

Collective Attachments and Community Responsibilities: *The Impact of NIME Research*

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23 June 2026, NIME 2026, London

An adaptation of the [Atelier SENs](#), the Sciences, Environments and Societies workshop by Sophie Quinton and Eric Tannier, distributed under the CC-BY-NC 4.0 license.

Preamble

Motivation

Digital technologies are deeply intertwined with music. They make way for collectives and communities of practice to form, often in dialectic processes of practice shaping technology and technology shaping practice. They enable new forms of artistic creation, expression, and distribution, and are the reasons why communities like NIME exist. At the same time, **digital technologies have a growing environmental footprint**, from manufacturing and mineral extraction for devices, as well as the energy consumption and waste associated with digital infrastructures, altogether contributing to environmental degradation. We are in a situation where many of the activities and infrastructures related to digital technology—and to NIME research—cannot or should not be maintained in the future if we want the earth to remain liveable, despite our complex attachments to these.

This workshop is an adaptation of the [Atelier SENs](#) and aims to create a space of structured, collective reflection, for members of the NIME community to discuss the consequences of our research, the values that it conveys, and to make a first step towards imagining what a redirection of NIME research could look like in mid- to long-term trajectories towards sustainability. So, beyond the direct environmental footprint of the digital technologies that make up essential components to our communities and practices, as well as flying to conferences among others, *what role does our work in NIME research play in the destructive behaviour of our societies?* Can something that is a *new* interface ever be one that is not geared towards generativity and addition? Can there be a *subtractive* approach to interface design for musical interaction? How can NIME as a community imagine *doing without* or *doing with less*? And ultimately, **does our research contribute to building a world that corresponds to our values?**

Objectives

We aim to explore ways of knowing and ways of theorising NIME research that are less inclined towards innovation, and together move beyond questions of individual responsibilities and try and make larger scale community reflections.

More specifically, we aim to:

- 1) To provide a setting to collectively discuss the consequences of our research, the values that it conveys, and more generally how NIME research fits in the Anthropocene.
- 2) An attempt to broaden the discourse around societal and environmental impact and NIME research, and build upon already existing dialogues concerning the apprehension towards the innate 'new', 'novelty', innovation-focused discourse in our field, from which we potentially can start articulating a different ontological underpinning of works surrounding music technology (and sustainability).

The objective is not to reach a consensus between the participants, but rather to provide everyone with the opportunity to reflect and take a stance on current environmental issues in a respectful and constructive setting. By confronting ideas and sharing knowledge, the goal is then to find common ground. Besides, the workshop provides an introduction to science and technology studies, in particular to the philosophy, history, and sociology of science.

Organisation

The workshop will adopt a set of roles and rules to make sure everyone can speak freely. We are aware of the possible reluctance towards rules and roles, in such contexts. However, we see several good reasons for adopting such a format. On the one hand, rules are needed to ensure that speaking time is distributed equitably, so that everyone has the opportunity to express themselves. Secondly, we want to avoid an exchange of preconceived opinions on the subject, as the aim of the workshop is to initiate structured, collective reflection, and find some common ground without hiding differences. Finally, with a setting that differs a bit from the standard in academia can help participants take a step back to reflect on their work and feel safe while discussing topics on which they are not specialists. **For all these reasons, it is important that participants agree at the beginning of the workshop on the confidentiality of the opinions and experiences shared during the workshop.**

The workshop follows a repeating structure of: 1) The organisers introducing a new segment and its objectives, 2) collective reading, where participants will be asked to volunteer to read the texts aloud to the entire group. 3) Individual reflection or discussion in smaller groups, 4) collective sharing or discussion.

Role Assignment

* The workshop organisers outline the workshop program and present and assign different roles at the beginning of the workshop. During the workshop they will introduce the objectives and facilitate each segment. After the workshop, the organisers collect participants' feedback and potential documents produced and include them in a short summary of the day. This summary will be redistributed to the participants.

* One of the organisers will take the role as a timekeeper, announcing the end of each segment, start of a break etc, to the group, so that the workshop can run smoothly and finish on time.

* Preferably among the participants, one person will ensure that speaking time is distributed evenly between individuals or groups (gender, age, academic rank, etc.) and will mediate fairer distribution if necessary.

Experience with the Atelier SENs shows that this role is necessary, as imbalances often arise if no one is in charge of ensuring fairness. However, announcing this role at the beginning of the workshop also brings awareness to fair distribution and can mitigate the need for intervention.

Schedule

Duration

30 min	Welcome and introduction.
1 h	Why do you work in NIME research? Beyond individual answers that mix personal interests and opportunities, participants are encouraged to consider the social and economic elements that have shaped their experience.
2 h	Mapping of values and attachments. Discuss and uncover important attachments, tensions, contradictions or imbalances between different components (epistemic, economic, social, environmental) of our work in NIME research.
1 h	Discussion based on documentary resources. Identify polarising questions within the group and start a discussion around them relying on relevant texts from STS and humanities.
1 h 15 min	Looking ahead and redirecting our attachments. Formulate possible scenarios for NIME research in 2046, assess them for their likelihood, impact and desirability so as to envision a common scenario of redirected attachments for NIME researchers that could form the basis for more in-depth discussions.
30 min	Final remarks and reflections.

Detailed program

Participants are encouraged to take notes if they want to. The organisers will ask for feedback at the end of day and/or by email in the following days. We will also provide a blank sheet on which everyone can write down bibliographic references to be shared with the group.

9:00-9:30: Welcome and introduction

1. (15 minutes) Introduction by the organisers.

- Presentation of the context and objectives of the workshop (see Motivation and Objectives in Preamble)
- Present workshop plan and assign roles (see Organisation, Role assignment and Schedule in Preamble).

2. (15 minutes) **Around the table.** In turn, participants briefly (maximum one minute per person) share their expectations and potential apprehensions about the workshop and their *value statement*.

9:30-10:30: Why do you work in NIME/music technology research?

1. (5 minutes) **Presentation of the objectives of the segment:** Identify key (interior and exterior) factors that have influenced individual experiences and career paths. It is a way to learn how we end up being part of the same community, and which social, economic, historical and psychological forces have shaped the landscape of NIME research.

2. (5 minutes) **Collective reading** of an excerpt of a talk by the mathematician Alexander Grothendieck (see T1), that highlights the lack of reflection and discussion around the question of why we do research. The text brings up some of the most obvious answers, and is relevant to both scientific research, artistic and design research and engineering.

3. (25 minutes) **Group discussion in smaller groups** (max four people per group). This question can be approached in several ways: Why not another profession? Why this particular field of research? What combination of opportunities, constraints and choices led you to this point? Can you identify a decisive moment? A moment where you hesitated? Where did your career path become clear, for example, the choice of thesis topic for those who have completed or are working on a PhD? In which case, what was your involvement at that moment? Everyone is encouraged to offer a personal response and reflect on the past rather than discuss their own current situation or scientific research in general.

4. (25 minutes) **General discussion.** One person per group provides a summary (2-3 minutes) of the previous discussion without repeating personal anecdotes told by others. The objective is now to look for similarities and differences in personal experiences, and to identify major factors explaining the various trajectories: a decisive encounter, the possibility of a grant, etc. Other members of the group may complete the overview. A general discussion follows, where everyone is invited to reflect on the social, economic, historical and psychological forces have shaped the landscape of research in the group.

10:30-10:45: Break

10:45-12:45: Mapping of values and attachments

1. (5 minutes) **Presentation of the objectives of the segment:** The goal now is for everyone to make explicit the values and attachments that drives (or pushes) them in their work, the social and environmental conditions on which they depend for their work, and the consequences their work has outside academia. The goal is then to make a collective assessment of the attachments and values that connects the group as a whole, as well as for the group to identify and discuss tensions, contradictions, instabilities and lock-ins between these different components of their research. It is also a question of identifying certain points of tension or fragility in relation to the current and future environmental and social situation.

2. (5 minutes) **Collective reading** of an excerpt from an article from 2021 by Vincent Israël-Jost and Léo Coutellec, researchers in philosophy of science (see T2). The excerpt defines the concept of values and distinguishes between epistemic values and non-epistemic values.

3. (20 minutes) **Individual preparation.** Participants are provided with sticky notes, and are now invited to write down around 5 attachments, described in a few words only, one per sticky note. An attachment can be i.e. an element (idea, object, social group, institution, natural element, etc.) that they care about and that guides them in their work, or, conversely, something that holds them back, that they need and that they work with without necessarily having chosen or approved of it. One can think of attachments as *what we hold dear* and *what sustains us*. An attachment is what connects our profession to our values (social justice, right to health, etc.) or to our external environment (the world of research, society, science, the climate, etc.).

4. (40 minutes) **Sharing attachments – first round of mapping.** In turn, each participant describes one attachment in one sentence or word, or simply reads what they have noted on their sticky note, and place the corresponding sticky note on a large surface (whiteboard, flipboard paper), either close to a similar one or alone. If others have a similar sticky note, they can place it down now too.

As the sticky notes are being placed, the organiser can move them around (with the permission of the participants) to reveal categories such as ‘research institutions’, ‘research community’, ‘environmental impacts’, ‘social components’, etc. This sequence continues until all the sticky note have been placed.

5. (30 minutes) **Second round of mapping.** Now that all sticky notes have been placed, the organiser materialises the identified categories using a pen.

During this activity, a cartography is gradually taking form with links and sticky notes. The organiser now leads a group discussion while:

- Using a felt-tip pen to mark the categories identified when the sticky notes have been placed.
- Represent the relationships between attachments, which may be of different types, for example:
 - Cause-and-effect links: Between research and environmental impacts? Between research, economic growth and funding? Etc.
 - Dependency relationships: Between scientific or artistic excellence and academic freedom? Between social utility and scientific excellence? Between social utility and funding? Etc.
 - Tensions or even contradictions: Between freedom and responsibility? Between expertise and democracy? Between the economy and the environmental footprint? Etc.
- Identify elements that have no clear cause, dependencies or consequences. Are these attachments ends or means? For example, what is the purpose (if any) of academic freedom, or knowledge, or rationality? How are these attachments fuelled economically? Etc.
- Highlight the imbalances and dynamics that lead to scenarios in which certain attachments can no longer be preserved.

6. (20 minutes) **Around the table.** In turn, each participant points to either an attachment that they care about in particular, or to an attachment that (in their opinion) should be renounced given its consequences, or to a link or interconnection between attachments that is important to preserve, introduce or break. This can be done by for example drawing a + symbol next to attachments they wish to keep (if possible given the observes dynamics) or a – symbol next to those they wish to renounce. A general discussion can follow.

12:45-14:00: Lunch break

14:00-15:00: Discussion based on documentary resources

1. (5 minutes) **Presentation of the objectives of the segment.** Identify polarising questions in the group and start a discussion around them relying on relevant texts from the human and social sciences.
2. (20 minutes) **Vote on polarising questions.** Among the eight questions provided with the workshop material (see O1), the organiser, or the group, chooses five (these ten questions are chosen because they frequently arise and tend to polarise discussions). The goal at this point is not to debate but simply to provide everyone with the opportunity to reflect and take a stance, despite the ambiguity of some questions. Participants indicate, with a pen stroke, on the question-sheets the position along the line which better represents their view, first on individual sheets, then on the collective question-sheets.
3. (15 minutes) **Collective reading** of one or two texts from the documentary resources (see T2-T17). Each question-sheet refers to an element in the documentary resources. The organiser chooses elements prioritising the most polarising questions from the previous step.
4. (20 minutes) **Group discussion.** Participants are invited to share their reaction to the selected texts, e.g. what they find interesting, what they disagree with, whether their position on the initial question has changed, if it could change after more in-depth study, etc.

15:00-15:15: Break

15:15-16:30: Looking ahead and redirecting our attachments

1. (5 minutes) **Presentation of the objectives of the segment.** Formulate possible scenarios for NIME research in 2046, assess them for their likelihood, impact and desirability so as to envision a common scenario of redirected attachments for NIME researchers that could form the basis for more in-depth discussions. The goal of this last activity is to reflect on, share and discuss visions of the future, and our desire to act upon it, in order to start building a common prospective scenario on which to work together.

Futuring consists of exploring the future, not as something that has already been constructed and needs to be revealed, but as a world that needs to be built. It can give rise to exercises of prediction ('building on a future considered to be the most probable'), projection exercises ('trend-based exploration of the future') or scenario-building exercises ('exploration of several futures based on narratives'). It is a multidisciplinary and systemic approach that integrates the long term (past and future) and takes ruptures and discontinuities into account.

3. (10 minutes) **Individual preparation.** Each participant lists at most 3 scenarios that may come true by 2046, and that would impact their work with music technology and NIME research. Such a scenario may be likely or not, desirable or not. It could be a trend (increase, worsening, maintenance etc.) or a discontinuity (shortage, crisis, progressive renouncement or rejection of something), rapid or slow. It may relate to any part of our natural environment and/or our social organisation (political, economic environmental, technological, social, regulatory, cultural, etc.), be large-scale and small-scale.
4. (15 minutes) **Group discussion in smaller groups** (max four people per group). After discussing the scenarios proposed within the sub group, each group chooses (and clarifies if needed) one or two of them, ensuring a diversity between trends and discontinuities, desirable and undesirable scenarios, large-scale and small-scale changes, etc. Each selected scenario is described on a sheet provided by the organiser (see O2).
5. (10 minutes) **Vote on scenarios.** For each scenario, all participants indicate on the corresponding sheet (see O2) their view on 1) the probability that the scenario will come true; 2) the impact that this would have on their work; 3) the desirability of such a scenario; 4) to what extent they think that their scientific community is prepared or will be prepared for such a scenario. Like before, the vote can be organised in two stages (first individually and then collectively).
6. (35 minutes) **Group discussion.** By examining the consensus and dissent that emerged during the votes, the group discusses and selects two common scenarios, one that they consider desirable and one that is high impact.

Then the group is invited to discuss how the likelihood of the desirable scenario to come true can be increased by taking action from today onwards. What are potential the trade-offs and attachments involved that perhaps will have to be redirected? What types of renouncement are a part of these scenarios? What alternatives – whether digital or not – can be proposed?

On a sheet provided by the organiser (see O3), map out the different possibilities that exist for this scenario considering we want to 1) impede from happening, 2) renounce, 3) de-digitise, and/or 4) substitute/add.

16:30-17:00: Final remarks

1. (30 minutes) **Around the table.** In 2-3 minutes, each participant shares their feelings about the day (new insights, concrete ideas, frustrations etc.), and possible next steps to follow up on the discussion, e.g. by investigating further one polarising question or working on one of the prospective scenarios.

The organisers can propose a meeting with participants to discuss after-thoughts in a couple weeks/months time.