Christopher Dell/Wolfgang Stark

Tuning in to organizational innovation – music as a metaphor to understand the improvisational field in organizations

What allows today’s companies and organizations to be innovative in a complex world?

How can we disclose the secrets of an innovative culture in organizations?

Can musical language and a technology of improvisation play a major role as an innovative approach to meet today’s challenges in organizing complex processes?

Many have tried to understand why some organizations are innovative and creative and manage to adapt to today’s complexity while others are not. As organizations face increasing uncertainty and complexity, they will need to invent solutions to problems which cannot be anticipated - or even imagined - in advance. In this climate, new knowledge and insight will be created and shared through new types of conversations. These new conversations will need to be deeply creative - as much as the kind of collaborative conversations artists have as they work together. One of the most complex kinds of artistic conversations are musical conversations; the spontaneous and yet highly skilled and present improvisations between musicians.

The research project “Music_Innovation_Corporate Culture” (www.micc-project.org) is using new knowledge based on the language of music for the process of organizing (Weick 1987) in companies, organizational networks and innovative collaborative processes. In a quest to disclose the secret of innovative organizational cultures the methodological approach of the project tries to identify the patterns of innovative cultures by linking organizational settings by using musical thinking and the patterns of improvisation (Dell 2002).

The Improvisational Field

Complexity and turbulence are the key words for the contemporary world we live in: organizational situations constitute a net of superposed timelayers and contingent, sudden aggregations of communication. The economy of production and organisational technologies unfolds in a texture of cooperation of diverse models of partnership from the small cell team to the strategic alliances of organisations. An organizational situation has emerged in which the tentative and the provisory becomes the status quo. Thus, the inventive production of improvisation becomes a norm in itself: challenge and possibility.

Improvisation ethymologically descends from the latin "improvisus", which means unforeseen, unexpected. The term improvisation belongs to the realm of what-is-not-yet. Thus improvisation cannot be described in itself, but can be localized as a continuous readiness and an ability to

---

1 Christopher Dell, a professional jazz musician and organisational theorist, is founder of the Institute for Improvisational Technology (Berlin, Germany)

Wolfgang Stark, Dr. phil., is professor for Organizational and Community Psychology and director of the Organizational Development Lab at the University of Duisburg-Essen, Germany.

Both are members of the research team of “Music_Innovation_Corporate Culture” (www.micc-project.org), based on a research grant in the program “Innovation Strategies Beyond Traditional Management”

2 MICC is part of a research cluster on “Innovation Strategies Beyond Traditional Management”, funded by the German Government
improvise. Everything else will come out of the situations and their processes. Field, network, variation principles, are the categories of action on fluid ground. To improvise in situations of ambiguity, alertness and presence become key features. Moderation not only becomes the model of governing teams and situations. Improvisation positions itself as a technology that also takes into account the agreement, the actual state and the autobiographic characteristics of the individual in a group process.

Improvisation does not differentiate between thinking and acting, but intensifies the movement between the systems of the body. Improvisation therefore acts as a controlling system in the navigation between the difference of intersubjective openness and solipsistic moments of subjectivity. Then, intellectual work, social experience and practical-intuitive competence is converging – as is the difference between the individual and the collective in social systems, and the difference between the past and the future in time (Scharmer 2009). If improvisation acts in a mode of permanent crisis, in the mode of permanent decision-making, we haven’t defined how the decisions come about. Here the abilities come into play that empower us to judge. Hannah Arendt lays out, that Kant’s notion of the faculty of judgment is connected with the sensus communis, with the community as the site that allows us to develop and discuss: critique becomes an open system. So the power of judgment develops its criteria and scale out of the public sphere of negotiation. Improvisation in contemporary societies is the faculty of judgement in real-time.

Pattern Mining within the Improvisational Field of Organizations

In addition to traditional social science methods like interviews and participant observation, the MICC-project elaborates on two specific methods in order to detect improvisational patterns in organizations: the Musical Learning Journey develops a format of a “conversational performance”, in which a Jazz Combo as part of the project tries to grasp the artefacts and basic values of an organizational culture, transform it into a musical performance as a basis for a cultural discourse on a specific organization. This is to open peoples’ minds and organizational culture for musical thought as an alternative way of organizing.

As a second step people in organizations will develop graphical musical notations (scores) of their organization/department/work in progress, based on the idea of new way of musical thought known as “New Music”: the scores show the lay-out of a graphic notation which is coming to life via the performance (acting) instead of the interpretation of a given piece of music. Here, in the process of the performance, while acting, the sound will emerge as part of a joint creation (not interpretation) of reality.

Based on this, the non-representational notational drafts of the New Music precisely thematize the relationships between design, recording, repetition, interpretation, reproduction and improvisation. In connexion with organization studies and analysis, the goal is to detect and analyze a range of topics developing in parallel, which investigate the transposition of the temporality of artistic processes and methods of communication. In artistic modes of production, notation takes on new meanings, or functions as a working tool that alters the form of art itself, as well as the way it is made and reflected. It is therefore important for us that notation in New Music is understood in its essential aspect, the creative act.

---

3 Arendt, Hanna, Lectures on Kant's Political Philosophy, Chicago 1992
4 Immanuel Kant, Critique of Judgement, Indianapolis 1987
Fig 1: Organizational Score as a musical script of a work-in-progress

The analysis of improvisational patterns in organizations is based on C. Alexanders (1977) concept of "a pattern language" which are unfolding and changing within the values and principles of organizational cultures as flexible forms problem solvings proved to be viable and succesful in practice. According to Borchers (2008), in each practical fields the notation of patterns will follow formal principles:

"Each pattern is a set p={n, f1…fi, s, e1---ej} of a name n, forces f1…fi, the solution s, and examples e1…ej. It describes a commonly encountered design problem, and suggests a solution that has proven useful in this situation.

A pattern language is a directed acyclic graph. Each node represents a pattern. There is a directed edge from pattern p1 to p2 if p1 recruits p2 to complete its solution. Edges pointing away from a pattern are its consequences, showing what lower-level patterns need to be applied next. Edges pointing to a pattern are its context, the situations in which it can be applied. This relationship establishes a hierarchy within the pattern language. It leads the designer from patterns addressing large-scale design issues, to patterns about small details." (Borchers 2008, p. 116)

Patterns can be the key to understand the principles of organizations and the deep levels - "the unknown" - of modern and complex organizational cultures. But patterns and a pattern language in organizations today have to enhance flexibility instead of stability, the creation and detection of new forms of conversation and relationship ("serendipity" acc. to Cunha 2005). Therefore the built-in principles of patterns and pattern language (the "patterns of patterns") have to meet the parallel challenge of continuity and variability which is analyzed in non-linear systems (Brockman 1995). Improvisational patterns therefore bear the built-in dynamics of repetitive principles and solutions combined with extreme variability and complex time frames which we also can find in fractals.

Fig. 2: Fractal Picture and the „Serpinski-Triangle“ as an example for repetitive creative systems
Organizational innovation today is based on the art or technology of improvisation: how and when can patterns create new dynamics and a new set of patterns which itself is creating a new and combination unexpected combination of patterns as part of the performance process? How can we describe and experience communication in the sense of synaptic transmitters between organizational patterns?

Improvisation Technology in Organizations

Research on a technology of improvisation, while using knowledge from the performing arts (especially jazz and contemporary “new” music, but also from modern forms of theatre and dance), develops practical tools for innovation processes in organisations and social systems. By testing and researching it opens up new models of improvisation. While taking into account the fact that improvisation practise enables us to navigate through the new organizational spaces which are characterised by new dimensions of abrupt change, uncertainty and insecurity, the organization then becomes a transit place, choreographed by a huge, complex variety of rhythms in which we navigate and perform at the same time.

Originally, the term improvisation was used to describe a stage of repairing situations, to correct in a sloppy way what went wrong. Although improvisation was inherently associated with flexibility and mobility, it was only ever meant to be in temporary use. Now the situation seems to shift: complex social space takes on the qualities of permanent improvisation. The lifestyle of transition and transformation becomes one of the key features of the everyday life. Therefore, organizational patterns also, originally being exemplars of linear planning, decision making and evaluation, have to adapt to a situation of complexity and awareness and towards the art (or technology) of improvisation.

Improvisational Learning

At first sight improvisation works in a disorderly fashion and seems unprofitable and ineffective. But this first impression also shows that the process works. Why? Because the process triggers those questions that it wants to trigger. Put another way, improvisation works because it contains difference, gaps, looseness, and interspaces, which are available for the active interpretative work of the recipients, thus helping to qualify their experience. In an improvisational process, the actors develop those sensors that they need in order to grasp directly the ambivalence of a situation, to interpret it, and make it usable. Cunha (2005) says: „In the improvisational mode, people act in order to learn.“ Improvisation can thus be described as a technique, that allows to integrate serendipity as a learning process, that involves proactive learning. This does not mean, that analysis is excluded. Rather the opposite. It just says, that the performative aspect of learning is put into focus. Analysis then concentrates on the re-arrangement and re-interpretation of material that is gathered through the improvisational process in that way, that it is connectable to new processes in time. The analytic work then relies on qualified experience and the development of complexity-sensors that should lead to a transformation of attitudes and thus enable ecological change. But in order to do this, you need to develop the abilities needed to recognize change, allow it and help design it.

As Mintzberg and Westley stated, people in organisations and social systems may learn through analysis, intuition or improvisation. Analysis is a structured process that may or may not lead to surprising findings. The analytical mode does not only assume an ontological base that is externalized from existing situations, it also starts from this base. The intuition mode derives its learning results from establishing connections that were not previously proposed. The improvisational mode is structured very differently: people not only act in order to learn, but also try to incorporate analytical frameworks into action that becomes a learning laboratory for the „reflective practitioner“. Graebner

5 Cunha, Miguel P., Serendipity. Why some organizations are luckier than others, Lissabon 2005, S.8
showed that an important source for creating value is a mode of serendipity that is caused by exposure to different practices. In the MICC-project, the research practice exactly aims at this mode of serendipity: to trigger the process and use the fact, that the different practices carry different forms of surprise. In this way we try to apply what we analyze to our own process. The only way to do this, is to include improvisation in the experimentation and research process itself and to make that visible.

Improvisation is the mode of action that ensures the independence of the structures it contains as value and precisely in this way maintains the content of design while keeping the process open. That implies that those who practice improvisation also practice recognizing patterns that others overlook, and use these patterns pragmatically, subtly, or even ‘trendily’. From this, one important factor is emerging: the fact that improvisation does not, as often is expected, need less time and planning. The opposite is the case: a constructive handling of disorder as a cooperative transgression of the plan is potentially more difficult, needs more time for preparation and follow-ups. To be too open in the process also may weaken the process and rob it of direction. Therefore improvisation requires high concentration on coordinating measures and interaction.

Improvisation often is avoided because there is no time available for interpreting ambivalent designs. Why is it worthwhile to invest time in improvisation, i.e., active interpretation? Because those who take the time to reflect on situations and their potentials and try to integrate these reflections in open processes of action, are able to accept ambivalence, thus expanding their scope of activity and their effective degrees of freedom. Why? Because they are able to recognize when ambivalence is functional and when it is dysfunctional. Here both can be functional on a situation’s meta-level. If one’s improvisational abilities are expanding, the ability to process ambivalence in a given time frame is rising, because: an ongoing practice of improvisation may enable people to recognize and play on global time horizons as well as macro-rhythms.

**Improvisation in Mode 2**

Improvisation follows Latour’s dictum that we cannot externalize. Consequently, a research process is not a space where we determine what is already there, but it is a space that is permeated by possibilities, a field of options that are to be anticipated. In a traditional research setting it is pretended that the analysed epistemological space is an objective spatial structure which is only ruptured when something ‘goes wrong’. Then we ‘repair’ the situation and everything continues in the ‘planned’ manner. This way of solving complex situations might be called improvisation of the first order. Improvisation of the first order acts only as a reactive principle, repairing a lack of order or a problem in the process. Our concern, on the other hand, is to also reveal with our way of performing the mode of production of our current organizational reality, i.e. to view ourselves as performative organizational producers.

How does that work? We use improvisation of the second order as a translation of learned rules and practices into an anticipatory concept that does not fade away with planning or framing. As a permanent experiment and continuous navigational exercise, that is sometimes more and sometimes less in crisis, it tries to transgress planning as a transversal process. Improvisation of the second order is space production as creation.

Improvisation – the term already suggests this – is a method more in the sense of a “techne” (craftsmanship) that cannot be standardised: art. One might therefore speak of an improvisational technology as social technology that helps to organize the courses of action of spatial production. But it is simultaneously also a perception of reality, ontology of transformation, which shifts the emphasis from the object to the relationship and from the relationship to the process. Technology becomes improvisation partly because it generates information from its courses of action on the one hand,

---


9 Latour, Bruno, En tapotant légèrement sur l’architecture de Koolhaas avec un bâton d’aveugle..., in: L’Architecture d’aujourd’hui, 361, Nov-Dec 2005
which in turn provides future orientation for the actors involved, and on the other hand has constructive effects on the ambivalence of a situation. As a technology, however, improvisation also produces a large quantity of raw data, which creates the need for the improvisers to organize, i.e., to link and structure raw data in such a way as to ensure that action remains possible.

**Improvisation as a Basic Tool for Modern Organizational Dynamics**

What does this mean for the conception of the organization? We begin from the basic assumption that representational expressive forms as notations and conceptions are no longer adequate to discover how organizations are functional. Contemporary forms of organizations begin to explode, because their movements have already exploded. Therefore we suggest that a focus on the figurative object of organization is no longer helpful in this respect. Rather, it is much more helpful to focus on the vision and process of organization, and, by using artistic processes and modes of communication, try to analyze patterns of the improvisational field in organizations.

Today, “production is immediately consumption and recording process (Enregistrement), without mediation. The recording process and consumption accord directly with production, although they do so within the production process itself. Hence everything is production.” (Deleuze & Guattari 2009). The structures to be revealed only make sense when shown in their functioning, for they are either representations or the bearers of relationships of people (Weick 1987). The diagrams of the organization are not directly representative. Rather, they are the bearers of relationships and the distributors of agents.

In this respect the interdisciplinary set-up of MICC is not intended to interpret the organization as music but has rather to be seen as an exercise to introduce musical thought (whereby thought is not to be reduced to mere cognitive processes but to a conceptual embodiment) into the analysis of the organization as performative process.
References

Arendt, Hanna: Lectures on Kant's Political Philosophy, Edited and with an Interpretive Essay by Ronald Beiner, Chicago 1992


Crossan, M; Cunha, M P; Cunha J V & Vera, D: Time and Organizational Improvisation. Universidade Nova, Lisboa 2008


Cunha, Miguel P.: Serendipity. Why some organizations are luckier than others, Lissabon 2005, S.8


Kant, I.: Critique of Judgement, Indianapolis 1987


