

IMPROVISATION AS A TOOL FOR CREATIVITY: THE CASE OF WOMEN

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OVERVIEW

- On the nature of improvisation
- Improvisation in different music genres and cultures
 - -Improvisation in Eastern Music
 - -Improvisation in Jazz-modal extension
 - -Improvisation in Avant Garde graphic scores music
- Big Ears (listen and understand the meaning)
- Towards new pedagogical issue on improvisation
- Gender issue for Women in Jazz



On the nature of Improvisation



- **Improvisation**, also called **Extemporization**, in music, the extemporaneous composition or free performance of a musical passage, usually in a manner conforming to certain stylistic norms but unfettered by the prescriptive features of a specific musical text. (Birttanica)
- Music originated as improvisation and is still extensively improvised in Eastern traditions and in the modern Western tradition of jazz.

Monophonic or polyphonic traditions?

- In essentially monophonic musical cultures, whether Western or non-Western, improvisation has been of paramount importance, if only because successful improvisation is always more readily achieved by soloists than by groups



MUSIC GENRES AND IMPROVISATION

- **Ancient Greek music** (improvisig on the tetrachords)

<https://www.youtube.com/watch?v=vtSBJVOqKuY>

- **Classical Music** : From Medieval music to Romantism

(Johann Sebastian Bach, W.A. Mozart, Felix Mendelssohn, and Frédéric Chopin virtuosi of improvisation)

- **Eastern Music** : Byzantine, Jewish, Islamic Maqam/Indian Raga

- **Jazz Music:** New orleans Early Jazz, swing music, bebop, Gypsy Jazz, cool Jazz, Modal Jazz, Latin Jazz

- **Machine learning and blending styles**



Improvisation in Western Music

In early European music from Roman Catholic chant to medieval polyphony was rooted in such improvisational practices as the exploration of motivic possibilities in the church modes (see church mode) and the addition of a second melody to a preexisting melody or cantus firmus.

- <https://www.youtube.com/watch?v=Ei88J4lERbk>
- In Renaissance improvisations over **ostinato basses** (relatively short repeated bass patterns) and maintained through the centuries especially by organists who embraced such popular ostinato genres as the passacaglia and chaconne.
- Organists and Pianists are the essential improvisers.
- <https://www.youtube.com/watch?v=EcKtGkob224>
- <https://www.youtube.com/watch?v=fBA-38mzabs>



EASTERN MUSIC

Modal improvisations have remained central to much non-Western music, including

Vocal performance

- -the chant of the Byzantine, https://www.youtube.com/watch?v=28hoJKg1_lw
- <https://www.youtube.com/watch?v=TBfLL3YTNoI>
- Jewish
- <https://www.youtube.com/watch?v=gtsQ5kpkI-8>
- Islāmic *maqām* elaborations,
- <https://www.youtube.com/watch?v=H8YeF3xD5eI>
- Indian raga performances.
- <https://www.youtube.com/watch?v=IIQrUZLyATo>
- **Instrument performance**
- Clarinet
- <https://www.youtube.com/watch?v=P6eDYV3mOrk>
- Duduk....<https://www.youtube.com/watch?v=OxeXHbYxick>
- .



JAZZ

In jazz (through different styles-new orleans, blues, bebop, cool jazz, etc.)

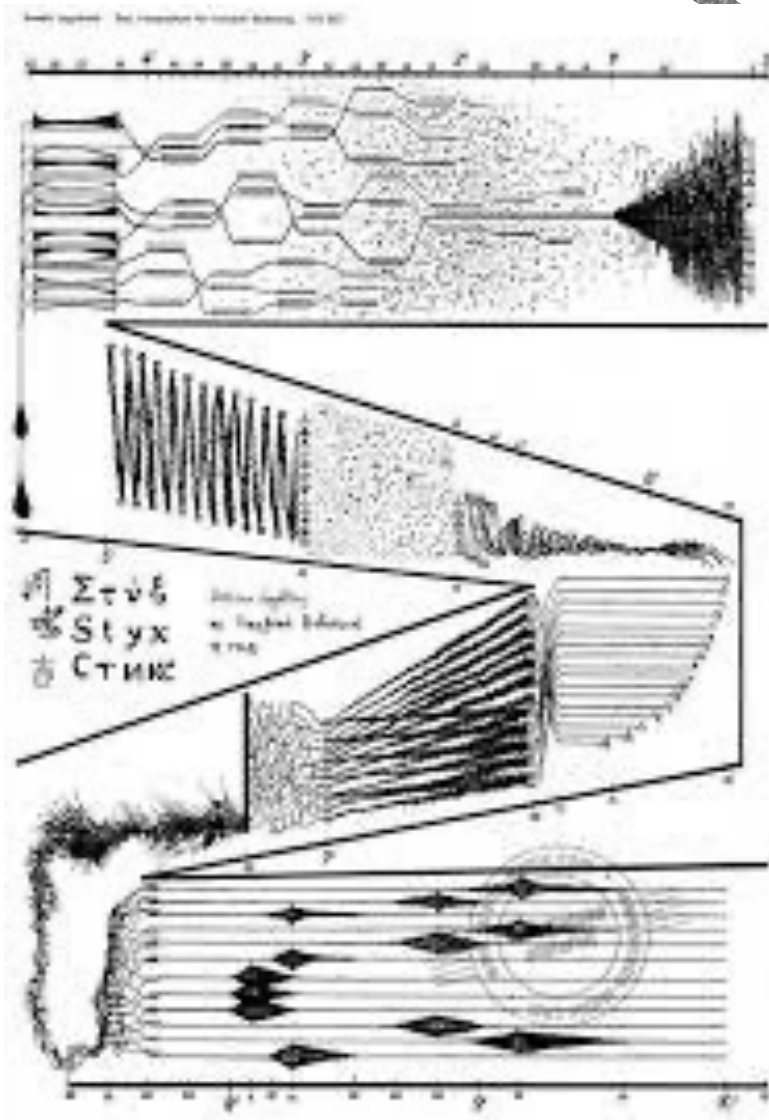
Process structured on a mode through a ground bass

Early Jazz, swing music, bebop, Gypsy Jazz, cool Jazz, Modal Jazz, latin Jazz. Etx..

https://www.youtube.com/watch?v=__OSyznVDOY

<https://www.youtube.com/watch?v=hLUyVyM626A>





EXPERIMENTAL MUSIC- GRAPHIC SCORES

- <https://www.youtube.com/watch?v=FdRyF6lBA0w>

**In Avant Garde music and Graphic Scores
(collaboration between performer and
composer)**

- a) In conventional notation (verbal instruction, a prescription for duration, or an idiosyncratic graphic code)
- b) Some works required performers to combine at random “building blocks” of brief musical phrases or entire sections presented by the composer;



MACHINE IMPROVISATION

-Computer driven improvisation by a composer

-Computer aided improvisation for understanding different styles (bridges between past and present, bridge between cultures)

- AI for understanding idiomatic improvisation and interacting
- AI for blending idiomatic improvisations through computational models in different styles

-Computer generated improvisation by interacting with the performer

-Music Robots improvisation

<https://www.youtube.com/watch?v=l9OUbqWHOSk>

-Improvisation technologies for participatory performance (audience)



ETHICAL QUESTIONS ABOUT MACHINE IMPROVISATION AND THE SOCIAL INTELLIGENCE

Improvisation is both personal and social, a practice based group activity whose lack of coherence between action and dialectics is catastrophic for credibility but vital to adaptation

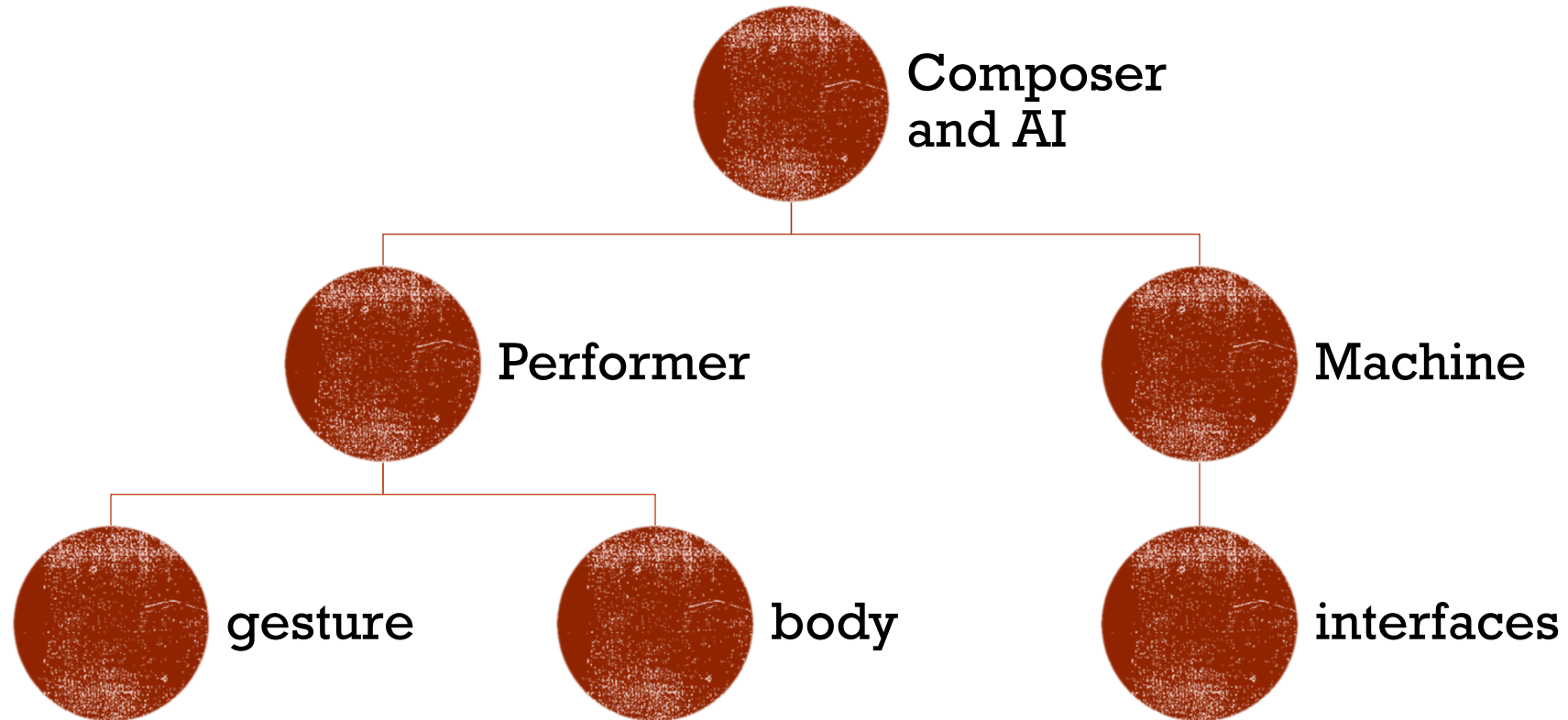
- 1. Improvisation might have the external appearance of a utopian community or cult **where the computer should be the medium for not a dialog but also for dialectics ?**
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- 2. From the postmodernization of Jazz through music industry (Eric Hosbawm) we are facing a new era of co-creation with the machines .**Can Co-creativity with the machines bridge the past and the present and articulate an utopian sensibility that suggests that a different world might indeed be possible?**
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- 3. Can Machine improvisation bridge cultural anthropology and ethnomusicology with historical /systematicmusicology where we **can explore the limits of improvisation in music , learn which are the archetypal patterns of performer in East and west culture and interact with music that are improvised ?**
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- 4. Can machine improvisation be seen as a laboratory of **social experimentation** of a non hiérarchcal organisation which offers a dialogic conversation of unvoiced thoughts, and actions often unresolved or disrearded. Can machine improvisation go through this communication?
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- 5. Could machine Improvisation **articulate collectivism**, a sounding out of group listening and responing. Can we examine the ethos with the principles of this communciation embodied by the musician vs the machine ?



SHIMON, MARIMBA PLAYER (G.WEINBERG, GEORGIA TECH, 2014)



COMPOSER AND AI



MUSIC IMPROVISATION AND AI

OMAX-(Assayag-chemiller, Dubnov-IRCAM)

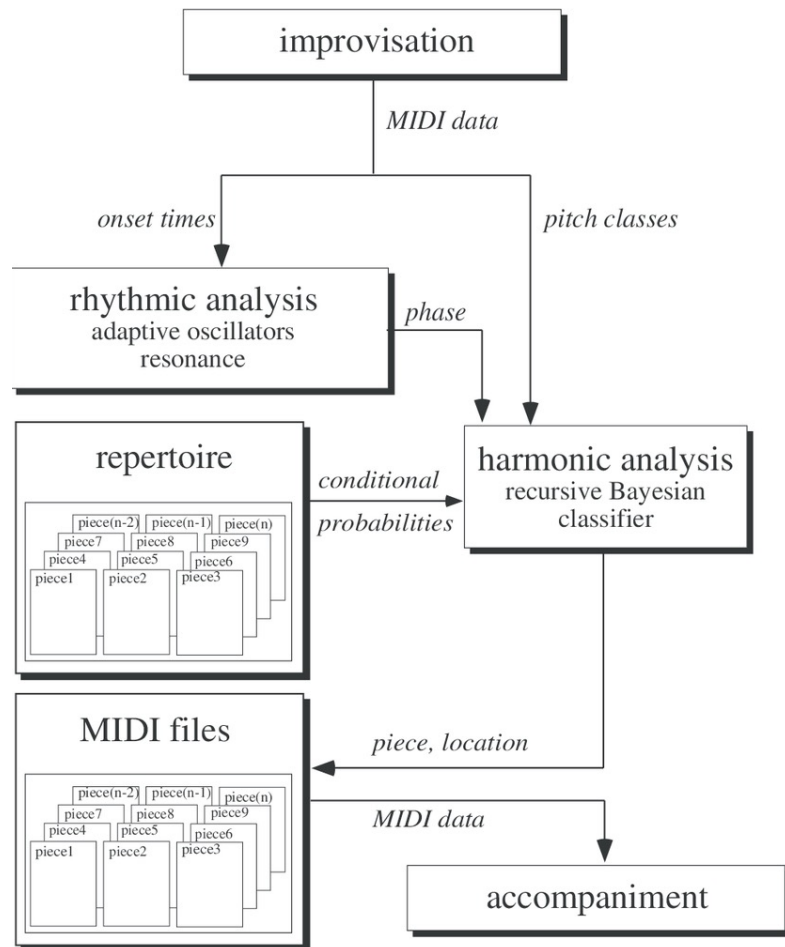
- , which is teaching computers how to improvise, musically.
- a sense, the project is all about self-discovery.
- By teaching machines how to improvise well, the REACH group will be inventing more precise definitions of music for themselves.
- This all circles back to the methods behind reinforcement learning.



MUSCI CREATIVITY AND AI

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- Music composition (generation of music scores (D.Cope/ experiments on artificial intelligence till intelligent interactive systems)
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- Generation of improvisation (Assayag and team/Omax-DCYI2, Ircam)
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- Music robots (Winberg G./Shimon, Georgia Tech)
-
- Music industry and machine learning
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OMAX

<https://www.youtube.com/watch?v=2jFpGQbrcag>



TOWARDS NEW PEDAGOGICAL ISSUES OF IMPROVISATION

1. Improvisation in Western classical music has been addressed and researched more frequently recently, and there is increased discussion on alternative approaches to teaching and supporting improvisation
2. The values in Western classical music education remain primarily aesthetic at their core, often placing interpretational and technical mastery above all else and striving for perfection Skoogh and Frisk (2019, p. 2) explain that “what is sought after in Western classical music are original interpretations, but with utmost respect for the text”.
3. In other words, musicians have to be creatively unique, while at the same time being completely in line with how the composer envisioned the music. It is thus not surprising that classical musicians show more performance anxiety, which is negatively correlated to the flow state (Fullagar et al., 2013; Kirchner et al., 2008; Mao et al., 2020), than musicians in other genres (Papageorgi et al., 2011).
4. Inventive ways are emerging to bridge the gap between classical and jazz music education (e.g., James, 2019) as well as between Western music and other traditions (Kohfeld et al., 2020). Research calls for a shift in the pedagogical perspective from one grounded on imitation and repetition, to one based on reflection and collaboration (Costa and Creech, 2020).
5. The latter suggests a teaching approach marked by an attention to the practical exploration of expressive affordances through sound-producing movements (techniques) and correspondingly less attention to abstract principles (such as harmonic/intervallic rules and compositional concepts).



BIG EARS : LISTEN AND UNDERSTAND THE IMPROVISATION

In jazz, the term "big ears" refers to the ability to hear and make meaning out of complex music.

One needs "big ears" to make sense of improvisatory negotiations of tricky changes and multiple simultaneous lines and rhythms.

- nuanced conversations between soloists;
- between soloists and rhythm sections;
- between music and other social realms;
- between multiply situated performers and audiences and institutions;
- between the jazz at hand and jazz in history.

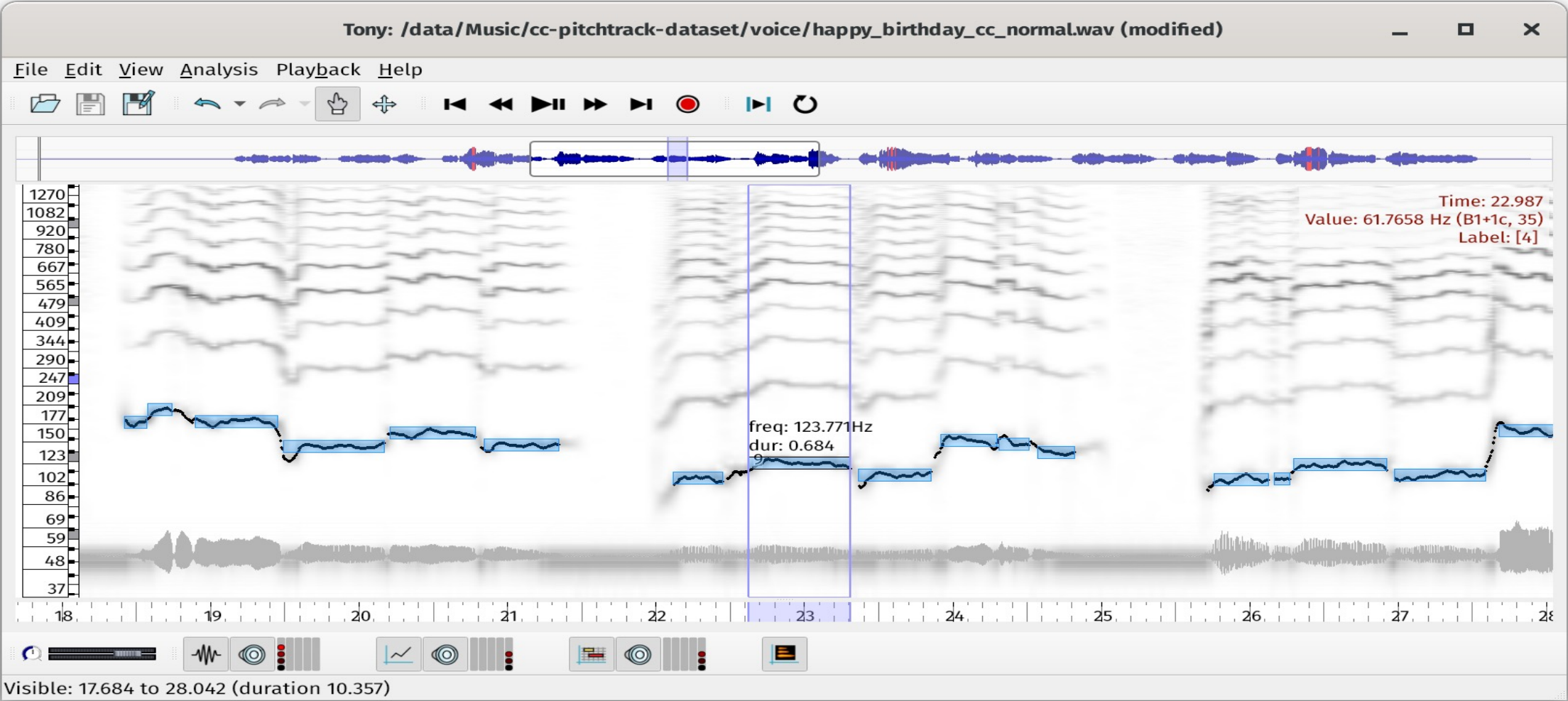


DEFINING IMPROVISATION

Intuition	decision-making based on instinct, guided by previous experience and knowledge.
Creativity	novel and deliberate interpretations, combinations or transformations of ideas.
Bricolage	the use of what's available at hand to address an issue.
Adaptation	the ability to cope with new or unforeseen, external circumstances.
Innovation	the creation of new processes, then applied and used to stimulate new ideas.
Learning	observation and critical analysis of implications/outcomes from the workflow.
Compression	the time between between learning, thinking and doing.



NEW PEDAGOGICAL TOOLS OR THE VISUALIZATION OF IMPROVISATION



WOMEN IN JAZZ

FROM NINA SHIMON TO SHIMON ROBOT

- <https://www.youtube.com/watch?v=355RWiehK98>
- <https://www.youtube.com/watch?v=mDleoK3xZsY&t=50s>
- <https://www.youtube.com/watch?v=ZpTV1-acSU8>



- Historically, women performers in jazz have been mostly singers, among them
- Ella Fitzgerald (1917–1996),
- Billie Holiday (1915–1959)
- Bessie Smith (1894–1937),
- Carmen McRae (1920–1994),
- Dinah Washington (1924–1963),
- Sarah Vaughan (1924–1990),
- Betty Carter (1929–1998),
- Anita O'Day (1919–2006),
- Abbey Lincoln (1930–2010),
- Nancy Wilson (1937–2018),
- Diane Schuur (born 1953),
- Diana Krall (born 1964), and
- Gretchen Parlato (born 1976).



- Beegie Adair (piano, arranger and composer)
- Toshiko Akiyoshi (piano, composer, and bandleader)
- Melissa Aldana (tenor saxophone, and bandleader)
- Lil Hardin Armstrong (piano, composer, arranger, and bandleader)
- Lynne Arriale (piano, composer, and bandleader)
- Dorothy Ashby (harp, composer, and bandleader)
- Lovie Austin (piano and bandleader)
- Judy Bailey (piano, composer, bandleader)
- Sweet Emma Barrett (piano)
- Carla Bley (piano, composer, and bandleader)
- Jane Ira Bloom (soprano saxophone, composer, and bandleader)
- Joanne Brackeen (piano, composer)
- Jane Bunnett (saxophone, flute, piano, and bandleader)
- Judy Carmichael (piano, bandleader, and vocalist)
- Terri Lyne Carrington (drums)
- Barbara Carroll (piano, bandleader)
- Regina Carter (jazz violin)
- Anat Cohen (clarinet, tenor and soprano saxophones, and bandleader)
- Alice Coltrane (harp, composer, and bandleader)
- Roxy Coss (saxophone, flute)
- Blossom Dearie (piano, vocalist, and bandleader)
- Dena DeRose (piano, vocalist)
- Dorothy Donegan (piano, vocalist)
- Eliane Elias (piano, vocalist, composer, arranger)
- Mimi Fox (guitar, and bandleader)
- Scheila Gonzalez (saxophones, woodwinds)
- Mary Halvorson (guitar, and bandleader)
- Jutta Hipp (piano)
- Shirley Horn (piano)
- Bobbi Humphrey (flute)
- Margie Hyams (piano, and vibraphone)
- Ingrid Jensen (trumpet)
- Dolly Jones (trumpet)
- Yoko Kanno (composer, arranger, and bandleader)
- Andrea Keller (piano, composer)
- Grace Kelly (saxophone)
- Joelle Khouury (piano and composer)
- Jeanette Kimball (piano)
- Kristin Korb (bass, vocalist, bandleader, and composer)
- Diana Krall (piano, vocalist, and bandleader)



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DILEMMAS ON GENDER EQUALITY IN JAZZ

- To understand dilemmas characterizing gender equality work in music, we could deploy a poststructural line of thinking where gender, knowledge and subjectivity are viewed as socially constructed, constantly negotiated and pervaded by discourse.
- Following Foucault (1972), a discourse is a way of speaking about something, constituting a network of meaning which provides access to certain ways of understanding the world.

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- Annfelt (2003) describes jazz as a hegemonic masculine discourse, thereby inherently heterosexual. Masculine dominance is furthermore described to be reinforced through conventions of musical practice, where “[g]ender and sexuality, in relation to men, masculinity, and virility, all play their part in defining normative productions of musical style and sound” (Caudwell 2012: 398).
 - Hamming and improvisational practices, often considered a model of democratic process, are paradoxically pointed out to reproduce male entitlement to jazz (Caudwell 2012; Smith 2004) through ideals closely connected to masculinity, such as rebelliousness and risk-taking (Annfelt 2003).
 - These practices can also be considered elitist because they establish a division between audience and musician (Gooley 2011) – a division which the British Feminist Improvising Group (FIG, formed in 1977) worked to break down by constructing improvisation as something “anyone can do” (Smith 2004: 236). Using FIG as an example, Smith argues that free jazz improvisation can serve as an area for articulating **critique through humour and parody.**



CONCLUSIONS

- <https://www.youtube.com/watch?v=E90YEOJB1Vg>
- Scholars from many different fields agree that improvisation is an important part of musicianship and should be better represented in formal music education + (Biasutti, 2017; Landau and Limb, 2017; Higgins and Mantie, 2013). Improvisation is not only an important ability to learn, but also a valuable experience to have.
- Improvisation seems to be experienced less positively by female musicians and even less by musicians who play only classical music. Both groups report having less knowledge about improvisation when compared to their peers. The present study illustrates the need to incorporate improvisation in tertiary classical music education and to do so in a manner that takes into account the perspectives and needs of different groups of students.
- The social roles connected to gender seem to play an important role in how one perceives improvisation (Wehr-Flowers, 2006, 2007). This was also evident in our study, where female musicians more often reported having no knowledge about improvisation and had more negative attitudes and feelings associated with improvisation. The latter may be connected to the fact that female music students are rarely involved in bands performing non-classical music, something which is common among male students. There are also more male music students studying classical music, who are interested and actively involved in jazz music. Furthermore, female students did not experience flow while improvising to the same extent as their male peers.



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SOFIA (Support of female improvisation artists)

<https://www.nicolejohaenntgen.com/sofia-support-of-female-improvising-artists/>

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<https://www.europejazz.net/news/new-project-made-women-jazz-music-wwwjazzwomennetworkcom>

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Videography

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