

## Expert improvisers in Western classical music learning pathways

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Despite a growing interest in Western classical improvisation among researchers, educators and musicians in recent decades, research insights on expert improvisers' learning pathways are scarce. In order to further understanding this phenomenon, we formulated the following research question: "What characterizes the learning pathways of Western classical music expert improvisers?" Addressing this question, we designed an exploratory case study, conducting open-ended semi-structured videoconference interviews with a purposeful sampling of  $N = 8$  Western classical music expert improvisers. The participants are international classically trained musicians who are recognized as expert improvisers by their peers and who have improvised on professional albums and in established concert halls. In-depth analysis of our data revealed two distinct learning pathways among the participants: (1) native improvisers, who have improvised since the very beginning of their instrumental learning; and (2) immigrant improvisers, who started to improvise at a later age, during their graduate studies or at the beginning of their professional career. Native improvisers began to improvise spontaneously, without apparent extrinsic incentive, while immigrant improvisers started to improvise in order to attempt to fill a gap in their musical practice. Various factors motivated the immigrant improvisers interviewed to themselves dedicate to this practice, including seeing improvisation as a means to experience (i) a 'getting back' to oneself; (ii) an authentic human encounter; (iii) a sense of immediacy characterizing the creative process; and (iv) an equalitarian musical practice. Lastly, a 'learn-unlearn' process appears to underlie improvisational expertise development. Implications of these findings for expertise development and skill acquisition will be discussed.

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## 1. Introduction

Improvisation can be found in various art-forms: in theatre, the visual arts and music. Furthermore, most of our day-to-day conversations are improvised (other than formal exceptions such as prepared conferences, discourses, etc.); since they are not scripted in advance, we react, extemporaneously, to what has been said by our interlocutor (Sawyer, 2001, 2003). The same can be said for most of our actions, some of them being more improvised than others. A similar continuum, ranging from extemporized to overlearned, applies for musical performance; and traces of improvisation can be found in virtually any musical concert, even when the music is performed entirely from a score (Gould & Keaton, 2000; Lehmann, Sloboda, & Woody, 2007). Hence, improvisation is ubiquitous in both our musical and non-musical day-to-day behaviour; improvisation is a necessary gesture of adaptation to the real-time occurrences of our environment.

Various definitions of ‘musical improvisation’ can be found in the relevant literature, such as “the creation of a musical work, or the final form of a musical work, as it is being performed” (“Improvisation” in the Grove Music Online, Nettl et al., 2016 para. 1). While this statement focuses on the “musical work”, most definitions of ‘musical improvisation’ centre rather on its spontaneous nature (see, for example, Azzara, 2002; Berkowitz, 2009; Ferand, 1961; Koutsoupidou, 2005). However, establishing whether ‘musical improvisation’ is a spontaneous activity or not is subject to much debate (Berliner, 1994; Nardone, 1996; Weisethaunet, 1999), because choosing to improvise is a deliberate decision and because of the numerous years of practice that are needed to improvise fluently. Therefore, we believe that it would be more appropriate to define improvisation as “an unpredicted musical occurrence”, be it a subtle, extemporized, agogic accent<sup>1</sup> in an overlearned – that is, a performance which is repeatedly rehearsed until it is automated – musical work or an entire piece or section of a piece. Improvisation played a central role in the musical life of the Renaissance, Baroque, Classical and Romantic periods (Moore, 1992), when “being a musician” implied being able to compose, perform and improvise music. However, from the middle of the 19th century (Moore, 1992) until a few decades ago, improvisation had virtually disappeared from Western classical music performance practice. A distinction between performer and composer emerged around the mid-19th century, which led to increased specialisation among Western classical musicians (Berkowitz, 2009). Consequently, most professional musicians in the 20th and 21st centuries have worked primarily to develop their technical proficiency and notation reading skills, while investing little, if any, time in cultivating their compositional and/or improvisational abilities (Berkowitz, 2009). In recent decades, however, improvisation in Western classical music has undergone a ‘renaissance’, thanks to the committed work of researchers, music educators and performers (Solis & Nettl, 2009).

## 2. Reviewing literatures: what have we learned?

We chose to develop five themes in order to provide a comprehensive view of musical improvisation: (1) music and language analogies; (2) the influences on learning of musical improvisation; (3) the role of improvisation in Western classical music pedagogical practices; (4) theoretical and empirical research studies on musical improvisation learning; and (5) the learning process of the Western classical ‘expert’ improvisers.

### 2.1. Music and language

Various themes related to the similarities and differences between music and language have been discussed in the literature. Therein, a broad range of grammatical and semiotic questions have been addressed, including namely those related to the semantic content of music and its grammatical rules. Along these lines, comparisons between fundamental musical and linguistic competencies were also drawn, bringing to light the similarities between (1) musical improvisation and spontaneous conversation, (2) musical composition and textual writing, and (3) performing from a musical score and rhetoric or theatre (Berkowitz, 2009). From another perspective, a conversational metaphor has also been observed among improvisers to describe interactions that occur between musicians in the course of performance in the context of jazz (Berliner, 1994; Monson, 1996) and free improvisation (Menezes, 2010).

### 2.2. Effects of improvisation learning

For almost half a century now, scholars have advocated that improvisation be reinstated in Western classical pedagogical practice (Azzara, 2002; Kenny & Gellrich, 2002; McPherson, 1993; Sawyer, 2007; Wilson, 1970). This proposal is supported by a substantial body of empirical research in musical education that has demonstrated to positive effect that integrating improvisation into the curriculum contributes to the holistic development of the students. For example, research has shown that learning improvisation can improve one’s understanding of musical concepts and the music achievement of elementary music students (Azzara, 1992), as well as hone accuracy of aural perceptions (Wilson, 1970). Furthermore, practising improvisation has been shown to reduce stage fright and increase a musician’s motivation (Kenny & Gellrich, 2002) and musical creativity (Koutsoupidou & Hargreaves, 2009). While previous empirical research measuring the effect of improvisation on

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1 “The prominence given to a note or notes in performance by [ . . . ] a lengthening of duration or a brief preceding silence of articulation” (Thiemel, 2016, para. 1).

other variables (e.g. [Azzara, 1992](#); [Guilbault, 2009](#); [Koutsoupidou, 2005](#); [McPherson, 1993](#); [Rowlyk, 2008](#); [Whitman, 2001](#); [Wilson, 1970](#)) was principally done in pre-school and undergraduate settings, recent research has also demonstrated the positive effect of improvisation in higher education and advocated its (re)introduction into conservatories and universities ([Burnard, 2014](#); [Burnard & Haddon, 2015](#); [Dos Santos & Del Ben, 2004](#); [Olthuis, 2015](#)). Developing improvisation aptitudes, beyond being a most valuable goal per se for any musician, is also a unique means for fostering crucial musical and non-musical competences that will be important in a learner's personal, scholarly and future professional contexts ([Campbell, 2009](#); [Olthuis, 2015](#)).

### 2.3. Improvisation situated in the Western classical music pedagogical paradigm

Despite the resurgence of Western classical improvisation in concert halls and the growing support for it in music education, the practice remains virtually absent from the current paradigm of Western classical music teaching and learning ([Scott, 2007](#)). This situation can be explained in part by the phenomenon of “teachers teach the way they learned” ([Dunn & Dunn, 1979](#); [Dubé, Héroux, & Robidas, 2015](#)). Apart from a few recent projects (e.g. see [Burnard & Haddon, 2015](#)), there is a general view that most Western classical music teachers have never learned improvisation ([Dubé et al., 2015](#)); they do not, as a rule, include it in their pedagogical practice, a cycle which was fostered through generations of masters and apprentices. This phenomenon is reinforced by the lack of empirically grounded pedagogical material available for the teacher who would like to integrate improvisation into his/her curriculum ([Després, 2011](#)). The key point here is that following our experience and observation, most Western classical music teachers have not been taught improvisation as part of their formal training, and that the teaching and learning methods available are not grounded on the factual learning pathways of various experts in the domain but rather on a single person's experience or intuition.

### 2.4. Theoretical and empirical research studies on musical improvisation learning

Theoretical models of the learning process of improvisation have been proposed by [Kratus \(1995\)](#) and [Kenny and Gellrich \(2002\)](#). Empirical research studies on musical improvisation have been carried out in various contexts: jazz expertise development has been thoroughly investigated by [Berliner \(1994\)](#) and numerous studies have examined improvised “world” music skill acquisition and transmission processes, for example, in Iranian ([Campbell, 1990](#)), West African ([Campbell, 1990](#)), Turkish ([Stubbs, 1994](#)), Persian ([Nettl, 1992](#)), Javanese ([Brinner, 1985](#)), Korean funeral ([Park, 1985](#)) ([Booth, 1995, 1987](#); [Campbell, 1990](#)) and South Indian ([Cormack, 1992](#)) music. Berliner's research results show that the learning pathway of jazz improvisers is complex and mediated by different factors: (1) musical enculturation in childhood; (2) transfer of knowledge within the jazz community; (3) learning and understanding of the jazz repertoire; (4) imitation of experienced improvisers; (5) the transcendence of models by developing a personal voice; (6) the understanding of the underlying theoretical principles of music; (7) the installation of a routine of practice; (8) the ability to structure the formal development of improvisation; (9) a two-way interaction between improvised and composed ideas; (10) the development of a “third ear”, which allows the musician to listen critically as auditor, as well as when he plays; (11) personal and musical interaction between musicians; (12) diversified concert experiences. Summarizing the findings of the research on expertise on jazz improvisation learning makes clear that despite the apparently spontaneous nature of improvisation for the spectator, improvisation learning is constructed through a complex and idiosyncratic compound of cultural immersion, extracurricular experiences, mentoring, informal learning, jam sessions, band experience, learning song and chord progressions, ear copying (namely building a repertory of licks), composing, transcribing, personal innovation, interactions with a community of practices and audiences and assimilation of theory and the jazz tradition (e.g. see [Berliner, 1994](#); [Fraser, 1983](#); [Kingscott & Durrant, 2010](#); [Monson, 1996](#)). While jazz research provides detailed descriptions of the process of skill development of expert jazz improvisers, not very much empirical research has examined the learning processes of ‘high-level’ Western classical musicians ([Berkowitz, 2009](#)). In the context of this study, the terms ‘expert’ or ‘high-level’ improvisers refer to classically trained musicians who are recognized as expert improvisers by their peers and who have improvised on professional albums and in major concert halls.

### 2.5. The learning process of the Western classical ‘expert’ improvisers

Among the few available studies on the topic of the learning process of the Western classical ‘expert’ improvisers are those by [Berkowitz \(2009\)](#) and [Johansson \(2008, 2011\)](#). Berkowitz interviewed Robert Levin and Malcolm Bilson, two expert musicians who have active professional teaching, recording and performing careers in improvisation of the classical period. Berkowitz identified three phases of improvisation skill development: (1) incubation, internalization and assimilation (practising exercises and repertoire); (2) rehearsal; and (3) further development through the act of performance (p. 116). [Johansson \(2008, 2011\)](#) studied Western classical organists' (N = 10) learning process, concept of improvisation and creative practice. She identified four “ways of learning”: (1) instrumental fascination, (2) apprenticeship, (3) learning through performance and (4) communication with an inner guide ([Johansson, 2008](#)). As research pioneers, both [Berkowitz \(2009\)](#) and [Johansson \(2008, 2011\)](#) have contributed respectively to a better understanding of the teaching/learning processes of classical period piano improvisers and of organ improvisers in a Scandinavian Protestant environment. While [Berkowitz \(2009\)](#) made a significant contribution by documenting a narrower improvisation learning process, mostly centred on technical and musical

developments, Johansson identified an intricate process, closer to that of jazz improvisers (although less complex), including motivational, social, musical dimensions and considerations related to self-regulation. While these research studies provide valuable insights about targeted dimensions of the learning process of Western classical 'expert' improvisers, the current state of knowledge on this topic calls for more comprehensive investigation documenting why expert Western classical music improvisers dedicate themselves to this relatively marginal practice and, more precisely, how they develop their improvisational skills. Providing an answer to these questions not only possesses great scientific value per se, but also has significant educational potential:

The primary goal of improvisation instruction should be to structure learning activities in which students at all levels can experience ways of thinking that resemble those of artist-level improvisers. Accomplishing this goal requires that we more closely examine and more clearly describe not only what experts do but also how they think about what they do (Norgaard, 2011).

In sum, while research has revealed improvisation to be a most valuable practice for Western classical music learners, few empirical studies have investigated Western classical expert improvisers' learning pathways. Because of the relative scarceness of research in this field, as well as specificity on the variety of instruments, languages and contexts in which Western classical musicians engage in improvisation, the present research aimed to document a broad range of Western classical expert improvisers' learning pathways. Research based on experts' self-reported experiences might reveal emergent perspectives on improvisation learning that would not otherwise have been accessible. We chose to focus on Western classical expert improvisers' learning pathways because we were interested in understanding the process by which musicians progress from a background in which improvisation is rarely (if ever) found, to a professional career in which they regularly improvise in concert halls.

Consequently, aiming to contribute to the existing knowledge about Western classical improvisation expertise development, we formulated the following research question: "What characterizes the learning pathways of Western classical music expert improvisers?"

### 3. Method

The currently limited state of knowledge on Western classical music expert improvisers' learning process calls for an exploratory investigation, which often benefits from a relatively small sample of participants (Crouch & McKenzie, 2006). Consequently, a case study research method (Yin, 2009) using open-ended, semi-structured interviews (Wengraf, 2001) as the main data collection method was chosen in order to provide an in-depth perspective of the participants' learning pathways. As our research object is confined to Western classical improvisation expertise, a strategic, purposeful sampling comprising key informants was chosen (Palys, 2008).

The study was conducted from Québec, Canada, and videoconference interviews allowed for recruitment of international participants.

Videoconference interviewing is still scarcely used in qualitative research, but recent publications claim that its qualities surpass its limitations and potential issues (Nehls, Smith, & Schneider, 2015). Apart from constraints on access in some regions, which were not relevant in our research given our purposeful sampling, the main inconvenience of videoconference interviews is potential data security issues and technological flaws causing bad connections or interruptions. The benefit of allowing international recruitment outweighed these potential issues. The Skype videoconferencing application was used in conjunction with Call Recorder for the Skype A/V recording application.

Available expert improvisers, websites and relevant media were consulted to draw up a list of potential participants. Personal email invitations were sent to every musician who appeared to fulfil the four sampling criteria we formulated to determine improvisational expertise; the participant had:

- 1 Reached peer-recognized improvisational expertise<sup>2</sup>;
- 2 Completed high-level Western classical music training (Bachelor's or conservatory equivalent) and/or had taught in a recognized Western classical music institution;
- 3 Improvised on at least one professional album; and 4 Improvised in recognized concert halls.

N = 8 expert musicians accepted to participate in the research. All of the interviews were conducted in French: n = 6 of the interviewees were native French speakers, and the remaining n = 2 participants were fluent in French; n = 5 participants originated from France, n = 1 from Germany, n = 1 from Israel and n = 1 from Canada. Upon acceptance we discussed with them whether or not they fulfilled criteria 2–4. All participants except one matched all four criteria. The remaining participant did not match criterion 3, but we chose to retain him in the sample because of his extensive international experience in live classical music improvisation. We sent a questionnaire to the participants before the interview in order to collect demographic information and other data related to their improvisational experience. Table 1 summarizes this information and details the criteria confirming expertise status. Fictional names have been used here to ensure participants' anonymity.

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2 Peer recognition is the most practical way of determining expertise in a given domain (Csikszentmihalyi, 1997). Internationally recognized improvisers were consulted in order to determine peer recognition.

Table 1  
Participants' main instruments, gender and fulfilment of expertise criteria.

Name	Gender	Main instrument (s)	Peer recognition	Formal training	Teaching position <sup>a</sup>	Improvised on professional albums	Improvised in concert halls
Philippe	M	Piano	Yes	Conservatory	International workshops	10	Yes
Sébastien	M	Classical Guitar	Yes	Doctorate	University	No	Yes
Thierry	M	Piano	Yes	Conservatory	International workshops	30+	Yes
Patricia	F	Piano	Yes	Conservatory	Conservatory	5	Yes
Isaac	M	Piano	Yes	Doctorate	University	5	Yes
Franck	M	Violin	Yes	Master	Conservatory	50	Yes
Sophie	F	Double bass	Yes	Conservatory	Conservatory	1/0	Yes
Daniel	M	Organ and piano	Yes	Conservatory	International workshops	14	Yes

We conducted a pilot study with one improvising musician in order to ensure the appropriateness of our data collection method. While the pilot study showed our technological design to be fully functional, it revealed weaknesses in our interview technique, which we adapted subsequently according to our observations. Specifically, we changed the interview guide format from a dense table to a lighter checklist (see Appendix 1); we left more space and time for “full” silences<sup>3</sup> (Duchesne, 2000); and we avoided yes/no questions throughout the interview.

### 3.1. Interview data analysis

We conducted N = 8 interviews. We transcribed the audio/visual recordings of the interviews using David Haselberger's Transcriptions<sup>4</sup> freeware. Pre-analysis was practised in conjunction with transcription. Because of the exploratory nature of our research, we retained an open model for coding<sup>5</sup> (L'Écuyer, 1987), in which the categories result from the analysed materials. Relevant portions of the interviews pertaining to musical improvisation learning were excerpted and coded. Gradually building our coding tree, we formulated operational definitions for every new category created and refined our categorisation throughout the coding process, merging and renaming categories for succinctness and exclusiveness. More precisely, as suggested by L'Écuyer (1987), the categorisation process comprised four phases: (1) organizing of the units of meaning into preliminary categories; (2) merging redundant categories to retain only distinctive categories; (3) creating the final analysis grid and formulating a differentiating definition for every category; and (4) the final classifying of the units of meaning (p. 57–58). After all the preliminary categories were created and merged into distinctive categories, the textual segments attached to every category were re-analysed and re-coded, if necessary, through an iterative process. Our aim was to achieve categories that are exhaustive but limited in number, objective, clearly defined, homogeneous and mutually exclusive (L'Écuyer, 1987).

Pre-analysis of our data and operational definitions led to the identification of a higher organisational structure encompassing all the categories of the coding tree. This structure comprises four narrative components: (1) when the participant started to improvise; (2) why he/she improvised; (3) how he/she learned to improvise; and (4) the feedback he/she received from others (peers, audience, family, etc.) about improvisation. Analysing the data coded into the categories pertaining to the first of these components revealed that the moment when improvisation was introduced into musical learning was highly polarised among the participants in our sample. This analysis revealed two distinct narratives pathways: the first is peculiar to those who began to improvise at an early age at the very beginning of their musical learning, while the second is typical of those who began to improvise at a later age after many years of instrumental learning. The participants belonging to the former narrative type were called native improvisers, since their learning pathway shares commonalities with the process of acquisition of a mother tongue; the participants belonging to the latter narrative were called immigrant improvisers, since their learning process evokes that of a second language. These two distinctive narratives appeared to be related to the other components (why, how and feedback) of improvisation we identified.

After this pre-analysis, all the data was revisited from the perspective of these two narrative types. The number of participants and number of references (in parenthesis) attached to every category, for both narrative types (native and immigrant) are included in Table 2 – Final coding tree below. While these quantitative data can be useful as primary indicators of areas of similitude or discrepancies between both narrative types, a full immersion into the qualitative data is required to achieve an in-depth understanding of our research object. The textual segments coded are of variable lengths and are valued relative to each participant's singular experience; they therefore need to be considered within their specific contexts to be fully understood. Hence an in-depth immersion in the qualitative data preceded the selection and the discussion on the findings presented below. The themes that appeared to be salient for every participant and the ones that seem more relevant for a better understanding of the native/immigrant narrative types are presented and explained in the Findings section below.

<sup>3</sup> The author identifies three types of silences: “empty”, “tense” and “full”. A “full” silence is a moment of introspection, of reflection.

<sup>4</sup> Available online: <https://code.google.com/p/transcriptions/>

<sup>5</sup> We coded the interview transcriptions using QRS International NVivo 10[1] software.

Table 2

Final coding tree.	Category	Definition	Participantsa (Frequency)	The participants describe. . .
	N	I		
When	Early beginning . . . beginning to improvise naturally, early in their life.		4 (13)	0 (0)
Embryonic experiences	. . . early sporadic experiences with improvisation.		0 (0)	2 (3)
Late beginning	. . . beginning to improvise deliberately, later in their life.		0 (0)	4 (9)
Ending	. . . deliberately choosing to quit improvising.	1 (10)	0 (0)	
Why	Authentic . . . improvisation as an artful or historically authentic practice.		2 (12)	2 (5)
Emotional	. . . improvisation as an emotional practice.	1 (1)	2 (5)	
Equalitarian practice	. . . improvisation as transcending hierarchies.	0 (0)	2 (5)	
Exciting	. . . improvisation as an exciting practice.	0 (0)	3 (4)	Extrinsic value . . . the extrinsic value or potential of improvisation.
		2 (3)	0 (0)	Flow . . . a flow-like state linked to improvisation.
Fun	. . . improvisation as fun.	4 (18)	3 (5)	
Getting back to oneself	. . . improvisation as a practice that reconnects them with themselves.		0 (0)	3 (7)
Human Encounters	. . . improvisation as a fertile ground of encounters between performers and/or the audience.		4 (9)	3 (16)
Immediacy	. . . real-time, unpredictability and risk-taking as a defining qualities of improvisation.		2 (3)	4 (12)
Openness, freedom	. . . freedom as a defining quality of improvisation.		2 (12)	4 (18)
Perceived gap	. . . a perceived a gap in their Western classical practice that is fulfilled by improvisation.		0 (0)	3 (9)
Self expression	. . . improvisation as a mean of self-expression.	1 (1)	4 (20)	
Spiritual practice	. . . improvisation as a spiritual practice.	2 (29)	3 (5)	
Subversive	. . . the subversive nature of improvisation.	1 (1)	1 (16)	
How	Associative improvisation . . . that improvising with other art forms can be beneficial.		3 (4)	2 (2)
Autonomous	. . . that they are self-taught in improvisation learning.	3 (5)	1 (2)	
Being a channel.	. . . feeling as a channel between an external source of inspiration and materialised sounds.		1 (1)	2 (5)
By ear	. . . the importance of audiation in the process of improvisation learning.		4 (9)	2 (4)
Collaboratively	. . . how playing and sharing with others are central to improvisation learning.		3 (28)	4 (28)
Constraints	. . . how choosing constraints before improvising can be beneficial.		2 (9)	1 (5)
Curiosity	. . . curiosity as a trigger for improvisation learning.	0 (0)	2 (3)	
Embodiment	. . . the link between the body and improvisation.	1 (8)	2 (8)	
Enculturation	. . . an enculturation process underlying improvisation learning.	3 (13)	3 (13)	
Formal	. . . a formal improvisation learning.	3 (5)	0 (0)	
Informal	. . . an informal improvisation learning.	4 (15)	4 (5)	
Instinct vs. knowledge	. . . the importance of the interaction between instinct and knowledge during improvisation.		3 (9)	2 (2)
Knowledge	. . . the importance of knowledge during improvisation.	4 (36)	2 (9)	
Laborious	. . . improvisation learning as laborious.	1 (7)	3 (17)	
Live experience.	. . . live concert improvisation as a catalyst for improvisation learning.		4 (18)	3 (8)
Naturally	. . . beginning to improvise spontaneously.	4 (5)	0 (0)	
Presence	. . . how being present is central to improvisation.	1 (3)	2 (4)	
Preparation	. . . how they prepared to improvise.	4 (29)	3 (4)	

Risk-taking . . . how risk-taking is necessary to improvisation learning.	1 (1)	2 (11)
Starting from nothing . . . the importance of starting from nothing when improvising.	1 (2)	3 (3)
Strategies and tactics . . . the strategies and tactics he uses during improvisation.	3 (18)	3 (3)
Unlearning . . . unlearning as a key to develop improvisational expertise.	3 (5)	3 (12)
Feedback Negative . . . others' negative response to improvisation.	2 (12)	1 (1)

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Positive. . . others' positive response to improvisation. 2 (2) 1 (1)

a Number of native and immigrant improvisers coded under every category; in round brackets is the number of textual segments coded for each category.

After completing the coding, inter-rater agreement was verified by a senior researcher (PhD in music) experienced with NVivo data coding. The inter-rater independently coded one interview (approximately 10% of the primary data), using an open model similar to that of the researcher. Afterwards, we discussed any divergent results and reworked operational definitions so that all categories reached a Kappa coefficient above 0.80.

## 4. Findings

### 4.1. When did they began to improvise?

As briefly stated in the Interview data analysis section above, pre-analysis of all the statements related to the when of improvisation allowed for the recognition of two main narrative types: native and immigrant<sup>6</sup> improvisers. Even if each participant expressed a unique relationship to improvisation, the distinctions between these two learning pathways were clear-cut among all the participants.

#### 4.1.1. Native and immigrant improvisers

Half of the interviewed musicians (n = 4: Sébastien, Isaac, Franck and Daniel), started to improvise “naturally” from the beginning of their instrumental learning (naturally).<sup>7</sup> For example, Franck began in a very organic and spontaneous way: as a child [ . . . ] along with my classical studies or violin practice; sometimes I would take a little detour [of] 15–20 min and improvise in the style [ . . . ] of the works that I was practicing. So, if it was a piece by Mozart [ . . . ] I would enjoy improvising, more or less consciously, something in the [musical] language I had just played.

We refer to this first type of learners as native improvisers because they “speak” improvisation from the time they begin to play their instrument. While Franck practised and learned improvisation completely independently (informal), the other native improvisers (Sébastien, Isaac and Daniel) later received formal improvisational instruction (formal). For the remaining participants (n = 4: Philippe, Thierry, Patricia and Sophie), improvisation appeared at an advanced stage of instrumental learning, typically around the end of formal training or at the beginning of their professional career. We call this second type of learners immigrant improvisers because they consciously and deliberately nurtured improvisation at a latter age through a process akin to second language acquisition. Even if two of them (Thierry and Patricia) had earlier sporadic improvisational experiences (embryonic experiences), they did not pursue this practice until years later, but instead focused on playing Classical music from the repertoire.

The statements categorised under the components why, how and feedback will be discussed be discussed in relation to these narrative types, and both distinctive and shared perceptions and experiences of native and immigrant improvisers be will revealed.

### 4.2. Why do Western classical expert musicians improvise? Their rationale

Apart from the organ school tradition and a few rare institutions (especially one that Franck attended), improvisation is not usually part of the Western classical musician curriculum. Then, why do a handful of Western classically trained musician choose to give up, partially or completely, playing others’ music in order to place improvisation at the core of their musical practice? Why do Western classical musicians decide, at some point, to learn to improvise, to improvise in concert and, against the established teaching tradition, to teach improvisation (even when the latter requires them to introduce improvisation courses in often reluctant institutions)?

#### 4.2.1. Native improvisers’ rationale

Why are native improvisers improvising? Because they do. This circular statement summarizes their learning pathway; they started to improvise intuitively, without necessarily realizing consciously that they were doing something “special”. Furthermore, despite the fact that they started to improvise “naturally” (naturally), acquiring expertise in such a complex domain is still a demanding task. What kept them going? Mere pleasure: native improvisers use more words related to fun and pleasure to describe improvisation than do immigrant improvisers (18 versus 5 references coded under fun). For example, Isaac said: “When I was a child, I improvised for fun”; and Sébastien:

After seeing Roland Dyens improvising as a warm up, I used [improvisation] like him, either for the encore or the opening of the show. I did that quite regularly and I was having fun [improvising] at home too: I recorded my “false”

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<sup>6</sup> Here we are drawing on [Prensky, 2001](#) well-known digital native/digital immigrant dichotomy. He uses these terms to differentiate those who were born in the digital age and use technologies with fluency from those who were born before the digital age and need to learn technologies as a ‘second language’.

<sup>7</sup> Throughout the Findings section relevant categories from the coding tree are indicated in round brackets.



compositions. I never wrote them so . . . I would never have written them because I did it for fun, it was my pleasure to [improvise]. Without remembering precisely why they started to improvise in the first place, most native improvisers feel, like immigrant improvisers, that they have good reasons to continue with this practice (authentic, extrinsic value, flow, fun, spiritual practice, etc.). For Franck, improvisation opens up interesting professional avenues:

[Improvisation] gives the opportunity to work in places where you could not work otherwise. I think that for a classical musician today it is important. More and more if you only know how to play what is written on paper, you are limited.

However, Sébastien had a different perspective and abandoned improvisation despite his great interest in that practice (ending). He did so because he felt that he had to make a choice between either playing contemporary music or improvising in concert, for he believed that the public and concert organisers are reluctant to accept both these practices. Therefore, he decided that he had to pick his battles and preferred to invest his energies in playing music composed by his contemporaries.

#### 4.2.2. Immigrant improvisers: a rationale for improvising

While native improvisers began to improvise quite spontaneously, immigrant improvisers decided at some point in their musical journey that they would learn to improvise (equalitarian practice, getting back to oneself, openness, freedom, self-expression, etc.). In one way or another, the immigrant improvisers we interviewed felt that creativity had been left behind in their initial musical training (perceived gap), so they sought out improvisation as a means of creative self-expression. For example, Thierry shared:

I think that I could have had an equally honourable career [as a traditional performer], but I would have been disappointed after a few years, being confined by attempting to perform in this very, very strict classical circuit that does not allow fantasy or improvisation. Even improvisation is absent from the Classical repertoire, although all concertos included planned cadenzas in which the soloist was expected to improvise. That is to say, nowadays the cadenzas are composed and played over and over again; we can no longer call this a cadenza. It is just a musical fragment that is written to palliate the lack of capacity of the interpreter. That's it.

The following quote from Patricia clearly demonstrates why she did so and how improvisation benefited her in an almost therapeutic way:

How I got into it? Because of a need, which one could call "deep". [ . . . ] I come from a classical background; I did my graduate studies at [famous institution], which is a place where there is a lot of pressure. When I returned to [home country], I played a lot: accompanying, travelling, doing chamber music. But at some point I had something like burnout, because it was too much music that I played, that I played, that I played, without choosing and embodying really what I wanted to play. So suddenly I left. I met someone who actually worked a lot on improvisation. [ . . . ] I worked on my own creativity and how, with an instrument [ . . . ], I could express myself without a score, without asking myself questions about what the composer or others would think, etc. So, truly getting back to myself.

Getting back to themselves appears to be the main motivation for immigrant improvisers to practice improvisation (emotional, getting back to oneself, perceived gap, self-expression). Along these lines, Sophie shared: "So [improvisation] is music, an extraordinary encounter, a state, a decision that both reveals your true self and wakes you up." In a similar vein, Philippe expressed:

I have realised that this relationship with improvisation was an essential one. For years I wrote scores [ . . . ]. But one day I realized, thanks to my travels and, in fact, most importantly to all those human encounters [ . . . ], thanks to those men and women who played without sheet music and who improvised [ . . . ], who were always in this relationship with what I call the abandonment, the letting-go [ . . . ], I realized that there was something there that was essential, essential. The essential is this relationship with the mystery, which is called grace. That's it.

In addition to the word "essential", which Philippe repeats four times in the extract above, he also described his relationship with improvisation in other segments of the discussion as fulfilling a "deep need" and as being a "vital" part of his musical life. For Philippe, as can be seen in the quote above, human encounters and contact with non-Western musicians were an important trigger for beginning to practice improvisation (human encounters). Seeing "those men and women who played without sheet music" awakened his desire to improvise and experience a whole new way of musicking. For Sophie the immediacy (or "realtimeness") of the creative process of improvisation is perhaps the main reason why she values this practice over performing other people's music (immediacy):

The only thing is that you cannot rework an improvisation but you can rework a composition. Obviously, someone can work on his string quartet for three months. But we, the four of us on stage, we write our string quartet in the moment. It's stunning. It's extraordinary.

After decades of improvising with numerous proficient and well-known musicians, Sophie is still amazed by the immediacy of the creative process of ensemble improvisation. With wonder, she describes how improvisers create in the moment (i.e. ideate and play), collaboratively, without exchanging a word, music that would take hours to write down (exciting). For

Sophie, the immediacy of the process is not the only reason why improvisation surpasses playing others' music. For her, the lived experience of the improviser is quite different from that of the interpreter in an equalitarian way (equalitarian practice):

Thanks to improvisation—and that's what's great—there is no hierarchy. I'll go even further: there's no male or female, no "gender", you know? [. . .] It's not even complementary: there's no composer, no interpreter. The "exécuteur", they say in French. Just the word . . . you run fleeing [from it]. I EXECUTE a Sonata in D major.

Sophie perceives improvisation as an egalitarian practice, which drastically sets this practice apart from the interpretation (or "execution") of a musical piece, the latter being characterized, according to her, by a hierarchical relationship that subordinates the musician to the composer. Along these lines, she views improvisation as a laborious real-time creation, while interpretation is a "conduit" between a composer and the audience.

#### 4.3. How do Western classical expert improvisers learn to improvise? Mapping pathways

Even if improvisation is created in real-time and might appear to be a spontaneous act to the observer, the participants in our research agreed on the fact that acquiring the skills and knowledge necessary to improvise at the professional level requires a lifelong apprenticeship (enculturation, knowledge, preparation, strategies and tactics). Furthermore, a complex network of experiences (associative improvisation, by ear, constraints, live experience, risk-taking and starting from nothing) and competencies (autonomous, curiosity, embodiment, instinct vs. knowledge, presence) to foster improvisational abilities.

##### 4.3.1. Learn-unlearn

Participants barely discussed the micro-structural process of their improvisation learning, providing very little description of the precise activities they undertook in order to develop their expertise. However, a macro-structural skill acquisition mechanism recurred throughout the interviews: the learn-unlearn process, as described here by Sophie: "[. . .] it means undoing, detonating, messing around, unlearning. To be, one must unlearn. But, my friend, in order to unlearn one must have learned a lot, a lot, learned a lot. And so it takes an entire life." In fact,  $n = 6$  participants mentioned that their improvisational expertise was formed, in part, through a repetitive routine of practice (in which they typically rehearsed scales, modes, arpeggios and patterns) that was then followed by a "unlearn everything" phase (knowledge, unlearning). During this process, the participants did not literally forget their musical know-what and know-how (they did know to rely on them during improvised performance), but they just "let go" (unlearning). In doing so, some participants shared, they felt as if they were transducing the music they produced from an external source of inspiration into sounds; they therefore reported having less personal attachment to their creation (being a channel).

##### 4.3.2. Native improvisers' hows

Since native improvisers began to improvise at a young age, without receiving sequenced instruction regarding how to do so, they retained little memory of their early learning. Notwithstanding their early engagement with this practice, native improvisers still felt that they needed to develop and maintain their improvisational abilities throughout their entire life (preparation). For example, when asked, "In order to address the risk-taking of improvisation . . . do you have tools or strategies to deal with the unknown?", Isaac stated: "Yes, being well prepared. It sounds like a contradiction, but in order to be able not to depend too much on one's preparations, one should be very well prepared, which means working on your improvisations a lot." The immediacy of the creative process of improvisation carries with it unexpected events and surprises that contribute to the necessity of a lifelong training for the improvising musician (risk-taking, preparation). Isaac continued:

And there are also times when your heart stops, because you find yourself in a remote modulation that is not in the style at all, and not where you wanted to be, and you [don't] know how you will return in 12 s [from] G flat major to D minor. There are moments . . . the unexpected is not always nice.

##### 4.3.3. Immigrant improvisers' hows

Immigrant improvisers, for their part, clearly remember the moment when they began their apprenticeship (late beginning), which they tend to consider both as a key moment of their musical career and a laborious process (laborious). Along these lines, Philippe shared: And then one day I said to myself that I will start to "let go" for this improvisation; that is to say, daring to express myself in concert. But it took me years to do so, [because] it was so intimate [. . .]. And I remember the first time I dared to improvise, I was very shy. It lasted a few minutes, very short, and I remember moments of emotion, trembling and uncertain. [. . .] And I remember a concert at the Olympia in Paris [. . .] where I played a total improvisation concert [. . .] before 2500 people. And it was the ovation and the applause that deeply surprised me, because I was more applauded than usual, at this risk-taking. And I also found true pleasure in letting go, in abandoning myself and not playing things that I knew.

##### 4.3.3.1. Humanencounters. For Patricia, in contrast to Philippe's experience (presented in the Immigrant improvisers' rationale

section), the intention to improvise preceded the significant human encounters she had (collaboratively). As she was looking

forward to reconnect with her personal creativity, she anticipated meeting improvising musicians who would inspire and guide her improvisation apprenticeship, feeling that these encounters would facilitate her improvisation learning.

#### 4.3.4. Summing up the whys and hows

In their process of developing improvisational expertise, musicians gradually build their knowledge base and acquire technical skills. By so doing, they can progressively improvise with more fluidity and feel better empowered to face any unforeseen situation. However, the achievement of expertise requires the musicians to progress one step further: they need to unlearn, i.e. to stop relying on their knowledge and to “let go”.

#### 4.4. Feedback

Even if they began to improvise at a very young age, native improvisers soon enough realized that they were doing something different that was, in some cases, well accepted and valorised (positive) (Isaac and Franck) in their environment and, in some other cases, perceived as a deviant practice by their colleges, audience, teacher or institution (Sébastien and Daniel) (negative). As an example, Daniel even hid himself from the director and other teachers of the conservatory he attended in order to improvise “clandestinely”, his teacher having told him (about his improvising), “Stop this nonsense and get back to work” (subversive). Immigrant improvisers were less eloquent (two references versus 14 for native improvisers) about the feedback they received from others about improvisation. Philippe simply expressed, in the quote in the Immigrant improvisers’ hows section, how he received a positive response to his first improvised concert performance (positive), whereas Sophie observed that she “suffered” because improvisation is often perceived as a practice that is not serious (negative).

### 5. Discussion – the road towards improvisation

At first glance, our data seemed to present highly idiosyncratic pathways toward Western classical improvisation expertise development. However, further analysis revealed a native/immigrant improvisers dichotomy around which we organised our results and discussion. Interestingly, none of the participants interviewed fell in-between the two relatively distanced poles of early and late learners. Perhaps a bigger sampling would have revealed grey space cases, but the distinction between these two categories was unequivocal among the participants interviewed.

The native/immigrant improviser dichotomy we identified is a phenomenon that could be found in any musical culture where improvisation is practised, but one that is emphasized by Western classical music’s traditional teaching and learning approach. In effect, classically trained interpreters are among the only musicians who can reach a high level of expertise without ever playing an unwritten note; and they feel at a loss without a score.

#### 5.1. Whys?

Interesting parallels can be drawn between music and language acquisition: “native” language is usually acquired through a two-phase sequence: (1) listening/speaking and (2) reading/writing (Roskos, Tabors, & Lenhart, 2009). While native improvisers learn Western classical musical language as a “mother tongue”, immigrant improvisers learn it in a way that comes closer to learning a “second language” (i.e. centred on the reading/writing phase, and with little, or no, cultural immersion). Through this type of learning, they do not acquire grammatical/syntactical rules through “speaking” (babbling, aural repetition and/or improvising), which could lead some musicians to a sense of creative incompleteness. This perceived gap was for the immigrant improvisers we interviewed the trigger that eventually motivated them to dedicate themselves to improvisation.

Among the immigrant improvisers we interviewed we noted an intrinsic motivation that seems to be a necessary incentive to improvise, like that observed among organists by Johansson (2008, 2011). The factors underlying this intrinsic motivation were that improvisation was perceived as a way to get back to oneself and an equalitarian practice in which a sense of immediacy reigns and which is inspired by human encounters. Indeed, there was a common agreement among the immigrant improvisers we interviewed about the fact that they felt that improvisation awakened and nourished their creativity at a much more profound level than performing from a score did. As an illustration, we can think of Sophie’s saying that improvisation “reveals your true self and wakes you up”.

However, native improvisers were also driven by an intrinsic motivation, but this one was constructed gradually and a posteriori by looking back at the beginning of their improvisational practice as directed towards pursuing this activity. Native improvisers had no clear memory of why they started to improvise: it just happened. However, all of them (except Sébastien) continued with improvisation, developing their improvisational skills to an expert level and integrating this competency into their performing/teaching professional activity. Furthermore, their motivation was sustained by different factors: mere pleasure as well as unique professional opportunities provided by their uncommon skills seemed to be the stronger motivators for them to pursue their improvisational practice.

## 5.2. Immediacy

Real time has been identified as a defining characteristic of improvisation by many authors ([Ashley, 2009](#); [Csikszentmihalyi & Rich, 1997](#); [Johnson-Laird, 2002](#); [Kenny & Gellrich, 2002](#)); this very trait was also perceived by some of the interviewees (Thierry, Sophie and Daniel) as one of the reasons why they value this practice over performing others' works.

## 5.3. Hows?

### 5.3.1. Learn/unlearn

The learn/unlearn process brought to light by  $n = 6$  participants in the present research can be related to various findings in the relevant literature. Firstly, the learn part of the process can be related to [Berkowitz \(2009\)](#) and [Johansson \(2008, Johansson \(2011\)\)](#) findings regarding improvisation learning, where (1) learning is nurtured within a master-apprentice relationship (Johansson), (2) through assimilation of declarative and procedural knowledge (Berkowitz); (3) learning is consolidated by using the acquired knowledge in the course of an *ex tempore* creation (Berkowitz) and (4) by refining improvisational skills through live performance (Berkowitz and Johansson). While these components can undoubtedly be part of one's improvisation learning process, our results tend to demonstrate that this list is neither exhaustive nor exclusive, for two native improvisers followed instead a self-taught, less systematic learning process.

Secondly, the unlearn part of the process seems to be an important factor for the flow state to occur in the improvising musician. Why is this so? Flow can be experienced at the critical moment when one is involved in a task that is more demanding than what one is used to (i.e. over the individual's difficulty average) and in which one's skills to complete that task are also beyond one's average ([Nakamura & Csikszentmihalyi, 2002](#)). So, is improvisation different from other domains of expertise? Not entirely; but, as with other disciplines, it has its specificity that relies on the demanding simultaneous combination of processes required from the musician (among others, hearing, listening, storing in memory, calling back from memory, ideating, playing and evaluating; see [Johnson-Laird, 2002](#); [Kenny & Gellrich, 2002](#); [Lehmann et al., 2007](#)). Cognitive psychologist [Johnson-Laird \(2002\)](#) suggested that the high cognitive load placed on the improvising jazz musician forces him to use a random or automated process. Recent medical imagery research provides empirical support for this idea:

This unique pattern may offer insights into cognitive dissociations that may be intrinsic to the creative process: the innovative, internally motivated production of novel material (at once rule based and highly structured) that can apparently occur outside of conscious awareness and beyond volitional control. ([Limb & Braun, 2008](#)).

When Sophie uses the term "unlearn", she is probably referring to these automated creative processes from an experiential standpoint.

## 6. Conclusion, implications, and next steps for music education

Our results support the theory of several authors (including [Brophy, 2001](#); [Kenny & Gellrich, 2002](#); [Kratus, 1995](#); [Sloboda, 1993](#)) who claim that improvisational skill is developmental (that is, it is something that requires nurturing) rather than innate, and that variables like socio-cultural environment, motivation, dedication, risk-taking and musical encounters exert more influence on the development of improvisational expertise than do inborn variables. Native and immigrant improvisers started to improvise in totally distinct conditions, which appear to have tinted their whole further relationship with improvisation. However, whether their skills developed 'naturally' or were nurtured, their learning process tended to be more and more similar as they advanced on their pathway towards improvisational expertise. Further research could investigate if similar divergent/convergent learning pathways are observed in other creative domains between high-achievers who are early and late learners.

Our results also suggest that introducing improvisation at the very beginning of musical instruction would be highly beneficial for the music learner. While all the experts interviewed perceived improvisation as an unparalleled, freeing practice and means of creative self-expression, native improvisers perceived their learning as a process that appeared less laborious than that of the immigrant improvisers. Furthermore, learning sequentially to "listen/speak" and "read/write" musically would allow the pupil truly to embody his instrument and the musical language under acquisition.

In accordance with the experts' learn/unlearn process, improvisation teaching and learning activities should alternatively be focused on acquiring knowledge, building skills and "letting go". Unexpected, unrehearsed or symbolic constraints could be favoured for "letting go" activities. As an example, asking the learner to improvise by ear on an unfamiliar chord progression (e.g. using quartal or unconventional harmonies) would force him to transcend his habits and explore new avenues; this is a process that is facilitated when experimentation and "errors" are welcomed and encouraged by the instructor. While a comprehensive knowledge in a given creative domain is a necessary condition for high-achievers, creating contexts where this body of knowledge has to be temporarily put aside could foster the ability to experience an inspirational creative flow. The main limitations of the present study relate to (1) self-reporting methods and (2) sample size. Self-reporting methods are subject to various types of conscious and unconscious biases, such as social desirability or memory failure. On another level, if we had pursued data collection to the point of theoretical saturation, a greater sample size might have given a more comprehensive view of Western classical music expert improvisers' learning processes. However, given the exploratory

nature of our research and the relative scarcity of Western classical expert improvisers, we believe our research design's qualities surmount its limitations: the qualitative richness of the data we collected support our methodological choice of the case study method based on semi-structured, open-ended interviews, using a relatively small sample.

Researchers and educators interested in the learning pathways of musical improvisation will benefit from direct observation of expert improvisers' rehearsal habits. The expert improvisers interviewed here tended to be more expansive about the context of their learning than about their actual learning processes (i.e. the concrete activities they undertook in order to acquire their expertise). Observation of practice routines combined with a think-aloud protocol method could provide a more precise description of expert improvisers' learning mechanisms. This would be a useful pedagogic as well as research tool. Particularly pertinent to this research topic would be questions concerning improvisers' specific learning exercises or routines. Those willing to cross disciplinary boundaries in order to engage with other forms of improvisation will help to champion further dimensions and differentiations of the diverse pathways to improvisational expertise. Improvisation, in music as well as in other domains, viewed as an adaptive gesture to a real-time unpredicted event, is an invaluable component of creativities, ranging from the small-c to the Big-C level. Fostering improvisational skills in any domain would allow the learner to develop the capacity to adapt to tomorrow's changing world that not even his/her teacher can foresee precisely.

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