NIME Principles & Code of Practice on Ethical Research

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1 SHORT VERSION

NIME upholds the highest ethical standards in research and artistic practice by recognising the importance of individual persons and data as an expression of personhood. These standards also include ethical values that are not always a concern of institutional research committees, including inclusivity, accessibility, animal rights, socio-economic fairness, and environmental awareness. The complete NIME Principles & Code of Practice on Ethical Research can be found at: nime.org/ethics.

2 LONG VERSION

This document contains the NIME ethical **Principles**, which describe the values and standards of our community, and the **Code of Practice**, which describes how authors can go about addressing these values when planning, running, and submitting a research project or a musical work to the NIME conference. The objective of the Code is not to oppress researchers and creators and curb their creativity. Rather, these principles are intended for NIME authors to use as guidelines, as a way to find creative solutions to complex social problems through their artistic and scientific research.

The document has been developed by the NIME Ethics Committee following the high ethical standards of our community to i) materialise the growing demand among NIME members of a **fair, inclusive, sustainable, ethical** community, and; ii) to offer guidance to the authors when considering the responsibilities they carry for our global society. However, ethics values and practices change in response to the concerns of societies and communities, the development of new technologies and their applications, new theories of ethics, and changes in the legal environments and contexts in which research and other activities take place. This is, therefore, a living document, owned by the NIME community and aiming to reflect its current values and practices as these evolve over time. The activities and contributions of the community in submitting, reviewing, presenting, and discussing papers, installations, and other works, in arranging and participating in workshop and debate, and in feeding views to the Steering and other NIME committees will thus collectively contribute to keeping the principles and code of practice reviewed, up to date, relevant, and maintained.

With this Code of Practice, NIME wishes to be a role model for other academic communities in which the highest interest is the health of, and benefit to, global society. Thus, the ethical standards and values described herein often exceed the scope of those typically considered by institutional research ethics committees. Where the latter often focus primarily - and rightly - on the protection of participants involved in research, NIME has a broader, more aspirational, view of the moral values embedded in its work. As such, the ethical principles described in this document still include research participant protection, but also encourage authors to orient their work towards fairness, inclusivity, accessibility,

and sustainability so that the work presented at NIME is reflective of the community's values. Approval by institutional research committees may thus be helpful to authors in considering and presenting their ethical considerations, but may not cover every aspect that NIME considers important.

Authors of all submissions are encouraged to reflect on any ethical issues connected with their research within their manuscripts, and it is expected that any ethical concerns are also listed in the ethical statement paragraph of the submission system. A failure to adhere to the Code of Practice presented herein will not result in an automatic rejection. However, authors are expected to pay careful consideration to these issues and to show an attempt to address them and an effort to commit to higher ethical standards with each new submission.

3 PRINCIPLES & CODE OF PRACTICE IN DESIGNING NEW MUSICAL INTERFACES

3.1 Accessibility

(1) Authors should seek inclusivity in the mode of production and engagement, such that all individuals can access or benefit from the technology and take part in the research and/or artistic process.

3.2 Environment

(1) Authors should seek to develop and promote environmental values on NIME and how their mode of production is considered environmentally sustainable (see NIME Environmental Statement). When this is not possible, authors should acknowledge the difficulties met in the ethical section of the paper/work discussion.

3.3 Inclusion

- Authors should seek gender/ethnicity/socio-economic inclusions in empirical studies. When this is not possible, it should be acknowledged and discussed in the ethical section of the paper/work.
- (2) Authors should seek to look at the full spectrum of needs, backgrounds, inclusiveness, and access to their creations. Where these needs are not universal, the author should acknowledge these as a limitation of the research outcomes, instead of as a limitation of the people or boundary on the people who might like to use them.

3.4 Socio-economic fairness

- Authors should seek to adopt FLOSS/FLOSH (Free/Libre & Open Source Software/Hardware) to support a democratic and inclusive approach to tool/instrument making.
- (2) Authors should consider whether someone with a limited income or access to resources could replicate the project. They should also indicate alternative, more affordable and more accessible, solutions and manufacturing methods.

3.5 Data & privacy

- Authors should secure consent for the use of personally-identifiable data/media used in the submission and the activity that led to it.
- (2) Authors should acknowledge the source for all open data (code, algorithms, audio, video, images, etc.) following the license(s) by the original authors.
- (3) Authors should support the community by making new data openly available, with a permissive license.

4 PRINCIPLES & CODE OF PRACTICE IN STUDIES WITH HUMAN PARTICIPANTS

4.1 Consent

- (1) Research participants' capacity for self-determination must be treated with respect.
- (2) Explicit, prior, informed, and voluntary consent is normally required from participants involved in the study.
- (3) In their study design, authors should include opportunities for potential participants to ask questions, have these questions answered, and have sufficient time to consider whether or not to participate in the study.

4.2 Data & privacy

- (1) Data about an individual is an expression of that individual and thus deserves the same level of ethical protection as an individual themselves.
- (2) Authors should collect the minimum amount of data required to undertake their work, and retain participants' sensitive data for the shortest time possible, compatible with open science and data sharing.
- (3) All collected, aggregated, and profiled data must have been consented for the specific purposes of the research.
- (4) Authors should aim at providing data (and relevant analysis scripts) in connection with a paper. This is important to allow verification and replication of the results.
- (5) Shared data should normally be anonymised unless there are good reasons not to do so, and this should then be justified in the paper. Care should be taken to avoid potential re-identification based on the combination of the shared data with other datasets, social media posts, etc. However, participants can be offered the possibility to have their comments/data to be publicly attributed to them (for instance, they might wish to encourage open dialogues).
- (6) Authors should protect sensitive information collected from participants and/or users by protecting their servers/personal devices with adequate security protocols such as encryption, passwords and restrictive access settings.
- (7) Third-party services with unethical or unclear data policies should not be used for collecting or storing data.
- (8) Authors should comply with local data protection practices and relevant national and international legislation (e.g. GDPR, CCPA). Please be aware that international frameworks may apply outside of a region. For example, the GDPR applies to all EU citizens' data processing by any organisation anywhere in the world, but also for any non-EU citizens that were in Europe during data collection. Where authors are subject to organisational policy and legal advice regarding these frameworks and laws, those should be followed.

4.3 Remuneration

(1) Authors should seek to remunerate study participants in recognition of their central role in their research. This is specifically the case when participants are professional musicians/artists who do not receive a salary from a higher education institution or research organisation.

4.4 Safety & Care

(1) Authors should assess the safety of research procedures for participants, for themselves, and others.

4.5 Post-research

(1) Consideration should be given to the effect of withdrawing their study and/or an instrument from the participants after the research is complete, and if this may result in harm or distress. Further consideration would need to be implemented, such as offering the instrument to the participants to retain (this solution might be impractical when resources are limited, but this issue should be considered and factored in at the design stage).

4.6 Participant selection

- Measures should be taken to minimise imbalance in the pool of potential participants: whenever possible, authors should select participants from varied gender, cultures, ethnicities, languages, and sexual orientations.
- (2) Tokenism is, however, discouraged: for instance, using gender as an axis of comparison should be avoided when not relevant (i.e. the number of gender-specific respondents' views when the study contains no gender-related hypotheses).

4.7 Minors and vulnerable individuals

- In studies involving minors and vulnerable individuals, extra attention must be paid to their safety, privacy, dignity and well-being.
- (2) Minors and vulnerable individuals for whom the consent of others (e.g. parents/carers) is required to participate (e.g. for legal and/or safeguarding reasons) should additionally be offered their own opportunity to consent to the fullest extent possible given their capacity to decide about the task. Their decisions should be respected.

4.8 Ethnographic research

- (1) Authors engaging in ethnographic research should employ decolonising research methods that value a dialogic relationship between researchers and communities researched.
- (2) In the case of culturally-sensitive ethnographic research, authors should engage with the research participants and local communities to establish shared goals.

5 PRINCIPLES & CODE OF PRACTICE IN STUDIES AND INTERFACES INVOLVING ANIMALS

5.1 General principles

- (1) The interests of the animal take priority over the interests of science and society, including human entertainment.
- (2) Animals should not be exploited in any form. Only studies that the animals involved in might genuinely benefit from and works with animals for whom the technology is directly relevant and beneficial are acceptable. The researcher needs to justify the research methodology and evaluation.
- (3) There must be a clear research aim that motivates studies on/with animals. Just trying out something new without proper justification should clearly be avoided.

5.2 Consent

- All studies involving animals require certification of part-taking animals' welfare by appropriate third-party organisations as well as formal and proven collaboration with animal ethology experts.
- (2) Prior consent must be obtained from legal authorities and/or human individuals that have intimate knowledge of the specific animal to be included in the study.

(3) The study protocol must enable individual animals to assess the situation and choose what to do. The researcher is responsible for appropriately monitoring the situation and responding to the animal's manifestations to protect their welfare.

5.3 Study protocol

- The animal must not under any circumstances be harmed or threatened during the procedure, nor killed at the end of it.
- (2) The animal must not be prevented from expressing spontaneous behaviour, and must not be confined away from their habitual settings.
- (3) Only positive forms of interaction should be used.
- (4) Studies with animals should ensure the physical and emotional health of the animal is taken into consideration. This means, avoiding stressful situations, including, for example, exposing the animal to distressing acoustic, visual, tactile or thermal stimuli, or confining the animal in non-habitual conditions for longer than they are comfortable with.

5.4 Post-research

(1) It is in the authors' duties to ensure and/or promote good quality of life for the animal after the animal's involvement in the research.

6 PRINCIPLES & CODE OF PRACTICE IN ENVIRONMENTAL IMPACT

- (1) While developing a NIME, or in the general management of the research, authors are encouraged to check the NIME environmental statement and the environment wiki to consider - and when possible address - the environmental impact of their work.
- (2) Authors should try to minimise waste when building a NIME and consider using sustainable/recyclable materials wherever possible.
- (3) Not being able to reduce the environmental impact will not automatically result in rejection, although intentional abuse of the environment may do.

7 PRINCIPLES & CODE OF PRACTICE IN ORIGINALITY

7.1 Plagiarism

- (1) Plagiarism, in all its forms, constitutes unethical publishing behaviour and is unacceptable.
- (2) Plagiarism takes many forms, from submitting others' work in one's own name, to copying or paraphrasing substantial parts of another paper (without attribution), to claiming results from research conducted by others.
- (3) Authors should ensure that they have written entirely original works, and if the authors have used the work and/or words of others, that this has been appropriately cited or quoted.

7.2 Multiple, redundant or concurrent publications

- (1) Authors should not submit manuscripts describing essentially the same research in more than one publication.
- (2) It is considered unacceptable to submit the same manuscript to more than one journal or conference proceedings concurrently.

7.3 Acknowledgement of sources

- Proper acknowledgement of the work of others must always be given. Authors should cite all publications that have been influential for the reported work.
- (2) Information obtained privately, as in conversation, correspondence, or discussion with third parties, must not be used or reported without explicit, written permission from the source.
- (3) Information obtained confidentially, such as reviewing manuscripts or grant applications, must not be used without the explicit written permission of the author of the work involved.

7.4 Manuscript authorship

- (1) NIME endorses the Vancouver guidelines, stating that authorship should be limited to those who have made a significant contribution to the conception, design, execution, or interpretation of the reported study. All co-authors should have read and approved the final version of the manuscript and have agreed to its submission for publication.
- (2) All those who have made significant contributions should be listed as co-authors. Where others have participated in certain substantive aspects of the research project, they should be acknowledged or listed as contributors.

7.5 Disclosure and conflict of interest

- (1) All sources of financial support for the project should be disclosed.
- (2) All authors should disclose in their manuscript any financial or other substantive conflicts of interest that might be construed to influence the results or interpretation of their manuscript.
- (3) Examples of potential conflicts of interest which should be disclosed include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding.
- (4) Potential conflicts of interest should be disclosed at the earliest stage possible.

7.6 Fundamental errors in published works

- (1) When authors discover a significant error or inaccuracy in their own published work, the author should promptly notify the NIME Steering Committee and cooperate to retract or correct the paper.
- (2) If the NIME Steering Committee learns from a third party that a published work contains a significant error, the author should promptly retract or correct the paper or provide evidence of the correctness of the original paper.

8 PRINCIPLES & CODE OF PRACTICE IN CHAIRING & PEER REVIEWING

8.1 Publication decisions

- (1) The chairs of each year's NIME conference are responsible for deciding which of the submitted work (papers, music, posters, panels, installations) should be published.
- (2) Each chair will assess the originality, ethics and NIME principles in this process. This may be done in consultation with other chairs.

8.2 Fair play

 The reviewers, meta-reviewers, and paper chairs should evaluate manuscripts for their intellectual content without prejudice.

8.3 Confidentiality

(1) The chairs must not disclose any information about a submission to anyone other than the corresponding author, reviewers, and potential reviewers, as appropriate.

8.4 Disclosure and conflicts of interest

- Unpublished materials disclosed in a submission must not be used in a chair's/reviewer's own research without the explicit written consent of the author.
- (2) Privileged information or ideas obtained through peer review must be kept confidential and not used for personal gain.
- (3) Reviewers should recuse themselves from considering submissions in which they have conflicts of interest resulting from competitive, collaborative, or other relationships or connections with any of the authors, companies, or (possibly) institutions connected to the submissions.
- (4) Reviewers should require all contributors to disclose relevant competing interests and publish corrections if competing interests are revealed after publication. If needed, other appropriate action should be taken, such as the publication of a retraction or expression of concern.

8.5 Involvement and cooperation in investigations

- (1) The chairs should take reasonably responsive measures when ethical complaints have been presented concerning a submission or published manuscripts.
- (2) Such measures will generally include contacting the author/s and giving due consideration of the respective complaint or claims made and may also include further communications to the relevant institutions and research bodies.
- (3) If the complaint is upheld, these measures might include the publication of a correction, retraction, expression of concern, or other note, as may be relevant.
- (4) Every reported act of unethical publishing behaviour must be looked into, even if it is discovered years after post-publication.

9 VERSIONING

(1) Current version: 1.1; 18 January 2023

(2) Previous versions

(a) 1.0; 18 November 2020