

Complexity leadership to foster the coevolution between power and knowledge

With additional notes from the context of international development cooperation with Beira, Mozambique

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Abstract

Complexity leadership is the leadership by a network of leaders that connect organisations and stakeholder groups. It has three sub-dynamics or sub-networks: adaptive leadership focuses on joining knowledge about development alternatives, administrative leadership focuses on joining the use of power, and enabling leadership connects joint administrative leadership to joint adaptive leadership. The three together cocreate knowledge-driven change. It benefits from, and nurtures, a culture of trust. It enables reaching joint goals for the long term, like sustainable transitions. Individual leaders should 'see' the tension between networked knowledge in the existing situation (business as usual) and the range of desirable futures. They should be able to trust that others 'see' the same tension which then can drive adaptation of a larger social system. An open mind and relative fearlessness and optimism as dominant attitude are first requirements.

Speaking truth to power: a social learning process

It's a well-known problem: decision-makers ignore your well substantiated advice, as to them it is an inconvenient truth. In this paper, we briefly summarize the well-known causes of this phenomenon, and what can be done to link knowledge to power by treating this link as a coevolution that can be fostered by the right kind of leadership.

'Speaking truth to power' is not easy. The use of knowledge in decision-making remains a deeply political process. Like power, knowledge is not in the heads of a few wise persons. Rather, it is dispersed over many persons and organisations having to deal with common problems. Linking knowledge to power is therefore a social process. It is easiest to believe people who are close to you and whom you trust. But what if power is wrong about the kind of knowledge it favours? What if an individual, despite a push from her or his power context, favours a truth that is *inconvenient* for those who enable her or his life and work? Which social processes may enable knowledge for the common good to gain influence over fragmented power, rather than the reverse? A learning process is needed to link-up the knowledge of many and connect it to power¹. The sustainability of our development may depend on enough people recognizing the need for such social learning processes to prevent 'power' making decisions which are predominantly based on facts it finds convenient.

Policy networks of organisations: interdependent, but lacking creativity

What kind of individual behaviour fits such a learning process? Dilemmas on the 'right' behaviour can be made manageable for the professional by facilitating small-scale dialogue among professionals on the 'right' thing to do in any specific situation. How professionals interact with each other therefore largely determines how they interact with citizens, determining their policy outcomes.

Policy networks often cross multiple levels of government, multiple ministries, and the public-private boundary, forming 'value chains'. Policy networks internal to organisations then interact with policy networks that overarch organisations. A hierarchical process of developing sets of rules that are in perfect harmony may therefore be too complex to manage from the top down². Decision-making always lags developments in society, and it always remains partial, as not all dependent actors can be

¹ After Al Gore dubbed knowledge about climate change an 'inconvenient truth', the Paris agreement on climate change (2015) showed the power of social learning. Even if it may not be enough to reach its target, significant momentum for climate mitigation and adaptation has been built-up in the preparation and follow-up of this UN convention. Structures to share power have emerged, driven by shared knowledge.

² <https://www.nsob.nl/over-nsob/actualiteiten/rapport-als-een-overheid-slagvaardig-de-toekomst-tegemeet>

involved in the process. Outcomes emerge without any one person being in control, from the ability and willingness of agents together to seek and find these solutions: cocreation. The main lines that an agents' line manager will judge her or him on can define a broader or narrower professional space. Taking creative initiatives for the common good, even if not entirely within red lines, may be rewarded if the culture encourages risk taking. Public organizations may also be under more (political) pressure to avoid mistakes than they are rewarded for creative initiatives. Spending time that is not clearly dedicated to goals in the professional space may then create a personal risk to agents, even if solutions to joint problems cannot be found in that narrow space.

Networked leadership to deal with complexity beyond policy networks

Some kind of networked leadership is needed to protect the spaces where the creativity may emerge, which is needed to deal with complexity. Policy networks, with their stakeholders and their economic reality, are 'complex adaptive systems' (CAS)³. More adaptive CAS are more capable of proactively responding to changing circumstances, making it resilient to shocks from outside, and other emergent common goals they collectively may strive for. Such leadership would demand leaders to dispose of a combination of power and knowledge needed to stay in power and at the same time to use that power for the benefit of the whole CAS. This results in a 'gap' in the traditional leadership theories which focus on the individual leader.

In complex conditions, what can a leader do for the benefit of the whole CAS of which he understands and rules only a small part? Complexity leadership theory combines leadership theory with complexity theory⁴. The central idea of complexity leadership theory is that a leader no longer leads alone, but connects at a personal level with 'leaders' in other parts of the CAS before they jointly act. Together they may exert an influence in the CAS, without having to make official decisions together, as in complex conditions that would be unmanageable. Networked leadership therefore is partly an informal dynamic. As any boundary drawn around a CAS is arbitrary - everything being connected to everything else - networked leadership is aware that it should make connections where most interdependency exists. There is strength in numbers: informal networks may connect large CAS if enough trust builds-up without each individual necessarily knowing every other individual.

The necessary three sub-dynamics of complexity leadership

Complexity leadership theory asserts that: (1) networked 'knowledge' leadership emerges in 'adaptive leadership networks', (2) networked 'power' leadership emerges in 'administrative leadership networks', and (3) that both are connected to each other by means of 'enabling leadership networks', enabling power to coevolve with knowledge.

All of these three leadership dynamics are necessary. We will now describe each sub-dynamic in more detail, and how, together, they foster coevolution between joint knowledge and joint power.

Adaptive leadership creates cross-border workable development alternatives. Joint adaptive narratives can explain how there are acceptable options for all to collaborate for the long term, changing unsustainable business as usual, making synergy emerge, and avoiding trade-offs. The participating agents are close to power but make no formal decisions. Their operating space consists mainly of time and safe operating space - protected against political risks. They transfer their ideas to trusted enabling leaders in their administrative leader networks, who then may take formal action.

³ Eg., Geert R. Teisman & Erik-Hans Klijn (2008) Complexity Theory and Public Management, Public Management Review, 10:3, 287-297, DOI: 10.1080/14719030802002451. See also <https://www.siboutnoteboom.nl/governance-of-complex-systems/>

⁴ Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. The Leadership Quarterly, 18(4), 298-318.

Administrative leadership networks are the policy networks we wrote about above, composed of official representatives. Not all administrative leaders in these networks are personally and primarily driven by sustainability of the CAS. Many may spend most of their resources on their career. They have power to decide, but they have little specific knowledge of alternative CAS futures, and little time for joint reflection. Administrative leadership is absolutely necessary to be able to continue to steer development at all, but it is not very creative. Many administrative leaders may be oblivious to complexity leadership, but they may still play a crucial role by adapting to a new reality if they adjust their position following a new mainstream. They may resist for a while, but eventually have no choice. This relates to a general principle of liberal democracy: the formal system must create just enough checks-and-balances to ensure that no administrative leader is in a position where he doesn't 'have to learn' ('power is the ability to afford not to learn'⁵).

Enabling leadership networks have both power and an eye for the need to think about alternatives that are at odds with current reality. They make decisions that give room to adaptive networks, so that people can spend time into networked learning, experimenting, and looking for ways to make that knowledge actionable and to scale-up⁶. Enabling leader networks have a lot of power, less knowledge and time, and they give the benefit to adaptive leadership by allowing them a safe space to operate, like a 'community of practice' of sorts. It separates joint knowledge (adaptive leadership) from joint power (administrative leadership) to create a constructive adaptive tension between those two other dynamics. This tension, which only emerges if knowledge is separated from power in a social process, may then propel CAS adaptation, meaning that both are connected again after all: knowledge once separated from power becomes meaningful for joint action. The CAS is gradually destabilised until adaptive tension moves it towards adaptation. They observe the effect of each step they make before they determine the next step. This is the actual coevolution between knowledge and power.

Transforming tensions between organisations to a shared tension between knowledge and power

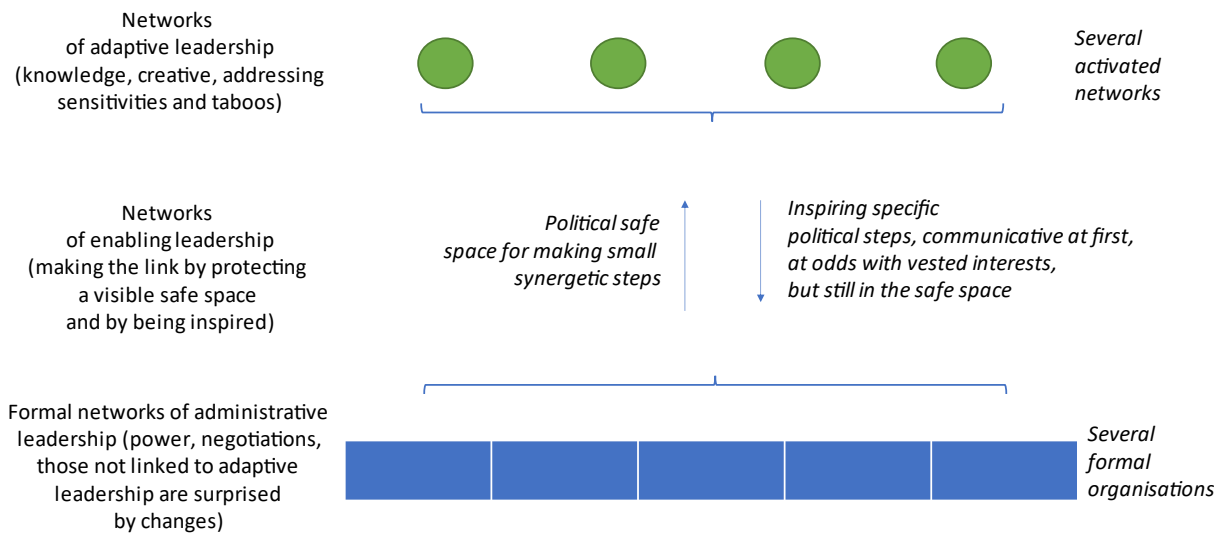
The constructive tension is also termed adaptive, opportunity, structural, or creative tension. It connects the current situation (networked power) with robust narratives about possibly more sustainable alternatives (networked knowledge). This tension drives the change in the formal hierarchies; power and knowledge develop in parallel and always influence each other in a coevolution. In each step of coevolution, it becomes a bit more widely visible that breakthroughs at scale may be coming, and administrative leadership may then inform their supporters with the preliminary work of adaptive and enabling leadership. For an adaptive tension to emerge, complexity leaders from different parts of a CAS must jointly 'see' the tension – i.e., they must each see it individually, and trust that others in the network see the same thing. They need to trust each other's narratives which is why they need to know each other personally. This can be called an 'activated' network of complexity leadership (with all three subdynamics). Many activated networks can exist in the same CAS.

Whether a CAS has room for complexity leadership at all depends on the management culture: do administrative leaders feel safe enough to spend their political capital on an investment in networked leadership? Do they present their results as a contribution to shared outcomes at CAS level? An open mind and relative fearlessness and optimism as dominant attitude in the CAS are first requirements.

⁵ Deutsch, Karl W. 1963. *The nerves of government: models of political communication and control*. New York: Free Press. p. 111

⁶ Nooteboom, S.G. & Termeer, C.J.A.M. (2013). Strategies of complexity leadership in governance systems. *International Review of Public Administration*, 18(1), 25-40; see also Catrien J.A.M. Termeer & Art Dewulf (2019) A small wins framework to overcome the evaluation paradox of governing wicked problems, *Policy and Society*, 38:2, 298-314

Tension between joint knowledge and joint power driving change



Notes on Beira, Mozambique

Reference is made to the Case Study on leadership processes in Beira, Mozambique as published in the Global Centre on Adaptation 'Light House Case Study: [A patient, process-oriented approach in Beira, Mozambique](#) (2021) (p.47 onwards)'

The Beira case can be analysed very well with the tools of the Complexity Leadership Theory. Mayor Simango was the archetypical adaptive, entrepreneurial leader who had all the knowledge of what his city needed. The Netherlands Embassy, and most other donors, were showing administrative leadership in their own right, although sometimes disconnected from the Beira situation and directed more towards internal goals and strategies. The Dutch delta team and the process management consultant showed enabling leadership by developing networks and initiatives that increasingly connected the reality of Beira to that of the donor community in the country. Most importantly these networks, through Round Table Dialogues, since 2015, have become safe spaces for joint learning and for exploring multi-party change initiatives such as, in a later stage since 2020, the sustainable O&M agenda which constitutes a complex institutional development and change process.

The created networks proved very effective after the devastation to Beira by cyclone Idai in March of 2019. The master plan itself, and the cooperation framework that had been established (including a national Post Disaster Needs Assessment, and the Beira Municipal Reconstruction and Resilience Plan) became a useful vehicle to identify major investment support for coastal protection, drainage and sanitation by the World Bank, the Netherlands, the European Union and German KfW. A total of approx. 150 million Euros in grants was made available.

Now, at the end of 2022, the networks that were created since 2015 through the Round Table Dialogues continue to provide a highly effective platform for cooperation and joint learning to all involved parties. Complexity leadership roles have been successfully consolidated and sometimes transferred to new participants in the network. The network as a whole is still growing in strength and effectiveness as a tool for delivering inter-institutional change processes.