IGU STATEMENT ON ACADEMIC FREEDOM AND ETHICS

(IGU-SAFE)

Summary*:

The International Geographical Union (IGU) is a non-governmental organization committed to advancing geographical science and education worldwide. It promotes geography through coordinating research and teaching initiatives across the globe, utilizing its network of National Committees, Commissions, and Task Forces. The IGU considers academic freedom and ethics as fundamental to its mission, which is reflected in the IGU Statement on Academic Freedom and Ethics (IGU-SAFE).

Academic freedom is a cornerstone of the IGU's principles. The organization firmly believes that individuals and institutions must have the liberty to conduct geographical teaching, research, and professional activities without fear of discrimination, censorship, or other restrictions. This aligns with the Universal Declaration of Human Rights, which enshrines the right to share and benefit from scientific advancements, engage in scientific inquiry, pursue and communicate knowledge, and associate freely in such activities. The IGU, as a full member of the International Science Council (ISC), subscribes to the principles of academic freedom and responsibility outlined in ISC Statute 7.

Ethical guidance forms a crucial part of IGU-SAFE. The statement emphasizes that geographical research should contribute to the public good, promote well-being, reduce inequities in resource access, and respect diversity. It advocates for non-discrimination and inclusive practices within the field. The IGU-SAFE also stresses the importance of responsible data management and privacy protection, particularly in the age of big data and artificial intelligence.

Fieldwork ethics are given special attention in the IGU-SAFE. The statement underscores the need to protect participants' health, well-being, and privacy during field research. It emphasizes the importance of avoiding harm to both people and the environment. A key ethical requirement in fieldwork is obtaining informed consent from research participants, ensuring they are fully aware of the research goals, methods, and potential impacts.

Professional conduct is another critical area addressed by IGU-SAFE. It promotes respectful treatment of colleagues and research participants, fostering a culture of dignity and integrity within academic and professional activities. The statement places particular emphasis on mentorship and support for junior researchers, encouraging senior professionals to actively guide the academic and professional development of their mentees.

The IGU-SAFE recognizes the challenges and ethical considerations posed by geospatial technology and artificial intelligence in geographical research. It addresses privacy and ethical concerns related to the use of these technologies, such as automated tracking, high-resolution imaging, and big data analysis. The statement highlights potential issues with AI in geographical research, including problems of bias, exclusion, and the "black box" nature of some AI applications. Importantly, IGU-SAFE stresses the critical role of human input in knowledge production, emphasizing that while AI can be a powerful tool, it should not replace human judgment and ethical considerations in geographical research.

The International Geographical Union (IGU) is an international, non-governmental, professional organization devoted to the practice and development of the discipline of Geography. The purposes of the IGU are primarily to promote Geography through initiating and coordinating geographical research and teaching in all countries of the world through its National Committees, Commissions and Task Forces.

The International Geographical Union (IGU) considers academic freedom and academic ethics to be central to the mission of advancing geographical science and education.

The IGU Statement on Academic Freedom and Ethics (IGU-SAFE) thus outlines priorities, provides principles and frameworks to defend and expand ethical choices and ensure fair conduct in teaching, research and public engagement within the discipline of geography, globally.

According to IGU- SAFE, Science, in the broadest sense of the concept, is based on hypotheses, methods, procedures and exchanges, and its results are shared through scientific communication and public engagement. Promoting the vitality and recognition of geographic science goes hand in hand with a code of practice at each step in the process of knowledge production. IGU- SAFE reiterates that research activity in geography, as in all other sciences and disciplines, aims to contribute to the development of knowledge and the advancement of science. It is based on the principles of integrity, rigor and responsibility that guarantee its validity and promote confidence in its results.

IGU-SAFE notes that geographical scholarship spans the social and natural sciences. As such scholarship and research is undertaken in a variety of environmental, social, and cultural contexts, geographers may encounter a broad array of ethical considerations in their research, teaching, professional practice, and dissemination. This is further compounded by diverse values, ethical standards and unequal intellectual property regimes.

The IGU SAFE seeks to promote thoughtful engagement through the possible ways of improving well-being and expanding geographical knowledge without causing harm to individuals, communities, non-human species, ecosystems and the environment.

<u>The IGU_SAFE</u> document is part of a dynamic, ongoing process of thinking about ethics given the changes and contemporary developments in geographical research, education and dissemination.

A. ACADEMIC FREEDOM

The IGU subscribes to the principle that it is essential for individuals and institutions to have the freedom to carry out geographical teaching, research, and professional activities without fear of discrimination, censorship, or other restrictions.

The right to share and to benefit from advances in science and technology is enshrined in the Universal Declaration of Human Rights, as is the right to engage in scientific inquiry, to pursue and communicate knowledge, and to associate freely in such activities.

The International Geographical Union (IGU) is a full member of the International Science Council (ISC). As such, IGU subscribes to the principles of academic freedom and responsibility enshrined in ISC Statute 7: https://council.science/publications/statutes-and-rules-of-procedure/ which explicitly states the following:

"The free and responsible practice of science is fundamental to scientific advancement and human and environmental wellbeing. Such practice, in all its aspects, requires freedom of movement, association, expression and communication for scientists, as well as equitable access to data, information and other resources for research. It requires responsibility at all levels to carry out and communicate scientific work with integrity, respect, fairness, trustworthiness, and transparency, recognising its benefits and possible harms.

In advocating the free and responsible practice of science, the Council promotes equitable opportunities for access to science and its benefits, and opposes discrimination based on such factors as ethnic origin, religion, citizenship, language, political or other opinion, sex, gender identity, sexual orientation, disability, or age".

In the light of the above, IGU-SAFE believes that academic freedom contributes to scientific progress and promotes the circulation of knowledge. IGU-SAFE highlights the imperative of independence, transparency, ethics and freedom within geographical education and research and will intervene when these are threatened or undermined.

B. ETHICAL GUIDANCE

It is important that research in Geography contributes to the public good, wellbeing, reduction of inequities in access to resources, and respect for diversity. This is why the IGU-SAFE recommends a code of conduct and ethics that goes hand in hand with academic freedom. IGU-SAFE believes that:

- Geographers have an ethical obligation to develop geographical knowledge and methods that are purposed to mitigate the harms caused by anthropogenic environmental change.
- Geographers should deeply consider when, where and how circumstances enhancing the well-being of one living entity are detrimental or negatively impact the well-being of another.
- Geographers must not discriminate, harass, bully, or engage in any forms of misconduct.
- In evaluating the professional performance of peers and other employees, Geographers should not discriminate against individuals or groups using criteria such as (but not limited to) age, class, ethnicity, gender, marital status, nationality, politics, physical disability, race, religion, and/or sexual orientation.
- Geographers should strive to create and maintain a diverse, pluralistic, and inclusive professional community.
- Geographers should continually work to empower the voices and views of un-or underrepresented communities.
- In general, Geographers should make data and findings publicly available to the greatest extent allowable by funding agencies and by our ethical principles, and in a fashion that is consistent with the goal of doing no harm to the people, places, and environments they study.
- Geographers should document clearly how datasets are collected, constructed, and managed, and carefully guard against any data breaches, while promptly notifying affected individuals or communities if a breach does occur.

- Geographers should reflect carefully on the potential problems that so-called "big data" pose with respect to data management, de- and re-identification, and privacy.
- Geographers should reflect carefully and envisage which ethical problems are caused by Artificial Intelligence (AI) in research, teaching, and publishing practices.

C. FIELDWORK

Geographic research and education share the practice of fieldwork, which is the experience of collective immersion outside the everyday context to understand a particular geographical situation.

The contemporary scientific environment offers new opportunities to advance science, for example with stakeholders and developing methodological paths of trans-disciplinarity, but at the same time it also poses complex challenges to scientific research, which is increasingly designed and financed through private sources, for commercial gains and along extra scientific world-led agendas.

Against these contexts, IGU-SAFE advocates that in the practice of fieldwork as well as in using geospatial technologies, researchers should make reasonable efforts to protect the health, well-being, and privacy of research participants.

Previously, the IGU has endorsed an International Charter on Geographical Education in 1992 (Washington, DC, USA) and 2016 (Beijing, China) by the General Assemblies. (https://www.igu-cge.org/2016-charter/). Following these, the IGU – SAFE recommends a code of practice in doing fieldwork as well as managing data and technologies that observe overarching ethical principles which centre integrity, respect, care and intellectual honesty:

The six main principles of this code with respect to fieldwork and data management are:

- 1) Not harming people: IGU- SAFE advocates that geographers must be sensitive to the unequal power positions relative to their research participants. As researchers they cannot be unaware of the consequences to those affected by their research. Potential harms can involve vulnerable groups, including when research is conducted with and by member of those groups like economically and locationally disadvantaged people, ethnic or other kinds of minorities, and indigenous people, among others. IGU -SAFE advocates for inclusive, co -creative and decolonial approaches in geographical scholarship involving human subjects where research is conducted "with" rather than "on" participants, avoiding extractive or exploitative research praxis. Information should not be extracted from such communities without their informed consent. Benefits to the communities must be recognized as such by the communities. Researchers must be completely transparent to their participants and consider their positions carefully if accepting commissioned research funded by parties whose agendas are seen as inimical by the communities.
- 2) **Not harming the environment:** Geographical research must not damage or cause harm to the natural environment. Researchers should **t**ake steps to promote environmental safety and be especially careful in engaging with non-human species. Potential issues include both social and physical threats to the viability of a group and its territory; Researchers must avoid methods and activities which may be invasive or have the potential to cause long term alterations to natural environments, eco-systems, and non-human individuals.

3) **Safeguarding an individual and the collective's privacy**: Geographers must ensure the privacy and safety of respondents and research participants during fieldwork and online activities, taking steps to protect and safeguard their identity, or personal data through the use of anonymized questionnaires, surveys; pseudonyms for individuals, places, collectives and secure storage of anonymized materials. These are necessary to protect privacy, confidentiality, and limit exposure to risks.

IGU- SAFE notes that understandings, expectations, and preferences regarding privacy differ across and within societies and expects that the same are clearly stated and transparently addressed at the initial stages of the research process. Further, privacy depends on the nature of the data, the context in which they were created and extracted, and the expectations and norms of those who are affected must be centred.

Efforts should be made to guard against any data breaches, especially when such data could be used to undermine the interests of communities or community members, and when specific agreements have been made to keep such data out of the public domain.

4) **Protecting researchers' safety**: Geographers should avoid collaborating with or seeking funding from public or private organizations known to participate in warfare or similar acts of violence – such as those associated with the military, intelligence, security, or police – without adequate ethical safeguards. Such participation can create risks for both researchers and the researched.

In situations where such collaboration is deemed ethical, researchers are responsible for prominently and publicly reporting such relationships.

Researcher's and participant's safety cannot be endangered by academic supervisors in situations of doing fieldwork in areas where issues of censorship and restrictions on free speech exist.

5) **Obtaining informed consent:** Geographers working with human communities must obtain free, prior, and informed consent from research participants. The consent process should be a part of the project design and continue through implementation as an ongoing dialogue and negotiation with research participants.

Informed consent includes at least sharing with potential participants the research goals, methods, direct and indirect funding sources, or sponsors, expected outcomes, anticipated impacts of the research, and the rights and responsibilities of research participants.

Researchers must clarify to research participants the possible impacts of participation, and make clear that despite their best efforts, confidentiality may be compromised, or outcomes may differ from those anticipated.

Geographers whose research involves humans, based in countries where there is an Institutional Review Board (IRB) or similar process, must obtain institutional approval and follow its stipulations about informed consent, modification of research practices, reporting

of adverse events, etc. At the same time, Geographers should be aware that considerations of ethics go beyond and may in some circumstances differ from such rules.

IGU – SAFE notes that the informed consent process is necessarily dynamic, continuous, and reflexive. When research changes in ways that may directly affect participants, geographers must revisit and renegotiate consent. The principle of doing no harm means that the right to refuse research goes beyond specific individuals approached through the IRB process and includes the right of communities to refuse participation.

Informed consent does not necessarily imply or require a particular written or signed form. It is the quality of the consent, not its format, which is relevant, but certain countries and/or regional organization require a specific format.

Whenever appropriate, the results of research should be shared with research participants, local colleagues, host agencies, and affected persons and communities in a format that is accessible to them. Acknowledgement, including authorship, should be determined in a fair and transparent manner.

D. RESPONSIBLE DATA MANAGEMENT:

As mentioned in section B 'Ethical Guidance' of this document, geographers should document clearly how datasets are collected, constructed, and managed, and carefully guard against any data breaches, while promptly notifying affected individuals or communities if a breach does occur.

Most funding agencies have guidelines for the use and distribution of data and research findings and may require a data use agreement as a condition for grant or contract awards. Such an agreement may include provisions designed to protect de-identified data from reidentification, and conditions relating to data storage, protection, publication, and transmission which must be adhered to.

E. PUBLICATION AND DISSEMINATION OF RESEARCH:

The IGU- SAFE underlines the need for integrity and intellectual honesty in research and dissemination of research including transparency about (co)authorship and publishing in the evolving science system of Artificial Intelligence.

The IGU- SAFE draws attention to the Committee on Publication Ethics ie COPE guidelines available on https://publicationethics.org/guidance/Guidelines.

F. PROFESSIONAL CONDUCT:

Geographers should treat those with whom they interact with dignity and respect, conducting themselves with honesty and integrity when engaging in academic and professional activities.

- (i) Teaching assistants should be treated with respect, as full partners in delivering a course;
- (ii) Research Assistants should be adequately compensated and work according to the terms of their contracts.

- (iii)Mentors should actively mentor the professional and academic development of mentees, provide clear instructions about expectations, and timely feedback on their performance.
- (iv) Mentors and seniors should be attentive to the overall wellbeing including mental health of students and junior colleagues, being prepared to provide personal support and facilitate access to professional counselling when available.
- (iv) Professional relationships must not be extractive and exploitative, and be conducted cordially with respect

G. GEO SPATIAL TECHNOLOGY AND ARTIFICIAL INTELLIGENCE:

Geospatial technologies introduce further challenges with respect to potential violations of privacy and confidentiality of individuals and groups.

Science systems are evolving in unforecastable way considering Artificial Intelligence (AI) which might impact scientific integrity in the conduct of research.

The IGU- SAFE flags the following examples of research approaches involving geospatial technologies that are particularly likely to raise issues of privacy and confidentiality, and therefore should be undertaken with special care: (1) automated tracking of the locations and movements of individuals or vehicles; (2) the use of images from satellites, aircraft, UAVs (drones), or ground-based sensors that are of sufficient resolution to identify individuals or vehicles; (3) the use of high resolution geographic location to link data in ways that violate personal confidentiality; and (4) any use of big data that compromises privacy, confidentiality, or violates other ethical principles in this Statement, even when such data is considered publicly available.

The IGU-SAFE notes that use of geospatial technologies and other geographical techniques within the context of warfare, or to support other acts of violence, is inconsistent with principles of doing no harm and securing free, prior, and informed consent, and is therefore outside the boundaries of ethical geographical research and practice.

Moreover, recent developments of AI may generate tensions and new problematic issues to some of the core principles and values that define ethical science. AI will not fall within the scope of open data initiatives given the tension of enabling access and maintaining commercial advantage. High quality data may result being kept confidential. Accuracy, problems of bias and exclusions, data coding and annotations, data infrastructures, standards, regulations are other open issues. Further, the use of big data and AI complicates notions of consent and of human research participants and the ways in which data is collected and used.

It is also unclear how AI worsen or solve reproducibility issues. AI may be used unfairly to multiply publications.

Use of AI in needs to be carefully assessed. Geographers have to be aware that some AI applications operate as black boxes, making impossible to understand how results are produced. AI dramatically re-actualises the Garbage in, Garbage out (GIGO) or Rubbish in,

rubbish Out (RIBO) problem, signalled in computer sciences since the 1960s. AI tends to produce normative results rather than groundbreaking insights because it is based in existing knowledge and existing opinions.

An initial general conclusion is that of the key input of humans in knowledge production.

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Links to other ethics statements

AAA Ethics Statement (2012)

AAA Ethics Forum

AGU Scientific Integrity and Professional Ethics Policy

APA Ethics Code (2017)

APSA Ethics Guide (2017)

ASA Code of Ethics

COPE (Committee on Publication Ethics)

ASPRS (American Society for Photogrammetry and Remote Sensing)

ESA (Ecological Society of America) Code of Ethics (2020)

GIS Code of Ethics (URISA)

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