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**Introduction**

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.

**Actor-Network Theory(ANT)**

Actor-network theory (ANT) is the creation of theorists in science and technology studies, which originated as a system for describing the processes at work in the creation of scientific knowledge.

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.

1) “Things are effects of relations.”

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.

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.
2) 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.

In practice, the social/human sphere and the material/natural sphere overlap. In order to explain the confluence of nature and culture, term ‘quasi-object’ (entities falling between the cultural and natural spheres of reference) was introduced.

3) Hybridisation

The components of an aggregate, a collectivity, are to be termed actors. The totality is a network.

‘Translation’ - the process of coordinating networks as actors

Effective translation

- durability: an effectively coordinated network will be long-lasting
- spatiality, distance, mobility

Broad relationality, rather than specific causation: causes are effects of their context

Causes are not simply interactions between atomistic 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.

Limitations

- By making interactions—networks and their construction—the object of study, it limits itself to a sharply asystematic view of the world.
- ANT lacks virtually all normative content. It is said to be a purely descriptive system.

State as a Network

The sociopolitical and factual-scientific spheres are of a piece, that the human/social sphere is not meaningfully separate from the material world.

1) State
An assembly of heterogeneous parts, human and nonhuman acting together as an ordered unit to project political authority over a given population and territory.

2) The international arena
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 hard-line distinction between the two.

**ANT and IR Theories**

1) Critiques of Realism

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.

2) Critiques of Neoliberalism (Keohane & Slaughter)

On a global scale, neoliberalism remains committed more or less to state centricity—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.

3) Constructivism

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.
Constructivism extends only to international relations itself, whereas ANT will view actors themselves as constructs of their relationships.

4) Actor-network constructivism

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. An ANT account of the international order will thus question a central tenet of conventional IR: state centricity.

Failed States

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.

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.

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.
Problems of Globalization Research

- Discursive power: a particular globalization rhetoric is pervasively deployed by both politicians and business leaders to justify the adoption of specific economic (and social) adaptation strategies
- Multiple scales of economic (along with political, cultural and social) relations
- Avoid privileging specific organizational loci of analysis
- How generalizable are the theories we develop based on particular times and places

Relational view of networks as a methodology

- Networks as neither purely organizational forms nor structures
- Networks are essentially relational processes, which, when realized empirically within distinct time- and space-specific contexts, produce observable patterns in the global economy
- To transcend ‘atomistic description’ of activities of individual actors (for example firms) or meta-individual imaginations of ‘deep’ structures, Networks thus become the foundational unit of analysis, not individuals, firms or nation state
- Identify actors in networks, their ongoing relations and the structural outcomes of these relations

Elements of a network methodology

- Network as an analytical tool, which aims to map the topological structures of social relationships
- Network as a form of governance (organizational form)

(1) Networks as relational processes and structures in which, and through which, power is exercised: intentionality and power relations among social actors in these organizations and institutions

- Power should be conceived as a practice rather than a position within a network
- Emergent network relationships: Network relationships generate an emergent effect so that the sum of these relationships is much greater than that of individual actors
- Structural understanding by conceiving of power as being diffused in a Foucauldian (capillary-
like) sense whereby it is always present in all social interactions
- The power to create, join or escape networks
- Network relationships should be understood as being both structural and relational.
  - structural, in that the composition and interrelation of various networks constitute structural power relations
  - relational because they are constituted by the interactions of variously powerful social actors.

(2) The multiple analytical scales and loci of networks
- A complex intermingling of different geographical scales (global, regional, national and local) in network formation and network processes; none of these scales should, in themselves, be considered a privileged level of analysis
- No one set of institutions should be automatically privileged above all others. Since all organizations and institutions must be mediated through social actors in networks, there are no a priori reasons why certain organizational or institutional forms should be favoured.

(3) The complex territorial embeddedness of networks
- Distinctive time–space specificity in their workings such that no regular conjunctions of events and outcomes can be fully predicted by network formation
- Moving away from the ‘topological presupposition’ of the ‘bounded region’ and towards a network methodology runs the risk of losing sight altogether of profound geographical variations across localities and regions.
- While networks are embedded within territories, territories are, at the same time, embedded into networks.

GCC VS ANT

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Implications
Networks are both social structures and ongoing processes, which are constituted, transformed and reproduced through asymmetrical and evolving power relations by intentional social actors and their intermediaries.

This relational view of networks emphasizes the role of human agency and the ongoing formation of networks that produce empirical outcomes.

1) A network methodology provides discursive spaces for challenging certain relationships within the global economy, while stopping short of advocating a radical revision of capitalism as a mode of social organization.

2) By fusing the human and nonhuman (including animals, plants, soil, air, water etc.) agents that become entrained in networks, actor-network theory allows ethical analysis in two senses. On the one hand, by collapsing the society-nature dualism, the ethical rights or responsibilities of all network participants can be considered within an analysis of the global economy, On the other hand, a network methodology expands the horizons on which our actions can be seen to be influential and within which we might be held to some ethical responsibility.

3) the relationship between a network methodology and other analytical bases for understanding the global economy, such as the ‘logics of capitalism’
Reality: Revealed in the practice of relations, reality is demonstrated and measured by lines of force drawn in the performance of relations.

Collectif, hybrid: An array of relations, links interpenetrations, and processes. A hybrid collectif can be contrasted with a collective, which is a thing. A collectif includes all that inspires, influences, and touches it. In this understanding of agency, differences and dualism are generated out of partial similarities. Collectifs allocate agency to a particular area of their network, and the actants located there are then said to be agents.

Inscribed reader: A person in whom a translation has been inscribed, thus an inscribed reader is prepared to perform the relations the translation has prescribed on encountering the context described by the translation.

Entelechy: A matrix of networked actors and actants that appears as a singular entity.

Enlistment: When one actant persuades another into an allied network.

Network consolidation: The appearance of singularity of a network, since networks are ordered with materials and strategies, creating aesthetic patterns of generated effects of power and hierarchy.

Authority figure: An actant that resists individuation in its performance as part of an institution’s administrative machinery.

Truth: A declaration whose alliances are intact. A sentence with insufficient allies appears false.

Agent: An actant located in an area that has agency allocated to it by a collectif.