

Merci AK.2 (V1) Report Rhythmic synchronisation

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The main feature of the Djazz improvisation software, which is currently being redesigned by Mikhail Malt with the aim of distributing it freely in 2022, is that it manages a regular pulse underlying the music. During experiments with musicians, this feature has brought to light a set of issues around the idea of synchronization. In jazz and world music, the synchronization of musicians allows for certain micro-shifts that are then compensated for to maintain an overall regularity of tempo, but which give musicians flexibility when improvising to let their imagination run wild (Chemillier 2019; Doffman 2008). These micro-variations that constitute rhythmic interaction are absent in music based on a metronomic tempo.

In the investigation of the TikTok network, this issue of tempo micro-variations came up in the practice of dueting. When one wants to use the Djazz improvisation software to duet with a TikTok video, what if the tempo of that video is not completely regular? As with the software in a jazz or world music band, we use a Djazz feature that allows us to synchronize the phrases calculated by the computer with a manual beat. Most TikTok musicians who play alone do so without a metronome. But the metronome is used whenever musicians use rerecording to record several parts or when they publish a video proposing to do a duet in order to facilitate the synchronization of potential duetists. During TikTok message exchanges with one of the musicians we duetted with, he said "I record about 20% of my videos with a metronome", but the one we duetted with was not one of them and we used manual synchronization.

The experience with the Toots Thielemans avatar (Chemillier & al 2022) allowed us to explore this notion of tempo flexibility and rhythmic interaction. To create the avatar we transcribed the parts of the piano-bass-drums trio in MIDI and set them to a metronomic tempo. When compared with the original, we perceive a slight irregularity in Bill Evans' version. The survey of reactions to the avatar emphasized the issue of rhythmic interaction. One listener wrote: "It bothers me a little that the accompaniment does not interact with the soloist...". Indeed, if there is a certain rhythmic flexibility in the harmonica part generated by the computer, there is none in the piano-bass-drums trio part since it was quantified in MIDI. One of the interviewees made the following observation: "impressive, it lacks the interaction with the musicians, the beginning "makes illusion" but less afterwards. It misses gestures of expression, articulations at the good moment ". As previously mentioned, the flexibility of the tempo in jazz is linked to the freedom of the improviser and therefore to the figures he plays. This is what the commentator calls "expressive gestures" and "articulations". One way to investigate this phenomenon would be to implement the concept of "narrative" discussed above in relation to musical discourse (McAuley 2021).

Biblio

Marc Chemillier, Ke Chen, Mikhail Malt, Shlomo Dubnov, A posthumous improvisation by Toots Thielemans, accepted submission to the conference *Toots Thielemans (1922-2016). A Century of Music across Europe and America*, Bruxelles, 9 -11 May 2022.

Stéphane Davet, TikTok, l'accélérateur de tube, *Le Monde*, 10 juillet 2020.

David Teather, Unofficial TikTok API in Python, <https://github.com/davidteather/TikTok-API>

David Chavalarias, Noé Gaumont et Mazyar Panahi, Hostilité et prosélytisme des communautés politiques. Le militantisme politique à l'ère des réseaux sociaux, *Réseaux* 2019/2 n° 214-215, p. 67-107, <https://www.cairn.info/revue-reseaux-2019-2-page-67.htm>

J. Devin McAuley, Patrick C. M. Wong, Lucas Bellaiche, Elizabeth Hellmuth Margulis, What Drives Narrative Engagement With Music?, *Music Perception* (2021) 38 (5): 509–521.

<https://doi.org/10.1525/mp.2021.38.5.509>

Steven Feld, Une si douce berceuse pour la “World Music”, *L'Homme* 171-172, « Musique et anthropologie », 2004, p. 389-408.

Néstor García Canclini, *Hybrid cultures : strategies for entering and leaving modernity*, Minneapolis : University of Minnesota Press, 1995.

Paul Gilroy, *The Black Atlantic : Modernity and double consciousness*. Cambridge : Harvard University Press, 1993.

Marco Antonio Gonçalves, Etnobiografia : biografia e etnografia ou como se encontram pessoas e personagens, in Gonçalves, Marco Antonio;

Roberto Marques et Vânia Cardoso (ed.), *Etnobiografia : subjetivação e etnografia*. Rio de Janeiro : 7 Letras, 2012, p. 19-41.

Denis-Constant Martin, Le métissage en musique : un mouvement perpétuel (Amérique du Nord et Afrique du Sud), *Cahiers d'ethnomusicologie* 13, 2001, p. 3-22.

Jean-Claude Rabeherifara, Françoise Raison-Jourde, Identité, contestation et métissage : la chanson malgache dans les années 1970-1980, in Chastanet, Monique (éd.), *Entre la parole et l'écrit : contributions à l'histoire de l'Afrique en hommage à Claude-Hélène Perrot*. Paris : Éditions Karthala, 2008, p. 173-201.

Timothy Rice, Time, Place, and Metaphor in Musical Experience and Ethnography, *Ethnomusicology* 47 (2), 2003, p. 151-179.

Mark Doffman, *Feeling the groove: shared time and its meanings for three jazz trios*, PhD, The Open University, 2008.

Marc Chemillier, Cats, jazz et machines: jouer avec ou sans clic, Sylvie Chalaye, Pierre Letessier (éds.), *Animal, jazz, machine*, Passage(s), Esthétique jazz, p. 149-161, 2019.