Complexity and nationalism

ERIC KAUFMANN[†]

Birkbeck College, University of London, Malet Street, London WC1E 7HX, UK

ABSTRACT. Classic theories of nationalism, whether modernist or ethnosymbolist, emphasise the role of elites and spread of a common imagined community from centre to periphery. Recent work across a range of disciplines challenges this account by stressing the role of horizontal, peer-to-peer, dynamics alongside top-down flows. Complexity theory, which has recently been applied to the social sciences, expands our understanding of horizontal national dynamics. It draws together contemporary critiques, suggesting that researchers focus on the network properties of nations and nationalism. It stresses that order may emerge from chaos; hence, 'national' behaviour may appear without an imagined community. Treating nations like complex systems whose form emerges from below should focus research on four central aspects of complexity: emergence, feedback loops, tipping points and distributed knowledge, or 'the wisdom of crowds'. This illuminates how national identity can be reproduced by popular activities rather than the state; why nationalist ideas may gestate in small circles for long periods, then suddenly spread; why secession is often contagious; and why wide local variation in the content of national identity strengthens rather than weakens the nation's power to mobilise.

KEYWORDS: complexity theory, everyday nationalism, local nationalism, multivocalism, multivocality, nationalism from below, nationalism theory, personal nationalism, popular nationalism, tipping point

This paper argues that complexity theory – the notion that complex social phenomena may emerge from seemingly uncoordinated individual acts – can enhance our understanding of national identity, nationalism and ethnic conflict. The familiar modernist-ethnosymbolist (or constructivist-perennialist) theoretical axis is crosscut by a vertical ('top-down') vs. horizontal ('bottom-up') dimension. While this is not a new insight, the properties and network dynamics of 'horizontal' processes of nationalism are not well understood. Complexity theory sheds light on the importance of such dynamics in explaining the spread of national constructs and nationalism. It illuminates and links a series of puzzling phenomena in the study of nationalism, notably variation in the content and interpretation of national identity between people, groups and places; sudden, apparently inexplicable increases in

nationalist fervour over time; and why certain national constructions and movements succeed while others fail to reach a critical mass. It generates new questions and explanatory frameworks for empirical researchers to advance the field.

Complexity theory addresses the very essence of what constitutes the nation. The vertical, elite-diffusion model, which envisions the nation as a network of individuals connected to elite nodes, has been challenged by a series of critiques from scholars of everyday nationalism. These intimate 'spontaneous' peer-to-peer networks are as or more important as vertical networks in the construction and replication of nations. If nations are vertically constituted, their symbolic corpus can be read off elite documents and pronouncements. If they are horizontally constructed, the content of national symbols exists everywhere and nowhere: it cannot be located in an individual or document but, like a forest or flock of birds, lives as a complex whole, emerging from the interaction of individuals, groups and institutions. Its shape can only be grasped by interrogating a large number of individuals, institutions and groups.

Complexity theory links hitherto disparate meso-level literatures on everyday nationalism, multivocality, contested nationalism, personal nationalism, tipping points and nationalism as local metaphor. In so doing, it connects middle-range concepts with macro-theoretical debates in the social sciences. More than that, it opens up new avenues of empirical enquiry and assists those who research nationalism 'from below' to better understand their data. Work on everyday nationalism, or nationalism 'from below', has drawn our attention to the limitations of theories based on a top-down model whereby elite ideas and power structures diffuse ideas of nationhood down the social scale and out to peripheries. The state is the most prominent elite node, but separatist elites and intellectuals can be viewed in a similar light – as central nodes whose ideas flow vertically downward to influence the masses. While this model is most prominent in modernist accounts focusing on state or sub-state elites in provincial jurisdictions (i.e. Breuilly 1993; Gellner 1983; Giddens 1994), it also plays an important part in ethnosymbolist work focusing on romantic intellectuals as the principal actors (Smith 1986; Hutchinson 1987). Complexity theory thus expands upon the 'horizontal' pole of the horizontal–vertical dimension that cross-cuts the modernism-ethnosymbolism axis in nationalism theory.

Complexity and nationalism theory

Eric Hobsbawm had a keen ear for nationalism's horizontal and vertical cadences. Yet he remained elliptical on the subject. For Hobsbawm, 'practices filtering downwards…were probably predominant in this period [fin de siècle Europe]'. Yet he writes of working-class invented traditions such as football, which 'owed nothing to models from higher social classes'. At the conclusion

of his essay on invented traditions, Hobsbawm is remarkably noncommittal, raising more questions than answers:

The final aspect is the relation between 'invention' and 'spontaneous generation'… This is something which constantly puzzles observers in modern mass societies. 'Invented tradition[s]' have significant social and political functions and would neither come into existence nor establish themselves if they could not acquire them. Yet how far are they manipulable? The politics of German nationalism in the Second Empire cannot be understood only from above. It has been suggested that to some extent nationalism *escaped from the control of those who found it advantageous to manipulate it* (Hobsbawm 1983:306–7, emphasis added)

Or, writing somewhat later,

'With Gellner I would stress the element of artifact, invention and social engineering which enters into the making of nations.' Having said this, he concluded that 'If I have a major criticism of Gellner's work it is that his preferred perspective of modernization from above, makes it difficult to pay adequate attention to the view from below…. Official ideologies of states and movements are not guides to what is in the minds of even the most loyal citizens or supporters… national identification and what it is believed to imply, can change and shift in time.' (Hobsbawm 1990: 10–1).

Hobsbawm's work influenced that of Brubaker (1996) whose team undertook ethnographic research on everyday nationalism in Cluj, Transylvania. Their research showed that, despite the best efforts of nationalist politicians, ethnic identity had low salience for many ordinary folk in Cluj. It likewise revealed how unconscious behaviours, such as attending particular churches or hiring employees from one's social network, reproduce structures of ethnic division (Brubaker 1996: 281, 285, 297).

Complexity theory argues that large causes (i.e. political agitation) can have limited effects (weak mass nationalist response), while small causes (such as a local incident) may result in dramatic effects. In the case of Cluj, the repeated provocations of the Romanian nationalist mayor failed to inspire mass fervour. In other cases, however, initially small movements set feedback loops in train that produce large effects. David Laitin observes that the direction of assimilation in the newly independent ex-Soviet republics differs widely, with the dynamics of change resembling a 'tipping game'. Change may begin slowly, then suddenly accelerate into a cascade as titular languages such as Estonian breach a threshold level of penetration. People pay attention not only to nationalist exhortation or incentives but to what they believe their peers are up to. As the use of Estonian rises beyond a tipping point, this increases the practical advantages of learning Estonian but, more importantly, the perception others will switch to it, driving a self-fulfilling feedback (Laitin 1998: 21–30).

Brubaker and colleagues focus on emergence and Laitin on nonlinearity and feedback loops. All are connected aspects of complexity theory. Grasping these network dynamics and properties enriches our understanding of the

horizontal-vertical organisational axis that bisects the modernist-ethnosymbolist dimension of nationalism theory. Complexity theory thus enables historians and social scientists to make better sense of their data, scrutinising empirical cases for evidence of emergence, feedback loops, tipping points and distributed information.

Complexity theory and nations

In the 1990s, there was a growing awareness that many phenomena in the natural world could be better addressed through Complex Adaptive Systems (CAS) theory than linear Newtonian approaches (Capra 1996; Gell-Mann 1994). Complexity theory originally stemmed from natural science, where, for example, the rate of temperature increase in the world's climate or changes in the size of fish stocks seemed to change erratically, eluding incrementalist modelling techniques. Established methods were based on linear assumptions – estimating the effect of adding additional inputs to a model to point-predict a marginal change in the outcome of interest. Instead, as with the sudden, puzzling, collapse of Atlantic cod stocks, threshold conditions meant that small causes could produce large effects. Diminished fish stocks bedded down as a new equilibrium despite a plentiful food supply, which should have heralded a rebound to previous population levels. Complexity theory has also been adopted in the social sciences. Markets and cities, for instance, are cited as instances of complex systems whose whole represents more than the sum of its parts: macro dynamics cannot be reconstructed by aggregating the behaviour of 'typical' inhabitants (Urry 2005; Walby 2007).

It is not the intention of this paper to recapitulate the literature on complexity theory in the social sciences, which is well summarised elsewhere (Bousquet and Curtis 2011; Urry 2005). The connection between complexity and nationalism is also not entirely uncharted territory. Cederman (1997) uses agent-based modelling to examine how larger states are formed from smaller ones – as with Germany – and how nations toggle between ethnic and civic forms of nationalism depending on the relative size of their component ethnic groups. Mock explores how cognitive-affective networks bind individuals into larger systems of national identity, whereby individuals' emotional attachment to symbols reinforces macro-level representations (Mock and Homer-Dixon 2015: 10–1). Nations emerge through lower-level interactions.

Previous scholarship is germane to this work, but what follows is distinctive in several respects. First, it attempts to encapsulate and recast many extant 'bottom-up' critiques of nationalism theory within the rubric of Complexity. For the purposes of the study of nationalism, I identify the following relevant features of complex adaptive systems:

1. *Emergence* – the idea that a complex system is not controlled from a central node but instead emerges from the interaction of

interdependent parts on the basis of a small number of coordinating rules. The emphasis is on self-organisation from below into a complex whole. A flock of birds is not controlled by the lead bird but has a direction and collective behaviour – in response to predators, for instance – because all birds follow a similar set of simple rules, notably avoiding predators and flying equidistant to surrounding birds. The flock does not possess a common goal or direction to which each bird is oriented. Pedestrian traffic patterns furnish an example from the social world.

2. *Feedback loops* – the Amazonian rain forest is the source, through evaporation, of most of its own precipitation. Likewise, the greenhouse effect operates as clouds trap heat, melting ice caps and releasing methane, which increases solar absorption, adding atmospheric thickness, further trapping heat and so on. Feedbacks may be negative, as when an animal gets hot and sweats to reduce body temperature, or positive, as with the greenhouse effect or an epidemic, in which effects spur on causes that accelerate the effect, causing the system to spiral out of control. A 'viral' trend in fashion offers a sociological example.

3. *Threshold Effects* or 'Tipping Points' – sometimes long periods of stasis are punctuated by sudden changes, which cannot be readily explained as the outcome of discrete causes. When water boils with the addition of one degree of heat at 99°C, or a final sand grain causes a mound to collapse, a small cause, which could not be predicted, leads to a dramatic effect. A collapse of morale in an army after the latest in a series of incremental setbacks provides a social example.

4. *Distributed Information*, i.e. the 'wisdom of crowds' (Surowiecki 2004) – here the 'brain' of the system is distributed widely across its components, each of which possesses a different perspective that when aggregated produces a more effective entity than would be possible in a centrally directed system. In the ecosystem, knowledge is contained through the trial-and-error evolutionary trajectories of various species in relation to each other. In social systems, this takes place through the reflections and interactions of individuals in relation to each other and the whole. Markets are often used as a paradigm case of how harnessing the distributed knowledge of consumers and producers better satisfies individualistic human demands than a system of central allocation in which planners are only able to draw on partial information and expertise. This is not to defend the market against the charge that it generates inequality, pollution and other social ills because it cannot produce public goods. Rather, the point is that it has greater information-processing capacity and can therefore better tailor private goods to individual desires – for good or ill – than a centrally controlled system.

I will address each of these interconnected aspects in turn.

Emergence

National identity: from production to consumption

The classic modernist work on nationalism, notably that of Ernest Gellner (1983), assumes that national identity is an elite-led phenomenon that accompanies the rise of the modern state. It is orchestrated, controlled and coordinated. This holds as much for 'Megalomanian' state elites as 'Ruritanian' counter-state elites on the periphery reacting to their blocked upward mobility. The focus is on nationalist productions, such as monuments or school texts, rather than the way they are received or 'consumed' by the average person. The state, in Gellner's words, 'creates nations where they do not exist', and the entire panoply of the state – education, mass conscription, bureaucracy – is pressed into the service of a singular national vision (Gellner 1983: 48–9). Though beginning at the centre, nationalism diffuses outwards from core to periphery, from elites down the social scale. Peasants are remade into Frenchmen, to use Weber's (1976) phrase, as the nation is disseminated across a premodern landscape of self-contained local and regional attachments. Just as the national language is standardised and dialects fade, provincial or minority identities give way to a homogeneous national worldview based on key founding myths such as the French Revolution. Weber was of course alive to the importance of local conditions, citing popular resistance to taxation and conscription in the French periphery to show how incomplete the process was until the twentieth century (Weber 1976: 106–7).

Vertical theories of national diffusion did not go unchallenged. Hobsbawm, as noted, flagged this as a weakness in Gellner's argument. The late Fredrik Barth also wrote eloquently of the way ethnic boundaries are locally reproduced in 'complex poly-ethnic systems' with assimilation possible in some situations but not in others. Ethnicity emerges from interactions between neighbouring ethnic groups (feedback loops) that iteratively solidify boundaries. Elite construction and dissemination play a relatively limited role (Barth [1969] Barth 1998: 21). Empirical research in history and the social sciences in the past two decades have similarly exposed the shortcomings of top-down conceptions. Michael Billig's important work on banal nationalism opened the door to examining the often routine, mundane, vernacular, mass reproduction of national understandings, with private media rather than the state playing the signature role (Billig 1995). This has given rise to a focus on 'everyday' nationalism, which privileges horizontal over vertical relationships, mass over high culture, the contemporary over the traditional, decentredness rather than state centralism. Tim Edensor, whose work exemplifies the new genre, speaks of 'flows, processes…and "horizontal" interconnections, rather than…vertical, hierarchical structures' as central to national identity (Edensor 2002: 30).

He finds modernist theorists of nationalism overly statist but also faults ethnosymbolist theory for privileging the traditional and historical over the

contemporary and the high or folk culture over mass-cultural modes of expression (Edensor 2002, ch. 1). National identities, according to theorists of the everyday, resemble forests – an oft-cited example of a complex system – more than centrally directed machines: 'Some branches wither, are renewed, transplanted or emerge....these ongoing processes all feed back into each other, consolidating the apparent naturalness of modes of understanding and enacting national identity.' These connections create a 'dense series of associations between spaces, acts, things and forms of representation' to offer countless different ways of expressing identity (Edensor 2002: vii). In other words, national identity is like a forest, emerging from peer-to-peer flows and feedbacks more than via state direction, especially in our post-industrial, democratic age.

Yves Deloye draws our attention to the 'invisibility' of national reproduction; Edensor stresses its unreflexive nature. Microsocial practices – inhabiting an environment with national styles of vernacular architecture, listening to characteristically national music, watching a national sport, consuming national brands of automobile, matter more than participating in occasional bursts of state nationalism such as national days. Deloye speaks of the spread of national identity along 'various, ambiguous lines, based on largely unconscious processes…without easily identifiable actors. What is at stake here is the emergence of a national identification that is on the whole an unintended result' (Deloye 2013: 617–8). When taken-for-granted circuits of habit and interpretation among, say, white Englishmen, are problematised by the arrival of immigrants who do not share their localised cultural practices and understandings, a feeling of dissonance may result. This produces ontological insecurity among the newly self-conscious majority group. Such crises may fuel the success of anti-immigration parties or street movements, whose fortunes cannot simply be ascribed to far right entrepreneurs but are rooted in the horizontal interactions that underpin contemporary national identity in advanced liberal democracies (Skey 2011). A parallel example of emergent organisation and identity, from the religio-political sphere, is the 'leaderless jihad' of movements such as Al Qaeda or ISIL (Bousquet 2012; Sageman 2008).

Though some theorists of nationalism, notably ethnosymbolists, were aware of the problem of resonance – the failure of national appeals to take root by winning the affections of the masses – the production of meaning was still conceived as elite-driven (Smith 2009: 31–2, 71–2; Ozkirimli 2003: 348–50).[1] Moreover, as Turner classically pointed out, symbols are multivocal (Eriksen 2007; Turner 1967, 1975), with individuals interpreting signifiers such as the British flag differently depending on their situation. The Union Jack has served, for instance, as both a playful symbol of the 1960s Mod counterculture and an emblem of the fascist National Front (Edensor 2002: 26). Fox foregrounds the polysemic nature of national ritual performances: the range of responses to official events such as Bastille Day runs from indifference through to intense patriotic fervour while the neoclassical allusions of nineteenth century statuary are lost on contemporary audiences (Fox 2014).

The classical phrase used to encapsulate the nation is Benedict Anderson's term 'imagined community' (Anderson 1983). Following Anderson's lead, historical sociologists debating the question of when nations arose in history repeatedly stress common imagining as the litmus test of nationhood (Leoussi et al. 2006). This needs to be examined. Flocks of birds or schools of fish act in unison, but no individual imagines the whole or possesses a master plan. The whole cannot be read off an individual part. Each follows simple rules, out of which emerges a complex unity. When a collection of people who cooperate with some and avoid others on the basis of limited rules such as sharing an intelligible dialect, the entity may behave like an ethnic group even if it is unconscious of the whole. Members need not possess a clear consciousness of where the ethnic group's boundaries rest or agree on a common set of myths and memories for it to act in unison.

This problematises the importance of 'imagined community' and common consciousness that many theorists point to as a *sine qua non* of ethnicity and nationhood (Connor 1994: 103). I do not claim that most nations arose spontaneously, which would be absurd. At the same time, a recognition of the role of peer-to-peer, or village-to-village, interactions in which religion and language structured cooperation, could help to explain why Armstrong (1982) sees European ethnic groups ('nations before nationalism') forming along the boundaries between language families and religions. These are precisely the forces that would have structured micro-level interactions, communication and social boundaries from which 'nation'-like behaviour could emerge and onto which subsequent nationalist elites could project their emerging collective consciousness, finding resonance for their constructions. Brubaker (1996) likewise refer to the way Romanians and Hungarians in Cluj, simply by 'unconsciously' attending different churches and hiring among those they trust in intimate familial and friendship networks help reproduce ethnicity. The causes of this behaviour are not ethnic, but the effects reproduce structures that abet ethnic consciousness.

Complexity theory is linked to a horizontal–vertical network dimension of theory that is orthogonal to the modernism-ethnosymbolism debate. Ethnosymbolism stresses the importance of subjective myths and symbols that are reproduced in premodern populations by religious institutions, dynasts, sects, itinerant poets and performers (Armstrong 1982; Smith 1986; Hastings 1997; Gat 2012). While this spread of consciousness is compatible with emergence, complexity also allows for 'flock-like' unconscious coordination to emerge in the absence of shared consciousness – a phenomenon upon which ethnosymbolism is silent. If, in the premodern German lands, speakers of Germanic dialects cooperated more often with speakers of other distinct but intelligible Germanic dialects than with their neighbours who spoke Latin or Slavic dialects, this could form the basis of 'ethnic'-like boundaries. Large-scale patterns of conflict and cooperation could emerge from the microdynamics of locales even if the locals in question were unaware of the wider pattern of 'ethnicity' emerging from the sum of their local interactions.

This is not to question the fact that conflict often occurred within cultures and could cut across linguistic lines. For instance, the Conquistadors had native allies in their wars against Atahualpa or Cuahtemoc. Yet at the same time one may also speak of White-Indian conflict in the United States prior to the rise of a nationwide 'American Indian' imagined community in the late 1800s (Tucker et al. 2011: 806). American Indians were not an ethnic community in the sense of sharing common myths and symbols (Smith 1991). However, they exhibited 'ethnic' emergent properties arising, 'flock-like', from the sum of myriad local struggles against the encroachment of white settlers. Local cooperation with other Indian tribes did not extend to a nationwide movement and consciousness, linked by associations and print communication, until the late 1800s. Yet one may still denote an 'emergent' Indian 'flock' at a higher scale, produced by a pattern of local conflict with whites and cooperation among Indian tribes. This represents something more than a series of isolated local phenomena, even if it falls short of fully conscious ethnicity.

The local and the national

Where classical nationalism theory tells a story of *gemeinschaft* yielding to *gesellschaft*, and premodern localism giving way to homogeneous nationalism, emergence sustains a different interpretation of events in which locals serve as active agents in the co-production of nations. This is vital because, as Malesevic (2013: 15, 20, 42) notes, nation-states are often distant and abstract and must be woven into the micro-solidarities that generate emotional attachment and feelings of solidarity. Once locales – the parts – come to think of themselves as intertwined with the nation – the whole – localism energises rather than obstructs national identity. One is both a Liverpudlian and English, Gascon and French, and the two come to be mutually reinforcing. Social historians show that cities and regions interpreted, shaped and accelerated the spread of the state's 'invented traditions'. National celebrations in the nineteenth century were grafted onto pre-existing civic traditions to provide a continuous local narrative.

The city fathers of Hamburg, for instance, steeped in local legends of a glorious Hanseatic past, championed Germany as a great seafaring nation in the 1880–1900 period, a country with a trading past fit for a future of saltwater imperialism (Umbach 2006: 64–6). By contrast, in Pfalz, near the border with France, locals during World War I recalled their long pre-Unification history of resisting French aggression, reaching back to the Thirty Years War and Louis XIV. Their past became a German past. Following the disaster of World War II, Pfalzers distanced themselves from Nazism as a Prussian project and recalled an alternative version of local lore in which Pfalz served as a site of Franco-German interchange. Again, the local past was pressed into the service of German national identity, with the region a cradle of German democracy (Applegate 1990: 89–90, 241–4).

The so-called *heimat* version of the nation involves locals peering at the national canon through a decidedly local lens (Confino 1997). Many national myths emerged first as local urban myths, to be copied and adopted by other locales. A statue of Joan of Arc, for instance, was erected in Orleans as early as 1458, and she was the focal point for local pride until the 1840s, when she emerged as a national figure in part through popularisation by Jules Michelet's *Jeanne D'Arc* (1841). Often the pattern took the form of inter-city contagion rather than central adoption, as with, for example, the spread of the Floral Games in the Catalan-Provencal border region, later appropriated by Catalan nationalists (Leerssen 2015). In frontier regions, new borders were superimposed on what were formerly local differences. Nations subsequently served as resources that were used by locals on each side of the border to juxtapose themselves against their arch-rivals. As Sahlins writes of a Spanish-French border region, national belonging 'appeared less as a result of state intentions than from a local process of adopting and appropriating the nation…At once opposing and using the state for its own ends, local society brought the nation into the village' (Sahlins 1989: 9).

Bottom-up emergence is energised by locales that interact and interpret national symbolism in distinct ways. Local branches of non-state entities – patriotic societies and fraternities – often organise national celebrations. This is especially true in societies with a weak central administration. The United States lacked a strong federal centre prior to the Civil War and had little activist bureaucracy prior to the New Deal era of the 1930s. To say America lacked national identity is, however, a misnomer. National identity and symbols were interpreted in manifold ways by a multiplicity of actors. The lack of a national centre did not detract from national unity except during the Civil War. The nation served as an idiom, or symbolic 'zone of conflict', which contending regional or ideological fragments wrestled over and, in so doing, reinforced (Hutchinson 2005).

In the northern states from the 1880s, associations such as the Grand Army of the Republic (GAR) and Women's Relief Corps (WRC) organised Fourth of July celebrations while in the South this fell to the United Confederate Veterans (UCV) and United Daughters of the Confederacy (UDC). Patriotic societies combined regional foci – tending civil war graves, for instance, or building monuments to civil war leaders – with national parades and celebrations (Kammen 1991; O'Leary 1999). As these associations were chapter-based, local heroes seamlessly strode a wider, national stage. Souvenirs created by private entrepreneurs on their own initiative spread nationalist iconography within the population. Out of this disparate everyday nationalism rose a sense of national identity no less cogent than that of more state-directed nations such as Third Republic France. An Asian analogy is the way Philippine nationalism developed in distinction to that of Thailand. Whereas Thai nationalism was Bangkok-centric and focused on the person of the king, 'the Philippines was always conspicuously lacking in the kind of Archimedean point from which an avowedly neutral institutionalized embodiment of the national interest

could be articulated....diffuse and demotic, [it] began to emerge "from below" in the Philippines through popular representations and struggles styled as "Filipino'" (Sidel 2013: 474–5).

Feedback loops and tipping points

Fredrik Barth wrote of how Pathan or Lapp identity varied from place to place, with assimilation possible in some regions more than others. Ethnic boundaries came to be reinforced in interaction with other groups. Identity claims (including shifts) that are accepted by other groups in turn reinforce those identities in what Barth termed a 'self-fulfilling' process (Barth [1969] 1998: 28). We next consider the effect of these self-fulfilling feedback loops whose runaway properties result in tipping behaviour. Another instance of positive feedback is that nations, once created, socialise new generations into their symbolism. Nation-states generate incentives – such as honours and offices – to support their maintenance in what Stinchcombe (1968:112) terms an 'infinite loop', even when they may no longer be economically or militarily functional. Other nations use the label, reinforcing its use. Indeed, nations today are probably maintained more by these feedbacks than economic and military imperatives, which may well favour a globalised network of city-states and empires (Ohmae 1995). The reproduction of the nation is only checked by material or external shocks.

The expansion of nations furnishes a further instance of positive feedback. A rarely explored but often tacit view in the nationalism literature is that nationalist ideas spread smoothly from intellectual centres to regional elites within empires (Gellner's Ruritanians) or to native intellectuals such as Nyerere or Gandhi in overseas colonies. These figures subsequently spearhead secessionist and independence movements. A great deal of emphasis is placed on coteries of intellectuals, educated in the metropole, who establish nationalist organisations and journals.

But what were the network dynamics? How did ideas of nationalism spread? Did intellectuals in metropolitan centres communicate ideas of nationalism to literate individuals who preached it in public, as part of a top-down network, or might there also be important horizontal, peer-to-peer dynamics? In common with other social sciences, the focus in nationalism theory is on structural preconditions rather than short-run dynamics (Biggs 2005), yet the latter are vital for determining whether nationalist movements *actually* materialise in fertile situations. It could be argued that it takes time for new worldviews to spread: the diffusion of nationalist ideas in Hroch's ([1985] 2000) phase A, or the emergence of nationalist organisations in his phase B, emerges as much through 'viral' peer-to-peer networking as top-down print capitalism. Like an epidemic, the more who become attached to an idea, the more vectors for its spread, until a tipping point is reached. David Laitin's aforementioned assimilationist cascade, in which members of minorities

suddenly switch from the imperial language to their vernacular once a threshold is passed, offers further evidence (Laitin 1998: 21–30). This is especially marked in societies prior to the development of mass literacy. For Leerssen this helps explain, among other phenomena, the spread of nationalism in societies with weak communications infrastructure such as Catholic Ireland from 1750–1825 and the occurrence of sudden paradigm shifts such as the appearance of historicism around 1800.[2]

Nationalist agitation and, especially, secession, create role models that further embolden others. Thus, the creation of new nations inspires the thoughts and deeds of others, even as the will of existing states or international actors may enable or stanch the process. Contagion is especially likely if potential secessionists see successful secessionist kin in nearby countries (Ayres and Saideman 2000). Assumptions about the smooth, linear spread of ideas, or of nationalist movements, should be recast in light of tipping dynamics.

The same is true of nationalist violence. In the Nagorno–Karabakh conflict, killing was often spontaneous rather than organised, with nationalist elites reacting to, rather than leading, the flow of events. Rumours fed into the Sumgait episode, which sparked a spiral of tit-for-tat Armenian–Azeri violence that subsequently escalated (Voronkova 2012). While many genocides are orchestrated by the state, others, such as the Rwandan genocide in which up to a third of Hutu men may have been involved, display important aspects of peer-to-peer contagion. Donald Horowitz (2001) draws our attention to the often spontaneous quality of ethnic riots as violence begets violence, a classic case of a positive feedback loop.

In recent Irish history, the 1916 Easter Rising is viewed as a turning point, after which armed Irish separatism took centre stage. Yet it is often forgotten that Irish Catholics strongly supported the First World War effort while their response to the Easter Rising was not immediate. The efforts of Irish Republicans to stir the population were continually frustrated. What appears to have occurred is a largely invisible rise of popular political nationalism, much like the early stages of an epidemic prior to tipping (Githens-Mazer 2006). While print capitalism played a role, so too did the logarithmic, peer-to-peer transmission of nationalist sentiment within the Irish population.

By contrast, the decades prior to the Easter Rising were a period in which nationalist agitation fell on deaf ears. Likewise, the IRA's Border Campaign of 1956–1962 in Northern Ireland was an abject failure despite a host of favourable conditions (discrimination, poverty, organisation). Deliberate efforts failed to register an effect. A complexity approach would suggest that nationalist sentiment had yet to cross its tipping point in the network of Northern Irish Catholics. Seven years later, however, there was a completely different popular response as the IRA's campaign took off, supported by rising numbers of local volunteers. Here again, while there were important events such as Civil Rights marches and police crackdowns, there was no single trigger, opening up the possibility of an initially slow spread of republican

sympathy along isolated networks followed by an organic, sudden, virus-like bloom of activity.

Brubaker (1996) likewise reveal how nationalist sentiment remained latent rather than salient in Cluj because the pool of Romanians animated by national chauvinism remained below the critical mass necessary to spark a chain reaction of mobilisation and counter-mobilisation. Empirical investigation into the spread of online petitions shows that many movements meet this fate: most fail with just a tiny fraction achieving mass penetration. Herding behaviour is important: less committed signatories who agree with the petition must be convinced that their peers are signing up before they will endorse it (Yasseri et al. 2013). The role of herding introduces a feedback loop to the process, much as Laitin describes with respect to the importance of whether the public perceives that minority languages will become more widely used in the future, which drives self-fulfilling behaviour.

The organisation of networks may affect whether messages cross a threshold: studies show that individuals are more likely to be converted to a cause if approached through several social connections. Hence, success is only partly a function of the intrinsic appeal of a petition and the resources behind it. It also results from the shape of the network and whether the message reaches key individuals who bridge multiple networks. Thus, even a resonant, well-resourced message may fail to catch on if it is marooned in outlying parts of the network (Yasseri et al. 2013). Future research should, where possible, attempt to identify the horizontal network dynamics that inhibit or enable the spread of national constructions and programmes.

Distributed information

Earlier we noted the polysemic, multivocal nature of national symbols and the fact that the content of national identity varies from locale to locale. A wide variety of individual and local identities may inadvertently generate ethnic groups like the Lapps or power social movements such as nineteenth century Czech nationalism at a higher level of aggregation. Likewise, diverse local understandings of a common symbol such as a flag, or referent such as France, emerge as a higher-order French national identity. This highlights the fourth aspect of complexity: distributed information.

The power of distributed information, popularised by New York Times journalist Thomas Surowiecki's book *The Wisdom of Crowds*, is used to explain why markets function better than central planning in providing private goods. When Boris Yeltsin visited Randall's Supermarket in Houston in 1989, he was transfixed by the choice on offer. 'When I saw those shelves crammed with hundreds, thousands of cans, cartons and goods of every possible sort, for the first time I felt quite frankly sick with despair for the Soviet people', he wrote (Allison and Beschel 1992). Yeltsin may have overlooked the market's failure to provide public goods such as health care to poor Texans, but its

superior capacity to slake private desires could not be doubted. How is it that stores in Houston manage to stock roughly the right amount of milk and other perishable products each day to meet an extremely varied set of demands from individuals across many different locations in the city?

The answer is that markets are able to harness the distributed knowledge of individuals. Every person is both consumer and producer and has a different perspective on what they can supply and what their and others' demands are. The price mechanism acts to aggregate their variegated specialist knowledge, pooling this distributed knowledge to regulate what is produced, how much, where and for whom. Few would contest that such a system works better to produce private goods than one based on central control, which cannot know the tastes and capacities of millions of individuals in diverse niches nor coordinate production and distribution to effectively meet constantly shifting patterns of demand. In short, a 'spontaneous order' emerging from complexity has greater information processing power than a centrally directed order where knowledge is focused among expert planners. We see this in other spheres such as guessing the number of beans in a jar, where the aggregate of everyone's guess consistently approaches or beats the best guess or when betting markets routinely offer superior predictions to experts (Surowiecki 2004; Hayek 1994: 6).

The principle of distributed information may be applied to national identity insofar as it can, like supply and demand, only be known by aggregating individuals' distinct perspectives. In effect one cannot speak of 'the' national identity, nor need it reside in a fixed set of symbols even though in some cases a cardinal *mythomoteur* (Smith 1986) such as the French Revolution or Arab–Israeli war will have a hold upon the affections of many. When Marks and Spencer, a British supermarket chain, asked customers to write one thing they liked best about Britain, they received well over a thousand different responses, from the monarchy to Cox's Orange Pippin apples (Edensor 2002: 175). In this sense, central planners of national identity who attempt to define the national hymn sheet are unlikely to minister to popular demand any more effectively than Soviet functionaries.

'Personal nationalism', Anthony Cohen's brilliant phrase, echoes the same idea. In discussing Scottish nationalism, he notes how geographically, religiously, economically, regionally and ethnically diverse Scotland is. The 'histories, literatures, folklores, traditions, languages, musics, landscapes, and foods of Scotland' are social facts that individuals use to construct their personal visions of the nation. 'Though these items may be interpreted differently, it is on the sharing of them that the sentiment of and attachment to the nation is predicated', he adds. Indeed, individuals are often not 'conscious of the individuality of their nationalisms', and politicians who seek to harness national sentiment must espouse a capacious version of nationalism in which all can see themselves. This said, Cohen admits that illiberal nations do not permit such latitude, and, where the state has firm control, complexity is a less useful framework. Yet resistance is possible, as

NiraYuval-Davis (2011: 6, 180) points out in her notion of the situated as opposed to hegemonic gaze. For instance, minorities or women often perceive the nation differently from the hegemonic white male norm. As Cohen's summarises, 'Nations obviously differ in the extent to which they permit the assertion of differing versions of themselves, and in the power with which they attempt to press individuals into a national matrix. As we know, there are countries in which individuals are compelled to stand in massed ranks to recite in unison a nationalist litany' (Cohen 1996: 804–5).

We saw that locale is one lens through which individuals may view the nation, accounting for differences in perceptions of national identity. John Hutchinson (2005) draws our attention to further dimensions of difference, remarking that competing ideological and class fragments inflect national myths in distinct ways. In eighteenth and early nineteenth century Britain, Whigs identified with the Anglo-Saxons, held to be the ancestors of the free yeomanry, while Tories looked to the Normans, founders of the royal dynasty, as the nation's ethnic ancestors. A reprise of this antinomy was played out in the American civil war with northerners favouring Anglo-Saxon yeoman-republican ancestors, southerners a Norman Cavalier myth (VanHoosier-Carey 1997); so too in France with the liberal Gauls and aristocratic Franks. At a more basic level, those in less privileged positions tended to identify with popular revolutions and protest episodes in the national past while the privileged looked to the established church or aristocratic traditions. The fact that all sides of the political and social spectrum spoke in the idiom of nationhood was, however, important, in that competition over the meaning of nationhood reinforced rather than weakened it. Unity emerges from a chaotic diversity with the common idiom of nationhood – proper name, flag – serving a similar aggregating role to prices in a marketplace. If contending political forces championed separate identity projects without reference to the nation, diversity could not produce unity, and no higher order could emerge from lower-level chaos.

Locale, class, ideology and ethnicity are not the only vantage points from which the nation is glimpsed. Gender, psychology, lifestyle and other lenses similarly refract the national image, focusing attention on alternative symbolic resources and usable pasts depending on the individual (Kaufmann 2008). This exemplifies the notion of distributed information: no two individuals are located in exactly the same ethnic, geographic, gender or psychological space. They peer at the nation from unique angles, resulting in different national identities, as Cohen and Yuval-Davis note.

Individuals' national identities may rotate from symbol to symbol as they transit from their home region to a capital city and thence to other countries – a voyage that leads them to perceive their nation differently. The shift is from a local nationalism partly oriented against the centre to an outward-facing national 'brand' emerging through interactions with other nation-states. The latter cleaves more closely to the official version of national identity than the former but should not be privileged as 'the' national identity.

Whatever the individual's ethnic origin, the proper name and focal point for their national identity remains the *nation* rather than their ethnic, faith or lifestyle communities. This, therefore, is not a description of multi-ethnic statehood in which distinct ethnic groups recognise a common civic national identity but rather a situation in which different individuals and ethnic groups identify deeply but differentially with a manifold range of 'national' symbols. Difference energises rather than detracts from nationalism. This 'crowdsourced nationalism' means that individuals in civil society, more than state elites, become the repository of national identity. Thus, the nation as a whole is characterised by a thoroughgoing *multivocalism* in which multiple national identities interact – often seamlessly – within the same nation. Emergence from below may be more important than top-down orchestration by elites.

Multivocalism as normative stance?

This article has focused on complexity theory as a way of making sense of a series of contemporary critiques of nationalism theory. Yet it is also possible to view multivocalism as a route for navigating between competing arguments over multiculturalism, cosmopolitan individualism and liberal nationalism. If national identity in stable liberal societies is highly personalised, then states that recognise this complexity by desisting from a prescriptive definition of the nation (Cohen's 'nationalist litany') are in a better position to advance *both* the liberty and loyalty of their citizens (Kaufmann 2016). Even where variants of national identity openly compete, this strengthens rather than fragments the nation as each side uses the idiom of nationhood to narrate their sectional aspirations (Hutchinson 2005).

Conclusion

This work makes the case for viewing nations as complex systems, not just elite constructs. Against a classic view which sees national consciousness diffused from elites down to masses and from centres out to peripheries, complexity allows for the emergence of national identity from below. States and elites are important actors but the role of mass publics in the everyday production and consumption of nations is vital. Complexity theory finds a common motif in recent work on everyday nationalism, contested nationalism, multivocality, personal nationalism, spontaneous ethnic riots, local nationalism and the concatenation of cultural movements. However, these disparate discourses have not been systematically brought together. Extant work has also paid insufficient attention to specific dynamics such as thresholds, feedbacks or network shape which complexity theory suggests future empirical researchers should pay attention to.

Several key aspects of complex systems – emergence, feedback loops, tipping points and distributed information – problematise elite-centric views of the nation. The emergence of nations, or the spread of nationalist ideas, secession or violence, may resemble viruses that incubate along networks until they reach a tipping point, rather than blueprints which are deliberately orchestrated and disseminated by elites. With complex systems, small causes may result in large effects and vice-versa. This sheds light on the erratic nature of national awakening, in which long periods of apparent dormancy may be followed by sudden bursts of activity that cannot be explained by any single event or critical juncture. Considerable elite agitation or violent events may fail to raise consciousness while in other cases minor protests may set feedbacks in train that lead to mass movements.

Emergence helps account for the presence of 'nation-like' behaviour before the age of nationalism and the significant overlap between premodern linguistic and religious patterns and modern national boundaries in Europe and East Asia. It explains why national movements may arise from the 'bottom-up' interactions of private associations, leisure providers and the media rather than the deliberate efforts of state elites. National identity, except in the most centralised and authoritarian states, is distributed within individuals in a population such that the collective representation of the nation cannot be read off official documents or a single individual. This accounts for the often puzzling, elusive quality of national identity in liberal nation-states. This 'wisdom of crowds' understanding of national identity may even be extended to the normative sphere, suggesting states should embrace a multivocal form of nationalism that can simultaneously advance both the liberty and loyalty of its citizens.

Acknowledgements

Endnotes

1 Conspicuous failures include movements for Occitanian, Padanian or indigenous 'Cruithin' Ulster-Protestant identity (i.e. Adamson, [1982] Adamson 1991). Post-colonial nationalism, notably in sub-Saharan Africa, has generally failed to supplant ethnic loyalties in salience (Smith 1983). According to Afrobarometer surveys, most sub-Saharan Africans privilege ethnic over national identities, though there are exceptions such as Tanzania where national identity holds first place in people's affections. See http://www.afrobarometer.org/, merged data for Rounds 1–4.
2 Personal communication with Joep Leerssen, 8 May 2014.

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