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An ecological perspective on organizations and leadership

Gerda van Dijk, School for Humanities, Tilburg University, Director of the Zijlstra Center for Public Control, Governance and Leadership, Vrije Universiteit Amsterdam, the Netherlands

Abstract

This paper addresses the growing complexity with which society and organizations are faced, and the concomitant implications and challenges for leadership. Organizational Ecology, an ecological perspective on organizations, can help, not by reducing this complexity, but by developing other ways of exploring, engaging with and understanding this complexity. An ecological perspective implies an approach of dynamic, complex, adaptive configurations, having emergent qualities, being subject to underlying dynamics through time and forming part of and being affected by a greater whole. Complexity is regarded as a given, as a starting point. This paper further elaborates on the implications of an ecological perspective for organizations, for leadership and leadership studies, proposing a transdisciplinary approach that extends beyond the sum of different disciplines, and a strong interaction between theory and practice - an approach to discover simplicity in complexity

Keywords

organizational ecology, ecological perspective, complexity, leadership, management, ecology

Introduction

We live in a time of significant change, while many of us also feel the world is becoming increasingly complex. The reality is that throughout history people have tended to feel that way about their era, and "complexity" often simply means we have yet to identify and grasp the changes occurring around us: but each era comes with its own set of challenges, and the same is true for organizations. In this paper I focus on organizations. We all deal

with organizations in our daily lives, and many of us also work for or with them, while some of us have even established our own. Organizations provide us with income, and as their employees we feel useful and – hopefully – valued and respected. We know we are part of a greater purpose and can accomplish things as part of an organization that we could not achieve on our own. Virtually all collective actions aimed at bringing about change in a society are performed in an organizational context. Social trends and initiatives too, are much more likely to succeed if they are supported by existing organizations or backed by organizational principles. This makes organizations the most powerful agent of change in our society, determining what that society looks like now and what it will look like in the future. At the same time, we, as a collective, also create our own organizations. By developing a greater understanding of organizations and how they operate, eventually we may learn to do a better job of organizing our society and perhaps we may even learn to become better, more responsible citizens in the process.

The transition from the twentieth to the twenty-first century brought about great changes, which both undermined the belief that people had the power to organize and transform society based on their own precepts and subverted the idea that organizations could be controlled and managed. This is no ordinary transition in time: as we ushered in the new millennium we also entered a new cultural age.

Processes relating to globalization, technological advances, and the widening socio-cultural gap have made interpersonal relationships weaker, more erratic and less manageable. Sociologists have identified a new Zeitgeist with which society moves forward to the next stage of modernity. This is sometimes referred to as "reflexive modernity" (Giddens, 1991; 1994), "fluid modernity" (Bauman, 2000), the "Die Erlebnisgesellschaft" or "experience society" (Schulze,1992/2008). Castells (1996) refers to a "network society of networking individuals". Individualization has given rise to countless new – often temporary – social networks. Decisions made by political authorities are making way for individual and collective self-organizing initiatives, while at the same time a more educated and affluent population has moved away from traditional decorum, and human interaction is becoming more informal and relaxed. Individuals are on a quest for self-development and self-improvement, in search of increasingly

memorable and intense experiences, "following their bliss", and discovering their personal talents. Governments, public officials and religious or moral values passed down by previous generations are losing their authority. Meanwhile, information and knowledge have become available and accessible anywhere. Backed up by knowledge as power, the balance of power has shifted radically and irrevocably since the advent of social media and social networks. Internationalization and globalization have made the world both larger and smaller. We are seeing both significant cultural exchanges that are enriching and lead to innovation, and the trend of people withdrawing into their own communities out of a deep-seated desire to protect their cultural identity.

The modernity of hierarchy, authority and order has gradually evolved to the next stage, the keywords of which are complexity, diversity, and interdependence.

At the same time, we face significant challenges as a society, including the financial and economic crisis – which also represents a crisis of integrity and leadership – and issues relating to the public sector: how do we rethink and recalibrate security, healthcare and education? Moreover – whether we like it or not – we are also affected by global social, economic, and environmental issues - the global population growth, the growing gulf between rich and poor, food safety and the food supply, the depletion of natural resources, and other environmental issues all require more urgent attention.

Many people view organizations as the cause of a lot of these issues – but they will eventually come to play a key role in their solution.

Complexity and organizations

Any organization, public or private, can exist if it creates value for its environment – that is, for customers, employees, and society. If the environment changes, the organizations that co-evolve with their context are most likely to succeed and to survive (Fielder, 1967). Over time we have moved from a product-driven economy to a service-driven economy and are now shifting into an experience-, knowledge- and innovation-driven economy. The focus is on how managers approach their work and how

organizations' functions mirror these larger shifts in economy: over time we see organizations shift the focus to creating value and organization forms (Volberda, 1998; Scharmer, 2009; Uhl-Bien & Marion, 2011).

Since the early twentieth century, with a product-driven economy, the focus on value creation has been on standardized production. All ideas about internal organization, about the organization and performance of operational processes and their management have revolved around making the production process as efficient as possible. During the second half of the last century, when Western societies were rapidly developing into service-driven economies, organizations created value by meeting customer demand: they provided services and, in many cases, "tailor-made solutions". Subsequently we saw the development of service concepts - all ideas about internal organization are based on customer demand and customer experiences.

By the end of the twentieth century a knowledge and innovation-driven economy began to gain impetus. In this type of economy, value is created as a result of a creative process, of innovation. Together with others – particularly customers – value is defined and developed in a network.

These three types of value creation each require their own type of organization, functioning according a fundamentally different set of disciplines. So much so in fact, that we identify different organizational logics, each of which comes with its own worldview and mindset. In these three types of logics, we see the internal organization becoming more complex, from orderly and standardized processes to demand-driven and customer-specific processes, to a stage where the organization and its environment virtually merge together. We transitioned from a future that could be extrapolated from the past to a future that continues to unfold before our eyes. Initially, customers were considered buyers, while organizations were regarded as being discrete, disconnected from the outside world. We then saw a shift to customer centricity: the whole process of thinking about "what to deliver" and "how to deliver" begins with the customer. This involved a shift for organizations: they had to learn to think "from the outside in" instead of the other way around. In other words, the exterior world became more integrated with the interior world.

In the third logic – the knowledge- and innovation-driven economy – the line between organizations and their environment becomes increasingly permeable and blurred. Value is created in networks, in chains, in temporary, informal partnerships or in free spaces, virtual or otherwise. Organizational limits are becoming more open, and organizations are part of a greater whole in which they are influenced, managed and defined. At the same time, organizations also influence the greater whole. In this third logic we can barely distinguish who exercises influence on what. It is not clear whether cause and effect are related: we are dealing with what is known as circular causality and interconnectedness. Value creation is the result of co-creation in various (temporary) networks. As organizations evolve towards the third logic, leadership, management and the organization as a whole, must learn to function within a context of emerging diversity, interconnectedness and complexity.

It should be noted that these trends and features described here do not apply only to private organizations. Organizations operating in the public sector are undergoing similar changes. Public organizations initially structured the public services and products as defined by politicians according *The Traditional Public Management* logic. In *The New Public Management,* individuals were regarded more as consumers – customers or clients. In the paradigm of creating *Public Value* (Moore, 1995; Benington & Moore, 2010; Moore, 2013) the central focus is on creating public value which is defined in a deliberation process by the public, and products and services are formed in co-creation processes.

These three organizational logics (i.e. production, services and knowledge or innovation) emerged at different times and are essentially dominant, depending on the predominant mood during the era in which they occur. Although one begins where the other ends, they do not actually replace each other: instead the old form continues to live on in the new form. Many organizations incorporate at least two of the logics, but not infrequently, all three have been integrated. Thus not only is the third logic complex in itself, but also there is the phenomenon of three separate logics that can be present at the same time, entailing different practices. In such an environment people speak essentially different languages. On a day-to-day basis in organizations, the first logic tends to have a permanent, generative force. If

those at the top of organizations are not effective enough in protecting the various logics, there is a significant chance that the first of the "modern management" principles, dating back more than a century (Taylor, 1911) will be and remain dominant, as most of today's managers are trained in these principles by instructors who, in turn, are also steeped in them (Hamel, 2009). Tools and methods from the first logic are often declared dominant for the entire organization, even when dealing with issues from the second or even the third logic.

- *We aim to innovate in the sense of "creating", but we publish a manual titled "Innovation Manual".*

- *We call for greater "trust" in organizations, but end up drafting elaborate codes of conduct and corporate governance codes.*

- *We introduced the virtual workplace in order to achieve greater unity and foster innovation and communication in organizations – but at the same time senior executives still have their own offices.*

- *We claim to be willing to enter into "difficult conversations" with each other, but we also request an agenda and adhere to it.*

- *We express the wish to co-create with others, but if we do not like the impending result, we "assume our responsibility" and "intervene".*

These examples illustrate a strong tendency to fight diversity, interconnectedness and complexity by standardizing the organization. However, although this may be proved to be ineffectual, many organizations and their leaders are unaware of this and find themselves oblivious to the logic on which basis they operate or should operate in order to achieve their objective of continuity. The current dynamics and the changing issues we face call for leadership that can handle diversity, interconnectedness, and complexity.

Complexity and leadership

Leadership theory and research have undergone significant changes over the years (Grint, 2011). At the outset, the research focused on the qualities of a good leader, known as the "trait approach" or "trait theory", which was based on the assumption that we are better able to select and train our leaders if we know what are the characteristics of an effective leader. The question of whether leadership is an innate talent or a skill – in other words, the eternal "Nature or Nurture?" debate – has never been answered definitively. Decades of research have produced lists of leadership skills and created the understanding that leadership is always established through the relationship between leaders and their followers. In the second half of the twentieth century, leadership was predominantly conceptualized as a relational quality between followers and leaders. This is illustrated by studies on situational leadership (Hersey & Blanchard, 1977), transactional and transformational leadership (Burns, 1978; Yukl, 2012).

As I mentioned earlier, since the end of the twentieth century, society and organizations are faced with growing complexity. Currently, a trend in leadership studies can be discerned in which leadership is conceptualized as being related to the context and the types of issues with which organizations and society have to cope. While technical issues, both simple and complicated, merely call for effective management, complex problems require actual leadership (e.g. Heifetz, 1994; Grint, 2005; Snowden & Boone, 2007). Simple and complicated issues assume a certain order and cause-effect relationship. There are specific recipes or formulas, which, if applied correctly, provide the correct answers or solutions. Complex problems do not have clearly identifiable cause-and-effect relationships and also do not have an obvious best solution or correct answer. They generally ask the involvement and commitment of many partners with (partly) conflicting interests. In complex situations, we can recognize patterns, and professional expertise can help us find solutions, but none of this provides any guarantees for future situations. There is the need for continual adaption, searching for the best resolution, and experimentation – and of course there is a fair bit of luck involved as well. Complex issues call for a type of leadership that recognizes who and what conditions are needed in order to organize a process that leads to a solution – and which can subsequently create those conditions. The solution may then become apparent - "the solution emerges". Scharmer (2009) notes a combination of, and interaction between, three types of complexity: 1) Dynamic complexity whereby cause and effect are not immediately clear and there is a delay between cause and effect and, by extension, between intervention and effect. Take climate

change for example, even if we were able to comply with carbon emission standards, temperatures will still continue to rise for many years to come. 2) Social complexity, where there is a difference in interests, worldviews and values. The greater this social complexity, the more important this multi-stakeholder approach becomes, in which all stakeholders have a voice and let these voices be heard. 3) Emerging complexity, which refers to complexity that occurs when the solution to the problem is not clear, the problem is still unfolding, and it is not apparent who the stakeholders are. Emerging complexity is characterized by the lack of possibilities for extrapolation.

The greater this emerging complexity, the less we are able to rely on past experience. At times of shifting trends, when the future cannot be predicted based on past patterns, complex issues need to be addressed as they develop. The knowledge required represents a "white spot" and still needs to be developed. There is a need for a deeper social "attention structure" in which the intelligence of the open mind, the open heart, and the open will are all employed. In leadership the focus must then shift from the results achieved by leaders (the "what") and the processes used by leaders (the "how") to the sources from which leaders (the "who") operate. The main leadership tool is the "Self" - the state of mind of the leader as the source from which all action originates. This requires the full human repertoire to be called on and employed - the intellect of the mind, the empathy of the heart, and the spirit of the will – the driving force behind all action for both individuals and groups.

All this has brought leadership theory to the next level. Leadership being conceptualized in relation to context and issues is considered more and more as an organizational or system quality from small organizations to large networks. In this conceptualization, leadership can be found at all levels, and all those involved, individuals and organizations, are given agency - the potential to influence others, to lead and contribute. Some leadership concepts that illustrate this include Connective Leadership (Lipman-Blumen, 1996), Distributed Leadership (Spillane, 2005), Servant Leadership (Greenleaf, 1996), Invisible Leadership (Hickman & Sorenson, 2014) and Complexity Leadership (Uhl-Bien & Marion, 2008; 2011). The Complexity Leadership Theory goes as far as perceiving explicitly leadership as something that occurs in and is embedded in a complex,

adaptive, dynamic and multi-layered field with many different players occupying changing positions. The Complexity Leadership Theory considers and examines "complexity dynamics" as social mechanisms that occur wherever people interact with each other. Complexity dynamics are the forces that occur along with the emergence phenomenon. Emergence refers to self-organization - the development of complex, organized configurations, with a lack of any central or targeted control. Emergence is then assigned a phenomenon we also recognize in ecology: it is a feature of living systems that cannot be deduced from the features of the individual parts, since in the relationships between the (living and non-living) parts, the parts are subject to change. At a deep level, new emergent qualities develop and, in turn, these cause the relationships between the parts to change. According the Complexity Leadership Theory, in such systems, leadership is identified as three roles in the management that must be filled - administrative leadership or bureaucratic leadership (without becoming bureaucratic), adaptive leadership and enabling leadership, which "enables" others. In conceptualizing leadership this way, it seamlessly integrates a call for leadership coping with diversity, interconnectedness and complexity.

Without creating the suggestion of a list or summary, a change can be perceived in thinking about leadership. Leadership was initially regarded as a quality of competence of individuals, and later it was considered in the context of the relationship between leaders and their followers. The current trend is to regard leadership as part of and a feature of a dynamic, complex, adaptive configuration with emergent qualities, where all participants are assigned leadership. Of course, this also means everyone is able to influence the organization as a whole.

Organizational ecology

We perceive diversity, interconnectedness, and complexity all around us. While establishing control over complex systems remains out of reach, better understanding of complex adaptive systems leads to better ways of dealing with uncertainty and ambiguity as indicated by the frontier science referred

to in the literature as Complex Adaptive Systems (CAS)[1]. Morin (2008) elaborates that these so-called 'restrained' complexity theories remain within the epistemology of classical science, aiming at creating order through reduction - looking at a small number of elements and then look for cause and effect. This approach has given us a greater understanding of how to deal with both simple and complex issues. However, applying this approach – which draws on traditional system theory, cybernetics, chaos theory and contingency theory – simply does not suffice in case of so-called 'general' complexity. "In the classical view, when a contradiction appears in reasoning, it is a sign of error. You have to back up and take a different line of reasoning. However, in a complex view, when one arrives via empirical means at contradictions, this points to the fact that we have reached a deep layer of reality that, precisely because of its depth, cannot be translated to our logic." (Morin, 2008:45). General complexity requires an epistemological rethinking and a paradigmatic shift from reductionism, simplification and controls common in the classical natural sciences, to a form of complexity that "requires one to comprehend the relations between the whole and the parts" (Morin, 2008).

Following this thinking on complexity, I suggest that organizations should be viewed from an ecological perspective: that is to say, starting from ecology as a fundamentally connective discipline. This field has examined the functioning of open, dynamic, and complex configurations – ecosystems – since the beginning of the twentieth century and uses complexity as a point of departure.

Organizational Ecology[2] as used here, draws on the "original" ecology and approaches organizations from an ecological perspective. As I noted, an ecological perspective is already emerging in recent organizational and leadership theory, but how do we define an "ecological perspective"? I will limit myself for now to what I consider the four main characteristics.

First of all, an ecological perspective approaches organizations as living configurations, consisting of a large number of interacting agents - individuals, teams and departments operating within specific physical conditions such as buildings, along with resources, tools and procedures that influence and shape each other in horizontal, vertical and diagonal relationships. Relations and relationships between the agents, between "humans" (Weick & Sutcliffe, 2007; Gergen, 2009) and also between "humans" and "non-humans" are considered essential (Latour, 2005). These interactions are non-linear, and minor changes can disproportionately engender substantial effects.

Second: from an ecological perspective, organizations are more than the sum of their parts: they have emergent qualities. Schein (2004), Senge (1990) and Isaacs (1999) are examples of scholars who describe the role and importance of emergent qualities within organizations such as organizational culture, learning ability, trust, and safety, respectively. It is actually the more elusive qualities that play a role as emergent phenomena in organizations. It is the emergent qualities that determine whether an organization is successful or not, whether people want to work there, whether employees feel valued, and whether an intervention has a constructive or an adverse effect. Emergent qualities are not easy to manage or quantify, and cannot be directly deduced from the characteristics of the parts, yet they are tangible and recognizable all the same. In fact, you could consider them inevitable.

Third, from an ecological perspective, organizations are always subject to an underlying dynamic through time: it is inevitable that they change. I see many actual organizations change on a daily basis, despite – and sometimes thanks to – their management. An ecological perspective regards the development of organizations in terms of dynamics in time and the organizational lifecycle (e.g. Greiner, 1972; Cameron & Quinn, 1983; Baum & Shipilov, 2006; Van Dijk & Peters, 2011). Each organization has its own history. The past has been integrated into the present and has its own underlying dynamic, in which autopoietic and adaptive capacity play a key role.

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[1] The field of Complex Adaptive Systems (CAS) is approximately 20 years old, having been established by physicists, economists, and others studying complexity at the Santa Fe Institute in New Mexico, USA.

[2] Originally, studies in Organisational Ecology approached organisations from a population dynamic, evolutionary and/or Darwinist perspective (Hannah and Freeman, 1977; 1989).

Box 1: Autopoietic and adaptive capacity

> *As in ecosystems, organizations have a number of characteristics that are designed to maintain the organization and ensure its survival: we refer to this as their "autopoietic capacity" (Beer,1979; Maturana &Varela,1988). Examples of this include "resistance to change" and the "self-cleansing ability". Autopoietic capacity is also aimed at maintaining one's own nature or individual identity. A strong vision and mission and organizational values may be expressions of autopoietic capacity. At the same time, organizations must also be able to respond to signs from the environment and be able to adapt accordingly: this entails adaptive capacity. Examples include organizations that respond quickly to new market opportunities, continue to develop and are able to cooperate.*
>
> *Autopoietic and adaptive capacity are both vital to organizations, although they also work against each other. If they are in balance, they generate a creative tension and dynamic and enable organizations to evolve. However, if one or the other is too dominant, this will either result in isolation and eventually death, or it will be fully integrated into its environment and disappear as a result.*

Fourth: from an ecological perspective, organizations themselves also form part of larger entities, including communities of practice, professional groups, and local, regional, national, international and global markets. They are influenced by these entities while at the same time having an impact on the greater whole. We determine ourselves how we define organizations and their borders, if any. Organizations and organizational limits are constructs; they are ambiguous. It is essentially a choice we are making: we determine the organizational limit based on the perspective, the objective, the significance or the meaning we assign to an organization.

In studying organizations, an ecological perspective compels us to put the day-to-day operations of organizations first. We are used to considering organizational performance based on a variety of academic disciplines and logics, including business or organizational logics (instrumental rationality), sociology (the nature and dynamics of social relationships) and psychology (underlying psychodynamic processes). In real life however, there is no neat division between these disciplines: in actual organizations, they are intricately and inextricably linked. An ecological perspective involves a more holistic approach and synthesis rather than reductionism and analysis

– without ever losing sight of the analytical component. This calls for a transdisciplinary approach, which extends beyond the sum of discrete disciplines: a transdisciplinary approach creates meanings in the interaction between different disciplines, approaches and organizations – between theory and practice.

An ecological perspective on leadership and leadership studies

Leadership is an essentially contestable concept, however, it can be helpful, Grint (2000) contends, to map processes of the leadership phenomena. Here, I follow Marturano et al. (2013) who propose "an understanding of leadership as an asymmetrical (albeit interactive and mutual) influence process that serves to articulate, clarify, and facilitate the accomplishment of a group's (organization's, community's, society's) objectives (including, importantly, survival). Thought of in this way, it becomes clear that leadership in some form or another exists essentially any time humans come together to accomplish things. Such a definition permits – indeed, invites – studies of the phenomena of leadership that include not only a fixed focus on 'task accomplishment' or 'member satisfaction,' but also the consideration of broader matters such as the dynamics of context, the philosophical 'meaning' and moral implications of leadership and its objectives, and the impact of leadership on people, both in groups and considered as individuals."

In studying leadership (interventions), an ecological perspective helps us to conceptualize leadership as it allows for the widest possible spectrum of analysis. Leadership studies, in this perspective, are not necessarily about finding the conceptual, correct answer, but rather about exploring, engaging with and understanding leadership phenomena emerging in establishing a substantiated and balanced frame of action, in the context of a continuous changing, dynamic configuration an organization. This means that when faced with complex issues we need to ask ourselves different questions than those we are used to asking from a positivistic and reductionist view. It involves finding patterns in relationships, interactions and underlying dynamics. For example:

if we are to innovate in the sense of "create", we ask ourselves questions such as:

- where are the informal and formal networks and relationships as sources of innovation?

- what is required in order to be able to further strengthen these networks?

In our quest to create more "trust" in the organization, we ask ourselves questions such as:

- where do we find trust in the organization, and why does it exist there and not in other areas?

- how can we use informal systems in order to help people develop more confidence/self-assurance?

If we want to intervene, we ask questions such as:

- what stage has the organization reached in its lifecycle?

- what are the corresponding cultural differences?

- what types of interventions and leadership styles are effective and which are not effective?

In Organizational Ecology, complexity is regarded as a given. It serves as the foundation for current private and public organizations and the context of which they form part and in which they operate. The field aims to increase insight into and understanding of complex issues for organizations by actually approaching them as the complex issues they are and investigating them in the process.

From an ecological perspective, like research into ecosystems, research extends to organizational practice as a whole, its components, and the relationships between the two. The fact that the object of the study is 'outside' the university, calls for researchers with practical experience who are able to know and consider the various elements, their interrelationships and the overlying patterns. Because that is one valuable lesson we can learn from ecologists - the importance of observation and identification in the "field". It is only when we are immersed in practical experience – up to our necks, so to speak – that we will come to recognize patterns for what they really are. To achieve this, we need to apply specific type of research

methods: for example, conducting research on a day-to-day basis, in and with organizations and individuals, combinations of quantitative and qualitative approaches might involve "action research", "intervention research", "design-oriented research". Another example would be taking advantage of the practical wisdom of individuals and organizations: in this case, we let practical experience speak for itself. One aspect of ecology that is radically different from Organizational Ecology is that with the latter the object of the study generates the data itself. This is self-evident, as human beings working in organizations assign meaning to their practices themselves. In other words: relationships between people give rise to practices and meanings (e.g. Gergen, 2009). Consequently, reflection and discussion are key aspects of the research. Thus Organizational Ecology aims to create interaction between theory and practice, between communities of practice and academia. First and foremost, the emphasis is on acquiring practical and empirical knowledge and integrating this into the academic framework through academic "rigor and relevance".

Organizational Ecology, as used here, focuses on exploring, engaging with and better understanding, how organizations function as dynamic, complex, adaptive configurations, so that we will be able to intervene more effectively. An ecological perspective can support management and organizations as they move forward to face the challenges of an ever-increasingly turbulent global economy.

The positivist and reductionist approach has brought us a long way, but the current times may call for wisdom rather than theoretical knowledge. I would encourage all academics and scholars to tap the rich source of daily practices. Academic knowledge, which is strongly rooted in practical experience, will then allow us achieve more wisdom and discover simplicity in complexity.

This will not be a simple process, but done I believe will ultimately turn out to be very rewarding.

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