

MERCI ED.1 Report on experimentation, user feedback and validation (EHES)

Marc Chemillier

« Artisticiel », by Bernard Lubat

To the principle of musical dialogue with expert improvisers highlighted by the collection of CDs "Dialogiques d'Uzeste" (duets of Bernard Lubat with Sylvain Luc in 2016, with Louis Sclavis in 2018, etc.), is added that of dialogue with computers. The book-CD *Artisticiel* published in this collection on May 28, 2021 features Bernard Lubat (piano, vocals) dialoguing with the computers of Gerard Assayag and Marc Chemillier. It is a synthesis made at the end of nearly 20 years of collaboration with Bernard Lubat.

The confrontation between man and machine is not obvious when it comes to jazz and improvised music. Bernard Lubat, virtuoso drummer, has a demanding conception of rhythm. On the individual level it is based on the playing of the drum, the temporal cutting in full and loose, the articulation and the discursive freedom. On the collective level it is based on the sharing, the responsibility and the independence within the group. What happens when we introduce a technology, a "foreign body", into this game of exchanges, reflexes, expression and precision? Machines have their own temporal logic expressed through algorithms that give them a certain "slowness" in the deployment of their processes over time. This does not suit the requirements of the confrontation and the joust defined by the collection "Dialogiques". As Bernard Lubat says: "The music that I prefer is rugby!"

The finalization of the book-CD *Artisticiel* required the use of the most recent advances in musical technologies developed at IRCAM (synthesis by phase vocoder, software of follow-up of tempo, algorithms of stylistic simulation) and a thorough reflection on the possibilities of interfacing of the computers so that they can acquire the flexibility necessary to adapt to the rhythm of the collective improvisation while remaining reactive to the initiatives of the musicians. Part of the recordings on the *Artisticiel* CD are live recordings made in previous years. We had planned to complete it with studio sessions which could not be done in part because of the health crisis. We therefore decided to include in the CD tracks improvised a posteriori by the computers from Bernard Lubat's recordings kept in our archives like frozen embryos.

The booklet accompanying *Artisticiel* explores the scientific, philosophical and creative aspects of this strange relationship between man and machine. Bernard Lubat testifies of his vision on the experiments thus carried out: "The machine by its curious combination of laborious stupidity and dazzling inspiration, seems to "liberate" from certain habits or automatisms". Marc Chemillier observes the traces we deliver to the machine and the treatments they undergo, a social issue in an era where recommendation algorithms proliferate. Gérard Assayag introduces and discusses the concept of co-creativity to characterize the new type of man-machine relationship at work in these records. The book is

completed by a contribution from George Lewis, an American composer and researcher who pioneered computer improvisation, who looks back on his first steps forty years ago and looks forward to the future.



Several concerts are associated with the publication of this book-disc. In February 2020, Bernard Lubat invited Gérard Assayag and Marc Chemillier to participate in two concerts "Improvista" organized at the Philharmonie de Paris. According to the description posted online by the Cité de la musique, these two events were placed "under the sign of improvisation. Multi-instrumentalist Lubat juggles piano, vocals and percussion with his legendary dexterity. At his side, a vibrant constellation of major figures of the French scene, including Michel Portal, Joëlle Léandre, Louis Sclavis, Géraldine Laurent, Bruno Chevillon, Juliette Kapla, Sylvain Luc and Jacques Di Donato. The Tambours œuvriers of the Compagnie Lubat also bring their thunderous contribution. Other concerts were planned with Bernard Lubat and the computers, but had to be cancelled because of the health crisis. In particular, a day of conference-concert was to be held at the Institute of the Complex Systems in Paris and to allow to develop the reflexion on these interactions man-machine by discussing on the one hand the place of technologies in the society at the time when the democracies are confronted with algorithms of manipulation of the opinion (works of David Chavalarias) and on the other hand with the role of the composer Pierre Boulez as source of inspiration of Bernard Lubat (several works of Boulez were to be played, in particular by Elaine Chew at the piano who was to present her work on musical interpretation and cardiac rhythms). Lubat was to improvise in duet with a "virtual Pierre Boulez" generated with the help of creative software. This day will be rescheduled soon.

The book-disc is available for streaming (Spotify, Deezer, etc.) and for sale in record shops and bookstores. It was the subject of several comments in the media, column in *Jazz Magazine* (Guy Darol 2021) and in *FrancoFans*, monthly magazine of the independent music scene in France (Gatellier 2021), emission Open Jazz on France Musique (Duthil 2021), posts on various specialized blogs (Benoit 2021), (Granjon 2021), (Prévost 2021).

Credits :

Production : Association Djazz

Coproduction : Lubat Jazzcogne Production

Executive Produced : Marc Chemillier

Licensed by Cristal Groupe, Coordination: Fred Migeon

Music Publisher : Éric Debègue Cristal Publishing

Book Publishing : Phonofaune

Recording : Damien Duleau (Uzeste), Christopher Andrew McDonald (Philadelphie), The Roulette (New York)

Editing, mixing : Damien Duleau, Marc Chemillier, Gérard Assayag, Fabrice Vieira

Texts : Gérard Assayag, Marc Chemillier, George E. Lewis, Bernard Lubat

Translation : Noam Assayag

Book Publisher : Delphine Lagache

Graphic designed : Valentine Dupont

Correctors : Sophie Gallo-Selva, Anne Confuron

Photos : Jeff Joly, Michel Le Ray, Olivier Sigaut, Cheryl Lewis, IRCAM - Centre Pompidou

Painting : Martin Lartigue

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Biblio

Guy Darol, rubrique Marque-page, *Jazz Magazine*, n° 738, juin 2021, spécial Getz, p. 13.

Alex Duthil, émission Open Jazz sur France Musique, vendredi 28 mai 2021, à 18h36.

Fabien Granjon, Livre-disque — Artisticiel — Lubat et ses hétéraulètes, blog personnel, mars 2021

<https://fabiengranjon.eu/livre-disque-artisticiel-lubat-et-ses-heterauletes/>

Xavier Prévost, chronique, *Les Dernières Nouvelles du Jazz*, 28 mai 2021 :

<http://lesdnj.over-blog.com/2021/05/bernard-lubat-gerard-assayag-marc-chemillier-artisticiel.html>

Matthieu Gatellier, chronique dans *FrancoFans*, n° 89, juin-juillet 2021, p. 73.

Raphaël Benoit, chronique, *Citizen jazz*, 14 novembre 2021 :

<https://www.citizenjazz.com/Artisticiel-Cyber-improvisations.html>

Other musical collaborations: Camel Zekri, Adrien Chaillou, Charles Kely Zana-Rotsy

Charles Kely Zana-Rotsy

Work with Malagasy guitarist Charles Kely Zana-Rotsy resumed in October 2021 after an interruption during the health crisis and continued in the form of a series of interviews at the musician's home and a series of guitar-vocals and keyboard-computer performances in public in the bar Chez Adel in Paris (November 12, 2021, December 17, 2021, January 28, 2022, i.e., approximately once a month). This investigation should lead to the publication of an article accepted in the *Cahiers d'ethnomusicologie* entitled "L'hybridité vue à partir du sujet: le cas du musicien franco-malgache Charles Kely Zana-Rotsy" by Marc Chemillier and Yuri Prado, and to the making of a documentary film by Yuri Prado as an extension of the one made in 2018 by the Direction de l'image et de l'audiovisuel de l'EHESS (https://www.canal-u.tv/video/ehess/live_session_djazz.47181).



Gnawa Machine Duet at Ars electronica in Linz, September 12-13, 2020

The Gnawa machine duo of Camel Zekri (guitar-machines) and Marc Chemillier (keyboard-computer) has been invited to perform at the Ars electronica festival in Linz, Austria in September 2020. As the Ars electronica catalog states (p. 249): "The challenge of Gnawa machine is to integrate the computer into a particular cultural context, that of the Gnawa brotherhood in North Africa to which Camel Zekri belongs. His modal guitar playing is accompanied on the keyboard by Marc Chemillier assisted by the Djazz system which learns automatically by enriching its memory and which is rhythmically adjusted with score following algorithms. Then the guitar becomes a controller thanks to movement sensors. It drives a second system, Le Cercle, which dialogues with the first. The two machines listen to each other and improvise on what the other is playing. Djazz records with a long-term memory while Le Cercle captures small fragments on the fly."

Ars Electronica 2020 Catalog:

<https://ars.electronica.art/keplersgardens/files/2020/09/festival2020.pdf>

Video of the Gnawa Machine performance at Ars Electronica 2020 (at 1:32:50):

https://www.youtube.com/watch?v=A_jdtBuPEmA&t=5570s



Adrien Chaillou Organ Trio at La Preuve par 9 in Saint-Brieuc, March 13, 2020

Saxophonist Adrien Chaillou was asked to interact with the Djazz software during the festival La Preuve par 9 in Saint-Brieuc in March 2020. The concert planned at the Bonjour minuit hall in Saint-Brieuc had to be cancelled because of the coronavirus epidemic. But a work session had taken place beforehand on February 28, 2020 with Adrien Chaillou (saxophone, compositions), Fady Farah (organ), Baptiste Castets (drums). The saxophonist wrote his impressions following the experiments of improvisation of the Djazz software on his own compositions: "After a first meeting with Marc, I must admit that I was bluffed by the capacities of improvisation of Djazz. This meeting between artificial intelligence and improvisation questions our place as improvising musicians [...]. What to think of a machine that, unlike humans, quickly compiles abilities without any memory or technical flaws? The hand of man being present through Marc, should it be considered (and developed in this sense) as an instrument or as an expression of its own, free of any control during the improvisation?"

Full commentary by Adrien Chaillou :

<http://digitaljazz.fr/2020/02/29/la-preuve-par-9-a-saint-brieuc/>

