

State Failure, Actor-Network Theory, and the Theorisation of Sovereignty

Joseph MacKay*

The actor-network theory (ANT) model currently in use in science and technology studies attempts to evaluate the processes at work in systems and collectivities on new terms. ANT suggests that we evaluate networks, broadly defined as virtually any sort of collectivity, in terms of both their social and material components. Applying it to the international system suggests a new way of evaluating both state failure and state sovereignty as such, addressing the concerns mentioned above about the phenomenon and our understanding of it. While the model was developed to explain the development of scientific knowledge, its creators intend it for application to almost any complex, collective activity or set of relationships. By doing away with the distinction between social and material causes, it permits a more inclusive model for explanation of what occurs when an organised system such as a state breaks down. If a state is an actor-network, an affiliation of material and social elements coherently organised such that it can present itself as a unified actor, then state collapse is the breakdown of this organising capacity. Thus, sovereignty in practice can be understood as the ability of a state to present itself as a unified actor in the international system.

This essay will argue that sovereignty is not a static fact or a condition—rather, it is a process, or a series of actions and processes, through which a collection of actors and networks present themselves as a coherent unit. Thus, a failed state is a heterogeneous set of physically and culturally interrelated actors that has lost its capacity to coordinate itself, and has broken down into a set of cultural and material non-state actors.

In the mid-1980s, Somalia was comparable to many African states. Economically poor and in weak developmental condition, it was governed by a quasi-socialist military dictatorship. By the early 1990s, however, it was regarded as something else entirely—the only country in the world without any effective government. The overthrow of the dictatorship, infighting among its successors, and the collapse of effective governance became elements in a now all too familiar story. Somalia had become an emblematic case of state failure. It had ceased to meet the basic standards of organised statehood.¹

What occurs, in theoretical terms, when a state fails? The phenomenon has been well documented, and much discussed in International Relations literature, but remains the subject of some theoretical debate. While a classical account of the problem describes state collapse as a domestic phenomenon, caused by internal

* Joseph MacKay completed a bachelor's degree at the University of King College and Dalhousie University in Halifax, Canada. He subsequently attained a LLM in International Law and International Relations from the University of Kent in Brussels in 2006. In September 2007, he will begin doctoral studies in Political Science at the University of Toronto.

¹ Menkhaus, Ken. "State Collapse in Somalia: Second Thoughts." Review of African Political Economy, 93 (2003): 40507.

dissent, poverty, and strife, others suggest that the phenomenon is more often driven by external economic and political pressures.² Further accounts have recently suggested that the phenomenon itself may best be couched in a critique of traditional notions of sovereignty—if state collapse represents a failure of sovereignty, then perhaps the concept itself is in need of re-evaluation.³

The actor-network theory (ANT) model currently in use in science and technology studies attempts to evaluate the processes at work in systems and collectivities on new terms. ANT suggests that we evaluate networks, broadly defined as virtually any sort of collectivity, in terms of both their social and material components. Applying it to the international system suggests a new way of evaluating both state failure and state sovereignty as such, addressing the concerns mentioned above about the phenomenon and our understanding of it. While the model was developed to explain the development of scientific knowledge, its creators intend it for application to almost any complex, collective activity or set of relationships. By doing away with the distinction between social and material causes, it permits a more inclusive model for explanation of what occurs when an organised system such as a state breaks down. If a state is an actor-network, an affiliation of material and social elements coherently organised such that it can present itself as a unified actor, then state collapse is the breakdown of this organising capacity. Thus, sovereignty in practice can be understood as the ability of a state to present itself as a unified actor in the international system.

This essay will argue that sovereignty is not a static fact or a condition—rather, it is a process, or a series of actions and processes, through which a collection of actors and networks present themselves as a coherent unit. Thus, a failed state is a heterogeneous set of physically and culturally interrelated actors that has lost its capacity to coordinate itself, and has broken down into a set of cultural and material non-state actors.

A Note on Structure:

Given the scope of inquiry and range of theoretical positions involved, a difficulty inevitably presents itself with finding an appropriate point of entry into this set of issues. The argument will begin, thus, by assessing a range of theories, before comparing them, contrasting them, and then at least partially integrating them.

It will be useful to begin by assessing two concepts central to the argument—sovereignty and state failure. The history and usage of the terms will be briefly assessed, to the end of arriving at working definitions. This will be followed by an account of actor-network theory and an argument in favour of its application to the state. This will then be applied to failed states. Finally, there will be a discussion of the consequences of an argument that actor-networks can be used to explain the geopolitical world.

A brief word on objectives: the goal here will be to provide a framework for explaining the causes of state failure. The goal will not be to provide specific explanations so much as to show broadly how they should be sought out. Nor will it be to evaluate the theoretical or practical effectiveness of international law in protecting state sovereignty. The legality of interventionism is not directly at issue

² Wilde, Ralph. "The Skewed Responsibility Narrative of the 'Failed States' Concept." *ILSA Journal of International and Comparative Law*, 9 (2003): 42526.

³ Brooks, Rosa Ehrenreich. "Failed States. or the State as Failure?" *University of Chicago Law Review* 72 (2005): 116264.

here. Secondly, the aim will be to demonstrate the utility of actor-network theory in international relations generally. The result should be an improved model for the discussion of a range of geopolitical issues, including but not limited to the one at hand. Failed states, it will be argued, are emblematic of a selection of international issues that conventional IR is poorly equipped to deal with—namely, those that involve non-state and nonsocial actors in prominent roles.

1. Theorising State Failure and Sovereignty:

1a. Evaluating Sovereignty:

State failure and sovereignty can be analysed as interdependent concepts—formal, functional, independent statehood and its absence. Where one is a basic unit of political organisation and the set of norms that preserve it, the other represents its collapse and perhaps the failure of norms to protect it. ⁴

Defining sovereignty itself is a bit like defining existence in philosophy, or consciousness in psychology. Its centrality to political philosophy and International Relations theory is such that it becomes difficult to identify. Because so much of political and indeed legal theory rests upon it, finding a basis for it proves difficult. ⁵ Nonetheless, providing some definition of it is a requirement of understanding state collapse.

While it has a complex history, we owe the notion of sovereign equality largely to the political theory and practice of the European Enlightenment. In the mid-1600s, the basic structure of sovereign equality was set out: a vertical power structure at home and a horizontal one abroad. Hobbes gives us the state in perhaps its simplest form: a more or less sealed power structure, wherein all authority is given over to a central governing authority, a ‘sovereign’. There is no power structure outside the state—internal authority is absolute, external authority is nonexistent. ⁶

Around the time of Hobbes’s work on the theorisation of sovereignty, the peace of Westphalia enshrined sovereign equality in the international order. The bargain struck between the European states of the day was a simple one: “What’s mine is mine, what’s yours is yours. We will not interfere in one another’s areas of authority.” This formula for peace and stability gave the nation-state its unique standing. Unmitigated domestic authority would in turn permit them to expect international equality, and vice versa. The rule established a firebreak between the domestic and international orders, protecting the structure of each precisely by keeping them apart. ⁷ By the time Max Weber set out his own Hobbesian definition of the state in the early 20th century (an organisation possessing a “monopoly of legitimate physical violence” on a given territory—a closed, vertical, unchallenged power structure ⁸), sovereignty had become the central idea of international politics, and the state was the key category of international actor. ⁹

⁴ Helman, Gerald B and Stephen R. Ratner. “Saving Failed States.” *Foreign Policy* 89 (1992): 3.

⁵ Bartelson, Jens. *A Genealogy of Sovereignty*. Cambridge: Cambridge University Press, 1995: 111.

⁶ Hobbes, Thomas. *Leviathan*. United States of America: Touchstone, 1997: 13233.

⁷ Krasner, Stephen. “The Hole in the Whole: Sovereignty, Shared Sovereignty, and International Law.” *Michigan Journal of International Law* 25 (2004): 1077.

⁸ Weber, Max. “The Profession and Vocation of Politics,” *Political Writings*. United Kingdom: Cambridge University Press, 2002: 31011.

⁹ Krasner (2004): 1077.

Sovereignty, of course, is not an idea without its discontents. “It [sovereignty] was never more than a convenient label,” E.H. Carr tells us—a theoretical gathering point for a loose affiliation of phenomena, a placeholder in the structure of our political understanding.¹⁰ This is perhaps the chief general critique of sovereignty—that it simplifies a vast assortment of power structures and interdependencies into a simple formula of horizontal versus vertical political relationships. Sovereign equality describes the state in theory but not in practice. Ann-Marie Slaughter notes that it has recently become a virtual platitude that sovereignty is under assault, both in theory, in a range of critical appraisals, and in practice, in the form of increased economic and geopolitical interdependence among states.¹¹ Louis Henkin simply dismisses it with distaste as, “that ‘S’ word.”¹² Most of these have in common a fairly straightforward insight: we do not understand sovereignty properly, and we need to stop talking about it as if it were unproblematic. That a debate is ongoing, and has been for some time, indicates both that the term is deeply problematic and that we rely significantly upon it. The idea of sovereignty persists, as a value, as a legal norm, as a fact on the ground, and as a theoretical concept.

What then of sovereignty under the law? The Charter of the United Nations, and the Covenant of the League of Nations before it, enshrine sovereignty more or less as the organising principle of the international system. States, as we might expect, are to be sovereign and equal—no power above them (excepting the special powers granted to the UN Security Council) and equal legal status for all of them.¹³

This sets out the role of states, but not what qualifies them *as* states. To this end, customary international law sets out practical qualifications for statehood, as articulated by the Montevideo Convention of 1933. A state is said to possess four things—a defined territory, a population, a capacity for effective governance, and an ability to enter into relations with other states.¹⁴ States meeting these can expect that other states will not interfere in their internal affairs. However, this does not resolve the difficulty concerning sovereignty, as it is necessarily silent, however, on the practice of statehood. Law can prescribe standards, but it cannot show us how states are created and maintained in practice, or how they relate to one another.

Sovereignty, in short, remains problematic. This gives us some idea of why state failure has proven a difficult topic of analysis. The next section will look at some of the pitfalls of attempting to understand it.

¹⁰ Carr, Edward Hallett. *The Twenty Years Crisis: An Introduction to the Study of International Relations*. Great Britain: Palgrave, 2001: 212.

¹¹ Slaughter, Anne-Marie. “Sovereignty and Power in a Networked World Order.” *Stanford Journal of International Law* 40 (2004): 28384.

¹² Henkin, Louis. “That ‘S’ Word: Sovereignty, Globalisation, and Human Rights, Et Cetera.” *Fordham Law Review* 68 (1999): 1.

¹³ “The Covenant of the League of Nations.” *Blackstone’s International Law Documents*. Ed Evans, Malcolm D. Oxford: Oxford University Press, 2003: 17. “Charter of the United Nations.” Evans: 826.

¹⁴ Wallace-Bruce, Nii Lante. “Taiwan and Somalia: International Legal Curiosities.” *Queen’s Law Journal* 22 (1997): 456. (While the Montevideo Convention never entered into force, it is generally taken to authoritatively describe customary international law in this area.)

1b. State Failure in the Existing Literature:

The term ‘state failure’ can be traced to the early 1990s, following the 1991 publication of Gerald Helman and Steven Ratner’s article “Saving Failed States.” The article describes a nation state that has ceased to play its part, both domestically and internationally. The authors compare contemporary failed states to the geopolitical remnant of Germany after the Second World War—a state entity that has ceased to perform the basic functions of governance, no longer enforcing authority or providing for its people. The consequences are human suffering and insecurity, both internally and externally.¹⁵ On Helman and Ratner’s account, the proliferation of the phenomenon can be ascribed to two significant historical events: the end of the Cold War and the end of European colonialism, both resulting in a large number of newly independent states. These states, created in the spirit of the UN-mandated self-determination of peoples, were intended to have a liberating effect, ending periods of colonial or communist oppression. That these states would require help economically and developmentally was understood by all concerned, but that they would simply not function geopolitically was, the authors argue, never properly considered—such an idea ran contrary to the liberatory spirit of decolonisation.¹⁶

As a solution, Helman and Ratner prescribe a policy of intervention by developed states. Existing approaches such as financial aid are insufficient, they argue, as these presuppose the existence of an effective government to receive them. Where one is lacking, the international community needs to take a “more systematic and intrusive approach,” in the form of intervention in the governance of a failed state—preferably with the consent of the state’s remaining authorities, but not necessarily.¹⁷

Recent history has not made Helman and Ratner’s position any less controversial. Since the article’s publication, many of their ideas have been tested, with mixed results. Numerous intrusive reconstruction missions have been undertaken by the UN and others with varying degrees of success, many granting the international community at least some of the authority of government. In the cases of Kosovo and East Timor, the UN has governed the two territories outright for a period of years.¹⁸ Conversely, in the case of Somalia, intervention largely failed to resolve the humanitarian crisis, and the country remains without effective government more than a decade later.¹⁹

Ralph Wilde’s 2003 article “The Skewed Responsibility Narrative of the Failed States Concept” nicely glosses one of the major objections to this position—that it implicitly holds collapsed states responsible for their condition. The flaw, on Wilde’s account, is that states often fail under immense foreign pressures—economic, political or even military. The state failure phenomenon cannot be properly understood in the terms of domestic politics alone; foreign influences are involved. A program of international administration for the state itself can address only domestic causes of state failure—external conditions that encourage a state’s collapse

¹⁵ Helman and Ratner: 34; Wilde: 425.

¹⁶ Helman and Ratner: 4.

¹⁷ Helman and Ratner: 1213.

¹⁸ Kondoch, Boris. “The United Nations Administration in East Timor.” *Journal of Conflict and Security Law* 6.2 (2001): 246.

¹⁹ At the time of writing, the situation in Somalia had been complicated by the rise of the Islamic Courts Union (ICU), and the intervention of Ethiopian troops in the country. (“The Rising Fear of a War of Proxies.” *The Economist* July 15, 2006: 4748; “Ethiopian Troops Enter Somali Government Base.” *New York Times* 21 July 2006: A3.)

(economic pressures from foreign investors or international financial institutions, military pressures from other states, either directly or through local proxies, and so on) are left unaddressed. Further, the prospect of international intervention must be approached with caution, as intervening states may already be as much a part of the problem as of any solution. Any intervening foreign power brings with it its own interests, its own political value system, etc., limiting the good it can do in a local context. Often foreign intervention may eerily resemble the foreign causes of the problem, as both bring military activity, an economic agenda, and other interests with them.²⁰

A second, more radical set of criticisms of Helman and Ratner's program concerns sovereignty itself. It suggests that sovereignty as such is a problematic concept, and that state failure is largely a consequence of undiagnosed difficulties with it. The position takes two tacks. The first is that the descriptive account of statehood is flawed, and thus encourages a flawed account of state collapse. The second, more radical claim is that our normative account of statehood, the Westphalian rule of international noninterference and absolute domestic authority is in some practical way flawed as well, making statehood an unattainable and perhaps undesirable goal. Rosa Brooks' 2005 article "Failed States, or the State as Failure?" strongly argues both positions.²¹

Failed states, Brooks claims, are most often states that never succeeded in their own right to begin with. Either they collapsed during or shortly after independence (as in Bosnia and East Timor) or they were sustained for a period afterward by the unique international arrangement of the Cold War, during which numerous newly decolonised states were made to function artificially through significant economic aid and political influence from one of the two superpowers (as in the Democratic Republic of Congo).²²

This in itself supports Wilde's argument that external forces largely determine state collapse. Brooks goes further however, to claim that sovereign and equal statehood is best understood as a problematic notion itself. Noting that the practice of sovereign equality is a development of recent centuries, she argues that it has served as an effective organising principle for only some of its adherents. While independent statehood has served Western societies well, many others have foundered under the weight of it. In effect, she argues the state as such is a failure, both morally and pragmatically. States go habitually to war, abuse their own populations with impunity, and even then succeed as political structures only some of the time. She adds to this an argument about the state of the international community itself: if the international system is as prone to conflict, disagreement, inequality and violent abuse of authority as she claims, then it is itself analogous to a failed state. If the sovereign part of statehood does not hold, then neither does the equal part—the mechanism that sustains a balanced international order. An international community of states founded on sovereign equality is, like the collapsed states she describes, a project of political organisation that simply never got off the ground.²³

²⁰ Wilde: 425. For a political-economic assessment of foreign causes of state failure, see generally Morton, Adam David. "The 'Failed State' of International Relations." *New Political Economy* 10.3 (2005).

²¹ Brooks: 115961. For a similar position see Clapham, Christopher. "The Challenge to the State in the Globalized World." *Development and Change* 33.5 (2002): 777, 780, 785.

²² Brooks: 116768.

²³ Brooks: 117274.

Brooks' argument is self-consciously polemical, but makes an important point. If sovereign states fail or risk failure as often as they seem to, at least outside the developed West, then perhaps something is wrong with sovereignty itself. She points out quite rightly that the notion of sovereign equality holds only as an idea in international law. After Stephen Krasner, she argues that sovereignty is something of an agreed upon falsehood: most states willingly and regularly cede sovereignty to some degree (under treaty, or to international organisations) and also abuse one another's sovereign rights from time to time (at war, or through punitive economic policies). We may claim to value sovereignty, but we have great difficulty upholding it in practice. Sovereign equality does not describe the international system as it stands; rather it describes an international system we might like to have. It not a fact but a norm, one to which we often do not live up. Additionally, sovereign equality seems to be a bad political model in some contexts. The notion that peoples can best seek political identity through statehood has proven problematic in practice, not only because it breeds conflict but because of the sheer number of ethnicities that might seek statehood. In short, sovereignty is neither a true, accurate fact nor a good norm. It does not occur reliably in international relations, and is not especially desirable, inasmuch as it does not reliably uphold international peace and security. It may be an idea we are better off without.²⁴

Thus, if we are serious about explaining and preventing the collapse of states, then we should look more critically at the state itself. To meaningfully question state failure we must also question state success, and related international norms.

1c. Working Definitions:

As argued above, it is important to recognise the difficulties in defining sovereign statehood, and in turn state failure. Nonetheless, working definitions of each will be necessary. For sovereignty, the dual definition offered by Robert Jackson will be used here.

Jackson's dual account of sovereign statehood is introduced in his 1990 book *Quasi-States*. Statehood, he tells us, has two aspects: positive sovereignty and negative sovereignty. The first constitutes the ability of the state to govern: to enforce effective control and provide basic services, to carry out the role of a state. Negative sovereignty, conversely, consists of an absence of external interference—the recognition of a state's sovereign rights by its peers in the international system. The two form the basis for sovereign statehood—capacity and permission to be a state.²⁵

These two parallel two notions of statehood under international law. Positive sovereignty is roughly equivalent to the standards described in the Montevideo Convention: a set of minimum qualifications states must themselves meet in order to be called sovereign. Negative sovereignty equates to the other component of statehood under international law: recognition as a state by other states, thereby granting standing as a subject of international law.²⁶

Happily, the two forms of sovereignty almost always occur together in the current state system. However, a number of states have lost the capacity to carry out

²⁴ Brooks: 117274.

²⁵ Jackson, Robert H. *Quasi-States: Sovereignty, International Relations and the Third World*. United States of America: Cambridge University Press, 1990:2629.

²⁶ Grant, Thomas D. "States Newly Admitted to the United Nations: Some Implications." *Columbia Journal of Transnational Law* 39 (2000): 17879.

positive sovereignty, having lost the capacity to govern effectively. Jackson terms these quasi-states: states that possess one kind of sovereignty but not the other.²⁷

Jackson's argument parallels Helman and Ratner's, in that he places little emphasis on the range of causes behind state failure, describing instead the form state failure takes. As such, Jackson's hard line distinction runs afoul of Wilde's argument—a failure of positive sovereignty may be conditioned by a failure of negative sovereignty, in the form of foreign interference. Further, Jackson leaves little room for any argument that sovereignty as such is in any way flawed.²⁸

Nonetheless, the distinction remains useful. In order to discuss the influence of one form of sovereignty on the other—a discussion essential to evaluating the causes of state collapse—we will need to understand the difference between functioning as a state and being recognised as one. Therefore, Jackson's dual definition of sovereignty will be used here as a provisional way of discussing statehood, with the caveat that the two parts should be understood as interdependent.

With this account in mind, it will be worthwhile to briefly sketch a working definition of state failure. For the purposes of this dissertation, a failed (collapsed) state²⁹ is one in which the central government has lost effective control over the bulk of its territory—regardless of the cause—and has therefore ceased to deliver basic public goods.³⁰

The definition is neither absolute nor in itself a source of explanation. We might note that state failure and success are relative phenomena: States rarely have absolute and undiluted vertical control over their territories, and governance rarely ceases absolutely. In terms of causation, it is by no means assumed that this failure is caused by internal forces alone—rather, no initial assumptions will be made about the causes of state collapse. It will also not be assumed that a failed state is best assisted by restoration to positive sovereign statehood. Instead, provisionally, we should say only that a failed state has lost most of the capacities of governance. It has become a quasi-state. Discussing why this is so, and what role sovereignty plays in the issue, will comprise the bulk of this study.

2. Actor-Network Theory and the State:

2a. The Theory:

Actor-network theory (ANT) is the creation of theorists in science and technology studies including John Law, Michel Callon, and especially Bruno Latour. It originated as a system for describing the processes at work in the creation of scientific knowledge. Despite its relatively narrow origins in science and technology

²⁷ Jackson: 2123.

²⁸ Wilde: 425; Brooks: 117274.

²⁹ A distinction is sometimes drawn between state failure and state collapse (Milliken, Jennifer, and Keith Krause. "State Failure, State Collapse, and State Reconstruction: Concepts, Lessons, and Strategies." *Development and Change* 33.5 (2002): 75354). For the purposes of this dissertation, the terms will be used interchangeably.

³⁰ There is a temptation to distinguish here between the state itself and government. For the purposes of this argument, the state is an organisation defined in part by effective government, and the failure of that government is the primary criterion of state failure. As such, the distinction, while real, is not useful to the definition of state collapse itself. The other constituent elements of the state (population, territory, and so on) come into play only when discussing causes of state (government) collapse.

studies, its proponents have argued for some time that it might be applied to geopolitical issues.³¹

Since its inception a few decades ago, Latour and his theoretical allies have promoted a reaction to two sharply divergent accounts of knowledge creation: on the one hand what might be loosely termed traditional scientific realism (the view that science is a rational program for the discovery of objective facts about the world), and on the other a range of constructivist beliefs involving scepticism about the rationality or objectivity of science.³² They have attempted an end run around this disagreement by changing the object of study. Both traditional scientific realism and recent scepticisms about science will tend to emphasise scientific methodology, and whether or not it reveals objective truth. Latour and others argue that instead of studying methodology, one should study the practice of science, actual activities in laboratories, and theorise them. The result is a model that blurs the distinction between realist and constructivist accounts of knowledge, by in turn blurring the distinction between the social/human and material/natural spheres of reference.³³

The argument can be reduced to a few key points. Indeed, John Law reduces the theory's core ideas to five words: "Things are effects of relations."³⁴ The idea is that an account of any complex system or aggregation (such as a laboratory or a polity) should depart not from a discussion of its parts, but from a discussion of the connections between them, their roles and their behaviour being determined by their relationships. This is the first of three key points to be made about ANT: it starts analysis with relations, not with individual elements. This is an injunction against essentialism. We should not break things down into discrete, categorised parts. We should proceed instead from relationality itself. Thus, a useful discussion of a car in motion does not begin by distinguishing the driver from the vehicle—rather, it will describe the relations between moving parts: the driver's hands on the wheel, the firing of pistons under pressure, etc. These interactions make the vehicle's movement possible. Proceeding from descriptions of the driver and the car does not aid us in understanding the car's motion. It merely shows us two distinct elements in a system, without shedding light on how they work. Their nature is determined precisely by the system, as a fluid web of relations. The proper object of study is the relationships

³¹ Latour, Bruno. "The Impact of Science Studies on Political Philosophy." *Science, Technology, & Human Values* 16.1 (1991): 1, 1718.

³² There is nothing like the necessary space available here to sketch the debate in science and technology studies, or even to survey the literature properly. Generally, though, the difference is between a belief in a substantive, objective, empirically present reality which science describes, and a belief that all knowledge of the world has social or non-empirical origins, or at the very least has roots in some form of irrationality. For an example of fairly conventional Enlightenment realism, see generally Kant, Emanuel, *Critique of Pure Reason* (Trans. J.M.E. Meiklejohn. United States of America: Prometheus, 1990). For more recent scientific realisms, or other 'pro-science' views, one might look to analytical philosophy and more specifically to logical positivism. For an example of an analytical philosopher expounding logical positivism, see Ayer, A.J., *Language, Truth and Logic* (Great Britain: Gollancz, 1946). For a more critical, irrationalist assessment in the history of science, see Kuhn, Thomas, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962). For social constructivism see Bloor, David, *Knowledge and Social Imagery* (Chicago: University of Chicago Press, 1976).

³³ Latour, Bruno. *We Have Never Been Modern*. Trans. Catherine Porter. Cambridge: Harvard University Press, 1993: 3.

³⁴ Law, John. "Ladbroke Grove, Or How to Think about Failing Systems." December 6th, 2003. Centre for Science Studies, Lancaster University. March 30th, 2006. <<http://www.comp.lancs.ac.uk/sociology/papers/Law-Ladbroke-Grove-Failing-Systems.pdf>>: 6.

between them. Studying these will yield greater breadth of knowledge about how the collectivity works.³⁵

This leads us to the second point, a consequence of the first: the indivisibility of social from material (human from nonhuman) elements. Having moved from objects to relations, we should not prejudge the nature of objects by subdividing them from the outset.³⁶ If we want to know what makes car and driver go down the road together, we learn little from dividing these parts into human and nonhuman categories. It is easy enough to describe them in entirely human or nonhuman terms, but one set of explanations will always mask the other. We can look at the driver and sketch a social-scientific account: his mind tells his body how to drive the car; he drives well or poorly depending on his mindset; social pressures determine the speed at which he drives. We can discuss the car itself and even the driver in physical, mechanical terms: pistons move under pressure; combustion generates heat; calories fuel the driver's muscles, neurons fire to direct them.

However, neither set of explanations accounts for the whole situation. Each, that of the social or the physical sciences, discounts the other, masks its explanatory power. What we need is an explanatory device that covers both areas at the same time. We need to consider car and driver as precisely what they resemble driving down the highway: an interrelated aggregation of parts, operating in unison. Bluntly, this means that we need to stop privileging humans as distinct from other objects of inquiry.³⁷ The difference between the two will cloud our perception of these interactions. If each, and their component parts, participate in the interactions we are studying, and if those interactions are our primary object of study, then all should be treated simply as components in the broader collective.³⁸

In practice, the social/human sphere and the material/natural sphere overlap. Communication for example occurs between people, but it is always mediated through the material world in some way—electronically, on paper, through the vibrations of speech. The social sphere is, thus, ensconced in a material context. Inversely, we know the material world only in a social, subjective context, through a web of shared experience and belief. The point, in philosophical or metaphysical terms, is profound. The realist and constructivist positions to which ANT reacts will try generally to reduce scientific knowledge either to objective truth or to social construction. Here, the two pass into one another: they are interdependent, and cannot rightly be separated. Knowledge of the natural world occurs socially, but in a material context—as the product of social interaction that is itself materially founded. Subjective, social experience, the substance of the social sciences, occurs in a material context knowable only through the mediation of the social, subjective sphere. It follows that the social and the material realms are of a piece, inseparable.³⁹

In order to explain the confluence of nature and culture, Latour introduces the term 'quasi-object'. The term refers to entities falling between the cultural and natural spheres of reference. Examples might include cars, computers, printing presses, weapons of mass destruction—hybrid actors that bridge the artificial gap between humanity and the material world.⁴⁰

³⁵ Law, John. "Notes on the Theory of the Actor Network: Ordering, Strategy and Heterogeneity." *Systemic Practice and Action Research* 5.4 (1992): 37980.

³⁶ Latour 1993: 1011.

³⁷ Latour 1993: 34.

³⁸ Law (1992): 38081.

³⁹ Law (1992): 38082.

⁴⁰ Latour 1993: 5154.

This notion of hybridisation brings us to the third point, concerning actors and networks. The components of an aggregate, a collectivity, are to be termed actors. The totality is a network. What we have between them is a familiar sort of duality at work: individuals and systems, agents and structures. The crucial move made by actor-network theorists is to claim that the two categories collapse into one another. A network will often interact with other networks; in so doing each will take on the role of actors. How do the car and driver—a network—interact with the broader network of surrounding highway traffic? Clearly, at this point, they are no longer simply a network unto themselves. Rather, viewed in a broader context, they are a single, coherent actor. Conversely, an actor is itself a network of parts, of actors. Car and driver and not unproblematically a single unit, nor are they simply two actors—they are an array of bone, muscle, pistons, electrical components, learned driving skills, mechanical calibrations, and so on. Hence the hyphenated term actor-network: each is always and at once both. ⁴¹

Law uses the term ‘translation’ to describe the process of coordinating networks as actors. Accordingly, he identifies specific characteristics of effective translation—it will be worth looking briefly at these. The first is durability: an effectively coordinated network will be long-lasting. In the case of political organisation, for example, laws are written down in order to make them permanent. The second is about spatiality, distance, mobility, and the argument here is much the same. We can measure the efficiency of a translation by the distance it can cover, the space it can organise within a given actor-network, while remaining unified as an actor. Again, take an example from politics: the capacity of a government to extend authority over a given territory indicates the effectiveness with which it constitutes a state, translating it as a coherent actor. ⁴²

Both these qualities of translation are made more complicated by being themselves relational. Both the permanence of a set of laws and extent of a government’s authority are effects of the things they conflict with—resistance to law, and competing political authorities. Thus, the other two elements of effective translation are reactions to the relationality of translation. First, it will be desirable for a network to be able to anticipate the reactions of the elements it translates, thereby helping to preclude resistance, and making translation more permanent. The other is about scope: translation is a necessarily local phenomenon. It requires a centre, an instigating actor or actors that aggregate themselves and others into the network as a larger actor. Effective translation, thus, organises from a point of authority on out. ⁴³ A geopolitical example helps again. An effective government has a hierarchy of authority, and establishes means to project the authority of the state. It trains police to maintain order, provides basic services to help sustain a social balance, and so on. The example is obvious enough—organised governance is, as we have seen above, one of the most basic standards of statehood. All of these modes of translation apply not only to sociopolitical networks, but also to material ones, and to aggregates of the two—the car, the driver, and the combination of the two might all be approached this way.

This has consequences for causation as well. If we evaluate all things by the connections between them, then causes are not simply interactions between atomistic

⁴¹ Callon, Michel. “The Sociology of the Actor-Network: The Case of the Electric Vehicle.” *Mapping the Dynamics of Science and Technology*. Eds Michel Callon, John Law, and Arie Rip. London: The MacMillan Press, 1986: 2833. (This text also provides a much more eloquent case study of the construction of in mechanised transportation.)

⁴² Law (1992): 38790.

⁴³ Law (1992): 38790.

objects, they are themselves effects of relations—we should not look for individual causes but for the mass of relations between things, analyzing the push-pull connections between all elements of a context rather than isolating parts of it for study.⁴⁴ We should examine broad relationality, rather than specific causation, as causes are effects of their context. Isolating them will only deny us access to what defines them.⁴⁵

Returning to the practice of science, consider briefly what a laboratory is for ANT: an assembly of more or less coordinated parts—professional scientists, equipment, samples, student research assistants, experimental subjects (humans, animals, others), and so on. These actors in the laboratory network interact to produce knowledge. The network is coordinated through a power structure established by researchers to produce knowledge. The resulting knowledge is constructed by the laboratory—it is a product. It is also real, being the output of interaction between humans and material objects of study. As we break down the distinction between natural and social, the distinction between the real and the constructed breaks down as well: the content of science is both a social and a material reality, in effect a real construction.⁴⁶

Before moving on, it will be worth noting two commonly identified limitations of the theory. First, by making interactions—networks and their construction—the object of study, it limits itself to a sharply asystematic view of the world. It does not deny the existence of organised systems, but it does not presuppose that they are organised in a certain rigid way. Rather, it makes the mode of their organisation the object of study. Thus, it provides us with very little structure through which to view the world, past the basic notion of the actor-network itself. There is, thus, remarkably little in the way of proposed methodology. Law assesses this fairly straightforwardly: the world is complex, temporal, nuanced, sometimes ambiguous.⁴⁷ It should not be approached through a fixed, limited logical filter with which to assess data. This is not to say that the study of organised systems is impossible, or that methodology must be abandoned—it is to say that it should be adapted to reflect a complex and specific, localised reality.⁴⁸

The second limitation, briefly, has to do with normativity—ANT lacks virtually all normative content. It is said to be a purely descriptive system.⁴⁹ It will be

⁴⁴ Latour 1993: 8285.

⁴⁵ Indeed, Latour and others have often expressed concern that the term ‘network’ itself implies an excessively rigid or schematic description of a complex and disordered reality. They have increasingly turned to biological metaphors to describe collectivities. Latour cites Lynch suggesting the theory should more properly be called “actant-rhizome ontology.” (Latour, Bruno. “On Recalling ANT.” *Actor Network Theory and After*. Eds. John Law and John Hassard. Oxford: Blackwell Publishers, 1999: 19.) Latour himself is rather more graphic, referring to networks and their defining principle of interconnectedness as a “bloody throbbing tangled mess, the entire vascularization of the collective.” (Latour, Bruno. *Pandora’s Hope: Essays on the Reality of Science Studies*. Cambridge: Harvard University Press, 1999: 109.) The general intention is to deemphasize all reference to actors or structured relations, replacing them with the nebulous push-pull of many interactions occurring together.

⁴⁶ Latour (1991):12-15; 1993: 2427.

⁴⁷ For detailed discussion, see generally Law, John. *After Method: Mess in Social Science Research*. Great Britain: Routledge, 2004.

⁴⁸ The approach taken here will reflect this. A theoretical position—that ANT can be used to assess states and their success or failure—will be presented, with a few short examples. There will be no extensive mechanically logical discussion of state structure, or quantitative analysis of statehood. This is simply because it would be entirely inappropriate to the theory proposed.

⁴⁹ Wynne, Brian. “Response to Radder.” *Social Studies of Science* 28.2 (1998): 33840.

enough here to note for now that if the theory lacks prescription and also declines to privilege social—human—categories over others, it will likely prove controversial when applied to sociopolitical contexts. Further, it might present problems when applied to international norms such as negative sovereignty.⁵⁰ The model threatens to provide a factual account to the exclusion of guidance—a description of a world without direction on how to act in it. Addressing this will occupy much of the concluding sections of this article.

To review: a network consists of relationships. It is the aggregation of which its component parts are effects. Things are determined by their relationships, but an actor-network is a totality of relationships, consisting of the component actor-networks involved in it. An actor is, thus, itself an aggregate of connections. There are no atomistic actors. To paraphrase a well-worn line, it is relations all the way down.⁵¹ Thus, the distinction between individuality and collectivity blurs; each is always and at once the other. There is no agent being determined by a structure, or vice versa. The idea is simply that the distinction between the two is, and always was, false.⁵² Here, finally, is the central question and object of study of ANT: what determines whether we see an actor or a network when we look at something? How do actors gather together, coordinate, to form a more ordered network—itsself appearing as an actor?⁵³

2b. Geopolitical Networks—the State as Laboratory:

The original task of ANT, explaining the creation of scientific knowledge in a laboratory environment, might appear to differ significantly from explaining the behaviour of international actors. One issue belongs to the realm of factuality, of material knowledge, and the other to the sphere of politics, of sociopolitical ideas and processes. The gap is bridged if we accept ANT's claim that the sociopolitical and factual-scientific spheres are of a piece, that the human/social sphere is not meaningfully separate from the material world. If this is the case, the same theoretical model should explain both.

To expand on this, consider a state as a network: an assembly of heterogeneous parts, human and nonhuman acting together as an ordered unit to project political authority over a given population and territory. Consider that we understand laboratories primarily in terms of their ability to generate knowledge about the world around us. A state is an assembly of parts with the ability to generate political authority. As with a laboratory, the state will include material as well as social elements: to understand the state we should assess not only its human elements but also its material components: infrastructure, natural resources, armaments, and so on.⁵⁴

The difference between the two, laboratory and state, has to do not so much with their general composition (both can be understood as networks) so much as with what they produce: knowledge and political authority. The distinction between these is that which ANT sets out to eliminate—the difference between the social and the material. If both can be construed as networks, then we ought to be able to use the same general principles to explain one that produces knowledge and one that produces

⁵⁰ See chapter 5a for further discussion.

⁵¹ Hawking, Stephen. *A Brief History of Time*. United States of America: Bantam, 1998: 1.

⁵² Latour (1999): 16; Callon (1986): 2833.

⁵³ Law (1992): 38486.

⁵⁴ Latour 1993: 1820.

political authority. In turn, their products are not so different—both the laboratory and the state are concerned with constructing the reality of the world. If the social and material spheres are not rightly separated, then neither are these two.⁵⁵

Indeed, the state necessarily includes social and material elements. Consider the four attributes of statehood recognised under customary international law. Territory is a material attribute. Population is sociocultural. Effective government includes bureaucracy, laws, and the physical means of their enforcement. A capacity to engage in relations with other states is sociopolitical. At each stage a range of elements is involved. Effective government, for example, requires a physical security apparatus, bureaucracy, printed volumes of statutes, physical transport infrastructure, a culture of obedience to the state, and so on. Even a state's territory includes material and social components, including border control, cartography, the study of natural resources, laws governing land ownership, and so on. At every turn, the notion of statehood is permeated with social-material relations—is constituted of hybrids, of actor-networks. In order to have a basic conception of sovereign statehood, we need both social and material components. Latour suggests this argument himself: the Leviathan, the state, he tells us, “is a skein of networks.”⁵⁶

An attempt to separate the social elements of a state from its material elements will prove difficult. Effective control cannot be reduced purely to social causes. This would discount the means of enforcement necessary for law and order (vehicles, arms, etc.) and the means to provide basic services (transport infrastructure, agriculture, etc.). Equally, it cannot be reduced solely to the material sphere, either. One cannot make sense of government without the people who compose it.

All this, of course, assesses only what is called for under international law as qualification for statehood. It does not include the things that make states work in practice—the economic forces at work, the sociocultural bonds that hold a state together. An economy, for example, involves natural resources, cultural consensus about currency, and all the rest. Suffice to say that the state is always and originally both social and material, and within it the two cannot be readily or usefully separated.⁵⁷

We can also move from this to see the position of the state on the international stage. Collectively, these elements form a Hobbesian Leviathan, enforcing a Weberian monopoly on the legitimate use of violence. They present themselves as a single international actor, even as they appear internally as the parts of a complex system. This, then, is statehood as it exists in practice: a heterogeneous network presenting itself as an actor—many things acting out the role of one at the global level. The international arena is the context in which this occurs—a space in which aggregated networks interact with one another, as ordered actors operating to their own advantage. The international system itself becomes a network, but a disordered one. Thus, the difference between the international system and the state is one of degree—the degree to which each is ordered to behave as a single actor. States as actor-networks emphasise the unified actor part of the formula, but the international system lacks the necessary integration and central authority for this, and appears as a network. This commonality between international and domestic politics undermines the hardline distinction between the two.

2c. ANT and IR:

⁵⁵ Latour (1991): 15.

⁵⁶ Latour 1993: 12022.

⁵⁷ Latour 1993: 12022.

While a survey of IR theory generally is beyond the scope of this work, it will be useful to compare ANT briefly to a few existing IR theoretical schools. The theory breaks sharply with much in current IR, most radically from neorealism, but also from neoliberalism. It relates more closely to existing constructivist accounts of the international system, such as that of Alexander Wendt.

A conventional neorealist account takes after Hobbes. States are closed, freestanding power structures, relating internationally in a condition of anarchy. For realists, states are largely unproblematic institutions—they may have complex internal political dynamics, but these are unimportant to grasping their international behaviour. States are self-interested actors, and can all be expected to act rationally to their own advantage, regardless of their internal politics. Briefly, if a bit imprecisely, this is the neorealist structure of the international system: states are unified rational actors, interacting in an international condition of anarchy. Thus, they are more or less equal, concerned only with their own survival and advancement.⁵⁸

The ANT account of statehood proposed here rejects or at least significantly modifies a realist account of sovereign statehood. States are not governed with absolute authority from within, even in theory, and they are not free from influence abroad—again, even in theory. Rather, a more accurate theoretical description of the international order would be a mass of interrelated parts. Some are states themselves, some are within states, and some operate quasi-independently of states (international organisations or multinational corporations, for example). Some state actors will necessarily influence one another, as actors outside the state will influence actors within it—so long as they can interact economically and politically on the global stage, more powerful actors will have a capacity for influence weaker ones.⁵⁹

Thus, the firebreak of sovereignty is porous: influence passes into the state from without, and passes out of the state from within, to other state or non-state actors. The state structure is contingent upon the capacity of the state network to remain ordered. However, the ordering efforts of a network and its component actors are always subject to influence from the actor-networks with which it interacts. States are consequences of complex international and domestic interactions that permit them to attain the basic attributes of effective statehood—positive sovereignty. They are also dependent on their place in the international network to retain status as states, which they receive through recognition—negative sovereignty. Sovereignty in either form is not the primary fact of the international system—it is an effect of, and to a degree a reaction to, a more complex global order. States are structured networks, ordered against the invasive or damaging effects of other actors, sovereign or otherwise. Thus, they are dependent on that very international order for their status as states. This should not surprise us—as Hobbes says, the state is a reaction to a complex and dangerous broader world.⁶⁰ But they are not absolute power structures: they are influenced from abroad. Further, their component actors are influenced from abroad. The continued existence of the sovereign state is dependent upon this prior interplay of non-state and state-component actors. Sovereignty is not, in practice, the

⁵⁸ Waltz, Kenneth. *Theory of International Politics*. United States of America: McGraw-Hill 1979: 79-101.

⁵⁹ Keohane, Robert O and Joseph S Nye. *Power and Interdependence*. New York: Harper Collins, 1977: 35.

⁶⁰ Keohane, Robert O. "Hobbes's Dilemma and Institutional Change in World Politics: Sovereignty in International Society." *Whose World Order?: Uneven Globalisation and the End of the Cold War*. Eds. Hans-Henrik Holm and Georg Sorensen. United States of America: Westview Press, 1995: 16869.

primary fact of world politics—it is an effect of an already occurring assortment of power struggles between the elements that permit statehood to occur.

The realist (or neorealist) mistake is to assume that if states set out to defend themselves on an international field marked by anarchy, they will thus operate freely and rationally. States may not be subject to overarching authority, but they are subject to international influence—economic, geopolitical, even military. So long as states and their component actors interact in complex ways (a virtual certainty in a complex world) they will be subject to one another's influence. This does not negate the relative unity and independence of states. But it does make unity and independence—sovereign equality—just that: relative.⁶¹ A viable theory for explaining state behaviour will need to account for this.⁶²

The neoliberal institutionalist view of international politics attempts to seriously address the issue of interdependence. If this theory has a flaw, it is that it does not grasp its complexity or the extent. A good point of departure for this is Robert Keohane, who has described modern states as defined not by their sovereign separation, but by their interdependence. States are not simply free-floating actors in an anarchic world where they can expect help only from themselves. Rather, they are economically, and even geopolitically dependent on one another not only to thrive, but to sustain their identity as states. As such, in at least some contexts states are driven to form institutional allegiances with one another, in order to reap mutual economic and security benefits.⁶³ This still differs from the ANT account propounded above in many fundamental ways, but it at least has in common a reflection of two key points: state interdependence, and an implicit belief that IR theory should account for at least some elements other than states (in this case, international institutions).

Ann-Marie Slaughter, another neoliberal theorist, has taken to using the term 'government networks' to describe relations between elements within national governments across international borders, allowing for approaches to international issues that allow for complex solutions undertaken by decentred, horizontally integrated alliances of sub-state actors. This suggests international integration on a much smaller scale, and at a lower political level—integration, on informal and nonbinding terms, between individual elements within state governments. What they offer is a venue for discussion, for the sharing of information and expertise, and for political influence. Although her networks are very different from those described by actor-network theorists, they attempt to address actors other than unified states.⁶⁴

The difference from the account proposed here has to do mostly with what kinds of actors are included. On a global scale, neoliberalism remains committed more or less to state centrality—to the notion that states as institutions of human politics are the central actors of the international system. On a local scale, it remains implicitly committed to addressing humans—society, culture—as the only real political actors worthy of study. The objects of analysis are states, as institutions of human society.⁶⁵ The material world, the object of natural science, is assessed only insofar as humanity impinges on it—we may discuss natural resources or nuclear

⁶¹ Slaughter, Anne-Marie. "Disaggregated Sovereignty: Towards the Public Accountability of Global Government Networks." *Government and Opposition* 39.2 (2004): 18788.

⁶² The inclusion of material actors further modifies the issue. An example: it is difficult to understand the behaviour of states without taking into account natural resource politics. To say that untapped oil reserves, for instance, do not influence state behaviour as an actor is to say that states are indifferent to oil. (Keohane and Nye 1977: 37.)

⁶³ Keohane (1995): 17475.

⁶⁴ Slaughter (2004): 28893.

⁶⁵ Keohane (1995): 165.

weapons, but we do not discuss them in and of themselves, only insofar as politics takes note of them. The neoliberal view retains, thus, some notion of sovereign equality as the key principle of the international order—states are free institutions, guided from within and with a more or less free hand to do as they will domestically. The notion of sovereign equality is mitigated by the influence of international institutionalisation, but it remains the governing logic of global politics. The ANT account proposed here, as we have seen and shall see further, differs fundamentally on this. ⁶⁶

Perhaps the account in contemporary IR theory most closely related to that proposed here is the constructivism of Alexander Wendt. Wendt argues that the dynamic of relations between states is constructed by its participants. This means that neither anarchic competition between states nor their integration in international institutions is inevitable. Instead, states collectively choose the form of the international order. Realists and institutionalists have in common the belief that states can be expected to act in a rationally predictable way—one position argues that they rationally must compete and the other that they rationally must cooperate at least some of the time. Wendt's move is to argue that the international environment is constructed by states, and as such the situation of anarchy "is what states make of it." Thus, it is neither necessary that states compete to protect themselves, nor necessary that they cooperate in the name of protection. Rather, the urge to competition or integration is a condition of the relationships that states create between one another—neorealists and neoliberals are wrong to presuppose either. The international order is the invention of states, a collectivity they create by relating to one another. Wendt's state centrism is, thus, the basis for a novel reading of the international order. States are a privileged category of actor. The relationships between states are not determined by any structural necessity. Rather, they are created by the actors themselves. ⁶⁷

Wendt shares with actor-network theorists a belief that the ways actors relate to one another do not have any one structure or form. Rather, relations between actors are constructed by actors themselves, who are then constrained by these relationships, in turn determining further relations. The views differ most notably in two ways: first in terms of what an actor is, and second in the extent of the constructivism proposed.

The first of these is that ANT is typified by its extremely wide definition of the term 'actor', whereas Wendt retains a claim that the appropriate actors for study in IR are states. The second point is the extent of Wendt's constructivism. ⁶⁸ Wendt contends specifically and only that states construct their relationships with one another. Thus, his constructivism extends only to international relations itself, whereas ANT will view actors themselves as constructs of their relationships. Taken together, the claim is that states are actors that construct the international system through the choices they make in their relations with one another. ⁶⁹

However, this account has a necessary shortcoming: if only state behaviour is to be studied, then the impact of non-state actors will always be underappreciated. If

⁶⁶ Keohane (1995): 16667.

⁶⁷ Wendt, Alexander. "Anarchy Is What States Make of it: The Social Construction of Power Politics." *International Organization* 46.2 (1992): 42235.

⁶⁸ We can see that Wendt's constructivism is more limited than Latour's from his loyalties in the philosophy of science. Wendt's program draws on the scientific realism of Hillary Putnam and others, a school of thought in analytical philosophy that is vastly removed from ANT. (Wendt, Alexander. "The Agent-Structure Problem in International Relations Theory." *International Organization* 41.3 (1987): 35055.)

⁶⁹ Wendt, Alexander. *Social Theory of International Politics*. Cambridge: Cambridge University Press 1999: 12.

we assume that states determine their actions on the international stage only by evaluating their relations with one another—even if they create the context of their actions, as Wendt contends—then we assume that states are unwilling or incapable of adjusting their actions to react to non-state actors. This is demonstrably false. To see this in recent history, we need only consider the impact of non-state terrorism on U.S. foreign policy, or the impact of large multinational corporations on the behaviour of smaller developing states.⁷⁰ States demonstrably have relationships and interactions, positive, negative or otherwise, with non-state actors. Consider the role of Hezbollah in Lebanon—a freestanding military organisation doubling as a political party in Lebanese politics, a non-state actor that helps to determine the course of Lebanon's foreign relations.⁷¹ Surely any study of state behaviour on the international stage would best take this sort of thing into account.

Wendt's theory is as much affected by this shortcoming as his neoliberal and neorealist forbearers. While he is not a determinist about the international sphere, as neorealists and neoliberals are (both argue that states are bound by circumstance to act in a particular way), Wendt does limit his constructivism to relationships between states. Behind Wendt's constructivism, the firebreak of sovereignty remains.⁷²

Actor-network constructivism is altogether more pervasive. The theory contends that all actors are constrained and directed by their relationships in networks—but also that networks are equally constrained by actors. As such, the two effectively construct, create, constrain each other. States are determined by their place in the international system, just as much as they construct it.⁷³

An ANT account of the international order will thus question a central tenet of conventional IR: state centrality. If the question is how actor-networks construct themselves as coherent power structures on the international stage, then we will need to ask the same question of states themselves. The permeability of state sovereignty means that if we are to understand why states behave as they do as actors in a global network, we will need to look at their internal actor-networks as well. What would an account of the international system look like that questions states rather than assuming their role?

The proposal is simple enough to set out—ANT provides a way to discuss international relations without having to make assumptions about states. Existing IR theory will account for state behaviour only by making assumptions about what states are. The proposed model rejects the claim that international and state politics are fundamentally distinct, viewing their difference as one of degree. The consequence is that the two can be discussed with the same analytical tools.

3. ANT and Failed States:

3a. Failed States as Disordered Networks:

The following sections will proceed to do three things: first, account for failed states as networks, second, show how material as much as social causes

⁷⁰ See generally Vernon, R. *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises*. New York: Basic Books, 1971. For a more recent example of the argument, see Sassen, Sakia. *Losing Control?: Sovereignty in the Age of Globalization*. New York: Columbia University Press, 1996: 15.

⁷¹ Haddad, Simon. "The Origins of Popular Support for Lebanon's Hezbollah." *Studies in Conflict and Terrorism* 29.1 (2006): 2125.

⁷² Wendt 1999: 13.

⁷³ Wendt (1987): 33740.

contribute to state collapse, and finally, show how these causes cannot meaningfully be separated in practice.

If a state is an ordered network, it is certainly a large and complex one. A state's labourers, professional politicians, military personnel, highways, military research and development programs, statutes, judicial precedents, and so on, must be ordered according to a central principal that can adapt to internal and external challenges, extending over territory and unfolding history. The road to statehood is long. Much is required of states—new ones must meet the requirements of statehood for the first time, while old ones must retain them in the face of internal and external challenges taking any number of forms: foreign invasion, economic crisis, domestic insurrection, natural disasters, and others. This constitutes a significant effort of translation. Perhaps it should be no surprise that some states do not measure up.

The argument is straightforward enough: if a state is a large, well ordered actor-network, then a failed state is a network that has lost its coherence as an actor. It has lost its positive sovereignty, its capacity for effective governmental control. In ANT terms, it has lost the capacity to translate itself from a mass of connected elements into a unified system, an ordered actor-network. Its component parts have fallen away from the network's centre of translating authority (the government), and have become disorganised.

The recent war in the Democratic Republic of the Congo (DRC) serves as a good example. Perhaps above all else, the war is best understood as complex. Involved elements included not only varying political-military factions, but also the ways in which natural resources, foreign economic pressures, and any number of other factors contributed. We might begin with the origins of the conflict. In 1997, forces led by Laurent-Desire Kabila overthrew dictator Mobutu Sese Seko, ending a period of undemocratic but largely peaceful rule. Kabila was in turn killed several years later, during what had become a full blown civil war, involving regional armed groups, economic interests, and at least six neighbouring countries. Some of these states aided Kabila's insurrection and then in turn aided the armed groups that went to war against his government.⁷⁴ Tribal loyalties contributed to their involvement, as did economic interests. DRC possesses has numerous desirable natural resources, including diamonds, and coltan, a mineral used in mobile phones and other consumer technologies. The exploitation of these provided both an impetus for intervention by neighbouring states and funding to rebel groups that sought Kabila's overthrow. These in turn drew western economic interests to the conflict.⁷⁵ All of this fails to mention the large and diverse population itself, of which several million died over the course of the war. Most of these were not combat deaths, but were due to malnutrition and outright starvation. A swath of infectious diseases contributed, including HIV, Ebola, Marburg and tuberculosis.⁷⁶

The further involvement of international aid groups had a mitigating effect on the humanitarian disaster that accompanied the war. A number of foreign aid workers

⁷⁴ Olsson, Ola and Heather Congdon Fors. "Congo: The Prize of Purdution." *Journal of Peace Research* 41.3 (2004): 32527.

⁷⁵ Montague, Dena. "Stolen Goods: Coltan and Conflict in the Democratic Republic of Congo." *SAIS Review* 22.1 (2002): 10304, 108.

⁷⁶ Coghlan, Benjamin, Richard J Brennan, Pascal Ngoy, David Dofara, Brad Otto, Mark Clements, and Tony Stewart. "Mortality in the Democratic Republic of Congo: A Nationwide Survey." *The Lancet* 367 (2006): 44, 47-51; Van Hep, Michel, Veronique Parqué, Edward Rackley, and Nathan Ford. "Mortality, Violence and Lack of Access to Healthcare in the Democratic Republic of Congo." *Diasater* 27.2 (2003): 14142, 14547.

were themselves killed.⁷⁷ Even after a tentative peace was reached, and a transitional government of national unity formed, fighting continued apace in the northeast of the country. The sheer number of committed armed fighters in DRC, and a lack of peacetime employment, made disarmament difficult, even with their myriad leaders nominally committed to peace. Meanwhile, the humanitarian crisis largely continued. At the time of writing, a new constitution had been approved in a referendum, and national elections had occurred.⁷⁸

One could easily enough go on at some length, but the analytical point is easily enough made. Charting the causes and events at work in the DRC conflict is both complicated and difficult. It is insufficient to track the conflict according to the roles played by states, for many of the tribes and armed groups involved straddle borders or are allied only to themselves. To cast the conflict along ethnic lines would be to ignore the economic forces at work. To interpret the civil war along economic lines would discount the importance of the armed factions themselves, many of which were little more than vehicles for the power-political advancement of their leaders, with little tribal or national loyalty. Even accounting for all of these ignores the role of natural resources. What is needed is an explanatory device that does not rely on a single category or criterion of analysis.⁷⁹

This is the advantage of ANT, which emphasises not the geopolitical nature of the actors involved (political, military, economic, ethnic, etc.) or their motivations, but the relations between them. It also, by opening the door to nonsocial causes, permits us to address the role of natural resources in the conflict, along with hybrid human and nonhuman categories, such as agriculture or the trade in arms, wherein social and material causes necessarily interact.

To take one element of the conflict alone, consider the status of former militants. Their loyalties are limited by their need to support themselves economically. Many of these men have remained in the bush, armed, and prone to crime or absorption into new armed groups to support themselves.⁸⁰ A range of influences determine their behaviour: their militia membership, economic situation, tribal affiliation, personal loyalties, whether or not they possess arms, whether or not they live in a mineral rich region, and presumably others.

What ANT permits is an account of a complex web of shifting allegiances, causes, and relationships that drives conflict within a failed state, of which the individual armed fighters just mentioned represent a small cross-section. If we want to understand and mitigate crises such as these, we will need a broad-based analytical model like the one proposed here.

3b. State Failure, ANT, and IR:

Having compared existing IR theory to ANT already, it will be useful to repeat the comparison with specific reference to failed states. We might begin by returning to existing accounts of state collapse in order to evaluate their shortcomings.

⁷⁷ "Aid Effort in Africa Undermined by New Violence, UN Reports." New York Times December 20, 2005: A3.

⁷⁸ International Crisis Group. *Maintaining Momentum in the Congo: The Ituri Problem*. Nairobi/Brussels, 2004: 13; "The Results Come in with a Bang." The Economist August 26, 2006.

⁷⁹ Tshitereke, Clarence. "On the Origins of War in Africa." African Security Review 12.2 (2003): 8182; Law (1992): 39193.

⁸⁰ "After Failures, UN Peacekeepers Get Tough." International Herald-Tribune May 24, 2005: 2.

The existing accounts set out here often fail to do more than describe the state failure phenomenon. Helman and Ratner set out a definition of state failure, but do not account for the causal mechanisms underpinning it, beyond alluding to historical context.⁸¹ Wilde begins to show us the causal complexity at work, but tells us only that some of the causes involved might come from outside the state in question. Brooks, while making significant critical inroads, does not give us a set of tools for evaluating the phenomenon. State failure remains under theorised. Existing accounts do not explain both successful and failed states on the same terms, within an account of the international system.⁸²

We might look for a mechanism of evaluation, then, in broader IR theory. Conventional IR theory discusses the successful majority of states and the international order in which they reside. Extant IR is perhaps predisposed to poorly handle state failure as an issue precisely because it is state centric.⁸³ To adequately describe failed states, one will need to discuss international actors other than states themselves. This is because a failed state will need to be understood not only as an actor in its own right, but as a range of non-state actors left behind in the state's absence. A failed state is likely unable to act in its own interest. Indeed, it is likely unable to act in a coherent, unified way at all. Therefore, we will need to address multiple actors—the remnants of government, non-state armed groups, economic interests, and so on.⁸⁴ Extant IR theory, with its emphasis on rational state actors, is poorly suited to the task. It is simply the wrong tool for the job.

Why study state collapse in IR then? Because failed states remain an important part of the international order: failed states generally retain international recognition. Indeed, this is precisely Jackson's point—to explain the existence of state actors that cannot act as states because of their internal political condition. These are borderline cases, wherein status in the global order is unclear. The border in question is the limit, the conceptual periphery of the state system. We should try to account for them because they have a place in the state system. However, explaining them will require that we move beyond the state system itself.⁸⁵

Thus, another reason why state failure has received rather poor theoretical attention is that it generally involves non-state actors. It is difficult, for example, to account theoretically for state failure in Sierra Leone without discussing the Revolutionary United Front (RUF), an armed group without national affiliation.⁸⁶ Equally, as Wild contends, it is difficult to discuss state collapse throughout much of Africa without discussing economic pressures from multinational corporations.⁸⁷

Thus, the ability of a theoretical model to account for these non-state actors, and its ability to account for the theoretical status of failed states themselves, is central to its ability to theorise the problem. As we have just seen, we need not look long at the various forms of realism, liberalism, and so on, to grasp their chief shortcoming. These are models designed for the analysis of states themselves as rational actors, not for the discussion of state creation, destruction, or non-state influences.⁸⁸ And yet, state collapse remains in need of analysis. The accounts

⁸¹ Helman and Ratner: 45.

⁸² Wilde: 42627.

⁸³ Waltz: 80.

⁸⁴ Helman and Ratner: 45.

⁸⁵ Morton: 377.

⁸⁶ Hirsch, John L. *Sierra Leone: Diamonds and the Struggle for Democracy*. United States of America: Lynne Reiner Publishers, 2001: 13.

⁸⁷ Wilde: 426.

⁸⁸ Morton: 377.

specific to state failure discussed here, suffer from rather the opposite problem—they describe the phenomena itself, but lack a theoretical framework. Neither category directly addresses the problem within an account of the international order.

This, then, is the first major advantage of applying ANT to the issue. It provides a model that allows us to discuss successful states, failed states, and various non-state actors in a single theoretical framework, so that their interactions can be usefully theorised. Indeed, because interaction is precisely the theoretical calling card of ANT, the inherent differences between these actors will be set aside. When we look at them individually, we will view them as networks, rather than as unproblematically fixed types. In turn, viewing the international system as a meta-network of actor-networks allows the concurrent analysis of states, failed states, non-state economic or military actors, sub-state actors such as political parties, pressure groups, trade unions, revolutionary organisations, and any number of other actors, all of which have potential roles to play in explaining complex international phenomena such as state failure. Adopting ANT encourages us to move fluidly across levels of analysis. Indeed, it suggests that the parcelling off of differing levels of analysis proposed in traditional IR theory is an analytical mistake. Dividing domestic from international politics precludes the study of influences between the two.⁸⁹

⁸⁹ For a canonical account of levels of analysis in IR see Waltz: 3959.

3c. Material Causes of State Failure

Applying the actor-network model to collapsed states should allow analysis not only of the sociopolitical causes of breakdown, but also how a variety of environmental, technical, and other nonsocial or partially nonsocial causes contribute. This is where the more radical claim of ANT about the role of nonhuman actors in networks becomes central: ascribing actor status to nonhumans widens the scope of causal inquiry.⁹⁰

As we have just seen in DRC, a range of material causes are often at work in the collapse of a state. Natural resource exploitation can instigate conflict between economic actors, or cause them to use other, such as militias in DRC, as armed proxies. The presence of manmade nonhuman actors (factories, vehicles, landmines) may constrain and direct the behaviour of humans in conflict, and even determine their willingness to engage in it. The environment and society's relationship with it will often itself determine the fate of a state.

This is where the recent work of Jared Diamond becomes useful. What Diamond claims to demonstrate empirically is that societal collapse will often involve a number of nonsocial, environmental causes.⁹¹ Natural resource depletion, climate change, societal failure to adapt to new environments, and others, will fuel a society's demise. Societies, he tells us, exist in environmental contexts. Each must understand its environment, know how to use it sustainably, and how to adapt to environmental change. History is littered with societies destroyed by their own failure to either recognise the limits of their environment or to adapt to environmental change. Diamond looks at a number of them.⁹²

This has some surprising consequences. For example, Diamond attributes the Rwandan genocide in large part to overpopulation and resource depletion, rather than straightforwardly to violent ethnic hatred. The problem was not so much a social issue, as a combination of a societal problem with resource scarcity, which bred a violent struggle for what remained.⁹³ Diamond extends the argument to much earlier failed societies as well, such as the medieval Norse colony in Greenland, or the indigenous population of Easter Island. In both cases, indiscriminate deforestation led to a lack of fuel and a failure of agriculture due to soil erosion. These, combined with a reduced population of animals to hunt for food, led to a rapid decline in population and a failure of social organisation.⁹⁴

In each case, to evaluate the society alone is to see only half the picture. The situation and makeup of each society—small or densely overpopulated, hunter gatherer or agricultural—involved a relationship with their location. Environmental change may occur on its own, or may be the consequence of societal behaviour. Agriculture may have failed because of indiscriminate deforestation, thus encouraging

⁹⁰ Latour 1993: 12021.

⁹¹ Diamond uses the term 'societal collapse' to describe the breakdown of the social order generally. While we are concerned here with the fate of governments specifically—of states as actors and mechanisms for political control—the two are closely enough related, insofar as societal collapse will tend to occur in tandem with the collapse of political authority. (Diamond, Jared. *Collapse: How Societies Choose to Fail or Survive*. England: Penguin Books, 2005: 78.)

⁹² Diamond: 1923.

⁹³ Diamond: 31128.

⁹⁴ Diamond: 11419, 24876. For relations between past societies and their environments see also generally Redman, Charles. *Human Impact on Ancient Environments*. Tucson: University of Arizona Press, 1999. For environmental degradation as a conflict driver, see generally Homer-Dixon, Thomas F. *Environment, Scarcity and Violence*. United States of America: Princeton University Press, 1999.

topsoil erosion. To make good sense of this, we need to look at that topsoil itself, and at the role of the trees, not just at the farmers. We need to analyse the material, non-social parts of the situation that contribute to failure. An accurate assessment of these cases requires that we do precisely what the peoples in question did not—understand their environmental situation and how it contributed to their fate.⁹⁵

We can add to Diamond's environmental causes a second set of material causes, those that are bound explicitly to the social. Landmines exemplify this: these inanimate objects can become agents in combat, often long after war has ended. Once planted, they are actors. Indeed, the presence of landmines has become a recognisable risk factor for failed states—Afghanistan, Bosnia, and any number of African countries, for example.⁹⁶ Landmines not only present a significant and unpredictable risk to noncombatants, the difficulty of removal extends the impact of warfare into peacetime. This can slow reconstruction significantly.⁹⁷ Landmines effectively become agents detached from the parties that lay them, operating long after their intentions have died away.⁹⁸

The case of Sierra Leone extends the issue to natural resources. There, the RUF sold diamonds to Liberian dictator Charles Taylor to fund a campaign of more or less indiscriminate violence. The presence of mineral wealth became a necessary condition for the perpetuation and escalation of chaos on the territory of a state that had lost virtually all capacity for meaningful governance. Gemstones became agents of violence, causes of state collapse, and barriers to peaceful reconstruction. This stands distinct from environmental causes of state failure. The cause was neither environmental change nor resource depletion—the resources themselves, by their presence and their interaction with military-political actors, contributed.⁹⁹

Thus, the environmental causes set out by Diamond combine with material causes more directly linked to the social sphere. What underlies this is the notion that we cannot and probably should not separate social from material causes as we explain state failure.¹⁰⁰ If both contribute, the objective should be to explain both on the same theoretical footing.

3d. The Inseparability of Social and Material Causes:

Diamond, like actor-network theorists, recognises not only the importance of assessing nonsocial causes in discussing sociopolitical issues, but also the importance of recognising the relationships between the social and material. What ANT provides that Diamond's framework lacks is a set of theoretical tools for assessing the relationships between the two. Diamond, a natural scientist by training, has shown persuasively that a certain set of phenomena is at work when a society collapses, and

⁹⁵ Diamond: 51421.

⁹⁶ Andersson, Neil, Cesar Pahla de Soula, Sergio Paredes. "Social Cost of Land Mines in Four Countries: Afghanistan, Bosnia, Cambodia and Mozambique." *British Medical Journal* 311 (1995): 718-21.

⁹⁷ Bilukha, Oleg O, Muireann Brennan, Bradley A. Woodruff. "Death and Injury from Landmines and Unexploded Ordnance in Afghanistan." *Journal of the American Medical Association* 290 (2003): 650-53.

⁹⁸ For a further example of armaments as actors, one might look generally at the global small arms trade, where the availability of black market weapons often acts as a catalyst for conflict, as in Sierra Leone, among other cases. (Hartung, William D. "The New Business of War: Small Arms and the Proliferation of Conflict. *Ethics and International Affairs* 15 (2001): 7983.)

⁹⁹ Hirsch: 15.

¹⁰⁰ Diamond: 1415.

he catalogues them. We should recognise also that these causes involve relationships. At each turn, one contributing cause of societal breakdown will be deeply linked with others. The breakdown of material support for a society will have social causes. For example, economic pressures may prevent prudent resource management. The social causes of collapse may be environmentally influenced: a given society may fall victim to a violent neighbour wanting to control scarce resources. The two—material and social causes—are not easily separated. ¹⁰¹

Diamond's project is a plea for environmentalism, and the data he presents are intended in large part to support this. However, it is easy enough to see actor-networks behind this imbroglio of causation. Diamond identified material causes, and some sociopolitical ones as well, but does not couple them within an explanatory framework. In sum, the works surveyed here are, on the one hand, a patchwork of environmental and technical knowledge from the natural sciences and, on the other, a set of limited theoretical frameworks from the social sciences. The advantage of ANT lies in replacing these with a more complete, inclusive model for documenting the aggregation of causes involved in bringing down the social order, and the governments that manage it. ¹⁰²

A third reason to view ANT as a better tool for evaluating the global order can be approached through a problem described by Wendt. The agent-structure problem in IR theory refers to the difficulty of explaining whether actors or their contexts determine behaviour: how do we explain the relationship between states themselves and the structure of the international order in determining state actions? This is, in effect, a form of the problem of reductionism. Wendt couches the problem as an argument in favour of his own position. Neorealists, he tells us, reduce the subject matter of IR to individual state behaviour. Neoliberals reduce it to international systems. Both explanations are wrongly reductionist in that they exclude the explanatory power of the other. Wendt proposes that the two construct one another in dialogue: states determine the structure of the international order by determining their relations with one another, and that order in turn constrains them. So constrained, their further actions further determine international structures, and so on. ¹⁰³

ANT suggests an altogether more radical approach. Wendt employs a reductionism of his own, by accepting only states as international actors, thereby discounting the influence of non-state and nonsocial actors on the international order. The appropriate response is to turn his anti-reductionist constructivism on states themselves, and to all other international actors. Each is composed of sub-actors, which are determined by their context, their structure, the network containing them. ANT is a radically anti-reductionist programme, in that it breaks down some of our most basic categories of explanation, those that identify social areas of inquiry as distinct from others. The three stated arguments for ANT over conventional IR are, in effect, one and the same. They are a rejection of systematic, mechanical reductionism, in favour of a heterogeneous model, permitting breadth of study.

The sacrifice in this, perhaps, is extent of explanatory power. ANT suggests that consistent mechanical explanations of state behaviour will be difficult to attain. Indeed, it suggests that they are likely not the proper objective. Conventional IR

¹⁰¹ Diamond: 67.

¹⁰² That Brooks, an academic international lawyer, presents the most critical assessment of state failure and of our grasp of it is perhaps not accidental. Her assessment shows little if any reverence for existing IR theoretical models, being critical of state centrality both as a fact and as a value. (Brooks: 116875.)

¹⁰³ Wendt (1987): 3740.

theorists might respond to ANT that the rejection of reductionist explanations does away with mechanical explanations altogether. This would be a half-truth—what is lost is not explanation itself, but structured, consistent explanation. The proper object of study is translation, the process of integration and disintegration within actor-networks. Thus, we should not study the norms or patterns of state behaviour. We should study state creation and destruction, and the creation and destruction of international structures and organisations, change rather than stability, exceptions rather than rules. State behaviour may not be consistently explainable—it may always be determined by differences of cultural norms and natural context. It will, however, always be open to study, not as a consistent order, but as a heterogeneous range of orders.

This is the central tradeoff of the move from conventional IR theory to ANT: a loss of explanatory depth in exchange for explanatory breadth and accuracy. We cannot explain states as consistent actors or predict their behaviour, but we can explain particular states in a broader context of myriad other actors. The appropriate objects of study are not patterns but instances. The concomitant mode of research would be the case study, an individual scenario in need of explanation.

With all this in mind, we are finally within view of the phenomena at work in failed and successful states. A state is a massive, complex network of sociopolitical, economic, cultural, environmental, natural resource, technical, military, and other actors, each attached to the others so closely that it cannot be accurately separated out. An example: the riot shield used by police quelling a demonstration is composed in part of hydrocarbons, scarce natural resources. Technical expertise is required to produce it. A hierarchical security apparatus is required to use it. The protesters themselves, if they are successful in their aims, may help to determine things like the availability of hydrocarbons to their government, if oil is being bought from foreign governments to which the protesters object.

If the protests are targeted at the removal of a fragile government, then a yet more complex scenario may result. Perhaps the government is overthrown; the military steps in, but is resisted; the protesters take up arms; neighbouring states intervene. At present, there is no state actor-network to which we can refer. Instead, there is an assemblage of actor-networks, component parts of what was once a state. Positive sovereignty breaks down, and the international actor that was the state is replaced with an assortment of separate non-state actors, each effectively autonomous. This, in the event, is state failure. Always at work in this will be a second set of actors that we all too easily ignore—the highways, landmines, diamonds, printing presses, telecommunications systems, agricultural equipment, etc., that permit both war and peace, life and death, to go on. They are no more separable from the political order than the car is from the driver, while going down the highway. When the Leviathan collapses, these remain in play.

4. Some Consequences:

4a. Consequences for Sovereignty:

What does the actor-network model tell us about statehood as such? First, that it is an impermanent, transient thing. Positive sovereignty involves sustaining a complex network of myriad parts. As we have seen, networks are temporal, fleeting things. Sustaining them requires an effort of integration and consolidation, of translation. A government's capacity for continual translation through the provision of

basic services, security, and so on, is not absolute or without limitation. When internal and external pressures bring the state mechanism down, what occurs is not the breakdown of a qualitatively unique status. Sovereignty as it is carried out in practice (positive sovereignty) is the consequence of specific and limited capacities on the part of the government. It is a specialised and complex form of translation, but it is not fundamentally different from the processes that integrate any other system (a car's engine or a large corporation, for example). ANT suggests that regardless of sovereign status in the international system—negative sovereignty—we should evaluate the fact of sovereignty as it is carried out by states as a limited and imperfect process. Thus, there will be outside influences, failures of coordination within the system, the risk of collapse. Even vast systems that appear irrevocably integrated as a singular actor on the international stage can fall to pieces at a moment's notice, brought down by causes we could not easily have anticipated easily in advance—Law offers us the example of the Soviet Union.¹⁰⁴ Governments are, of course, relatively unique institutions, but sovereign states are not so special as to be perfectly closed and internally integrated actors. They can fail, fragment, and subdivide in as many ways as any other ordered system. We should not forget as we discuss their behaviour that they are never more than assemblies of parts and the translations that integrate them.

Of course, states remain what they appear to be: the largest and most powerful category of international actor. What changes on an ANT account is that they are not the only category of international actor we should study. Nor is the division between the domestic and the international absolute. It exists, but is porous, insofar as influence passes in and out of the state, such that states will sometimes influence one another's domestic affairs, and subnational or non-state actors will influence one another across international boundaries.

What then of negative sovereignty? How shall we make sense of statehood as something conferred by the international community? Here we should consider two facets: the practice of negative sovereignty, recognition that is, and the imagined model of a sovereign and equal international order. Recognition is a political event, whereby states affirm one another's sovereignty. It need not be based in practice on the standards of positive sovereignty set out in customary international law, and we should thus view the practice as politically arbitrary. That the international network of states is loose and uncoordinated permits disagreement among states about recognition. Consider the international status of Somaliland, the *de facto* state inside the failed state of Somalia. Somaliland functions as a positively sovereign state while Somalia itself cannot—and yet the latter is recognised internationally and the former is not.¹⁰⁵ Recognition is at least potentially arbitrary, the product of an international network of states that remains, for the most part, untranslated as an actor.

As for negative sovereignty in the other sense—the sovereignty that confers equality in the international system—we might best understand this as a myth. It is a consensual and participatory myth, to be sure, and one that serves a purpose, in that it helps discourage interventionism. It is a stabilising principle. This is not quite the same, however, as saying that it is an absolute governing principle. This has been argued persuasively in conventional IR theory by Stephen Krasner and others,¹⁰⁶ who demonstrate that sovereign states have a lengthy history of violating one another's sovereignty, both militarily and otherwise. Brooks adds to this the relatively recent practice by some states of ceding elements of their sovereignty, both to legally

¹⁰⁴ Law (1992): 379.

¹⁰⁵ Wallace-Bruce: 484.

¹⁰⁶ Krasner 1999: 38.

binding international organs such as the UN Security Council and in the economic sphere to the WTO and to numerous regional free trade systems. The current fashion for economic globalisation suggests that this is not a trend likely to stop.¹⁰⁷ None of this is to say, of course, that state sovereignty is not often treated with real seriousness by state actors. It is to say, however, that there is nothing especially absolute about the rule. It is, in practice, a tendency in the international system, not a hard and fast rule, and as such we should not grant it unique status as the primary organising principle of the international system. International law may dictate that it is, but it would be a mistake to assume that this applies in practice. Indeed, international law itself is subject to analysis under ANT—law, like human communication, will always take material forms, as printed instruments, recorded court proceedings, means of enforcement. We should understand international law itself as a locally constructed and occurring phenomenon. The sovereignty norm belongs to the time and place, and of its application, and should be understood as contingent upon the networks in which it arises.

What then is sovereignty? In the event, both positive and negative sovereignty are practices. They are processes of translation that states carry out. Positive sovereignty is the effort to create and sustain the state that defines state government. Negative sovereignty is the consensus of the international community about a state's sovereignty, also a limited, temporal, fluid process. Sovereignty of either sort is not something a state possesses. It is something a state does. Positive sovereignty is a set of techniques, modes of translation. It is not an ontological status—to treat it as such is to profoundly misunderstand it. The appropriate object of study is not the fact or condition of positive sovereignty, but the processes that create and maintain it. It is something closer to what is meant by the Greek word *technē*, a skill or capacity that an individual or an assemblage of actors possesses.¹⁰⁸ It is, collectively, the processes undertaken by the coordinating actors of the state—the government. Negative sovereignty is reflected in the networked decisions of the international community, and perhaps also reflects the translating capacity of the state in question to procure recognition for itself. What is important is the question of how one attains and keeps it.

ANT's reevaluation of agency poses a second question—what model might be appropriate for assessing actor-network motivations and behaviours? Can any of the existing models discussed here be retrofitted to apply? It has been suggested that ANT has Machiavellian overtones, implying a sort of realism.¹⁰⁹ Alternatively, one might suggest that a variant of liberal institutionalism is at work in the coordinating effects of networks. However, a form of Wendtian constructivism might be the best fit. Actor-networks construct and constrain one another by their interactions, rather as Wendt's agents construct their contexts, and in so doing help define one another's actions. The difference is this: while Wendt makes atomistic actors rather than relations construct the international order, replacing them with actor-networks leaves relationality itself in charge of the process of construction.¹¹⁰ Wendt's theory, insofar as it correlates with ANT, provides not a consistent predictive or even explanatory

¹⁰⁷ Sassen 1996: 5; Brooks: 1178.

¹⁰⁸ This is by no means a new approach to the issue of sovereignty; rather it is likely among the oldest: Plato describes statecraft as a *technē* in *The Republic* (Trans Desmond Lee. Great Britain: Penguin, 1987: 11720.) For a definition of *technē* see translator's note, 734.

¹⁰⁹ Fuller, Steve. "Why Science Studies Has Never Been Critical of Science." *Philosophy of the Social Sciences* 30.1 (2000): 20.

¹¹⁰ See discussion of Wendt in 3c and of actor-network constructivism in 3a.

mechanism, as do the other two, but instead a general way to understand a broad range of possible scenarios and outcomes on the global stage.

What we need to do, thus, is make sense of the international order without the absolute firebreak of sovereign equality. ANT allows us to do this, evaluating not states as a unique class, but a subset of the broader category of international actors. Doing this in turn encourages us to evaluate other international actors, as will be suggested in the next section.

4b. Consequences for Non-State Actors:

Sovereign equality grants a unique status to states as a privileged class of international actors. If, however, states are merely a powerful class of actor-networks, not wholly distinct from others, then a proper understanding of the global order will require that these others be given space and given voice in the international order. This point comes in both a factual and a normative version. Factually, we should make room in our explanatory models for a variety of international actors. Normatively, an argument can be made that we will need to give them political voice, legitimacy, if they are to be properly dealt with.

The factual point has already been made—if we are to understand crises such as state collapse, or other international phenomena, we will need to attend to all the non-state and nonsocial influences at work. The normative point is perhaps more contentious. Drawing normative claims from ANT is, as we have seen, difficult. Nonetheless, given a few basic normative assumptions—for example, that the general goal should be global stability—some general and provisional conclusions can be drawn.

For example, if we want to regulate, to contain non-state actors, then we might do well to grant them some place of legitimacy in the international system. As a brief example, consider the role of multinational corporations. The goal of regulating them at an international level, of limiting their behaviour beyond the scope of a patchwork of domestic legal systems, would be supported by granting them some status as international legal persons, some status as agents fit to be regulated under international law, to be listened to and addressed. The point is not that they should be granted status equal to states as architects of international law, but that they should be heard, understood, and given legitimacy in exchange for bowing to the authority of international law. The anarchy of the international order applies, presumably, to any actor outside the scope of national legal systems. Internationally regulating the actors of international business requires that they accept the authority of international law. If the international community wants them to do this, then they will need to be granted a reasonable place in it.

We might say the same of any reasonably peaceful international actor. NGOs for example could be approached in the same way. This may in itself help to marginalise violent international actors—gorillas, terrorists and the like—that need not be legitimised. However, the prospect of international legitimisation might serve as a bargaining chip in dealing with them, as a reason to disarm. A voice in international institutions—some sort of observer status at the UN or a new international body to hear and oversee them—might in some instances serve as a way of drawing these actors out of the wilderness of international illegitimacy.

A second actor-network point should be raised: as for non-state actors, so for nonsocial actors. It may be necessary to give increased voice to the material world in global politics. This is not as radical as it sounds; indeed, it is happening already.

International environmental negotiations grant implicit actor status to the natural world. The regulation of global trading in resources implies a role for resources themselves. The theorist Michel Serres, a fellow traveller of actor-network thought, has suggested that we should grant political voice to the material world, perhaps through the voice of natural scientists.¹¹¹ His argument suggests that it is time to make these implicit inclusions of material actors explicit: *things* need a place in the international order, one which we recognise as real and essential. The idea that the natural sciences should be given voice in the geopolitical realm is already broadly accepted among actor-network theorists.¹¹² The study of international politics and international law would do well to take this seriously if any number of issues—environmental degradation, resource allocation, and so on—are to be properly addressed. Here again both a factual and a normative reevaluation is called for. We can best understand the international context and determine action in it if we recognise the status of the material, natural world.

Whether discussed normatively or factually, it should be allowed that there is a certain radicalisation at work here. The implicit project in all of this is a remapping of the international order. Factually, this is a replacement of a schematic understanding of the logistics of rational interstate relations with a more nuanced, inclusive view of the global order. Normatively, it suggests a potentially radical call for political change: a vast host of actors having been held outside of international power structures, refused legitimacy by the narrow international mechanism of the state, their inclusion and legitimisation is at stake.

4c. Preventing State Failure:

All this breadth of theorisation invites a volume of varied and inevitably speculative political discussion. But what of the immediate problem at hand: does ANT suggest practical approaches to the problem of state collapse? There is no clear or obvious solution to present, but two general points should be made. First, we need to take non-state and nonsocial actors into account when choosing remedies for failed states. Second, we need to reevaluate the utility of states, closely integrated actor-networks, as modes of political organisation.

The first point has, in effect, been the main object of this study. We need to expand our modes of political understanding to include the broadest possible range of actors and influences if we are to learn to regulate state collapse. While the point has been made already, it will be worth noting generally that states as political organisations, governments, exist in a context of other actors, many of which are not states, and many of which are not even human. The logic is simple enough: if a problem or crisis has a wide range of causes, any attempt to slow or reverse it must depart from an understanding of these.

The second point has to do with the practicality of state sovereignty. One precondition of state failure is the state itself. State collapse is a phenomenon native to the post-Cold War era, to the period following decolonisation, and thus to the proliferation of statehood. If, as Brooks suggests, the sovereign state is simply not a

¹¹¹ See generally Serres, Michel, *The Natural Contract*. Trans. William Paulson and Elizabeth MacArthur. United States of America: University of Michigan Press, 1995.

¹¹² Latour goes so far as to refer to a “Parliament of Things” (Latour 1993: 14245). A recent 1000-page tome edited by Latour and Peter Weibel called *Making Things Public: Atmospheres of Democracy* (Cambridge/London: MIT Press, 2005) proposes, in a vast range of short essays and excerpts, a re-imagining of the political sphere to include objects, things, as actors.

useful political model in some contexts, then we need to look at sovereignty itself as one of the causes of state failure. Perhaps alternatives to conventional sovereignty should be considered—trusteeships, or others.¹¹³ Law suggests that the very practice of constructing an efficient, closely integrated actor-network such as a state may in itself fuel collapse. When a highly efficient, deeply interdependent network runs into serious trouble, “disruption is rapidly and unpredictably transmitted through the system.”¹¹⁴ The closeness of integration means that there will be very little allowance for systemic breakdown, slack with which to absorb the damage. The loss of authority at the centre of the state, or even a partial breakdown of control, will quickly breed disorder throughout the system. The Leviathan, when decapitated, falls to pieces.

The point here, generally, is that we have focused the state and our understanding of it too closely on vertical power structures, allowing too little political flexibility and excluding as many influences as we can from political legitimacy. The recent politicisation of ANT has occurred largely with the objective of widening the political sphere, opening the dialogue on politics to unheard voices. Making a small contribution to this has been among the objectives of this study.¹¹⁵ The hope, generally, is that a broader understanding, and consequently better solutions, might result.

Conclusions:

The conclusion, broadly, is that states fail for a vast range of reasons. Internal instabilities may lead to a failure of governmental authority. Outside actors and the political-economic pressures they exert on the states may contribute. Non-state actors may contribute significantly to damaging the state mechanisms, as might nonsocial, material actors. The sovereign state itself is a precondition for state failure, insofar as it is the centralised political authority of governance that collapses.

When we look for causes of state failure, what is required is a theoretical model capable of charting not only a broad range of international actors and influences, but of charting them on a single playing field. This is the advantage of actor-network theory. It permits a broad-based vocabulary for describing influences and constraints that a variety of international actors impose on one another.

As for failed states, so for successful ones, and so also for other international actors: if we want to understand the global order generally, in the broadest possible terms, this theoretical model offers a unique breadth of theoretical purchase. This is a large part of the argument in its favour. As the problem of state collapse illustrates, a vast number of influences are at work in state behaviour. Even if one wanted to study interstate relations exclusively, one would be obliged to examine these outside influences as well in order to fully explain state behaviour. Granting these others status as actors is not a choice so much as a precondition for understanding the actions and the role of states themselves. Sovereignty occurs in a context. Regardless of whether or not we choose to view it as the centrepiece of the international order, the surrounding terrain must be examined as well in order to make proper sense of the object itself. State centrality may or may not be an appropriate start point for an account of the international order. However, to evaluate states and states alone is something more like state exclusivity. As a filter for viewing the global order this is simply and bluntly wrong.

¹¹³ Brooks: 116465, 1175.

¹¹⁴ Law (2003): 15.

¹¹⁵ Latour (1999): 23.

The critique of ANT that it lacks normativity (as does much of extant IR theory surveyed here) applies here, but should not be extended too far. If we make a few basic normative assumptions, we can still glean prescription from it. Assuming that a stable world is the general objective at hand—and this seems a fairly reasonable assumption—we can learn much. The theory provides an apparatus with which to consider new possible political orders and their impact on a variety of actors, suggesting that alternative sovereignty regime and resource or environmentally oriented solutions to international issues should be considered.

Finally, there are profound factual consequences as well. States, along with their aggregate non-state and nonsocial counterparts, are quasi-objects: entities composed of hybridised social, psychological, technical, natural and other components. Insofar as this is the case, they are best understood as large, closely and efficiently integrated actor-networks, differing from all the rest in their size and degree of integration rather than in any qualitative way. They are otherwise differentiated from other international actors primarily by the legitimacy we grant them.

Thus, effacing non-state and nonsocial actors has falsely granted a unique centrality to statehood. If there have always been other actors, other orders at work, then there has never been an exclusive system of sovereign equality working in practice. The Westphalian international system prescribes a situation that is, in the event, impossible. Latour claims that modernity, the rational, humanist world view of the Enlightenment, is or was a falsehood acted out. “We have never been modern,” he claims, insofar as Enlightenment humanism and rationality take the form of a false division between the social and material worlds.¹¹⁶ In much the same way, sovereign statehood as a factual description of global politics has been a consensual, collective untruth. We have never been sovereign.

¹¹⁶ Latour 1993: 4648.

Bibliography

“After Failures, UN Peacekeepers Get Tough.” *International Herald-Tribune* May 24, 2005: 2.

“Aid Effort in Africa Undermined by New Violence, UN Reports.” *New York Times* December 20, 2005.

Andersson, Neil, Cesar Pahla de Soula, Sergio Paredes. “Social Cost of Land Mines in Four Countries: Afghanistan, Bosnia, Cambodia and Mozambique.” *British Medical Journal* 311 (1995).

Ayer, A.J., *Language, Truth and Logic*. Great Britain: Gollancz, 1946.

Bartelson, Jens. *A Genealogy of Sovereignty*. Cambridge: Cambridge University Press, 1995.

Bederman, David J. “Review Essay: Constructivism, Positivism and Empiricism in International Law: Legal Rules and International Society. By Anthony Clark Arend.” *Georgetown Law Journal* 89 (2001).

Bilukha, Oleg O, Muireann Brennan, Bradley A. Woodruff. “Death and Injury From Landmines and Unexploded Ordnance in Afghanistan.” *Journal of the American Medical Association* 290 (2003).

Bloor, David, *Knowledge and Social Imagery*. Chicago: University of Chicago Press, 1976.

Brooks, Rosa Ehrenreich. “Failed States or the State as Failure?” *University of Chicago Law Review* 72 (2005).

Callon, Michel. “The Sociology of the Actor-Network: The Case of the Electric Vehicle.” *Mapping the Dynamics of Science and Technology*. Eds Michel Callon, John Law, and Arie Rip. London: The MacMillan Press, 1986.

Carr, Edward Hallett. *The Twenty Years Crisis: An Introduction to the Study of International Relations*. Great Britain: Palgrave, 2001.

“Charter of the United Nations.” *Blackstone’s International Law Documents*. Ed Evans, Malcolm D. Oxford: Oxford University Press, 2003.

Clapham, Christopher. “The Challenge to the State in the Globalized World.” *Development and Change* 33.5 (2002).

Coghlan, Benjamin, Richard J Brennan, Pascal Ngoy, David Dofara, Brad Otto, Mark Clements, and Tony Stewart. “Mortality in the Democratic Republic of Congo: A Nationwide Survey.” *The Lancet* 367 (2006).

“The Covenant of the League of Nations.” *Blackstone’s International Law Documents*. Ed Evans, Malcolm D. Oxford: Oxford University Press, 2003.

- Diamond, Jared. *Collapse. How Societies Choose to Fail or Survive*. England: Penguin Books, 2005.
- Doornos, Martin. "State Collapse and Fresh Starts: Some Critical Reflections." *Development and Change* 33.5 (2002).
- Erskine, Toni. "Assigning Responsibility to Institutional Moral Agents: The Case of States and Quasi-States." *Ethics & International Affairs* 15.2 (2001).
- "Ethiopian Troops Enter Somali Government Base." *New York Times* 21 July 2006: A3.
- Fuller, Steve. "Why Science Studies Has Never Been Critical of Science." *Philosophy of the Social Sciences* 30.1 (2000).
- Goldsmith, Jack. "Sovereignty, International Relations Theory, and International Law." *Stanford Law Review* 52 (2000).
- Grant, Thomas D. "States Newly Admitted to the United Nations: Some Implications." *Columbia Journal of Transnational Law* 39 (2000).
- Haddad, Simon. "The Origins of Popular Support for Lebanon's Hezbollah." *Studies in Conflict and Terrorism* 29.1 (2006).
- Hartung, William D. "The New Business of War: Small Arms and the Proliferation of Conflict." *Ethics and International Affairs* 15 (2001).
- Hawking, Stephen. *A Brief History of Time*. United States of America: Bantam, 1998: 1.
- Helman, Gerald B and Stephen R. Ratner. "Saving Failed States." *Foreign Policy* 89 (1992).
- Henkin, Louis. "That 'S' Word: Sovereignty, Globalisation, and Human Rights, Et Cetera." *Fordham Law Review* 68 (1999).
- Herbst, Jeffrey. "Responding to State Failure in Africa." *International Security* 21.3 (1996).
- Hirsch, John L. *Sierra Leone. Diamonds and the Struggle for Democracy*. United States of America: Lynne Reiner Publishers, 2001.
- Hobbes, Thomas. *Leviathan*. United States of America: Touchstone, 1997.
- Homer-Dixon, Thomas F. *Environment, Scarcity and Violence*. United States of America: Princeton University Press, 1999.
- International Crisis Group. *Maintaining Momentum in the Congo: The Ituri Problem*. Nairobi/Brussels, 2004.
- Jackson, John H. "Sovereignty Modern: A New Approach to an Outdated Concept." *American Journal of International Law* 97 (2003).

- Jackson, Robert H. *Quasi-States: Sovereignty, International Relations and the Third World*. United States of America: Cambridge University Press, 1990.
- Jackson, Robert. "Sovereignty in World Politics: A Glance at the Conceptual and Historical Landscape." *Political Studies* 47 (1999).
- Kahn, Paul W. "The Question of Sovereignty." *Stanford Journal of International Law* 40 (2004).
- Kant, Emanuel, *Critique of Pure Reason*. Trans. J.M.E. Meiklejohn. United States of America: Prometheus, 1990.
- Keohane, Robert O. "Hobbes's Dilemma and Institutional Change in World Politics: Sovereignty in International Society." *Whose World Order?: Uneven Globalisation and the End of the Cold War*. Eds. Hans-Henrik Holm and Georg Sorensen. United States of America: Westview Press, 1995.
- Keohane, Robert O and Joseph S Nye. *Power and Interdependence*. New York: Harper Collins, 1977.
- King, Garry and Langche Zeng. "Improving Forecasts of State Failure." *World Politics* 53 (2001).
- Kondoch, Boris. "The United Nations Administration in East Timor." *Journal of Conflict and Security Law* 6.2 (2001).
- Krasner, Stephen D. *Sovereignty: Organized Hypocrisy*. United States of America: Princeton University Press, 1999: 9-25; Krasner (2004).
- Krasner, Stephen. "The Hole in the Whole: Sovereignty, Shared Sovereignty, and International Law." *Michigan Journal of International Law* 25 (2004).
- Kuhn, Thomas, *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press, 1962.
- Latour, Bruno. "On Recalling ANT." *Actor Network Theory and After*. Eds. John Law and John Hassard. Oxford: Blackwell Publishers, 1999.
- Latour, Bruno. *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge: Harvard University Press, 1999.
- Latour, Bruno. "The Impact of Science Studies on Political Philosophy." *Science, Technology, & Human Values* 16.1 (1991).
- Latour, Bruno. *Science in Action*. England: Open University Press, 1987.
- Latour, Bruno. *We Have Never Been Modern*. Trans. Catherine Porter. Cambridge: Harvard University Press, 1993.
- Latour, Bruno and Peter Weibel, eds. *Making Things Public. Atmospheres of Democracy*. Cambridge/London: MIT Press, 2005.

Latour, Bruno and Steve Woolgar. *Laboratory Life. The Construction of Scientific Facts*. United States of America: Princeton University Press 1979.

Law, John. *After Method. Mess in Social Science Research*. Great Britain: Routledge, 2004.

Law, John. "Ladbroke Grove, Or How to Think about Failing Systems." December 6th, 2003. Centre for Science Studies, Lancaster University. March 30th, 2006.

<<http://www.comp.lancs.ac.uk/sociology/papers/Law-Ladbroke-Grove-Failing-Systems.pdf>>.

Law, John. "Making a Mess with Method." December 20th, 2003. Centre for Science Studies, Lancaster University. March 25th, 2006. <<http://www.comp.lancs.ac.uk/sociology/papers/Law-Making-a-Mess-with-Method.pdf>>.

Law, John. "Notes on the Theory of the Actor Network: Ordering, Strategy and Heterogeneity." *Systemic Practice and Action Research* 5.4 (1992).

Law, John. *Organizing Modernity*. Great Britain: Blackwell, 1994.

MacOuat, Gordon. "The Latest Latour: Realism and Hope in Science Studies." *Canadian Journal of History* 36.2 (2001).

Menkhaus, Ken. "State Collapse in Somalia: Second Thoughts." *Review of African Political Economy*, 93 (2003).

Milliken, Jennifer, and Keith Krause. "State Failure, State Collapse, and State Reconstruction: Concepts, Lessons, and Strategies." *Development and Change* 33.5 (2002).

Montague, Dena. "Stolen Goods: Coltan and Conflict in the Democratic Republic of Congo." *SAIS Review* 22.1 (2002).

Morton, Adam David. "The 'Failed State' of International Relations." *New Political Economy* 10.3 (2005).

Olsson, Ola and Heather Congdon Fors. "Congo: The Prize of Purdition." *Journal of Peace Research* 41.3 (2004).

Plato. *The Republic*. Trans. Desmond Lee. Great Britain: Penguin, 1987.

Radon, Jenik. "Sovereignty: A Political Emotion, Not a Concept." *Stanford Journal of International Law* 40 (2004).

Redman, Charles. *Human Impact on Ancient Environments*. Tucson: University of Arizona Press, 1999.

Richardson, Henry J. “‘Failed States,’ Self-determination, and Preventive Diplomacy: Colonialist Nostalgia and Democratic Expectations.” *Temple International and Comparative Law Journal* 10 (1996).

“The Results Come in with a Bang.” *The Economist* August 26, 2006.

“The Rising Fear of a War of Proxies.” *The Economist* 15 July 2006.

Sassen, Sakia. *Losing Control?: Sovereignty in the Age of Globalization*. New York: Columbia University Press, 1996.

Serres, Michel. *The Natural Contract*. Trans. William Paulson and Elizabeth MacArthur. United States of America: University of Michigan Press, 1995.

Slaughter, Anne-Marie. “Disaggregated Sovereignty: Towards the Public Accountability of Global Government Networks.” *Government and Opposition* 39.2 (2004).

Slaughter, Anne-Marie. “Sovereignty and Power in a Networked World Order.” *Stanford Journal of International Law* 40 (2004).

Stewart, Frances. “Root Causes of Violent Conflict in Developing Countries.” *British Medical Journal* 324 (2002).

Tshitereke, Clarence. “On the Origins of War in Africa.” *African Security Review* 12.2 (2003): 81-82; Law (1992).

Van Hep, Michel, Veronique Parqué, Edward Rackley, and Nathan Ford. “Mortality, Violence and Lack of Access to Healthcare in the Democratic Republic of Congo.” *Diasater* 27.2 (2003).

Vernon, R. *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises*. New York: Basic Books, 1971.

Wallace-Bruce, Nii Lante. “Taiwan and Somalia: International Legal Curiosities.” *Queen’s Law Journal* 22 (1997).

Waltz, Kenneth. *Theory of International Politics*. United States of America: McGraw-Hill 1979.

Weber, Max. “The Profession and Vocation of Politics,” *Political Writings*. United Kingdom: Cambridge University Press, 2002.

Wendt, Alexander. “The Agent-Structure Problem in International Relations Theory.” *International Organization* 41.3 (1987).

Wendt, Alexander. “Anarchy Is What States Make of it: The Social Construction of Power Politics.” *International Organisation* 46.2 (1992).

Wendt, Alexander. *Social Theory of International Politics*. Cambridge: Cambridge University Press 1999.

-
- Wilde, Ralph. "The Skewed Responsibility Narrative of the 'Failed States' Concept." *ILSA Journal of International and Comparative Law*, 9 (2003).
- Wynne, Brian. "Response to Radder." *Social Studies of Science* 28.2 (1998).
- Yannis, Alexandros. "State Collapse and its Implications for Peace-Building and Reconstruction." *Development and Change* 33.5 (2002).