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Democratising the experience of learning to play a musical instrument

Introduction and empirical data

This presentation outlines a theoretical approach towards an understanding of the individual experience of playing and learning a musical instrument. I am a teacher in higher music education within the field of folk and world music and it is from this perspective that I approach this topic. This is a work in progress any ideas and suggestions could emailed to me (see below for contact).

The theoretical framework presented here is my interpretation of established ideas, which I have used to analyse and understand empirical data from a series of studies.

One auto-ethnographical article based on my own teaching experience from the Music Academy in Malmö and the Danish national academy of music departing from the question: "How can you, as a teacher, serve as a model without becoming a restriction?" This question is especially relevant in the given context: flute teaching in higher music education within the genre of folk music. This is certainly a small genre, and the influence from other exponents of the same instrument and in the same genre is limited.

The book chapter titled Meanings of Tradition in Swedish Folk Music Education explores the different perceptions and understandings of the concept of tradition among students of folk music in higher music education in Sweden. Since the idea of tradition is a foundamental dimension of folk music, this study also reveals different understandings of the nature of the genre and of individual positions taken in relation to the tradition.

My licentiate thesis, Timber and Timbre, explored the different approaches to the same instrument (the simple-system flute) taken by professional musicians active in different musical genres and traditions.

My current study, leading up to the PhD, is a study based on a learning situation where six flute players engage in musical activities and reflects on the experiences. It is designed as a co-operative inquiry and is yet on-going, but insights from this study have contributed to this presentation.

Theory

The core of the theoretical framework that forms the point of departure for this project is the concept of affordances (Gibson 1979/1986). I also include *effectivities* and *frameworks of affordances* (Mooney, 2010), which are later theoretical contributions, following the idea of affordances. I will first introduce these concepts and explain how I interpret and use them, because they have been used differently by scholars in a wide array of academic disciplines. After that I will present in what way I envision that they can be fruitful in understanding and discussing the phenomenon at hand.

Affordances

The concept of Affordances was introduced by American psychologist James Gibson. The focus of Gibson's project was to understand perception as a direct relationship between the subject and the object. An often-quoted passage in Gibson's writings provides this definition of affordances: "The *affordances* of the environment are what it *offers* the animal, what it *provides* or *furnishe*s, either for good or ill. […] It implies the complementarity of the animal and the environment." (Gibson, 1979/1986, p. 127).

Michaels and Carello (1981) provides some examples: " […] humans do not perceive chairs, pencils, and doughnuts, they perceive places to sit, objects with which to write, and things to eat […] To detect affordances is, quite simply, to detect meaning". (Michaels & Carello, 1981, p. 42).

Following from this is that affordances are not features of the object and not part of the subject, but it is this element of meaning and a possibility for action that bridges the object/subject divide.

Affordances in music

The concept of affordances has been widened to include other modes of perception than the visual, and has also been used in music research. There are different interpretations

of affordances and different translations of Gibson's ideas to the field of music. To my knowledge, the first application of affordances in music making appeared in Folkestads dissertation from 1996, writing: "The creative music making takes place in a process of interaction between the participants' musical experience and competence, their cultural practice, the tools, the instruments, and the instructions – altogether forming the *affordances* in the creative situation" (pp. 87-88, cited in Folkestad, 2012). In a later discussion on affordances and musical instruments, Östersjö and Coessens describe affordances as: "an instrument affords different musical possibilities to different performers; hence, the affordances of an instrument are as dependent on the individual performer as on the acoustic properties of the instrument" (p. 337).

My own definition, which emerged through the analysis of the interview in the study Timber and Timbre, interpret affordances as: *relationships between the musician and the musical instrument. These relationships constitute the opportunities for actions* (Tullberg, 2018).

Affordances of the simple-system flute

Here are examples of affordances, taken from the analysis of Timber and Timbre. These are areas of affordances in line with the above definition, that is, they are relationships that bridges the gap between the flutist and the flute. Furthermore, they only exist in the act of playing, and are constantly changing depending on both the instrument and the musician: (i) *affordances of the column of air*, (ii) *affordances of fingering,* (iii) *affordances of sound*, and beyond that (iv) *affordances of repertoire* was discussed, since both deliberate and intuitive interpretation of the musical material was clearly a process grounded as much in the individual disposition as in the repertoire itself.

Effectivities

Although Gibson argued for affordances as being part of neither the object nor the subject, or rather part of both, his writings was occupied with descriptions of light, surfaces, objects, and environments. Due to this unbalance, the term *effectivities* was introduced to describe the subjects disposition towards the object. Effectivities has been used and

understood in different ways and even criticised to ruin the reciprocity of affordances that makes it to such a powerful idea.

As I see it, effectivities is a vital construct in exploring affordances in relation to music making, since it provides a space in which it is possible to discuss the different dispositions and experiences among musicians, but also the progress and learning of an induvial.

Windsor and de Bézenac puts effectivities in a musical context:

> In this process [learning], musicians change their effectivities through the development of new perceptual sensitivities and levels of motor complexity. One needs only to look at the numerous compilations of technical exercises and study books used in Western classical music education to see an example of this. (Windsor, W. L. & de Bézenac, C. 2012, p. 8-9)

Developing the effectivities changes the affordances in relation to the musical instrument, and from the perspective of the subjective experience, the instrument is perceived differently. In this sense, a flute in the hands of a nine-year-old beginner is not the same instrument as a flute in the hand of a professional soloist.

Frameworks

Investigating how affordances informs music making, Mooney (2010) adds the idea of *frameworks*:

> A framework is any entity, construct, system, or paradigm – conceptual or physical – that contributes in some way to the composition or performance of music. [...] In making music, the composer or performer – knowingly or naïvely – engages multiple frameworks to create the end result, and in doing so brings the affordances of those frameworks into play" (Mooney, 2010, p. 144)

The affordances of a framework are further organized from the easiest to the most difficult.

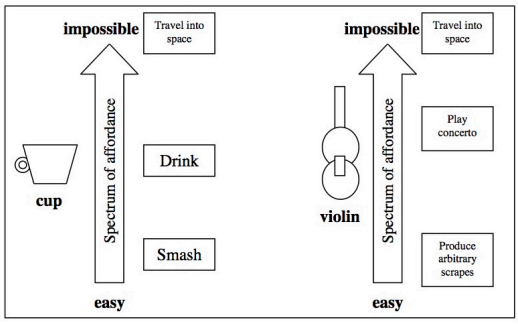
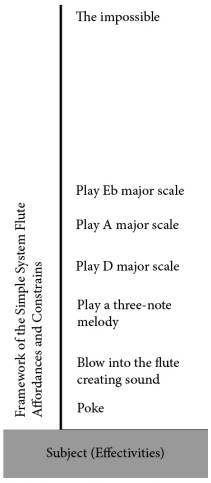


Figure 2: Two example frameworks – a cup and a violin – with example affordances positioned on a spectrum of affordance that ranges from 'easy' to 'impossible' to achieve.

Taking the effectivities into this equation means that the construction of a framework must be subjective, since what one musician perceives as natural and easy, might demand much constrain from another. Seen from this perspective, the concept of frameworks provides a way to step inside the "double arrowed" idea of affordances in order to see its nuances, always uniquely organized depending on both the object and the subject.

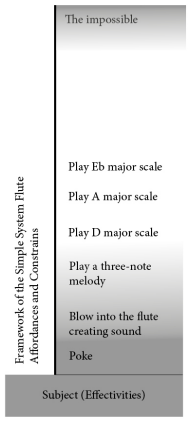
The simple-system flute as a framework of affordances

In order to show some concrete examples, I will go through a series of frameworks of affordances, generated from the empirical material.



The simple system flute as a basic framework

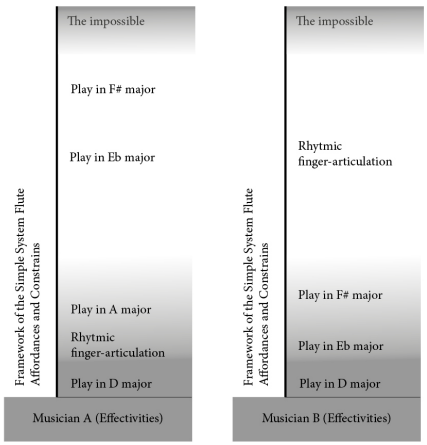
Framework 1 shows the simple-system flute as framework of affordances. Here is an example of how some actions that can be performed with the simple-system flute could be hierarchically organized in a framework. In this framework it is reflected that the spatial layout of the instrument is biased toward D-major and tonalities further away from this, that is depending on fingerings involving keys, demands more constrain from the player.



The simple system flute as a basic framework

Framework 2 is the same framework but with added gradient at the bottom and the top of the framework. It is apparent in the conducted studies that there are some tasks, for a musician is so rudimentary, that they are automatized and performed without any constrain at all.

Framework 3 and 4 shows examples of one physical framework of the simple-system flute – Fingering. These two frameworks are based on two of the musicians in the Timber and Timbre-study mentioned above. Both of them are professional musicians, playing the simple-system flute. But they are deeply rooted in two different genres; Irish traditional music and western art music from the 19th century. The different genres have different requirements regarding playing technique and finger movement patterns.



Framework of fingering Framework of fingering

Frameworks 3 and 4

Musician A plays traditional tunes and the repertoire is mainly limited to keys that are easily accessible to the instruments inhabiting the genre, some of them diatonic; fiddle, bagpipe, accordion, concertina etc. The genre also rests heavily on rhythmical ornamentation, most attainable in certain tonalities on the flute (that is tonalities using the open holes on the flute). Following from this is that Musician A perceives the simple-system flute as a diatonic instrument with the possibility of playing accidentals when required.

Musician B on the other hand plays solo and orchestral music written for the simple-system flute during the 19th century, and is required to play across all keys. To her the simple-system flute is a chromatic instrument. But with her technique, aimed towards this repertoire, the percussive movements needed for the rhythmical finger-articulation of Irish traditional music in unnatural.

These images are examples of one physical framework, the fingering of a simple-system flute. Although the instrument is the same, these frameworks are organized differently depending on the effectivities of the musician.

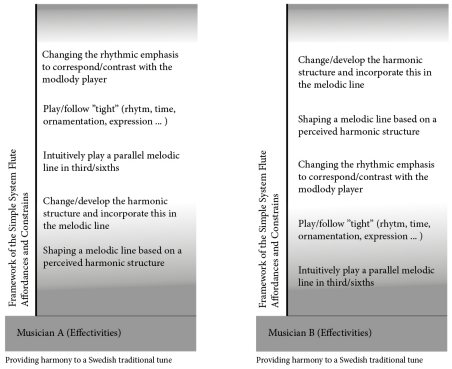
There is a parallel to the more widely used notion of idiomacy. In this study it was obvious that, what one musician thought – not only to be idiomatic to flute, but even the very nature of the instrument – was barely recognised by the other.

Framework 5 and 6 are based on examples are taken from the on-going co-operative study and show a conceptual framework, the act of providing a harmony to a Swedish traditional tune. Swedish traditional music is mainly an aural tradition. Besides playing the melody, it is custom for a melody instrument player to be able to provide a harmony. There are no hard and fast rules on how this is done, and this is an area where the individual perception of affordances of the repertoire, and the different strategies, resting on both practical and theoretical knowledge, becomes explicit.

There are definitely conventions, for example playing a melodic line in parallel with the melody. But the possibilities are vast when venturing off from this convention. In the case of flute playing, it is even less resting upon conventions since the flute does not allow for all of the same solutions as a fiddle, and has other possibilities to explore, less codified

in tradition. The practice of providing a harmony is thus a conceptual framework where the effectivities becomes a resource to be drawn upon.

The aspects of the conceptual framework included here are some examples of actions that have emerged in the co-operative study. These frameworks show two musicians and how some of these actions are organised according to their effectivities. Depending on who they are, their knowledge and competence, some of these aspects are easily done while some are beyond reach or possible only through much effort.



Frameworks 5 and 6

Musician A has rigorous theoretical knowledge and approach the task from an analytical point of view. He has not an extensive background in the genre and has yet not fully developed the competence of intuitively find the parallel melodic line. Furthermore, he is occupied by developing the harmonic patterns he found and not fully aware of the melodic variations and shifting rhythmic emphasis that comes through the interpretation of the melody player.

Musician A on the other hand has a long background in the tradition. He more or less “hears” the parallel line inside his head when he learns the tune. It comes with the package and all he has to do is to let it out. However, he has limited theoretical knowledge and while it is possible for him, with some effort, to identify harmonic progressions underlying the tune, he lacks the knowledge to find the parallel chords or other harmonic developments.

Parameters of effectivities

Effectivities thus, have a profound influence upon the experience of playing music and on the musical actions available through the perceived affordances. I will use the empirical material of the studies mentioned to categorise some aspects of effectivities. This is not intended to be inclusive, but only lists what have yet surfaced. I see this as an early stage in an inventory process. I will use my previous operational definition of effectivities as a point of departure: *everything that informs the subject's relationship to the musical instrument, and hence defines the affordances in this relationship* (Tullberg, 2018). I will use some insights from the previous and ongoing studies to dig into what the underlying parameters of effectivities may be.

Bodily features

Bodily and anatomic features such as the size of body and length of fingers. This might seem static but bodies change, grow, may become struck by injuries or illness. In the case of my studies, this area also includes direct sound producing aspects such as resonance from the cavities of the body and the size of the lungs.

Playing technique

Playing technique includes the technical skill of the player, but it is necessary to acknowledge that different aesthetic contexts are cultivating different kinds of technique, as we saw in framework 3 and 4 previously.

Embodied habits

Embodied habits can be seen as the unconscious or hidden part of playing technique, things that are just happening, without the musician being aware of it. This includes for example involuntary finger movements, manner of holding and balancing the instrument and tensions in the body. In the empirical material this is reflected for example in discussions on breathing and ornamentation and phrasing. The physical context in which the music is usually performed also affects how the practice is engraved in the body. The overall loudness in a session or the dry acoustics in a practice room are parameters that are brought up in the interviews.

Perception of the spatial layout

As mentioned in the presentation of framework 3 and 4, the perception of the spatial layout, and hence the affordances of the instrument may be significantly different from one musician to another. This might be heightened by the fact that flutists in general are not visually guided in the process of playing. The instrument disappears visually when it is bought to playing position. Finger movements may be more or less conscious, and depending on how the spatial layout is perceived, different patterns of movements are possible.

Theoretical knowledge

The theoretical knowledge is one aspect that informs the perception of the instrument and the orientation in the music. A certain passage of notes may be perceived as a scale or as a harmonic pattern. Relevant theoretical knowledge provides one mode of thinking and acting in the situation.

Experience of playing other instruments

Experiences from other instrument provides wider references with regards to the main instrument. This can also allow for a deeper understanding about the structure of the music and other ways of listening.

Inner musical library

The Inner musical library (Folkestad, XX) includes the music that is stored in our memory. What a musician listens to naturally affects the own musical practice. Conscious listening is brought forth as a way to articulate an aesthetic vision. Having played (and hence listened) in other genres broadens the musical horizon.

Contextual knowledge

Contextual knowledge about the music is not only what you know but also how you understand it. From the study on the perception of tradition among folk- and world music students, it was obvious that this differed significantly between individuals. Not only their

depth of knowledge but more importantly, how they saw this in relation to their own musical practice.

Changing/Developing the effectivities

All these parameters of effectivities, and certainly more than these, are factors that grow during learning. But they may also change negatively, depending on both the instrument, the condition of the musician and the given situation, making affordances to a dynamic perspective on musical practice and learning.

Since effectives determines what affordances we perceive, it implies an explorative approach to musical learning. It is not a lock-and-key process, where new levels of competence lead to a predetermined set of executive skills. It is rather about growing together with the instrument and being able to channel each unique personality in to music.

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