning and identity, but also leaves them feeling denigrated for their cultural heritage (Castells, 2009b: 143-4). Youth in particular can become disillusioned with modernity's material values and frustrated with the apparent hypocrisies and injustices of the 'liberal' West (such as its support for autocrats and selective protection of human rights, both of which appear to discriminate against Muslims). The results are often profound experiences of alienation, humiliation, marginalization, and outrage that provide the foundations for extremism (Stern, 2003; 2016; Korteweg et al., 2010). When more moderate forms of Islam appear weak and corrupt, many disaffected youth turn to more radical sources of meaning and identity, including salafism.

Salafism represents a rival globalist vision that aims to purify the world by returning to the 'uncorrupted' Islamic beliefs and practices that prevailed in the era of the Prophet (the seventh century).²⁷¹ It aspires to a utopian social order based on principles fundamentally different from – if not entirely opposite to – global modernity, which provide many with the sense of belonging, purpose, empowerment and identity found lacking in the latter (Castells, 2009b: 124).²⁷² Fawaz Gerges (2016: 229) thus argues that the lure of Islamic State “is that it imbues these recruits with a greater purpose in life: to be part of a historical mission to restore Islamic unity and help bring about redemption and salvation. It provides them with a strong sense of collective identity, a transformative experience, particularly young Muslims who do not feel integrated or who feel excluded in Western societies.”

The Islamic State (IS) has become perhaps the most prominent transnational identity-based terrorist movement, but arose from a concatenation of regional circumstances (Gerges, 2016: 8-20). The 2003 American-led invasion of Iraq, the systematic purge of Sunnis from Iraqi government, and the consequent rule of the Shia

²⁷¹ In this sense, the conflict of 'Jihad versus McWorld' is a clash between two rival universalisms, rather than between cosmopolitanism and local particularisms, as Kaldor proposes of 'new wars'.

²⁷² For example, in his announcement of the caliphate in June 2014 ISIS spokesman Abu Muhammad al Adnani declared: “By Allah, if you disbelieve in democracy, secularism, nationalism, as well as all the other garbage ideas from the West, and rush to your religion and creed, then by Allah you will own the earth and the east and west will submit to you” (Quoted in Stern and Berger, 2015: 117).

majority drove many disenfranchised Sunnis towards extremists groups for the sake of protection and political empowerment, whether they subscribed to the ideology or not. Some possessed valuable experience in war-fighting and counterinsurgency from their service to the regime of Saddam Hussein, and these skills help account for the astonishing initial successes of IS on the battlefield. Civil war in Syria offered even greater opportunities for militant organizing while the lacklustre results of the Arab Spring signalled to many that real political change would not come through peaceful means.

The Islamic State endorses a worldview as old as Islam itself by casting the global conflict between modernity and resistance as a cosmic battle between *Dar al-Islam* (the Muslim world living under strict Sharia law, which under Islamic State encompasses only Sunnis) and *Dar al-Harb* (the non-Muslim world, to be conquered and incorporated by *Dar al-Islam*). Other Islamist groups, such as al Qaeda, shared this worldview, but saw the restoration of an Islamic Caliphate as a project of the distant future, to follow the defeat of key enemies, such as the United States. The appeal of IS was its successful founding of a territorially expansive Caliphate, replete with Islamic governance, in the present. At its height, IS fielded over thirty thousand combatants to control a territory as large as the United Kingdom encompassing approximately a third of Iraq and Syria and containing six-to nine-million people (Gerges, 2016: 1-2). While the group has regional origins, it quickly became a global phenomenon attracting tens of thousands from around the world to fight and die for the Caliphate (Hamid and Atran, 2015; Blanchard and Hamud, 2017; Bergen et al., 2015).

The ideological crux of IS as a resistance identity is the group's wholesale rejection of modern statehood and international order.²⁷³ National statehood was a Western imposition upon the remnants of the Ottoman Empire (in the 1920 Treaty of Sèvres) that mingled uncomfortably with the universalist Islamic worldview, so that neither was effectively realized.²⁷⁴ For much of the twentieth century, statecraft trumped religiosity as

²⁷³ Indeed, IS's public relations arm heralded the groups conquest of the Iraq-Syrian border with the Twitter hashtag #SykesPicotOver, referring to the 1916 division of the Ottoman Empire by the Britain and France (Dasgupta, 2018).

²⁷⁴ Henry Kissinger (2014: 112-113) notes that from the 1920s on, "the Muslim world was stranded between the victorious Westphalian international order and the now-unrealizable concept of *dar al-Islam*. With scant experience, the societies of the Middle East set out to define themselves as modern states, within borders that for the most part had no historical roots."

leaders (such as Gamal Abdel Nasser, Saddam Hussein, and Hafez al-Assad) attempted to build national identity, assert sovereignty, and pursue the national interest rather than pan-Islamic aims (Kissinger, 2014: 96-145). Doctrines of nationalism, socialism, populism, and pan-Arabism provided the routes to political power for both secular leaders and those who would yet pursue Islamic principles within national statehood. By the end of the Cold War, however, Middle Eastern states faced rife popular discontent at their inability to deliver socio-economic improvements (particularly to younger cohorts who are increasingly educated yet facing poor prospects of livelihood), their failure to build legitimate authority amidst the contradictions between modernity and Islam, and their perceived vulnerability to Western imperialism (Sandbrook and Romano, 2004: 1015; Castells, 2009b: 12-23; Gerges, 2016: 5, 46, 223).

In rejecting national statehood, IS diverges from other armed Islamic groups, such as the Taliban, Hamas, and Hezbollah, that aspire to control (or found) state governments based on a blend of Islamist doctrine and nationalist ideology (Ugarriza, 2009). The Islamic “State” is better understood as a religious empire rather than state.²⁷⁵ Based on the rule of God over the rule of man, its unyielding universalism directly conflicts with the pluralism of the Westphalian international order (Kissinger, 2014: 122).

Stephen M. Walt (2015) notes that other revolutionary states that vocally disavowed the international order (such as France, Russia, China, Cuba, and Iran) soon normalized their behaviour to the prerogatives of statecraft, and suggests IS would (or would have, had it not lost its territorial basis) follow the same path. This argument, however, may underestimate the depth of Islamic State’s ideological fervour. As Gerges (2016: 271) notes:

While the Western and Arab media widely report on how ISIS has set up a political structure similar to a modern government in the so-called form of a caliphate, there is little analysis of the revolutionary character of the group’s governance... [IS]’s leaders are trying to systemically eradicate the existing social order and replace it with a new moral and religious system that incorporates the rules of seventh-century Arabia into today’s twenty-first-century society.

²⁷⁵ Weiss and Hassan (2015: xvi) assert that with its June 2014 declaration of the caliphate, ISIS “destroyed the boundaries of contemporary nation-states and proclaimed itself the restorer of a lost Islamic Empire.”

Territorial control enabled IS to cleanse the populations under its rule by waging genocidal violence against Shia (who are believed to practice a corrupted form of Islam), apostates, and dissenters. Through pledges of loyalty by other salafi jihadist groups, the Islamic State also boasts provinces in Egypt, Saudi Arabia, Nigeria (Boko Haram), Afghanistan, Yemen, and the Caucasus (Blanchard and Humud, 2017: 21-25), though the depth and significance of these ties remains uncertain.

The rise and continued appeal of the Islamic State stems significantly from its mastery of digital media. Information and Communications technology offer an effective vector to inspire, indoctrinate, and train, disenfranchised Muslims from around the world, encouraging them to fight for armed groups in the Middle East or carry out attacks against Western targets (Rogers, 2017: 47).²⁷⁶ Alongside its dissemination of books, lectures, audio, and deft videos over the internet, IS has excelled especially in the use of Facebook and Twitter (Stern and Berger, 2015: 72-3, 106). Such propaganda appeals especially to youth impressed by violence, ideological clarity, and adventure. Jessica Stern and J. M. Berger (2015: 290) stress that social media in particular creates unique “capabilities for self-organizing around content... [and] empowers people who hold fringe ideas to discover and connect with each other in ways that were never possible before.” communication tools that can receive, transmit, and compute can create a ‘smart mob’ by enabling large numbers of densely connected people who do not yet know each other to nonetheless act in concert (ibid: 71).

International interventions and local opposition have largely routed the Islamic State as a territorial empire, but the organization persists as a transnational identity movement increasingly focused on the ‘far enemy’ (Western powers) and employing terrorist violence.²⁷⁷ These attacks target sites linked symbolically to global modernity in ways intended to create worldwide media spectacle and pervasive panic. In itself this

²⁷⁶ Online recruitment is generally part of a process that also involves face-to-face meetings, hands-on training, and connections to terrorist groups through friends and family. But online media alone can inspire self-indoctrination and spur ‘lone wolf’ attacks.

²⁷⁷ Following the onset of American airstrikes in 2014, ISIS spokesman Adnani implored supporters in Western countries to kill Westerners in any way they can (Gerges, 2016: 230). Gerges further notes: “As ISIS loses ground in Iraq and Syria, the group will attempt to use spectacular attacks on foreign targets to divert attention from military setbacks and reinforce its narrative of invincibility” (ibid: 250).

violence is not and has never been an existential threat to the West; to become so, terrorists would have to acquire and successfully deploy not just weapons of mass destruction, but *arsenals* of them. The efficacy of present jihadi terrorism, however, lies not in its direct violence so much as in the *image* of violence; it generates an immediate and widespread sense of threat that is vastly disproportional to the actual capacity of these networks, exacerbating fears that an attack could happen at anytime, in any place. In this way, salafi jihadist terror aims to provoke over-reaction in the form of ill-advised policy responses that reinforce the extremists' narrative about the Western crusade against Islam.²⁷⁸

A second purpose of this terrorist violence is to demonstrate the strength of the salafi jihadist movement in an attempt to inspire Muslims everywhere to rise up and join it. In this aim, IS represents a post-al Qaeda generation of jihadists that emphasize shock and awe over theology. "For them, shock value, slaughter, and blood speak louder than words" (Gerges, 2016: 90). Images of violence are today a *strategy* of armed conflict as contenders seek to influence a mass audience, whether by inciting terror or capturing imaginations (Münkler, 2005: 28, 129-30). Joseph Nye (2011: 19) thus argues that in "an information age, communications strategies become more important, and outcomes are shaped not merely by whose army wins but also by whose story wins." Similarly, a member of the Islamic State's media team proposes: "This is a war of ideologies as much as it is a physical war. And just as the physical war must be fought on the battlefield, so too must the ideological war be fought in the media" (quoted in Stern and Berger, 2015: 147). Clashing worldviews are indeed at the heart of this global conflict. "Given the deeply embedded nature of those views, with the Western outlook perceiving threats from the barbarian margins but so many in those margins seeing the West as always willing to use force to preserve its privilege, we have a dangerous prospect of persistent conflict" (Rogers, 2017: 87).

²⁷⁸ On this note, Hamid and Atran (2015) argue: "The shock produced by the multiple coordinated attacks in Paris on Friday—the scenes of bloodshed in the streets, the outrage against Islamic extremism among the public, and French President Francois Holland's vow to me 'merciless' in the fight against the 'barbarians of the Islamic State'—is, unfortunately, precisely what ISIS intended. For the greater the hostility toward Muslims in Europe and the deeper the West becomes involved in military action in the Middle East, the closer ISIS comes to its goal of creating and managing chaos."

Terrorist violence, finally, also serves to consolidate commitment to the salafi jihadist identity and ideology. “What many in the international community regard as acts of senseless, horrific violence are to IS’s followers part of an exalted campaign of purification through sacrificial killing and self-immolation” (Hamid and Atran, 2015). Assaf Moghadam (2008: 73-74) explains that “Salafi jihadists believe that suicide operations against ‘infidels’ and ‘apostates’... represent the ultimate form of devotion to God and the optimal way to wage jihad. They present jihad and self-sacrifice as the antithesis to everything the West stands for.”²⁷⁹ Terrorist violence represents an act of devotion, “a good way to ‘do good’ or to ‘be good’” (Stern, 2003a: 5). It consolidates fundamentalist identity, demonstrates ideological commitment, and secures a place in heaven. Violence is not (or not merely) an instrumental means to an end, as ‘war’ is generally understood; violence is a sacred end in itself.

Many hope that IS has been defeated, but the group is just the timeliest manifestation of a globally minded identity movement. (And indeed, the latter is just one example of reactionary fundamentalism rising in opposition to global cosmopolitan modernity). Gerges (2016: 291) notes that salafi jihadism is a “traveling ideology... [that] has evolved into a powerful social movement with a repertoire of ideas, iconic leaders, worldwide supporters, theorists, preachers, and networks of recruiters and enablers” that will persist even if IS disappears.²⁸⁰

Even more broadly, Paul Rogers (2017: x, 152) argues that “groups such as IS and al-Qaeda should be seen not only as threats in their own right but also as markers for the kinds of conflict that will increase in frequency and intensity” as the world moves “into an era of revolts from the margins.”²⁸¹ A core feature of such a scenario is “the ability of movements from the margins to challenge the worlds strongest and best-resourced

²⁷⁹ Similarly, Stern refers to “a distorted and destructive interpretation of Islam, which asserts that killing innocents is a way to worship God” (2010: 108).

²⁸⁰ Hamid and Atran echo this point, positing that “even if ISIS is destroyed, its message could still captivate many in coming generations.” They further caution that Western governments and analysts underestimate at their own peril the ideological and emotional appeal of this message.

²⁸¹ Rogers (2017: 152) contends that “the way in which [the Islamic State] has spread and evolved into a transnational movement should be seen as an instance of a phenomenon that is likely to be repeated in the future, perhaps in very different circumstances that stretch far beyond the Middle East.”

military powers.” A second is the tendency of the powerful to rely upon military responses that are not only ineffective, but exacerbate the conflict and its violence (ibid).

Conclusions

How do changes in world order reshape the nature of violent conflict? The first chapter of this thesis argued that existing approaches to violent conflict – particularly International Relations and Comparative Politics – are ill suited to address this question because they do not employ sufficiently systemic ontologies. International Relations theory treats units exogenously, struggles to conceive systems change, and places the dubious concept of anarchy at the centre of explanation. The Comparative Politics literature tends to attribute civil war to domestic causes while ignoring the broader context of world order. Even the keystone concept of war, and its associated dichotomy of interstate and intrastate wars, fails to encompass the variety of violence and conflict observed in world order today. At the same time, various authors have recently identified key macrotrends in organized violence and begun to link them to world order, exposing the need for new forms of systemic explanation.

Chapter Two provided the foundations for such analysis by developing an ontology of world order based in complex systems thinking. Distinguishing between order, systems, and structure, it depicted world order as a system whose core structures are emergent properties. More specifically, Chapter Two elaborated several key premises:

- The *elements* of social structure are shared beliefs (elements of worldviews), rules (elements of institutions), and procedures (elements of technology). These elements combine to form the (changing) schemata of individuals (as suggested by the Complex Adaptive Systems literature).
- Well-defined, widely understood, and actively enforced *sets* of beliefs, rules, and procedures create, through the process of structuration, emergent collective social actors (such as classes, ethnic identities, corporations, civil society groups, political parties, governments, etc.) with collective agency. These shared schemata (or schematic ‘modules’) *constrain* individual behaviours in ways that enable *collective causal powers*. Emergent social agents require both a significant degree of ideational coherence and supportive material flows.
- Collective social actors are also shaped, reproduced, and transformed through their relations to other social actors. The interaction of actors with particular identities,

interests, and capacities creates a *structure of incentives and meaning* that grants actors different roles, rights, and responsibilities, so that their interactions tend to reproduce (through negative feedbacks) that very structure of incentives and meaning, and actors' corresponding identities, interests, values, and capacities. In some cases, positive feedbacks transform actors' identities, interests, values, and capacities through their relations (in processes of competition and learning, for example).

- Social actors may become so integrated and coordinated in their interactions that they constitute a higher-level social actor (as different organizations of a society constitute a state, for example). In this way, social actors can aggregate to higher-scales with novel emergent powers arising from the relational structure of smaller scale social agents.
- Beliefs, rules, and procedures, when widely shared, form supra-agential schematic assemblages (worldviews, institutions, and technologies, respectively) that feature endogenous dynamics of persistence and change, and exercise causal power within world order. Worldviews, institutions, and technologies are emergent social entities in themselves, and provide the elements (beliefs, rules, and procedures) that constitute collective agents.

These premises enable truly *systemic* analysis of world order by highlighting unit formation (itself an emergent phenomenon involving intrinsic and relational properties alongside processes of unit, vertical, and functional differentiation), interaction capacity (the character of interconnectivity), and emergent schematic assemblages (worldviews, institutions, and technologies).

This complex systems approach to world order offers manifold 'value added'. Most importantly, it emphasizes *emergence* as a distinctively dense and recursive form of causality that generates, maintains, and transforms social structure. Collective agents, relations, and schematic assemblages are all emergent features of world order. This approach conceives social structure as something *constantly in process* rather than a reified object, and can therefore countenance change, as well as persistence. Further, the emergent

nature of social structure suggests a *layered reality* in which the emergence of entities at one scale creates the potential for even greater complexity and surprising novelty to emerge at a higher scale. Quantitative increases in the density of interactions can produce qualitative change to organizational forms.

Finally, the conception of social structure as emergent highlights its *ideational and material* bases. On the one hand, social structure resides in the shared schemata of individual agents as a collection of various elements (beliefs, rules, and procedures, assembled into worldviews, institutions and technologies, respectively). On the other hand, social structure has a fundamentally material basis insofar as agents' practice of their schemata requires continuous flows of matter and energy to sustain them far from thermodynamic equilibrium.

Chapter Three answers the core question of this thesis by applying its systemic ontology to theorize the coevolution of violent conflict and world order. It argued that the structure of world order creates three sets of systems-level conflicts (of unit differentiation, vertical differentiation at the top, and vertical differentiation from top to bottom) that erupt into violence of a distinctive character depending on the broader features of world order (worldviews, institutions, technologies, and interaction capacity). Violent conflict alters these key features of world order, which in turn alter the nature of violent conflict. The analysis elucidated the mechanisms by which systems and units constitute one another and drive their coevolution forward. This framework helped to explain several major trends: the post-WWII decline of imperial wars and interstate wars, the corresponding rise in wars of national liberation and their tendency to produce civil war, the prominence of genocide and politicide within these 'wars', the post-Cold War growth of liberal internationalist interventions, the decline of civil war, and the continuing expansion of global containment measures.

Chapter Four emphasized the links between globalization and violent conflict by examining the rise of organized crime and reactionary fundamentalist identities. It supports Mary Kaldor's contention that globalization is (at least in some instances) reshaping the nature of violent conflict, but maintains that cases of drug violence in Mexico, illicit mining in DRC, and transnational salafist terrorism are much better examples of novelty than her depiction of 'new wars' in Bosnia, Afghanistan, and Iraq. In many ways, the

latter cases remain centred on the capture of the state, using violence still recognizable as war, exhibiting much continuity with other wars of the Post-WWII order. The cases examined in Chapter Four of this thesis, in contrast, confound basic notions of war and challenge the organizing logic of statehood.

The account developed in Chapters Three and Four yields a number of important insights on the intersection of violence, conflict, and order. Perhaps the most significant contribution of this thesis is to demonstrate that unit formation (and transformation) are *systems-level* concerns that help explain trends in violent conflict by relating them to the broader structures of world order. 'Unit-level' versus 'systems-level' explanation represents a false dichotomy. A key value-added of complexity thinking is its ability to countenance units as dynamic, emergent structures that constitute a larger system with emergent properties that in turn reshape units and their relations. A key theme of the analysis above is that violent conflict can act as an important driver of the formation, differentiation, and transformation of both units and systems, as well as their destruction.

Second, this thesis reveals several ways in which common conceptions of 'war' (and its various sub-categorizations) fail to capture highly consequential instances of violent conflict. The concept remains highly state-centric, hides from view the prevalence of genocide and democide within wars, and poorly grasps some of the most brutal instances of contemporary violent conflict, including drug violence in Mexico, reactionary fundamentalist violence, and extensive urban insecurity. The account argued that common systemic causes operate in violent conflicts typically studied in isolation, such as international war and civil war. It also revealed long-term continuities (as well as transformations) in the nature of violent conflict as it co-evolves with world order to create path dependencies alongside opportunities and constraints for change.

Finally, this thesis suggests that there may be certain 'trade offs' in the relationship between world order and violent conflict. Features of world order that help prevent one type of violent conflict may yet create vulnerabilities to another kind of violent conflict. The pacification involved in statebuilding, for example, reduced homicides and the proportion of people who die in international wars, but concentrated the potential for democide by government. The prohibition of interstate wars and commitment to existing borders have increased the risk of civil war and other forms of mass violence by fostering volatile and

vulnerable forms of statehood in the post-colonial world. The decline of formal empires and their wars of conquest produced different sorts of north-south relations that included distinctive international interventions and proxy wars. And the global economic integration that helps pacify relations among great powers and wealthy countries also facilitates transnational organized crime, exacerbates inequalities, generates social dislocations, and is predicated on the continued mass consumption that drives climate change as a growing source of conflict.

If violent conflict really does arise from systemic forces, then much of contemporary policy and practice is misguided in its focus on particular countries, treating symptoms but not causes. As climate change intensifies, the risk is that such measures will attempt to quarantine instability but generate more complex forms of violence in the process. This thesis is ultimately an attempt – and a risky one at that – to break out of extant paradigms and generate new thinking for a more just, peaceful, and sustainable future.

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Glossary:

Complex Adaptive System: collection of agents that each possess a schema – a set of rules that create an internal model of the world – and in interaction with each other and the environment, face selective pressures insofar as some agents are more fit than others. Selection may also operate upon individual schematic rules insofar as self-conscious agents evaluate and alter their own schemata (through processes such as learning, emulation, and trial and error).

Conflict: the incompatibility of valued ends pursued by social actors, which may span from a ‘clash of interests’ within commonly accepted rules (competition) to deeper divergences in basic values and worldviews that preclude any common ground.

Democide: the deliberate killing of a segment or segments of a civilian (non-combatant) population. The term includes genocide and ethnic cleansing (mass killing of people of a certain race, religion, ethnicity, or nationality) as well as politicide (mass killing of people holding particular political views).

Ecosphere: the totality of living organisms and the media in which they live (air, water, soil, and sediment) on earth. The ecosphere is here treated as the broader environment in which world order (as a system) exists.

Emergence: the process by which the decentralized interactions of elements produce novel, higher-level properties (behaviours, capabilities, or entities) different from those of the constituent units.

Globalization: The increasingly numerous rapid, diverse, and intensified connections that stretch human activities to the global scale.

Institutions: Collections of jointly understood *rules* of appropriate social behaviour. They include formal rules (constitutions, laws, and contracts), informal rules (customs and norms), and mechanisms of enforcement. *Constitutive* rules define the ‘things’ that are governed (such as private property or personhood) while *regulative* rules specify the ways in which things can, must, and/or cannot properly relate. A mixture of constitutive and regulative rules can create *organizational roles* that specify an actor’s identity and rights and responsibilities in relation to others.

Ontology: the study of the fundamental components – the most basic ‘things’ – that constitute reality. Ontology represents the premises or assumptions (often implicit) upon which theories are based.

Order: a state of affairs that exhibits regular patterns of behaviour over time. (See also: *World Order*).

Structure: most generally, structure encompasses ‘things’ and the persistent relationships between things, as two sides of the same coin insofar as things are constituted by the relationships between smaller scale things. More specifically, system structure refers in this thesis to the dense and recursive causal relationships that generate emergent properties. Structure is an emergent phenomenon.

System: a collection of interrelated elements whose interconnections produce collective behaviours, or some sort of whole, that persists through time. (See also: *Complex Adaptive System*).

Technologies: collections of *procedures* that transform matter, energy, and information (harness natural phenomena) to fulfill human purposes. Technologies involve ‘hardware’ – an essential connection to the physical world represented as a natural law or regularity – and ‘software’ – the individual and social actions required to apply a captured phenomenon to a specific task.

Violence: actions intended to physically harm (or kill) another person or persons.

World Order: what social organization exists at the largest, most encompassing scale of human interaction. Throughout most of human history, world order consisted of multiple, scarcely connected, regional orders – a plurality of worlds. Over the last few centuries, however, world order has become planetary in scale and incorporates virtually all of humanity.

Worldviews: Collections of fundamental *beliefs* about the physical and moral nature of existence. More specifically, worldviews include beliefs about *how the world is* (lay ontology), *how the world should be* (ideology), and a person’s *place within the world* (identity).