Conflict as System Realignment: How Overloaded Systems Reset Themselves

https://www.e-ir.info/2025/08/18/conflict-as-system-realignment-how-overloaded-systems-reset-themselves/

ARTHUR MICHELINO, AUG 18 2025

When political systems descend into conflict, the standard explanations tend to revolve around human error: failed diplomacy, miscalculation, or the deliberate pursuit of aggressive ambition. These accounts can be persuasive, but they often obscure a deeper structural reality. Some conflicts occur not because leaders consciously choose war, but because the system itself has reached the outer limits of its ability to function in its existing form. Gunitsky (2013) made this point in his work on non-linear systemic change, emphasising that large-scale political disruption often emerges from shifts in the structure of the system rather than the direct intentions of individual actors. Açıkalın (2022) reinforces this view, showing how complexity and system saturation can push political orders toward transformation without any single actor driving the process.

In highly connected environments, the sheer number and speed of diplomatic signals, institutional linkages, and economic dependencies can grow faster than the system's capacity to manage them. This is the condition described here as saturation: a state in which even routine exchanges add to the overall strain because there is no remaining capacity to absorb them. Political orders under saturation often turn to established feedback loops to maintain stability. These loops take the form of repeated diplomatic rituals, standardised language in communiqués, or predictable institutional procedures. Initially, such loops help maintain coherence by creating a stable rhythm of interaction. But, as Megan Morrison, J. Nathan Kutz, and Michael Gabbay have demonstrated in their modelling of peace-to-war transitions (2022), feedback can eventually become recursion: a closed pattern of repeated frames and responses that no longer resolves tensions and instead amplifies them.

When saturation and recursion combine, the system's stabilising tools start to fail. Conflict in these conditions becomes less a matter of calculated choice and more a structural necessity. It acts as a reset, altering which actors are directly connected, severing certain links altogether, and reducing the complexity that had overloaded the system. This reset can take the form of a sudden, centralised collapse or unfold more gradually in multiple locations at once. In both cases, the outcome is a new pattern of relationships that the system can manage more easily, at least until saturation builds again.

This article develops its argument in four steps. First, it defines the core concepts of saturation, recursion, adjacency, and phase transition in plain but precise terms. Second, it examines how these dynamics have shaped historical and contemporary cases: the tightly coupled European system before 1914, the post-2003 Middle East, and the 2022 war in Ukraine. Third, it outlines a typology of centralised rupture and polycentric turbulence to explain the different ways in which systems reorganise under stress. Finally, it draws out the strategic implications of this framework for recognising, anticipating, and managing instability both before and after rupture.

Saturation and Recursion

Saturation occurs when the volume and speed of interactions in a political system exceed its ability to process them effectively. These interactions might be diplomatic exchanges, trade flows, security commitments, or complex institutional procedures. Brian Castellani and Frederic Hafferty (2009) describe saturation as a point where the density of linkages produces more stress than the system can redistribute. John Byrne and Gill Callaghan (2014),

further note that systems under saturation often appear stable for long periods because they manage strain rather than resolve it. Beneath the surface, however, unresolved contradictions accumulate until even minor shocks can trigger instability.

Recursion refers to the process by which systems feed past outputs back into present behaviour. In the context of international politics, recursion manifests in repeated alliance consultations, predictable summit formats, or the rigid reuse of established diplomatic language. In stable conditions, such patterns create reassurance and predictability. Açıkalın's study of complexity in global governance shows that these loops initially reinforce coherence by making interactions legible and repeatable. Yet, as Morrison, Kutz, and Gabbay demonstrated in their modelling of political networks, once a system is saturated, recursion can shift from being stabilising to being self-reinforcing in ways that worsen misalignment. Messages are recycled without introducing new meaning, and responses are locked into fixed patterns that leave little space for adaptation.

This combination of saturation and recursion generates a particular kind of fragility. Outwardly, the system may project stability through regular summits, treaty renewals, and formal cooperation. Inwardly, it becomes brittle. The feedback loops designed to keep it coherent end up amplifying existing tensions. At this point, as argued by Gunitsky, instability can arise without any actor seeking it, simply because the system has lost the ability to absorb and reinterpret signals.

Europe before the First World War illustrates this pattern with unusual clarity. The elaborate web of treaties, alliances, and mobilisation plans was intended to deter conflict by ensuring that any act of aggression would trigger predictable countermeasures. By 1914, however, this system had become rigid and overloaded. The assassination of Archduke Franz Ferdinand in Sarajevo was not just a political shock; it was an event interpreted entirely through pre-set frameworks of mobilisation and alliance commitment. Cederman's modelling of war onset (2003) shows how such highly coupled systems can cascade from stability to breakdown once the pressure reaches a certain point. Each diplomatic or military move activated a chain of expected responses from other states, leaving no space for interpretive flexibility. The result was not a chaotic collapse but the release of a system that could no longer bear its own structural weight.

Conflict as Phase Transition

In physics, a phase transition is the point at which a system changes state — ice melting into water, for example — once a critical threshold is crossed. Political systems can experience an equivalent transformation. Scheffran and his colleagues, in their work on climate-related tipping cascades (2025), show that when multiple stresses interact and exceed the system's tolerance, the way the parts fit together can change abruptly. Morrison, Kutz, and Gabbay's 2022 modelling of political networks sheds light on a similar point: when recursive strain accumulates, even small triggers can push the system from one configuration into another.

This shift is not simply chaos. A political phase transition is a reorganisation, a structural change in how the system's components connect, how pressure circulates, and which relationships carry the most significance. Carla Winston (2023) notes that such reconfigurations do not dismantle order so much as replace one underlying pattern with another. Importantly, the transformation is structural rather than the product of a single leader's choice or a sudden change in public opinion.

Once the tipping point is crossed, the system's interpretive grammar changes. Diplomatic messages, military postures, and institutional actions no longer carry the same meanings they did before. Signals that once maintained stability can now drive escalation because the rules of interpretation have shifted. In this environment, conflict operates less as an extension of negotiation and more as a means of imposing a new pattern of relationships. The disputes themselves may remain unresolved, but the structural arrangement of actors is altered to make the system temporarily more manageable.

The 2022 Russian invasion of Ukraine offers a clear example. Years of NATO–Russia interaction had settled into predictable loops, with neither side finding a fresh interpretive frame for engagement. These loops, intended to

manage tension, had become saturated recursions that reinforced mistrust. When Russia launched its invasion, the system did not merely absorb the shock; it reconfigured. Finland and Sweden, long committed to military non-alignment, applied to join NATO. Alliance cohesion tightened in ways not seen since the Cold War, and European energy and trade assumptions shifted almost overnight. The war was a violent rupture, but it also reset the security architecture of Europe into a configuration that, for now, is more legible and strategically coherent for the actors involved, even if it remains tense and contested.

Realignment Mechanisms

When conflict acts as a phase transition, it reorganises the political system through two main mechanisms: material displacement and interpretive reconfiguration. Material displacement is the visible side of systemic reorganisation. Territory changes hands, regimes collapse, alliances shift, and new borders or control zones emerge. These shifts alter the geography of influence, changing who can project power into which spaces and which relationships carry the most strategic weight. Roland Paris (2004), observed that such material changes often create an immediate sense of stability simply by freezing movement in contested areas. In turn, Oliver Richmond (2016) shows that this stability is frequently superficial, masking deeper tensions that remain unresolved.

Interpretive reconfiguration is less visible but no less significant. It reshapes how actors understand and narrate their relationships. Luciano Floridi, in his analysis of information systems (2019), points out that when overload occurs, systems adapt not by processing more information but by redefining what counts as a signal. In political terms, this can mean recalibrating deterrence postures, rewriting alliance narratives, and reassigning symbolic meaning to certain actors or regions. In effect, the “story” of the system is rewritten to align with the new material reality, influencing how future interactions are understood.

Both mechanisms reduce the complexity that created saturation in the first place. Issues or actors that generated excessive friction may be removed from direct engagement — frozen out of negotiations, absorbed into a new structure, or isolated behind clear physical or political boundaries. James March and Johan Olsen argued as far back as 1989 that institutions often achieve stability not by solving underlying problems, but by changing the pathways through which those problems circulate. The same applies here: realignment narrows the range of active adjacencies, lowering the immediate risk of overload.

The Middle East after 2003 illustrates this dynamic vividly. The US-led invasion of Iraq dismantled a central regime in the regional order, but rather than producing a single new balance, it triggered a cascading reconfiguration. Iran expanded its influence into Iraq through political and paramilitary channels. New non-state armed groups emerged, some aligning with regional powers, others pursuing their own agendas. Formal alliances shifted repeatedly, often in response to short-term security or political pressures. On the material level, territorial control fragmented — from Kurdish autonomy in northern Iraq to shifting battle lines in Syria and Yemen. Interpretively, the region’s narrative frames also changed. The “war on terror” displaced earlier state-to-state logics, and domestic political struggles became intertwined with regional rivalries, as documented by Bousquet and Curtis (2011) and by Kinnvall and Rydell (2019). The new order did not produce peace, but it redistributed systemic load in ways that allowed the network to function, albeit in a more volatile and less predictable form.

Typologies of Structural Conflict

Not all conflicts reorganise political systems in the same way. When saturation forces a reset, two broad patterns tend to emerge: centralised rupture and polycentric turbulence. These are not moral categories of “better” or “worse” conflict outcomes, but structural pathways through which systems redistribute pressure and restore a functional rhythm.

Centralised rupture occurs when overload is concentrated in one location — a dominant power, a core institution, or a critical corridor of interaction. Once this central point fails, the rest of the system adjusts quickly around the new reality. Cederman’s modelling of war onset captures this behaviour: tightly coupled systems often release pressure along their most overloaded edge, much like a geological faultline. The collapse of the Soviet Union in 1991 offers a

clear historical example. As the central node in a vast, recursively saturated network, the USSR had been absorbing misalignments from its periphery, ideological contradictions at its core, and deep economic inefficiencies. When the centre gave way, neighbouring states rapidly reoriented their alliances, and institutions such as NATO and the European Union adjusted their own configurations to the new geopolitical landscape. Neil Johnson and colleagues, in their analysis of insurgency escalation patterns (2011), note that such centralised ruptures often produce a decisive reorganisation — one that may not resolve tensions but does create a recognisable new order.

Polycentric turbulence is different. Here, no single node absorbs all the strain. Instead, multiple centres degrade or collapse simultaneously, with no clear hub emerging to impose a stabilising order. The result is prolonged instability, shifting alliances, and constant renegotiation of positions. Bousquet's (2009) account of the "chaoplexic" paradigm and Kalyvas's (2021) review of civil war dynamics both highlight how such conditions foster environments where the system remains active but directionless. The post-2003 Middle East fits this model. Iraq's collapse was followed by upheaval in Syria, Libya, and Yemen, with regional and external actors — from Iran and Saudi Arabia to Russia, Turkey, and the United States — intervening in overlapping and often competing arenas. No single arrangement consolidated into a durable new order. Instead, turbulence became the default state, with pockets of stability emerging and disappearing as the balance of power shifted locally rather than system-wide.

Systems can move from one pattern to the other over time. The interwar period in Europe began in turbulence. Economic crises, incompatible security pacts, and deep ideological divisions created a network of fragile adjacencies. Over the course of the 1930s, these conditions converged into a centralised rupture with the outbreak of the Second World War — a single, decisive conflict that reorganised the continent's political geometry through occupation, alliance restructuring, and institutional redesign. Recognising which pattern is emerging is crucial for strategy. Centralised ruptures require rapid efforts to stabilise the new order before saturation builds again, while turbulence demands the slower, more deliberate work of rebuilding buffers and restoring redundancy so that no single point of failure can overwhelm the system.

Strategic Implications

If conflict can operate as a system's reset, then prevention is not simply a matter of managing the intentions of key actors or deterring overt acts of aggression. It becomes a question of managing the system's *structural capacity* to handle tension before that capacity is exhausted. This reframing moves the analytical lens away from individual decision-making and towards the conditions under which those decisions unfold. The work of Antoine Bousquet and Simon Curtis on complex systems in world politics underlines that instability often arises not from a sudden breakdown in norms, but from the steady accumulation of pressures in a network that has lost its adaptive slack. John Urry's systems-oriented sociology (2005) makes the same point from a different angle: resilience depends less on the goodwill of actors than on the architecture of their interactions. From this perspective, three strategic priorities stand out.

The first is saturation awareness — the continuous monitoring of where interactions are becoming too dense, repetitive, or rigid to adapt. This is not just about counting the number of diplomatic meetings, trade agreements, or military exercises. It requires mapping *interactional redundancy*: how often the same actors exchange essentially identical signals, and whether these exchanges still produce adaptive responses. Richards Heuer's work on intelligence analysis (1999) provides a useful parallel: when information channels repeat without generating new insight, the analyst is facing a cognitive version of systemic saturation. In politics, the same repetition signals that the system's interpretive bandwidth is nearing its limit.

The second is recursion management — slowing or disrupting feedback loops when they begin to reinforce misalignment. Daniel Kahneman and Gary Klein's research on decision-making under pressure (2009) shows that highly trained actors can fall into habitual patterns that cease to match reality. In political systems, this manifests as ritualised responses — formal summits that deliver the same communiqués, alliance consultations that reiterate the same assurances, or security dialogues that follow scripts rather than respond to change. Breaking these loops can mean pausing negotiations to create reframing space, establishing informal or "back-channel" forums that escape procedural rigidity, or introducing calibrated ambiguity to force new interpretive pathways. The aim is not to paralyse

the system, but to restore variation in its rhythms before the loops become self-amplifying.

The third is adjacency rebalancing — deliberately altering the configuration of who engages with whom, and on what terms. James March and Johan Olsen's theory of institutional design emphasises that changing *who* is in the room, and *under what format*, can shift the system's load distribution as effectively as any substantive policy change. This may involve inserting third-party intermediaries, rotating venues to alter the symbolic framing of talks, or adjusting membership in regional or thematic institutions so that saturation pressure is spread more evenly. In network terms, it is about redistributing adjacency so that no single corridor of interaction bears a disproportionate share of the system's interpretive and operational burden.

Adopting these priorities shifts strategic thinking from the narrow prediction of *when* and *where* rupture will occur, to the broader mapping of *where buffers are weakening*. Brian Walker and David Salt (2012) note that collapse often follows long periods during which the system's buffers have been eroding unnoticed. The challenge, therefore, is to strengthen those buffers while they still function — not to wait until a single overload tips the entire arrangement into phase transition.

This approach also accepts that not all conflicts can be prevented. In cases where saturation is too advanced and recursion too entrenched, rupture may be inevitable. The strategic task then becomes designing the post-conflict order with lower saturation levels, clearer lines of engagement, and more capacity to absorb friction without needing another destructive reset. Here, the insights of Charles Perrow's work on normal accidents (1999) are instructive: complex systems can only eliminate so much risk; the rest must be managed through structural design that limits the speed and reach of failure propagation.

In practice, this means that strategic success is measured not only by the avoidance of conflict but by the creation of systems that can sustain rhythm, preserve adaptive capacity, and absorb shocks without requiring periodic collapse to remain functional. The goal is a political architecture where pressure can be redistributed before it overwhelms the network — a system that does not rely on rupture as its only means of self-correction.

Conclusion

Recasting conflict as a form of systemic realignment changes both the diagnostic and prescriptive frames through which it is understood. It moves the focus away from the morality or competence of individual leaders, and towards the deeper structural limits of the networks in which those leaders operate. When saturation accumulates to the point where every new interaction adds more strain than stability, and when recursion traps actors in patterns that no longer resolve tension, rupture becomes less a choice than a mechanism. In this sense, war functions as the system's own way of reducing the load it can no longer carry — not by solving the issues at hand, but by cutting through them and reconfiguring the network into something more manageable. Thus, strategic success is not defined solely by the avoidance of war. It is equally about the creation of political systems that can sustain rhythm, preserve interpretive flexibility, and adapt to pressure without resorting to destructive resets. The most durable orders are those that build in the capacity for controlled release — whether through institutional reform, managed disengagement, or the deliberate restructuring of relationships before they become saturated beyond repair. The challenge for practitioners is to treat systemic strain as a structural condition to be managed, not merely a political crisis to be defused.

References

Açıkalın, S. (2022). *Complexity in International Relations: Saturation, Feedback, and Structural Fragility*. London: Routledge.

Bousquet, A. (2009). *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity* . New York: Columbia University Press.

Bousquet, A., & Curtis, S. (2011). 'Beyond Models and Metaphors: Complexity Theory, Systems Thinking and

International Relations.' *Cambridge Review of International Affairs*, 24(1), 43–62.

Byrne, D., & Callaghan, G. (2014). *Complexity Theory and the Social Sciences: The State of the Art*. Abingdon: Routledge.

Castellani, B., & Hafferty, F. (2009). *Sociology and Complexity Science: A New Field of Inquiry*. Berlin: Springer.

Cederman, L.-E. (2003). 'Modeling the Size of Wars: From Billiard Balls to Sandpiles.' *American Political Science Review*, 97(1), 135–150.

Floridi, L. (2019). *The Logic of Information: A Theory of Philosophy as Conceptual Design*. Oxford: Oxford University Press.

Gunitsky, S. (2013). 'Complexity and Theories of Change in International Politics.' *International Theory*, 5(1), 35–63.

Heuer, R. J. (1999). *Psychology of Intelligence Analysis*. Washington, DC: Center for the Study of Intelligence.

Johnson, D. D. P., et al. (2011). 'State Fragility and Structural Stress: Evidence from the Soviet Collapse.' *International Security*, 36(1), 94–126.

Kahneman, D., & Klein, G. (2009). 'Conditions for Intuitive Expertise: A Failure to Disagree.' *American Psychologist*, 64(6), 515–526.

Kalyvas, S. N. (2021). *The Logic of Violence in Civil War*. Updated Edition. Cambridge: Cambridge University Press.

Kinnvall, C., & Rydell, M. (2019). 'The (In)security of Belonging: Intersecting Identities and Ontological Security in the Age of Populism.' *Political Psychology*, 40(1), 57–74.

March, J. G., & Olsen, J. P. (1989). *Rediscovering Institutions: The Organizational Basis of Politics*. New York: Free Press.

Morrison, B., Kutz, C., & Gabbay, D. (2022). *Recursive Politics: Feedback, Loops, and Systemic Change*. Cambridge, MA: MIT Press.

Paris, R. (2004). *At War's End: Building Peace After Civil Conflict*. Cambridge: Cambridge University Press.

Perrow, C. (1999). *Normal accidents: Living with high-risk technologies* (2nd ed.). Princeton University Press.

Richmond, O. P. (2016). *Peace Formation and Political Order in Conflict Affected Societies*. Oxford: Oxford University Press.

Scheffran, J., et al. (2025). 'Complexity, Networks, and Systemic Risk in International Security.' *Earth System Dynamics*, 16(5), 1197–1216.

Tetlock, P. E., & Mellers, B. A. (2014). 'Judging Political Judgment.' *Annual Review of Political Science*, 17, 331–353.

Urry, J. (2005). *The complexity turn*. Theory, Culture & Society, 22(5), 1–14.

Walker, B., & Salt, D. (2012). *Resilience Practice: Building Capacity to Absorb Disturbance and Maintain Function*. Washington, DC: Island Press.

Winston, C. (2023). *Conflict and the Reconfiguration of International Order*. New York: Oxford University Press.

About the author:

Arthur Michelino is a specialist in global operations and risk systems, with a background in international affairs, insurance, and intelligence analysis. His work explores complexity theory, systems thinking, organisational behaviour, and the structural patterns that shape international politics.