

IMPROVISATION AND LEARNING PROCESSES IN ORGANIZATIONS: A METAPHOR APPLYING THE BRAZILIAN RHYTHM CHORO

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Abstract

Whereas improvisation has been discussed in international literature mainly from the metaphor of jazz and theater, this essay discusses how the phenomenon of improvisation can contribute to new interpretations of Organizational Learning. We use the metaphor of improvisation in the Brazilian rhythm 'Choro' in order to understand the process of improvisation in organizations. Thus, the main objective of the study is to discuss and analyze the role of improvisation in the Organizational Learning process. In the final considerations, we conclude that improvisation plays a significant role in the processes of Organizational Learning. Thus, we argue that the socio-cultural approach in Organizational Learning can help to understand the process of improvisation, with the role of communities of practice, culture, social practices and sensemaking in this phenomenon.

Keywords: Improvisation. Organizational learning. Choro. Metaphor. Music.

Improvisação e Processos de Aprendizagem nas Organizações: uma metáfora a partir do ritmo brasileiro Choro

Resumo

Considerando que a improvisação tem sido discutida na literatura internacional principalmente a partir da metáfora do jazz e do teatro, este ensaio teórico pretende lançar luzes e discutir como o fenômeno da improvisação pode contribuir para novas interpretações da Aprendizagem Organizacional. Utiliza-se a metáfora da improvisação no ritmo Choro para auxiliar na compreensão do processo de improvisação nas organizações. Desta maneira, o principal objetivo do estudo é discutir e analisar o papel da improvisação nos processos de Aprendizagem Organizacional. Nas considerações levantadas, entende-se que a improvisação exerce importante influência nos processos de Aprendizagem Organizacional e que a perspectiva da aprendizagem baseada em práticas pode auxiliar na compreensão da improvisação organizacional.

Palavras-chave: Improvisação. Aprendizagem organizacional. Choro. Metáfora. Música.

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Introduction

Meu coração/ Não sei porque/ Bate feliz/ Quando te vê/
E os meus olhos/ Ficam sorrindo/ E pelas ruas/
Vou te seguindo/ Mas, mesmo assim/ Foges de mim/ Meu co-
ração/
Não sei porque/ Bate feliz/ Quando te vê/ E os meus olhos/
Ficam sorrindo/ E pelas ruas/ Vou te seguindo/
Mas, mesmo assim/ Foges de mim/ Ah, se tu soubesses/
Como sou tão carinhosos/ Muito, muito/ Que te quero/
E como é sincero meu amor/ Eu sei que tu /
Não fugiras mais de mim/ Vem, vem, vem sentir/
O calor/ Dos lábios meus/ A procura dos seus/
Vem matar essa paixão/ Que me devora o coração/
E só assim então/ Serei feliz/ Bem feliz/.
(Lyrics from João de Barro in "Carinhoso", famous Choro from Pixinguinha)

Hello. Welcome to this jam session, a session of improvisation in which different topics will emerge from the interaction of the components in this presentation, consisting of recognized personalities such as Weick (1999), Cunha, Kamoche and Cunha (2003), Vera and Crossan (2004), Lave and Wenger (1991), among others. The topics will be demonstrated in relation to chords and melodies that permeate the field of improvisation and learning.

No, this essay does not have music as its main theme. However, we use the metaphor of improvisation in choro to explain the importance of improvisation in organizations. The link is straightforward and the lessons one can take from music are insightful and relevant: instead of musicians with different tasks and backgrounds, in organizations there are people with different backgrounds who occasionally take immediate action, without time for planning. Thus, there is an effort to create knowledge, to generate new ideas and even theories that emerge from improvisation. In organizations, increasingly complex and unstable scenarios cause difficulties in planning and conducting requirements, and improvisation gains importance in flexible organizations.

But what is a jam session? Brazilian musicians have a special name for this. They call it a "roda de Choro" which means a meeting of musicians to play Brazilian rhythms spontaneously and based on improvisation. Often the players who play in these jam sessions are not components of the same group, have different improvisation styles and different musical interpretations. Thus, the improvisation in the jam session is a mix of order and disorder that ends in new compositions, innovations and learning processes. It can be seen as a parallel art of playing, where the musicians play without the formalities of bigger concerts on stage. That is, they play without knowing what comes ahead of improvisation. The picture below is a tribute to Alfredo Rocha Viana (Pixinguinha), considered one of the greatest names in Brazilian choro.

Picture 1 - The batutas (1)



(1) Rio de Janeiro/Brazil. Circa 1923. The batutas; Sebastião Cirino on the trumpet, Pixinguinha on the saxophone Esmerino Cardoso on trombone.

Source: ARTE; EVENTOS/MANIFESTAÇÕES; SER HUMANO, Coleção M001 – Pixinguinha: 100 anos.

And what is improvisation in organizations? Improvisation refers to the contraction of planning and implementation, immediate action when problems occur, and the ability to perform a movement of anticipation or reaction without the benefit of prior reflection (CUNHA, 2002).

The environment of complexity, pressure and rapid changes faced by organizations require dynamism and new skills and competences in comparison to those used by mechanistic organizations. Thus, improvisation and learning has gained an important role for the survival and development of modern organizations. In this essay we discuss the articulation between improvisation and learning in organizations, analyzing the metaphor of Choro.

The concept of improvisation has already been discussed in international literature, but in Brazil it has been little explored. According to Cunha (2002), improvisation has gradually gained an important dimension in organizational literature, as the new characteristics of competition require rethinking the old established paradigms of management. Cunha (2002) is one of the authors who transfer the lessons of improvisation in the arts to management, making a connection with jazz and discussing the implications for organizations. Weick (1999) also built an analogy with music from the image of organic organizational structures and mechanical respectively to the image of organizations such as jazz bands and symphony orchestras. Meanwhile, Kirschbaum, Sakamoto and Vasconcelos (2006) believe that the metaphor of jazz is limited in explaining aspects as harmonious and cooperative relations between the musicians and organizations. Thus, keeping the focus of study in music, they argue that there is a need for new metaphors that are complementary to the metaphor of jazz.

Other sources of inspiration also helped to develop the theory of organizational improvisation. Crossan and Sorrenti (1997), for example, examined the relevance of *commedia dell'arte*, an art of improvised theater that emerged in Europe in the

sixteenth century. Using the metaphor of theatrical improvisation, Vera and Crossan (2004) examined the implications of cases of improvisation on business administration. They identified similarities and differences between the concepts of performance and success in the theatre and organizations, drawing lessons from the three major theatrical improvisation rules that could be applied in organizational improvisation.

This essay begins with an approach to improvisation and a justification for improvisation studies in organizations, using the metaphor of improvisation in choro music. Section 3 provides a socio-cultural approach to Organizational Learning in order to help understand the improvisation process, the role of communities of practice, culture, social practices and sense-making in this phenomenon.

Improvisation in Choro as an Organizational Metaphor

Choro was supported and influenced by a repertoire of European dances (polkas, waltzes, Scottish) and African rhythms. According to Pinheiro (2003, p. 26), the repertoire of Choro comes from adaptations of these dances, adding other rhythms, "improvisation and instrumental virtuosity", [...] inflections and modulations". Furthermore, it is its intense and expressive movement of the bass line, held on the bass strings of the seven string guitar that defines one of the most important characteristics of choro (ALMEIDA, 1999).

Other main features distinguish the Brazilian rhythm choro: "pieces with binary compass, syncopated rhythmic, melodic and expressive contrapuntal treatment of the melodic line and the busy bass line" (PINHEIRO, 2003, p. 31). Choro has a rondo form divided into three parts (A, B and C), in which the par B and C modulate and always return to the first part (PINHEIRO, 2003; ALMADA, 2006; CAZES, 2005). Musicians have to understand these musical structures and changes of tone to play with good improvisations.

Cazes (2005) considers that improvisation in choro, unlike jazz, was not common in the early decades (the late nineteenth century). Later, from 1902 to 1920, according to the author, Choro music opened to improvisation. However, the improvisation was almost only in the sense of melodic variation, in order to enrich with various features of ornamentation. This historical period is called by Cazes (2005) the mechanical phase of choro:

One listening to recordings of Choro mechanical phase you are surprised by the almost total lack of improvisation. The same piece of Choro music is often repeated four or five times without any change. You can only feel the heat of improvisation when Pixinguinha plays. With him everything is more alive, more joyful and rhythmic (CAZES, 2005, p. 44).

The composer Antonio Joaquim da Silva Callado is considered one of the pioneers of Choro. He was author of nearly 70 Choro songs, an eminent flutist, and a very popular person in the city of Rio de Janeiro (DINIZ, p. 15, 2003). One of his compositions is called "Flor Amorosa", composed in 1877, based on the lundu rhythm and polka, and recognized as the first Choro song (PINHEIRO, 2003, p. 21). Because of this this year was chosen as the symbolic date of birth of Choro music.

Villa-Lobos was a Brazilian classical musician and composer who contributed considerably to the dissemination of Choro. Diniz (2003) comments:

When Villa-Lobos collected elements of Brazilian urban popular music and folklore to develop his sophisticated compositions, founding a national aesthetic, he was inspired by the works of Ernesto Nazareth, João Pernambuco, Chiquinha Gonzaga and Anacleto de Medeiros. Once Villa-Lobos said: 'after the concerts, when we took a train, we used to [...] play serenades and Choro [...], improvisations of the moment' (DINIZ, 2003, p. 26).

A famous and typical Choro group formation has the name regional. According to Almada (2006), *regional* means a small groups of Choro, consisting of a flute, a

guitar, cavaquinho and pandeiro. However, this group is also open to many other instruments, such as the mandolin, the clarinet and saxophone (ALMADA, 2006; CAZES, 2005). According to Cazes (2005), the name *regional* originated from the regional character of the Choro music in 1920, with groups such as "Turunas Pernambucanos", "Voz do Sertão", and "Os Oito Batutas". In the 1930s the *regional do Choro* identifies as instrumental in the 30's, fulfilling a need for radios. For "radio stations the work of *regional* groups was essential, because these musicians did not need written arrangements, they had the agility and power of improvisation to fill holes and solve any problem in relation to accompanying singers" (CAZES, 2005, p. 85).

Indeed improvisation is an activity based on different ways of changing sounds, and is linked to performance, composition and musical interpretation, presenting aesthetic ideas related to the individual and collective learning of composers and performers. Improvisation in the Choro can be defined as:

[...] creation of a musical work or its final form, as the music is being played [...] Immediate composition of the work by performers, developing or tuning details on existing work, or anything within these limits. [...] It is linked to the idea of returning to a more spontaneous musical achievement, in which members respond to [...] what other performers are playing (SADIE, 2001, p. 450).

Sadie (2001) provides a general definition of improvisation, highlighting it as the art of creation, an instant composition, formulation or adjustment of details on one existing work. Ornamentation is also a form of improvisation. In this case, "the musician or singer adorns a particular melodic line, usually with freedom to increase expressiveness and express creativity and brilliance" (SADIE, 2001, p. 450).

In improvisation there is a key element that Weick (1998) analyzed called *bricolage*. This refers to the action of holding the parts with the available materials and creating a new concept. According to the author, this type of activity is essentially the act of reworking an existing structure in accordance with circumstances in order to deal with unexpected opportunities and problems. Weick (1998) and Hatch (1999) explain that improvisation does not occur only through the chaos and lack of structure. Improvisation also occurs in structured environments. The authors emphasize the importance of pre-arranged elements, plans, experiences or interactions and prescribed roles in order to improve the improvisation in organizations.

There are two main ways to improvise in Choro, according to Sá (2000) and Cazes (2005): creation using as reference the melody and harmonic norms; or ornamentation of the thematic material that is being played with variations of the melody. Sá (2000, p. 24) explains that part of understanding Choro music is the comprehension that "improvisation works based on the melodic-theme based on the tune that is being performed". According to the author, unlike jazz, the option of not improvising is also quite common and acceptable in Choro music, especially when it comes to a certain kind of Choro whose melodic construction is constituted only by fast sixteenths in progress.

There is a need to understand that the act of improvisation varies according to cultures, territory, and symbolic language. Bailey (1992) uses the concepts of idiomatic and non-idiomatic improvisation to explain that argument:

I have used the terms 'idiomatic' and 'non-idiomatic' to describe the two main forms of improvisation. Idiomatic improvisation, much the most widely used, is mainly concerned as the expression of an idiom – such as jazz, flamenco or baroque – and takes its identity and motivation from that idiom. Non-idiomatic improvisation has other concerns and is usually found in the so-called 'free' improvisation; while it can be highly stylized, it is not usually tied to represent an idiomatic identity (BAILEY, 1992, p. 11-12).

The performance of improvisation requires considerable learning, practice, virtuosity, technical understanding of the Choro style, perception of its own melodic phrasing, whether in the execution of the melody, bass line, or accompaniment (SALEK, 1999). Some authors agree that a basic requirement for learning Choro music is playing in the *rodas de Choro*, informal groups that play together (CAZES, 2005; SALEK, 1999).

At these meetings, the apprentices learn with the masters, play together, and listen to the playing style of experienced musicians, developing their musical understanding and having the opportunity to develop technical performance.

Some of the resources that are used by Choro experts and that define the character of Choro in their interpretation are: a) flexibility on the compass, swing and variation on the metrics, change the flow of the melody, dynamic modification (SÁ, 2000; CAZES, 2005), b) creation of new melodies based on harmony, use of dissonance, c) ornamentation - changes in the score, such as the addition or erasure of notes, pauses, other rhythms (SALEK, 1999; CAZES, 2005), d) rhythmic-melodic changes - changes in the melody and rhythm, made based on the knowledge of style, creating new sentences; the player anticipates a good note or a group of notes (SÁ, 2000). As regards rhythmic and melodic flexibility, Sá (2000, p. 24) explains that "there is a lack of 'sauce' when some Choro is played in a very rigid way. That is, when the performer plays exactly what is written in the score".

Nailor Azevedo Beaker is a saxophonist, clarinetist, arranger and composer who is active in the genres of jazz and Choro. In an interview with Falleiros (2006, p. 24), he says that one of the great lessons he learned from his father about improvisation: "you play a melody, when you come back [to make repetition of the theme], you play a different tune, but stay close to the first". According to him, when you are far away from the original melody, it is difficult to stay in the line with the improvisation: "close to the first line, do not stay far away, because in this case you can not come back [...] was the first and last lesson I had to improvise (FALLEIROS, 2006, p. 24).

The key to the description of improvisation in organizations using Choro as the metaphor lies appropriating the ways in which Choro musicians act and use the structures. We have moved beyond the usual question "what structure should/do we use?" to the question "how should/do we use our structure?" (HATCH, 1999, p. 82). Instead of trying to find ways to act and form their structures, Choro musicians constantly make structure implicit and discover what they are able to express in their improvisations. They have a Choro structure to support, but not always to show the way. Choro musicians do not accept their structures as given. This freedom creates space to improvise and encourages creativity, learning and innovation. Likewise, the "gingado" (Brazilian groove) and feel align with organizational culture and learning in their similar emphases to analyse the aspects of organizational life.

The special issue of the Organization Science Review in 1998 was entirely dedicated to the jazz metaphor for improvisation in organizations. In this edition, Lewin (1998) defended improvisation in jazz as a metaphor for organizational theories, saying that improvisation was previously regarded as a dysfunction of the organization, an unexpected event. In his background to organizational improvisation, Barrett (1998) transferred the lessons of improvisation in jazz to organizations, defending that there are strong similarities between the jazz player and the manager: both need to find new answers in their area of activity and both do that without the benefit of a score or guide certainty about the quality of the solutions. Weick (1998) argues against idealized visions of improvisation, often from metaphors of art, which often positions improvisation as a magic medicine for a company that has a gap in innovation and adaptation. Weick (1992) also took the example of jazz groups as a prototype of organizational flexibility.

Following this literature, this article adopts the metaphor of improvisation in Choro. Choro is recognized as one of the first popular music styles from urban Brazil. Popularly called "chorinho", it is a Brazilian music instrumental style with in existence for more than 130 years. The components required to implement "regionais do Choro" (regional groups of Choro) are musicians, composers and instrumentalists. The components required to implement these regional groups are musicians, composers and instrumentalists are called "chorões". Despite the name, the style usually has a hectic and lively pace, characterized by virtuosity and improvisation of the participants, which must be qualified and must pursue improvisation skills (DINIZ, 2003).

The "rodas de Choro" are composed of different musical instruments, such as wind instruments, strings and percussion. A musician plays as a soloist, and the soloist

allows others to improvise in the middle of the piece. Part of the improvisation process is done by instruments such as the flute, the mandolin, the clarinet and the saxophone, while the "cavaquinho" (a Brazilian instrument used to play samba and Choro) plays the base of the harmony. The guitar plays the harmony and can also improvise. And also percussion instruments are part of the process, such as the "pandeiro", that maintain the rhythm (DINIZ, 2003). Figure 2 illustrates this example:

Figure 2 - "Roda de Choro", an Art of Jam Session in Brazilian Music



Source: ARTE; EVENTOS/MANIFESTAÇÕES; SER HUMANO (2007).

The analysis of improvisation in organizations helps to clarify the definition, characteristics and issues related to this performance and interpretation. However, this concept presents challenges to establish designs between transactional and improvised actions that exist in organizations and those that exist in the arts (CROSSAN; SORRENTI, 1997).

Improvisation is a creative and spontaneous process that aims to reach a goal through a new path. As a spontaneous process, improvisation is extemporaneous, not planned and not premeditated. As a creative process, it seeks to develop something new and useful for the situation, although it is not always able to reach this point (VERA; CROSSAN, 2004). In the jam sessions, the improvisation occurs constantly. A great Choro player is a musician who is able to create various themes in the improvisation, not always observing the rules in a given song, and one who can spontaneously create new and beautiful musical phrases, new interpretations, new melodies, without losing the essential characteristics of the music being played. Goritzki (2004) identified the two main types of improvisations of Manezinho da Flauta, a Brazilian Choro musician. The improvisations of the flutist were: one that happens "on long notes and pauses" - they may occur in the substitution of the melody with improvisation; and another that happens after the ending of the melody (GORITZKI, 2004, p. 11).

Improvisation in organizations is a phenomenon that has been recently studied and has attracted the attention of a field of study in Administration (CUNHA; KAMOCHÉ; CUNHA, 2003). Cunha (2002) argues that the concept of improvisation can be applied to the analysis of three areas of organizational activity: the inner area (structure), the external area (environmental turbulence), and the area of articulation between the inside and outside (management of change).

According to Weick (1998), improvisation is more common than researchers and entrepreneurs may think. While managers and entrepreneurs tend to avoid surprises and prefer routines and control, improvisation is common. Improvisation is not a process that can be avoided and is part of the daily life of organizations (CROSSAN; SORRENTI, 1997). Moreover, improvisation occurs in organizations not only in circumstances of crisis, in which a team of work faces unplanned events, but also in day to day organizational life. Organizational change, in a global perspective, involves a planned phase and an unplanned phase. In this sense, the merit of the research on improvisation is to underline the importance and inevitability of the emerging facet of organizational change (CUNHA, 2002). Using the analogy with the metaphor of improvisation in Choro once again, the initial choice of repertoire does not anticipate the final outcome or the path to achieve it.

Improvisation is considered by Akgün and Lynn (2002) as an important construct to understanding new product development. Crossan and Sorrenti (1997) also argue that Organizational Learning has been studied with the focus on different aspects such as memory, sensemaking, intelligence, but not on improvisation.

Crossan and Sorrenti (1997) believe that improvisation is a part of the day to day organizational life and is an important element of organizational learning. It is sometimes referred to in a positive way and sometimes in a negative way. We also know very little about the characteristics that separate these two extremes. The tradeoff between prudence and exploitation continues to torment the reality of organizations.

But is improvisation an emergent phenomenon or a deliberate phenomenon? Is it an incremental process or not? Cunha and Cunha (2003) believe that improvisation can be both. The authors start with the argument that in a process of change, especially when the information technology has a central role, there is improvisation, when action takes place through the use of available resources.

In improvisation there is information sharing. Let us illustrate with the example of Choro: when a musician of Choro improvises on a theme, he concentrates on other components in order to interpret meaning. By doing this, he establishes a link between melodic phrases, and keeps a sense of the sentence or of other themes played by other musicians. In organizations likewise there are always ways in which individuals create senses and meanings that are relevant processes in improvisation. Thus, sensemaking works on the construction of information and highlights indirect new interpretations, based on action and its consequences (WEICK, 1995).

Sensemaking can be defined through seven characteristics which distinguish it from other explanatory processes: it is a process based on the construction of identity, it is retrospective; it represents sensitive environments (enactment); it considers the impact of socialization; it involves a continuous process (ongoing), it is focused on extracting indirect information (suggestions or "between"); and it is driven more by plausibility than by particularities. Organizations that can improvise can be treated as important environments for the creation of meaning (sensemaking), and generate meanings that can be valuable for individuals and consequently for organizations (WEICK, 1995).

The improvisational model for new product development proposed by Kamoche and Cunha (2001) identifies a number of structural elements specified in technical and social dimensions, which serve to facilitate innovative action. These elements the authors call minimal structures. In the learning processes of Choro and organization development it must be considered that one brick goes on top of another. Nobody builds buildings alone. However, sometimes people put different things on it without taking away what was already there. They seem to want to break what has been done in the past more than to add to it and contribute to it. In order to build something new you have to deeply understand and know about what has already been done.

Similarly, Barrett (1998) suggested the need to analyze minimal and unnegotiable structures, tacitly accepted and without the need for constant articulation. All these suggestions basically indicate a trend towards an effort to synthesize elements often considered opposites. The need for exploration and exploitation (MARCH, 1991) and the "dance" between adaptation and systematic use of opportunities or solutions in the development of organizational processes are additional examples of the dialectic

vision, which suggests new possibilities to understand organizational realities beyond the traditional dichotomies, for instance: differentiation versus integration, organic versus mechanical, innovation versus routine.

From the perspective of organizational learning, Crossan and Sorrenti (1997) point out that the application of intuition to action in a spontaneous way has been a neglected area in organizational learning, and that this is a fertile ground to be explored. Improvisation is one of the themes that provide new interpretations of organizational learning and their study may enable a new reading of relevant processes such as the development of people, organizational structure, organizational change, team work, innovation and creativity.

The emergence of a model for improvisation in organizations has less to do with only holding new metaphors than with the need to find ways to act more suited to the demands of a world with organizational change (CUNHA, 2002). One of the incentives for the emergence of improvisation, and maybe the most important, stems from the dissatisfaction with the design of structure that has prevailed till today. The theory of organizations has long been concerned with the problem of structure and the way that structures influence the behavior of individuals and organizations. The dichotomy that distinguishes organic and mechanistic structures, the structure of organizations, the more suitable structural formats for particular types of environment. The new research on improvisation in organizations can illustrate, however, that the choice of a position in the continued organic or mechanistic structure is not one of inevitability.

Thus, the metaphor of improvisation can help to understand the improvisation process in organizations. Moreover, it can help not only to understand how individuals improvise, but also how they learn to improvise. In the following section we show the small though relevant links between learning in organizations and learning in Choro improvisation.

Organizational Learning from a Socio-Cultural Perspective

Researchers in Organizational Learning are turning their focus to the learning processes in the daily practice of work. Several studies focus on theories such as incidental learning, learning in action and concepts of organizational learning and the workplace as a locus of continuous production of collective knowledge. These theories focus on work-based practices, on where they are found and produced, and on the important aspects of these learning processes. This connection exists in parallel, but is certainly not tied with formal courses, such as attending training and development sessions. Theories based on practice (NICOLINI; GHERARDI; YANOW, 2003) also emphasize that learning can not be regarded only at the individual level. Learning is understood as the emergence of relationships and interactions of people with the social elements and materials of particular contexts. Thus, the context is considered in their divisions of labour and power relations, environment, culture, and language. The Choro players have a very clear concern, which is to keep the language of choro very evident. They invent things, they improvise, they play with variations, but they know that the final sound ought to be choro. They do not lose sight of the characteristics and norms of Choro, and they have fun while working with this kind of music.

These arguments also occupy researchers in other areas of social science, particularly in new sociology, in studies into issues related to gender, cultural studies, critical studies in administration, organization studies and in adult education. There is an ongoing debate about the nature of relationships among people, objects and speeches, the nature of mutual reconfiguration that occurs in these interactions and the nature and context in which knowledge is generated. New models based on theories and practices have emerged to explain these issues, considering the evidence being produced by learning in ethnographic studies in various types of organizations (BECKETT, 2001; BELFIORE et al., 2004; FENWICK, 2002; GHERARDI; NICOLINI, 2000; SAWCHUK, 2003).

According to Gherardi and Nicolini (2001), learning occurs in the workplace and can be understood as a social and cognitive activity. It depends on the organizational context and is socially and culturally structured, and continually rebuilt by the activities of individuals who are part of this process. According to the authors, learning means being able to participate with the necessary skills in a complex context of relationships between people and activities. Knowledge is not only what lies in the minds of individuals, books or databases. This concept shows that learning plays an important role in daily practices, as it emphasizes the importance of applying knowledge in a social context. The individual must find out what, when and how it should be done, using the appropriate artifacts and routines. Afterwards, they should be able to identify why a certain activity was carried out. In order to understand the processes of learning therefore it is necessary to explore the contexts of activities, the social practices, and where they occur. To understand the circumstances and how individuals construct knowledge, there is a need of valid interpretations of the activities of learning in the workplace. The environment should be conceived as a social and historical product that is co-produced with the activities - actors, objects, activities, materials and artifacts symbolic, and everything that is a heterogeneous system that turns the interpretation of time. So the organizational environment should not be regarded simply as a "container" for human activities.

Brazil is characterized by multiple cultures and races, and the national culture is composed of many regional elements. Vianna (2002) highlights this heterogeneity and says that it is possible to observe the diversity of cultural expressions, whether religious, artistic or ethnic, in Brazilian music. Improvisation in Choro and samba, for example, creates an "area of intercultural mediation, allowing the meeting of social groups of various origins" (VIANNA, 2002, p. 41). Likewise, choro may have different accents, different techniques, even though it has had great influence from its birthplace, the city of Rio de Janeiro. However, some Choro musicians and composers have given some peculiar and regional characteristics to their composing and improvising.

What really characterizes choro is the rhythm. The rhythm is also what characterizes the regionality of the music. As regards improvisation, each musician has a different way of doing this. In the United States, when jazz musicians enrolled at universities, the other musicians started learning their improvisations and arrangements. The result of this learning process was converted into teaching materials. At universities arrangement is taught, for example, based on the work of Duke Ellington. They study improvisation analyzing the improvisation of the great masters. The way that musicians learn to improvise is essential to understanding improvisation in organizations as a practice based on a context of learning elements.

Further on the theme of learning choro and improvisation, Choro musicians know that they have to understand other musical languages. They are specialists in their instruments, but they have also learned notions about other instruments in order to work with composition. Other musical genres bring influences and ideas that can be adapted for Choro music and improvisations.

Thus, Gherardi and Nicolini (2001) proposed the socio-cultural perspective to study the learning processes in organizations. They assume that organizations and social practices are engaged in specific contexts of interaction. This perspective also suggests that knowledge is encrusted in daily work and not only in the minds of individuals. New studies with teamwork also show that knowledge tends to be distributed among participants, rather than focused on individuals (COOK; YANOW, 1993). Indeed, there is already a consensus that studies should focus on what and how environments produce practical forms of participation, of private activity and knowledge, instead of considering whether and how knowledge is acquired at work (BILLET, 2004).

The problem of some perspectives adopted to investigate learning in organizations is that they are not being based on models of learning that theorize on the individual or on the social dynamics articulated in everyday practices. Many studies underestimate the complexity of this dynamic. For this reason, contemporary theories of organizational learning tend to switch their focus: from individualism to the prospects of social learning (SAWCHUK, 2003), for the acquisition of designs based on

practice (HAGER, 2004) and an identification of systemic analysis which also respond by micro interactions that occur within the activity (ENGESTRÖM, 2001). Furthermore, there is a growing interest in examining the relationship among power, political aspects and the question of diversity as these dimensions influence daily activities and the learning processes.

The fluid nature of learning is central to understanding social complexity. However, most of the literature on learning neglects this relevant aspect and understands learning as a process of acquisition based on the accumulation of experience, knowledge and abilities. A considerable proportion of the literature discusses learning with reference to the experiential model (KOLB, 1984; ARGOTE, 1999), the behavioral aspects (CYERT; MARCH, 1963), the cognitive issues (DUNCAN; WEISS, 1979), the socio-cultural dimensions (COOK; YANOW, 1993), the reflective and emotional dimensions (SCHÖN, 1983; ANTONACOPOULOU; GABRIEL, 2001) and recently a vision based on practice (NICOLINI; GHERARDI; YANOW, 2003).

However, even the studies that consider a procedural approach to the study of learning in organizations do not examine the nature of learning as a stream. The complexity of social learning only now is being associated to some insights that are emerging from such analyses (FENWICK, 2003; ANTONACOPOULOU; CHIVA, 2005; ANTONACOPOULOU, 2006) and they are beginning to shed light on some of the dimensions of learning neglected in the context of work in organizations. Among the neglected aspects, Antonacopoulou (2006, p. 239-244) identifies four dimensions "which have not yet been addressed and discussed more deeply: interconnectivity, diversity, self-organizing and politics".

Interconnectivity refers to the relational nature of learning, the diversity encompassing different possibilities, and the inherent nature of how social systems renew. Finally, the political dynamics of learning highlight inequalities of power and control. A common theme of these additional dimensions of learning is "surprise" (ANTONACOPOULOU, 2006). Unlike the view of learning as something intentional and deliberate, these dimensions of learning allow the unexpected. This is the core of understanding that learning is not only a practice, but is also a flow, a multitude, a space (ANTONACOPOULOU, 2002), with improvisation. Learning is not only an activity, it is also a flow, a flexible structure, which connects the actors, systems and artifacts. This vision of learning in relation to practice may be useful to understand the diversity of organizational practices and improvisation. In choro music there are regional and sociocultural differences that influence composition and improvisation. Some examples include the great Brazilian composers of Choro presented in Valente's research (2008, p. 82):

Pixinguinha was born in Rio de Janeiro in 1897, and he lived there all his life, dying in 1972. K-Ximbinho was born in 1917 in Natal, and also spent much of his life in Rio de Janeiro. He died in 1981. Both lived in different contexts, receiving various socio-cultural influences. These differences were reflected in their works, both in compositions and improvisations. The diversity of their views and their musical influences are fundamental to our research, as evidenced in their improvisations, and analysing them we will illustrate the different procedures on their creations (VALENTE, 2008, p. 82)

Another relevant debate refers to the connection between learning and practice (WENGER, 1998; BROWN; DUGUID, 2000; GHERARDI, 2000; NICOLINI; GHERARDI; YANOW., 2003). In this debate, learning and practice cover not only the actions and activities related to learning, but also the role of language and other cultural artifacts and materials, the nature of social interactions, the implicit answer, located in the socially constructed worlds. This approach also emphasizes the importance of communities of practice as the space where the social dynamics of learning is negotiated, and reinforces principles of interconnectivity and interdependence between agency and structure, key aspects in the theory of actor-network (LAW, 1999).

The theory of situated learning (LAVE; WENGER, 1991) offers a critique to radical cognitive theories of learning. In particular, the critique questions that classroom based learning is as effective as learning within communities where the context takes place and practice really exists. According to the authors, the cognitive idealization

in the classroom is based on an assessment of positivist abstract knowledge, that is, knowledge is valuable because it reflects an objective reality and can be manipulated using the rational and symbolic logic. Situated learning is informal and located in the context. Thus, in the theory of situated learning "knowledge is seen as co-produced by people and the situation; commitment and engagement of individuals are important elements" (ANTONELLO, 2005).

Choro music has the peculiarity of working with informal ways of learning, without an exact formula for its implementation and improvisation. It is not easy to teach popular music in the traditional way. Popular music is not cerebral. Popular musicians do not train to be spontaneous. Classical music is more rigid, the interpretation ought to be thought before action, and the musicians have to play all the notes that the composers wrote. However, it is impossible to use this formula in choro music, it is possible to do many more improvisations and work with more flexibility.

The improvisations created by the musician and choro composer K-Ximbinho had a northeastern accent, from his regional influence, and this is also considered the general rules that characterize choro as a Brazilian rhythm (GORITZKI, 2004). Learning this musical language and its form of improvisation can result in a culture made up of various external influences. In Brazil there is no choro University, but nowadays there are many materials, videos, recordings, places where people play Choro. Therefore musicians learn to play participating in these communities of members interested in this kind of music and the musicians are influenced by other contexts too. In the 1930's there were many musicians interested in learning Choro music and the Choro improvisations. They wanted to understand what choro was, but they had almost no access to anything. At that time the influence of international music was very strong and this inhibited national groups. The change in the Brazilian context and the exaltation of national music helped to develop the country. Some communities of members interested in Choro practices were formed and helped to develop new ideas.

Lave and Wenger (1991) were the first authors to introduce the concept of Community of Practice. While often seen as a simple model of learning, where knowledge is transferred through flexible learning located, the central concept of Legitimate Peripheral Participation (LPP) was not only limited to learning. The authors described a community of practice as a set of relationships among people, businesses and the world at any given time, and in relation to other communities of practice. In these communities, newcomers learn from the older members and get permission to participate in certain tasks in the community of practice. Over time the newcomers move from the peripheral position to the full participation in the community.

Wenger (2000) describes communities of practice as a group of people who share an interest or a passion for something that they know how to do in the moments with constant interaction. Nicolini, Gherardi and Yanow (2003) consider that communities of practice are the key building blocks of systems of social learning, and they act as containers of social skills. Antonello and Ruas (2002) define communities of practice as a group of individuals who work together for a long time, share practices and knowledge. In these groups, individuals prepare their own mechanisms of confidence, because they know the capabilities of each one.

A community of practice is a group of people with similar interests who meet in a particular place (physical or not) to discuss and share knowledge. In these meetings documents are created, tools and values are defined. A community of practice is therefore different from a team, because the community creates the topics of interest, and not by the task to be performed. The community is a kind of an informal network, because it adopts some topics of interest and has an identity. A community of practice can be defined by the following elements: there is a topic of interest; the possibility of interaction and relations between individuals around the topic; and, finally, because the individuals have a practice rather than just a shared interest (ANTONELLO; RUAS, 2002). It is considered that in the Choro improvisation, knowledge is shared in the form of musical interpretations, life stories of Choro artists, cases, improvisation, new compositions, among others. Choro players play, compose and improvise Choro music. They are passionate about it, and they know that they must learn together.

They do not improvise alone, they do it with the group. In other words, they learn in communities, with people who already have more experience about the subject.

Lave and Wenger (1991) explain that the community of practice has an intrinsic condition for the existence of knowledge. According to the authors, learning takes space in these communities not only as a limited learning located where the examples of the practice are simply replicated, but by "learning with the legitimated peripheral participation (LPP)". LPP is not purely a concept to understand the learning located in practice, but also to interpret learning as an integral part of the practice, that learning is "a social practice generative in the real world".

Legitimated Peripheral Participation is complex in its nature. Each of the three aspects - legitimacy, peripheral region and participation - is essential and can not be considered in isolation. Legitimacy and participation define the ways of belonging to a community as a peripheral region and especially participation deals with the identity and position in the social world (LAVE; WENGER, 1991).

The ideas and practices that are shared, according to Nicolini, Gherardi and Yanow (2003), emerge from a predominantly knowledge-based learning through social and cultural phenomena. In other words, knowledge and learning is designed by the mental processes that are in the head of individuals, but is seen as forms of expertise, or as a knowledge situated in action in historical, social and cultural contexts.

In this spirit of sharing, the ways in which individuals create senses and meanings is important to this process of learning. The creation of meaning - or sensemaking includes the construction and the prominence of indirect information, which are interpreted and their interpretations reviewed, based on action and its consequences (WEICK, 1995). New creations and interpretations are part of the improvisation of choro musicians. Jacob do Bandolim and Pixinguinha, for example, used to play differently and improvise when the same melody came again. This capacity to create has made Choro a very rich musical genre.

The members of an organization, like Choro musicians, have to interpret hidden warnings, face unstructured tasks, deal with unfinished processes of knowledge, and above all take instant actions. Moreover, as the members of a Choro group, actors of an organization must also engage in dialogue and take part in negotiations. Thus, there is a creation of spaces for shared decision-making based on expertise.

Legitimacy in a community of practice focuses on the relations of power and authority in the group. In research with anonymous alcoholics, tailors, butchers and midwives, Lave and Wenger (1991) observed that legitimacy does not necessarily have to be formal. For example, for tailors and butchers there is a degree of legitimacy that comes from the formal hierarchy and the position in the organization. In the case of anonymous alcoholics and midwives the hierarchy is more informal. Anonymous alcoholics, in this case, gain legitimacy when they say that the stories of their new experiences become more mature and closer to the oldest.

The concept of peripheral participation (outsider) is not related to physical position in the core or the periphery, nor as a simple measure of the amount of knowledge that has been gained. The authors use the terms of peripheral and full participation to denote the degree of engagement and participation in the community (LAVE; WENGER, 1991).

The notion of participation provides a key to understanding the Communities of Practice (CoPs), which does not necessarily imply co-presence, in a clear and identifiable group, or even in visible social boundaries. While the CoPs imply participation in an activity in which all participants have a common understanding, it is not only about what it is but also what it means for their lives. The community and the degree of participation are in some ways inseparable from the practice (LAVE; WENGER, 1991). This theoretical framework and the "lenses" of the socio-cultural approach are available to researchers interested in developing studies that attempt to understand the process of improvisation and organizational learning.

Final Considerations about the Articulation among Improvisation and Organizational Learning

Improvisation, viewed in contrast to planning and implementation, is relevant to understand and better evaluate the learning processes of individuals and groups. It involves the spontaneous and intuitive aspects of creating new insights and understanding how these new creations institutionalize new structures. Organizational learning from a socio-cultural perspective describes the transformation using a lens that serves to transcend the interface of cognitive behavior.

The improvisation practiced by Choro musicians requires spontaneity, creativity, problem solving and learning. This article has emphasized the articulation of learning to improvisation, explaining that the more experienced musicians also learn to improvise or to be prepared for the moments of improvisation. They prepare, memorize, learn and train actions, as occurs in learning processes in organizations. However, improvisation in organizations is commonly more controlled and avoided due to possible damage that can occur. Despite this, some emergencies require the capacity to solve problems quickly and improvise. Some studies in the international literature have worked with the metaphor of jazz, trying to link it with the organizational context.

In Brazil this study follows a new path, emphasizing a musical genre which is widespread in Brazilian culture as a metaphor to understand improvisation and learning in organizations. By this we are seeking to address our own Brazilian characteristics. The Choro rhythm is embedded in cultural values and human behaviors. The aim of this article has therefore been analytical and it does not intend to seek ways to apply these concepts.

Unlike the Choro rhythm, jazz has many different styles, such as bebop, smooth jazz, free jazz, classic jazz, among others. In spite of this, the articulation of Choro with jazz is not far, considering that both rhythms were the result of a mixture of African, European and regional rhythms. The date of origin of Choro and jazz are also similar, because Choro music was born in 1870 in Rio de Janeiro (Brazil) in early 1870, and jazz was born in New Orleans (USA) in 1910.

In the case of Choro, what is fascinating is the fact that, despite the apparent lack of the structure, the songs are actually a creative process shaped by significant structural elements. Even so, music, improvisation and interpretation always end in a different way.

Thus, improvisation in organizations and Choro work with the need to constantly seek new solutions without the benefit of plans or pre-determined courses of action. The consequences of their actions take place and are analyzed and understood at the same time and are directed to a particular audience, which may consist of Choro lovers, or in the case of managers, by members of the organization, shareholders, and customers.

Considering these similarities, some conclusions for the improvisation of managers can be drawn using the Choro metaphor: a) the need for improvisation to stimulate the capacity to deal with unplanned situations, and stimulate innovative behavior; b) the mistake must be considered a part of the learning process; c) improvisation stimulates the alternation of the performance of organizational members in the roles of soloists and supporters in order to enhance work as a team and as the expression of individual capabilities, d) in improvisation situations there is a need to distribute leadership, making this a collective basis. The Choro improvisation can not be totally organized. It is necessary for there to be freedom and the possibility to play with variations. There is another way to do it in your own way. No Choro player gives the same performance playing the same music. The popular musician has to find his/her own way of playing, his/her own identity. But they have to learn and adopt a reference. They must choose a way and learn with a master.

In Choro music, the subject has a key role in maintaining the focus of musicians at the same time, and allows them the flexibility to improvise on the harmonic, melodic

and rhythmic structures. It is this synthesis between freedom and control that makes the musical structures of Choro so attractive to the world of organizations. It is possible to observe articulations among improvisation and learning. These articulations are made in organizations and in Choro music, as identified in Table 1:

Table 1 – Articulation among Improvisation and Learning

Period	Articulation among improvisation and learning
Before improvisation	<ul style="list-style-type: none"> • formation of practices and structures that provide a basis for improvisation • previously acquired knowledge, norms, rules, experiences, that shape the improvisation • there is no way to improvise without a prior learning. People do not improvise without a base, they improvise on something.
During improvisation	<ul style="list-style-type: none"> • real time learning process • creation of new ways, new forms, new structures, variations, in order to seek new knowledge to solve a problem or do better within a short time period; • experiences and changes may occur at the same time • new actions and results converge with time.
After improvisation	<ul style="list-style-type: none"> • period for reflection about mistakes and successes of improvisation • search for other solutions and possible precautions, in case the problem or theme happens again • maintenance of improvisation that has been done in the memory of the individual or group.

The difficulty that the researchers and managers face relates to the identification of the equivalent minimal organizational structure. Several possibilities have been advanced, but none can yet be taken as definitive. Visions, missions or prototypes of products are some possibilities. These elements can, in fact, combine in a philosophy of structuring involving organizational aspects, cultural, technological, information and control systems capable of guiding without limiting the autonomy of individual contributions.

Improvisation can occur in several instances and at various levels of complexity. We propose here the following categories of improvisation: (a) sudden improvisation - appears suddenly, required by the context; calls for quick and spontaneous actions; (b) reinterpretive improvisation - improvisation based on some experience that the individual or the group already had; the central theme is established in the memory, and the actions can be based on variations, reinterpretations, considering the context; also have possibility of new arguments and actions; (c) innovative improvisation - this kind of improvisation creates other ways of action, answers, performances, something new that may result in a new composition and a new routine.

The needs of organizational adaptation makes the difficulties faced by managers clear and the need for organizational learning. Managers need to show results, to adapt to changes in the environment. Moreover, some capacities are required for innovation, in order to adapt to the changes in the environment. Thus, models of management signed on the assumptions of predictability, stability and the ability to anticipate led to a search for models capable of providing a better understanding of the dynamic relationship between organizations and their environments (CUNHA, 2002).

The idea of making mistakes in an organization may be linked to the notion of organizations as places of learning and to explore new avenues of action. These ways of exploiting unknown means inevitably considers mistakes a normal aspect of organizational practice. Thus, the link to improvisation is straightforward. In improvisation in Choro, there is a shared knowledge about music, the rhythm, certain themes, which may at least to a new theme, a new composition. These elements are socialized and allow new interpretations and the creation of knowledge. Thus, exploring new ways and new interpretations through improvisation is considered a key element of structuration.

In this paper we have evaluated how learning helps to enrich the understanding of organizational improvisation. Moreover, we discussed that improvisation plays an important role in learning processes in organizations. The study of these two pheno-

mena together is essential as improvisation is a key element in understanding and advancing studies in organizational learning and its dynamics. Future investigations can be carried out using the socio-cultural approach, focusing on the interconnections of improvisation and the learning processes in organizations.

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