THE ART OF JAZZ
IMPROVISATION AS AN
ADAPTIVE MECHANISM FOR
CIVIL SERVANTS IN COMPLEX
GOVERNANCE NETWORKS
Samenvatting
Fragmentatie van macht en verantwoordelijkheid in netwerken is een van de eigenschappen van complexe omgevingen waarin ambtenaren opereren. Dit artikel verkent de werking van jazzimprovisatie als mogelijk adaptief mechanisme. Dit heeft geresulteerd in de beschrijving van vijf samenhangende randvoorwaarden voor ambtenaren. De correlatie voorbij de metafoor van jazzimprovisatie is de overeenkomst tussen de hoge opleiding en vaardigheden van zowel ambtenaren als muzikanten. Beiden opereren in dynamische omgevingen die constant inschattingen over publieke verantwoordelijkheid, leiderschap, controle en de realisatie van constante kwaliteiten vereisen. De individuele kwaliteiten, relaties, repetitieve aard en sterk leiderschap uit jazzimprovisatie zijn van toegevoegde waarde in het genereren van flexibiliteit en om te anticiperen/reageren in de huidige en veranderende condities die complexe netwerken vergen. Het toont eveneens de weergavemogelijkheden om creativiteit te uiten volgens vastgestelde regels in composities en arrangementen. De geleerde lessen uit jazzimprovisatie creëren nieuwe mogelijkheden en uitdagingen voor verder onderzoek naar de mogelijke en effectiviteit van vernieuwde vaardigheden voor ambtenaren.

THE ART OF JAZZ IMPROVISATION AS AN ADAPTIVE MECHANISM FOR CIVIL SERVANTS IN COMPLEX GOVERNANCE NETWORKS

Considerable amounts of power have shifted away from national governments. These shifts have occurred upwards towards international organisations, sideways owing to privatisation and the creation of non-governmental organisations, and downwards due to decentralisation of power towards lower tiers of government and other public organisations. This type of fragmentation results in complex situations for governments.

One of the characteristics of this fragmentation can be attributed to complex networks hosting different actors that share public responsibilities (Theisens, 2012; 2015:15-17). Although the influence of networks and relationships of actors as a form of governance and participation is well researched (e.g. Howlett et al., 2009:85-86; Klijn & Koppenjan, 2012; Provan & Kenis, 2007; Teisman, 2000), complexity remains an issue. The dynamics within governance networks increase with shifting structures and concepts, scattered leadership and control. Since governmental bodies are one of the main actors in these dynamic networks, subjectivity to these fundamental shifts in responsibilities in a more ‘liquid’ environment rather than a stable structure, raises the question of how coordination is realised and maintained.

It is this complexity that requires a new role for civil servants which creates a number of challenges. The tension of vertical responsibility and horizontal participation within networks means a reoccurring (re-)assessment of considerations, reviewing the importance and interest of procedures as well as power and control by civil servants. Equipping civil servants for fragmented responsibilities and power in this complexity is deemed necessary as more and more services and policies are formed and developed in networks. The Dutch Scientific Council for Government Policy (2002:6) stresses the consequences of networked interaction on values, production and knowledge, and knowing how to act and react in this environment could benefit from jazz improvisation insights.

Just as with jazz, where the improvisation of highly skilled musicians leads to new and beautiful music, it is suggested that improvisation between highly skilled public actors may lead to new and effective ways to produce public goods, services and values, due to its described adaptive ability towards networked governance systems (Boutellier, 2011).

This notion is interesting and of importance for Public Administration as a field and in particular for civil servants, as the ability to improvise could act as a sustainable solution in the previously described dynamic and current complexity in which they have to operate. As jazz improvisation is immensely researched in the organisation studies (see Cunha et al., 1999; Dennis & Macaul-
Knowledge, expertise and skills

Berliner (1994:1172) mentions the importance of technical proficiency of the instrument in order to establish accessible and applicable knowhow. Alongside knowledge on musical theory and the practice of harmonics, melody, rhythm, dynamics, chords et cetera, Whitmer (1953) and other authors (e.g., Berliner, 1994:174,186,215) explicitly address the chief principle of an easy and fluent improvisation as the exhaustive and rigorous study of the melodic, harmonic, rhythmic and structural aspects. Composed pieces or tunes, consisting of a melody and an accompanying harmonic progression, could provide the structure for improvisation. But knowledge is needed in mastering the chord progression of each piece as a fundamental guideline because of its role in suggesting tonal material for the melody's treatment and in shaping invention to its harmonic-rhythmic scheme (Berlin, 1994:63, 71).

Jazz musicians often learn to improvise by listening and copying from recordings or live performances, other players' musical phrases (or even whole solos). Jazz players also learn to assimilate musical "rules" concerning patterns to certain harmonic progressions, either explicitly, through a study of 'music theory' or, less methodically, by developing an "ear" for the accepted idioms. Both Barrett (1998:283) and Pressing (1984:353-355) acknowledge that the best players practice relentlessly by imitating master soloists, repeating patterns and phrases over and over until they become tacit and automatic, programmed in their conceptual, muscular and musical coding as well as in their motoring skills. Trumpet player Clark Terry summarised the creative process as "imitate, assimilate, innovate" (in Sabatella, 1992), which is also fully endorsed by Dennis & Macaulay (2007:609). It is this experience of learned routines and knowledge that results in skilled improvisation (c.f. Hatch, 1997; Miner et al., 2001 in Bergh & Lim, 2008).

Group dynamics

Having qualified and knowledgeable individuals working together within a group is key for the overall performance. Cohesion, role definition, social structure, open communication, "configuration of musical personalities and talents", self-expression and group welfare, mentioned by Berliner (1994:418), are all subject to the dynamics of a group. Although these elements are of importance for a successful performance, it takes time to alter and achieve. A critical element in group dynamics is urged by Wynton Marsalis as 'group improvising', which teaches the individual to adjust to the circumstances beyond personal control and employ a portion of influence to create something cohesive (in Miles & Carter, 2008:7; also see Newton, 2004:98). During collective improvising, the activities of creating, listening and evaluating become integral parts of the same process (Berlin, 1994:387). Rehearsing over and over with one another shows an effective way of aligning individual skills with the intensions, resourcefulness and dynamics of the group.

Methodology

In order to explain how jazz improvisation works, a broad and wide exploratory literature review was conducted across several disciplines (e.g., strategic management, marketing and organisational studies). A thorough analysis of this research resulted in a synthesis of the main components of jazz improvisation, providing the preconditions in which the components work as a cohesive framework.

Preconditions of jazz improvisation

The discourse in the various disciplines and sources (see for an overview Hartog, 2014; Moorman & Miner, 1998:700-702) proved to be ambiguous. Two camps can be observed. The first with the orientation on the Latin derivative of improvisation imprōvīsus, meaning 'not seen ahead of time'. This approach interprets jazz improvisation as extemporaneous, without a script, where music is composed and performed simultaneously with no rehearsal or chance to work out the ideas in advance (Barrett, 1998). The association with simultaneously composing (planned act) and performing (spontaneous act) without the aid of manuscript, sketches or memorised compositions inspired many authors (e.g. Barrett, 1998:283; Berliner, 1994:1; Crossan et al., 2005:131; Kamoche, Cunha & Cunha, 2003; Zagrofas, 2004). However, due to its shallow applicability, it lacks explanation on how it works and how it could be learned.

This is where the second orientation on jazz improvisation could be of more interest. Despite the 'on the spot' creation, improvisation could mainly be described to be a structured 'thing', which requires much thought and study (Berliner, 1994:63; Edberg, 2008; Sabatella, 1992; Whitmer, 1953:1). Several authors (e.g. Dennis & Macaulay, 2007; Hill, 2005) dissected improvisation as a process into consistent steps and characteristics, owing to the principle association of jazz improvisation with achieving creativity within and through the medium of established works and rules, or more or less codified and standardised forms (Barrett in Wright et al., 2012:653,659). This amplifies the presence of a structured manifestation of improvisation and provides the following preconditions:

- Knowledge, expertise and skills;
- Group dynamics;
- Rehearsal;
- Quasi-autonomous leadership;
- Composition and arrangements.
a plan on how to construct a meaningful and effective solo within those parameters. These skills are acquired by group rehearsals, individual practice routines and imaginative compositional play while away from an instrument, showing the unmistaken essence of training and rigorous musical thinking that underlie jazz improvisation (Berliner, 1994:15,215).

### 3.4 Quasi-autonomous leadership

Despite the fact that every musician in a band or group should be equipped with skills and practices, the need for a leader exists. Like Wynton Marsalis says: “Whenever you have a group of people playing together, somebody has to lead and somebody has to follow” (Berliner, 1994:418). One of the key elements why leadership is needed is the configuration of musical personalities and talents within each band. It is thought that the initial selection of personnel is itself a compositional act, requiring a special kind of sensitivity of a band leader. According to Berliner (1994:291,416), the success of an artistic enterprise is determined by the leader’s precise musical vision, knowledge of performance, styles of prospective players (influencing the collective palette of sounds), and judgement of their potential as interacting improvisers. Even combining this with opportunities for soloists, the assessment of the right framework of melody and harmony seems only reserved for an experienced and qualified leader.

### 3.5 Composition and arrangements

Jazz improvisation is mostly structured and practiced on beforehand using a digested plan or preconceived design/arrangement (Whitmer, 1953:36). This is also the stage where knowledge, skills, practice and experience leads to performance. Despite the fact that a composition or an arrangement occurs in a written form does not exclude the musical feeling and possibilities to act freely in the prepared framework (Ferand, 1939:337). Bands usually arrange, teach and learn their material during formal rehearsals. Consequently, the amount of time they allow for rehearsing strongly influences the nature of arrangements. Groups that work as stable units have the opportunity to rehearse regularly and evaluate and arrange their repertory formally which, according to Berliner (1994:301,306), will eventually result in a give-and-take process. In this period individual freedom is also negotiated and settled into the arrangement. They settle with what is mutually satisfactory and incorporate the most successful elements into the designs of the arrangements. Successful composer and bandleader Duke Ellington once said: “You’ve got to write with certain men in mind. You write for their abilities and natural tendencies and give them places where they do their best [...]. My band is my instrument.” (Berliner, 1994:305).

This precondition is intertwined with leadership. As a leadership skill, the assessment of band members results and contributes to arrangements and compositions. As Berliner (1994:302) mentioned, the processes underlying the creation of arrangements vary according to the skills of band members and the social structure of the band. Many musicians, although benefiting from the guidance of arrangements, alter them over time. As the frameworks of compositions serve as inspiring vehicles for improvisation, new arrangements provide comparable inspiration, challenging group members to negotiate fresh musical models in performance and stimulating the conception of ideas in the process. Performing a piece thousands of times over a career, one will always go deeper and deeper into its possibilities, discovering new ways of doing things (Berliner, 1994:307-308). Thelonious Monk, for instance, emphasised the artist’s intensive attention to revising arrangements, commonly practicing a single composition for two hours at a sitting; experimenting with chord voicings and substitutions, subtly altering the contour and phrasing of the melody. Although arrangers work out fundamental ideas on their own, they depend on rehearsals with other artists and live performances to test and evaluate ideas, especially for elaborate arrangements (Berliner, 1994:308). In addition, by determining which instruments play together and when, a balance is established between soloists and the ensemble. Berliner (1994:292-293) points out that this process offers the artist the musical guidelines with varying degrees of specification.

### Discussion and implications

When using jazz improvisation as a possible adaptive mechanism for the complex environments of governmental bodies, this literature study showed possibilities for skill development and competence enhancement of civil servants by describing the preconditions on which improvisation could occur.

### Knowledge, expertise and skills

The main elements of knowledge, expertise and skills could be imputed to the individual technical proficiency of the instrument, learning and recreating from others, musical theory and practice of harmonics, melody, rhythm, scalar patterns, dynamics and chords. In order for civil servants to ascertain this kind of qualitative knowledge and skills, we cannot dismiss the fact that numerous hours need to be spent in order to acquire these skills. Civil servants are educated and are involved in many courses throughout their career. Maintaining profound knowledge on their own instruments/tools in which they are capable of applying them in a pertinent and situational circumstance should be obvious for a successful outcome/overall performance. This implies that civil servants should gain comprehensive knowledge of their tools and those of others (i.e. best practices), and in which given situation certain tools generated which kind of outcome (e.g. benchmarking). This would be much like jazz musicians who are able to place their instrumental knowledge into all the available dynamic, rhythm, harmonic and melodic forms, thus being completely prepared for any situation. Another element is the repetitive matter in which these skills are refreshed and experimented with. This suggests that civil servants should simulate certain situations and combine certain factors which are most commonly addressed in their field of work, therefore refreshing the tools and skills at hand.

### Group dynamics

When operating as a group of professionals, the dynamics are key for a stable and qualitative performance. The cohesion of the group is determined by role definition, social structure, open communication and the configuration of musical personalities and talents. Rehearsing over and over with one another proves an effective way of aligning individual skills with the intentions and dynamics of the group. When civil servants operate in networks as core players, they must be able to assess the interaction with others in order to establish a stable and qualitative output. Since experience with a certain group shows over a period of time, a critical element could be for the core team to consider regular deliberation and align the main goals, assets, means and common ground for group interrelations to prosper.
Rehearsal
In the first two preconditions, the repetitive nature of actions and events seems predominantly present. This could mean rehearsing a certain solo, practising (e.g. routines, chords, melody), considering all possible phases of a theme, arranging and planning ideas/material, and group rehearsals. Even away from the instrument, ‘imaginative compositional play’ and musical thinking is of essence. According to this, civil servants should familiarise themselves with specific facets of their expertise as well as the network’s goals. This way they could constructively determine the possible and wanted outcomes.

Quasi-autonomous leadership
In creating balance to a group and its activities towards a performance, quasi-autonomous leadership is deemed necessary and important. The success of the artistic enterprise is determined by the styles of prospective players, and the precise musical vision and knowledge of performance by the leader. The precise judgement of the initial selection and potential of personnel is directly related to the influence of the collective palette of sounds. In configuring the right qualitative balance, the opportunities for soloists, the framework of melody and harmony, as well as the responsibility for regulating interaction should be accounted for. This means that civil servants should be able to assess the composition of actors and value each input regarding the established mutual grounds and targets. This is a skill that is comparable with both programme leaders and team leaders in governmental bodies. Each member also needs to acknowledge this ability and understand the main reason for the group composition to function towards a certain aim and purpose. Being critical on each individual performance and as a group establishes a quality to reflect upon the outcomes.

Composition and arrangements
The last precondition involves the main structure for improvisation considered beforehand as a digested plan or preconceived design. Composition, arrangements and musical score are key for mapping out the main framework of the performance and the possibilities for soloists. The success and quality of a group and performance is dependent on rehearsal, evaluation and formal arrangements in pursuit of mutual satisfaction of the designs. Underlying the creation of arrangements is the leadership qualification to assess the skills of band members and social structure of individual bands. Given the amount of time which is invested in the collaborative process of a composition or (re)arrangement by jazz musicians, civil servants could be challenged to (re)-think carefully whether a solution, initiative or project is adherently supported by all the team members. In doing so, civil servants should be able to translate and convey internalised experiences and pragmatics into a plan or design that can be proven in a practical situation. Like in jazz improvisation, these designs could be altered over time so that quality and success can be continued.

Limitations in implementing the preconditions
In general, when discussing the applicability of the preconditions beyond the jazz improvisation metaphor, a number of challenges appear. Semantics play a big part translating the used terminology in the preconditions towards determination for civil servants in complex environments. Co-determinants like melody, rhythm and harmony for knowledge and skills could predominantly be perceived as ambiguous. Due to the fact it could be interpreted in various ways, it remains difficult to pinpoint the right angle of assertion for an adaptive mechanism. From a conceptual point of view rhythm, melody and harmony could be seen as the basic pattern for governance networks to establish some form of equilibrium. If one of the elements is out of balance at the starting point (individual expertise) or after group rehearsal and forming the arrangement (performance), the whole dynamics could suffer.

For instance, is the main issue of the network addressed properly? As there are various melodies, there are various types of public issues with their own characteristics and complexity. Is the civil servant acquainted with all the facets and forms of the issue at hand? As for rhythm, is governance asynchronous with the (societal, economic, political, legal) responsibility of the governmental body as an actor? This could for instance relate to the level of governmental influence in the society on national, provincial and local level. Is the civil servant aware of the political and governing boundaries as an actor of a complex network? Is the relationship and mind-set aligned (in harmony) with the rest of the actors, thus what kind of political style (e.g. liberal, social) is preferred by the network? These questions are somewhat reflective of nature but necessary for a skilled civil servant, knowing the various possible formats and socio-political implications in a complex governance network.

Although group dynamics, rehearsal, leadership and arrangements seem evident, translating these preconditions towards determinants for complex governance networks could also be challenging. For instance, what kind of knowledge and skills should civil servants practice ‘relentlessly’? Which ‘phrases’ and ‘themes’ are considered study material in public administration? How could compositions/arrangements be ascribed to success and effectiveness? Based on the different facets of the preconditions, questions may rise on its applicability in various forms of governance networks.

Conclusion and further directions
In this paper, several components of jazz improvisation were distilled from a vast amount of resources. In doing so, five preconditions were suggested: 1) knowledge, expertise and skills; 2) group dynamics; 3) rehearsal; 4) quasi-autonomous leadership; 5) composition and arrangements. Jazz improvisation proved to be quite structured on beforehand, merely giving space to professionals in pre-set time frames to effectuate their knowledge, skills and insights in performances. The chief principle underlying an easy and fluent improvisation seems an exhaustive and rigorous study of the melodic, rhythmic, harmonic aspects, as well as knowing what one’s peers are doing. Jazz improvisation furthermore provides insights into the necessity of continuous learning and in-depth stored knowledge, the need for (group) rehearsal, routines, the functionality of determinative leadership, and the importance of interrelations in groups. This would follow the notion that improvisers prepare relentlessly for every possible context, and that collective improvising stimulates activities of creating, listening and evaluating.

Another underlying principle is the band leader who defines the band’s instrumentation and therefore the overall nature of the arrangement and quality of the performance. A stringent design or arrangement is rehearsed and tested, as is the variety of instrumental roles. With
the renditions and exploitations of the group’s sound, the quality is tested and determined for a performance. The arrangements which serve as vehicles for development are altered over time to maintain inspiration and challenge each group member, whilst stimulating ideas in the process.

The structural applicability of the preconditions into an adaptive mechanism is as much a conceptual challenge as an exploratory one. It showed the possibilities and limitations beyond the metaphor concerning the practicality and scalability. In future research, the suggested cohesive preconditions stimulates opportunities to research the effectiveness of renewed skills for civil servants in practice. The next phase of this research project on jazz improvisation will therefore focus on validating the preconditions in practice and exploring the applicability on forms of network governance.

References


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Abstract

Fragmentation of power and responsibility due to a constantly growing networked landscape of governmental bodies is one of the characteristics that lead to a complex environment for civil servants. This paper explores jazz improvisation as a possible coping mechanism for this complexity and has synthesised five cohesive preconditions for civil servants. The correlation beyond the metaphor of jazz improvisation is in the highly trained abilities of both musicians and civil servants, who operate in dynamic environments, to demand constant and swift assessments on public responsibility, leadership, control and to the end, achieve a qualitative performance. The individual qualities, interrelationships, repetitive nature and strong leadership found in jazz improvisation are of added value, generating the flexibility to anticipate and react on current and changing conditions that these complex governance networks demand. It also showed the possible interpretation of options to express creativity through the medium of established works and rules in compositions and arrangements. The lessons drawn from jazz improvisation create opportunities and challenges for further research on the possibilities and effectiveness of renewed skills for civil servants.