



Original Article

ISSN 3084-7516 (Online)

Received: 23-10-25

Accepted: 03-01-26

Published: 19-01-26

Investigative deontology: gender in the process of democratizing the exercise of the human right to science in Mexico

María Isabel Puente Gallegos^{1,a} 

¹ Universidad de Valencia, España.

^a Researcher for Mexico, at the Secretariat of Science, Humanities, Technology and Innovation of Mexico.

ABSTRACT

Exercising the human right to science presumes, in addition to access to scientific knowledge and the enjoyment of its benefits, equal participation in its production. However, this exercise means a gender-based democratization of spaces and preconditions in educational institutions. The present research has as objective to clarify, the gender ethical aspects in the form, content, and method of research, since through these three dimensions, to a greater or lesser extent, female students, postdoctoral researchers, workers, and researchers are affected. The methodology of this research is of type documental qualitative. Its nature is descriptive, analytical, and comparative in relation to the binomial of social and legal processes, which includes legal, philosophical, and feminist epistemologies. Among its main findings, the absence of ethical parameters in these three dimensions affects women's full exercise of their right to science was found both in terms of receiving its benefits and participating equally in its production. Finally, elements are proposed for the integration of scientific policies based on intersectionality, cognitive justice, and good practices.

Keywords: human right to science; feminist epistemologies; ethics of science; democratization of knowledge; violence in higher education institutions.

Deontología investigativa: género en el proceso de democratizar el ejercicio del derecho humano a la ciencia en México

RESUMEN

Ejercer el derecho humano a la ciencia presume, además del acceso al conocimiento científico y el aprovechamiento de sus beneficios, participar de manera igualitaria en su producción. No obstante, este ejercicio supone una democratización de género de los espacios y las precondiciones en las instituciones educativas. La presente investigación tiene como objetivo dilucidar los aspectos éticos de género en los elementos de forma, fondo y modo de la investigación, ya que, por medio de estas tres dimensiones, en mayor o menor medida, las mujeres estudiantes, posdoctorantes, trabajadoras e investigadoras resultan afectadas. La metodología de esta investigación es de corte cualitativo documental. Su naturaleza es descriptiva, analítica y comparativa en relación con el binomio de procesos sociales y legales, en el cual se incluyen epistemologías jurídicas, filosóficas y feministas. Entre sus principales hallazgos, se encuentra que la ausencia de parámetros éticos en estas tres dimensiones afecta que las mujeres ejerzan a plenitud su derecho a la ciencia, ya sea recibiendo los beneficios, así como a la participación de manera igualitaria en su producción. Finalmente, se proponen elementos para integrar políticas científicas basadas en la interseccionalidad, la justicia cognitiva y las buenas prácticas.

Palabras clave: derecho humano a la ciencia; epistemologías feministas; ética de la ciencia; democratización del conocimiento; violencia en instituciones de educación superior.

Cite as

Puente, M. (2026). Investigative deontology: gender in the process of democratizing the exercise of the human right to science in Mexico. *Revista jurídica peruana Desafíos en Derecho*, 3(1), 47-60. <https://doi.org/10.37711/RJPDD.2026.3.1.6>



©The author.
This is an article under the
Creative Commons license, CC-BY 4.0

Rev jurídica peruana Desafíos en Derecho. 2026; 3(1): 47-60

INTRODUCTION

Article 15 of the International Covenant on Economic, Social and Cultural Rights (United Nations, 1966) recognizes the human right to science (HRS), which establishes that every individual has the right to access the benefits of scientific advancement and to contribute to its development. Nevertheless, its full exercise faces many impediments, ranging from economic, bureaucratic, and political barriers to social ones. In this article, we will discuss the gender biases that still exist and distort the production of knowledge and hinder the epistemic democratization of women, by women, and for women (Committee on Economic, Social and Cultural Rights, 2020, para. 9).

Likewise, the World Conference on Science, convened by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Council for Science (ICSU) (1999) in Budapest, had as its central objective to strengthen the global commitment to science education and research, as well as to define strategies for aligning science with the social demands of the twenty-first century. Two fundamental documents emerged from this forum, adopted by consensus: the Declaration on Science and the Use of Scientific Knowledge, which emphasizes the need for political commitment to address challenges at the science-society interface, and the Science Agenda: Framework for Action, which establishes guidelines for promoting scientific cooperation and directing knowledge toward sustainable human development and environmental preservation. These documents, presented as the normative legacy of the conference, constitute the reference framework for the proposed follow-up and implementation actions (UNESCO and ICSU, 1999).

Also, UNESCO has established the Recommendation on Open Science, constituting an international normative framework aimed at promoting more inclusive and equitable scientific practices. This initiative fundamentally seeks to reduce scientific-technological gaps and materialize the human right of access to scientific knowledge. In parallel, in its UNESCO Science Report 2021, the organization analyzes the evolution of science, technology, and innovation (STI) systems since 2015, with particular attention to the role of science in the transition toward sustainable futures, both ecological and digital. Both documents emphasize the need to reorient the scientific enterprise so that it responds more effectively to global challenges and the imperatives of epistemic justice (UNESCO, 2021a). Nevertheless, international human rights instruments rarely question the foundations of patriarchal epistemologies, as well as the need for spaces free from discrimination and violence for the development of scientific knowledge.

For its part, at the United Nations General Assembly (2015), recognizing that gender equality and the empowerment of women and girls are crucial to the advancement of the entire 2030 Agenda, November 11 was proclaimed as the International Day of Women and Girls in Science. This decision is founded on the understanding that, despite constituting half of the world's population, women continue to be excluded from full participation in the economy and, specifically, in scientific and technological communities. This international day seeks to promote the full and equitable participation of women and girls at all levels of science, from education and training to decision-making and employment. To this end, this proclamation calls on the Member States of the United Nations system, academia, and civil society to eliminate discrimination and promote science education policies, fostering the professional development of women in science and making their achievements visible (United Nations General Assembly, 2015).

Recent studies show that, despite that slightly more than half of the world's population are women, currently only 33% of global scientific publications are led by women (UNESCO, 2021c). Furthermore, fields such as engineering, medicine, biology, and artificial intelligence reproduce discriminatory biases against women and girls. This results in the production,

dissemination, and reproduction of knowledge that discriminates against and subjects this group to violence. Likewise, it is in male-dominated fields where there is a higher prevalence of workplace, school, and sexual violence against women (Buolamwini & Gebru, 2018). These data reveal that women's formal access to education, by itself, does not guarantee equitable participation in the construction of epistemologies, nor does it ensure that women are protected from becoming victims of violence in spaces where they are surrounded by people with a high level of professional training.

In addition to the international human rights framework, the current Mexican constitutional system, in Articles 1 and 4, provides for equality between men and women (excluding non-binary and intersex persons); likewise, Article 3 guarantees the human right to science and education, which, in addition to being compulsory, shall be universal, inclusive, public, free of charge, and secular. Nevertheless, as we will see below, this has not yet been fully achieved, since the legal recognition of these human rights alone is insufficient, and their implementation has remained an intractable problem for women and the authorities of educational institutions. Therefore, significant gender gaps persist and are reproduced in the generation and application of knowledge. On the one hand, there are still gaps preventing women from entering and developing in the fields of research and teaching. On the other hand, institutions such as public research centers and higher education institutions, as well as the robust regulatory framework and the excessive number of collegiate bodies established to address these issues, tend to be ineffective and even re-victimizing (Díaz Méndez and Puente Gallegos, 2024).

METHOD

The methodological aspect of this research is qualitative and documentary in nature. Its nature is descriptive, analytical, and comparative in relation to the binomial of social and legal processes, which includes legal, feminist, and philosophical approaches. This research includes a theoretical review and a proposal to evaluate the substance, the development of the form, and the language of scientific and humanistic research, since, although it may have a scientific method and language, it may nevertheless reproduce hate speech.

Due of this, an adapted proposal of the Rabat Plan of Action (United Nations, 2021) (A/HRC/22/17/Add.4, appendix), or Rabat Threshold, provided for in Article 20, paragraph 2, of the International Covenant on Civil and Political Rights, is presented in order to propose a way to mitigate the problem addressed in the results of this text and contribute to the design of scientific public policies that are more friendly with the women.

Regarding the ontological purposes of adapting this instrument, there is a link with current Mexican administrative law, since, precisely, before financing, approving, or launching scientific or humanistic research, it is not only prudent to prevent, through this test, the reproduction of gender stereotypes or hate speech against women, but it also serves to prevent the glorification of war or neoliberal science, or the use of such research to legitimize discrimination or violence in all its forms against historically vulnerable groups.

RESULTS

The human right to science is a right that has been recognized recently compared to other human rights with a longer history of legal development, study, and application by the Mexican State. In the research that concerns us, we must understand that there is a trinity for the full and ethical exercise of the right to science. That is, first, it must be recognized and contemplated as a component of scientific standards and policies; in other words, it must be recognized in the positive law in force. But not only that; it must also be linked to ethical guidelines, such as the codes of professional ethics of each field.

This is not only intended to lay the foundations for the creation and benefit of scientific advances—we must dare to imagine science, in substance and form, without violence or neoliberal biases, seeking not to cause harm and not to serve to promote war or violence—but rather to ensure that the scientific knowledge generated every day in our country constitutes science for the common good of society. In this particular study, the aim is to recognize the benefit to women through legal scientific and research ethics.

Likewise, it is necessary for this to be exercised in a sustained and continuous manner, with an impact that is virtuous in the sense that it enables the existence of the world to be understood scientifically, and that people and sentient beings benefit from it rather than suffer harm from it. Accordingly, we must understand that there are preconditions for this to occur, such as social, political, economic, gender, and even environmental barriers. Therefore, we must understand that we should not refer to just any type of science, but rather, at all times, we must seek to ensure that it is directed toward achieving a world that is more epistemically just. To this end, we must go back to the Western philosophical-legal tradition, which has predominantly centered its analysis of justice on distributive and redistributive dimensions, that is, on the equitable allocation of goods, resources, and opportunities within a social structure (Rawls, 1999).

However, this framework while fundamental, results insufficient to address the deeper and more structural forms of injustice that characterize the contemporary global order in the exercise of human rights. One of these forms, perhaps the most fundamental because it is a condition of possibility for the others, is epistemic injustice (Fricker, 2007). It is in this context that the concept of cognitive justice emerges, not as a mere extension, but as a radical reorientation of the very project of cognitive justice.

Finally, it is necessary to point out that feminist critiques of dominant epistemology have challenged the very foundations upon which knowledge is constructed, revealing how power structures, particularly those based on gender, shape what is considered true and objective. For the philosophy of law, this analysis is not merely a theoretical speculation. It constitutes a fundamental tool for deconstructing the purported neutrality of law and examining how its practices and doctrines may perpetuate systemic injustices (Puente Gallegos, 2022). In response to this critique, feminist epistemologists propose more rigorous and genuinely objective standards of knowledge, understanding objectivity as an intersubjective critical analysis that gathers the greatest possible number of points to be considered.

On this basis, Harding (1992) proposes the concept of strong objectivity. This notion posits that, in order to achieve more objective research, it is necessary to begin by critically examining the values and biases that the researcher introduces into their work, as well as to begin from the lives of marginalized groups. This author argues that beginning research from the experiences of women and other oppressed groups, far from biasing the inquiry, actually strengthens standards of objectivity because it compels science and theory to confront social phenomena and relationships that would otherwise remain invisible.

Once this has been considered, the author proposes understanding scientific ethics through three branches: ethics in science, ethics of science, and ethics during the practice of science and research, as will be developed below.

Research Ethics

In this section we will refer to the substance of scientific and research knowledge, that is, ensuring that the knowledge generated—the substance of scientific research—is directed toward the construction of inclusive, egalitarian, accessible, and beneficial epistemologies for society.

De Sousa Santos (2010) coined the term *epistemicide*: the systematic annihilation of alternative knowledge, worldviews, and systems of knowledge perpetrated by the hegemonic, modern, and Eurocentric model of science. It is a matter of elucidating and constructing a more just distribution of existing knowledge, in order to achieve an ontological and epistemological transformation of what is considered knowledge and who is legitimized to produce it. This essay develops the concept of cognitive justice, exploring its origins, its key aspects, and the critique of the dominant paradigm, epistemic pluralism, the decolonization of knowledge, the dignification of subaltern forms of knowledge, and its disruptive impact on higher education, all from a critical perspective supported by the philosophy of law.

Finally, it is pertinent to situate legal androcentrism as the exegesis of Western epistemology and science. Androcentrism refers to the practice of taking male experience, values, and perspectives as the universal human norm, while presenting the feminine as particular, deviant, or inferior. Many times, what has been presented as supposed objective knowledge is, frequently, knowledge that reflects the viewpoint of hegemonic groups (Haraway, 1988).

Harding (2015) argues that traditional science operates under an ideal of weak objectivity, which seeks to achieve neutrality through the elimination of all values and contexts of the researcher. However, in practice, this claim fails to eliminate androcentric values, which remain invisible and unquestioned. For the philosophy of law, it is necessary to question whether public policies and science policies, for example, in the financing of research projects, actually encompass women. Let us remember that law, by presenting itself as a system of abstract and neutral rules, may be codifying and legitimizing a patriarchal social order (Puente Gallegos, 2022).

This epistemic pluralism must be considered as a starting point for cognitive justice. This implies the creation of institutional, political, and pedagogical conditions so that different epistemologies can interact on an equal footing. For the philosophy of law, this has profound implications. It entails, for example, recognizing the validity of plural legal systems, such as indigenous customary law, not as a gracious concession by the State, but as the manifestation of an alternative and legitimate legal rationality. It also entails questioning the notion of a universal and abstract legal subject in order to give way to situated subjects, whose experiences and knowledge shape the interpretation and application of norms (Mignolo, 2009). The democracy of knowledge in law requires a diatopical hermeneutics, that is, an interpretation that moves between different cultural backgrounds in order to construct more inclusive, profound, and complex meanings.

By way of example, Ciccía (2022, p. 74) reflects on and provides an account of sexist epistemologies that spread throughout the field of medicine and that situated the biological justification of women's status in a reduction, in the form of gender stereotypes, characteristic of the time. This was claimed by the British endocrinologist Heape, who stated that women should live according to their biological organization (referring to the gender roles of the geographical area and the period), since otherwise the consequences would be serious mental disorders, poor health, remaining unmarried, and implicit masculinity for them.

These gender biases in science have various consequences that, at the core of research, perpetuate hate speech that seeks to be legitimized through the usurpation of scientific discourse by seeking to denigrate women, as well as through the exclusion of research variables, placing masculinity as the measure of human universality.

Ethics in Research

Here, we will refer to the way in which research is conducted, since this also has an impact on the results of the construction of epistemologies, as it is also an essential component for the full exercise of the human right to science.

This section posits that ethics in science constitutes the ontological and epistemological substrate that gives legitimacy to the knowledge produced; the end does not justify the means. Therefore, it is emphasized that research methodology possesses an inherent ethical dimension in which form is also substance, and whose corruption not only violates fundamental rights but also generates flawed epistemologies that undermine the social contract of science.

By way of example, we can cite the case of James Marion Sims, which constitutes a foundational paradigm of epistemic violence and patriarchal and racial objectification embedded in the structures of modern scientific knowledge. His crucial contributions to gynecology—particularly the technique for repairing vesicovaginal fistulas and the development of the speculum—were built upon repeated experimentation without anesthesia or consent on the bodies of enslaved African American women (Guerrero, N., 2017; Shende et al., 2024).

Although the substance of what is researched is important because various public policies emerge from it, as well as data that are disseminated widely and from which public decisions are made, what was described in the previous paragraph is an example that the end does not justify the means.

Academic integrity

In this subsection, we will address, in an illustrative but non-exhaustive manner, integrity-related conduct, plagiarism, authorship conflicts, intentional manipulation of data, images, and statistics, scientific confidentiality, informed consent, integrity, confidentiality, professional secrecy, conflicts of interest, the ethical use of AI, and accountability.

The requirement of academic integrity does not only involve conduct such as avoiding plagiarism, data falsification, and the manipulation of results, as studied by Daston & Galison (1992); it is also often interpreted as a procedural norm. However, from an ontological deontology of research, this integrity is the fundamental pillar upon which the reliability of collective science rests. Conduct such as that described in the previous paragraph may be considered an ontological fraud that constructs a fictitious reality whose causes are often dishonest and driven by particular interests, upon which political decisions are made, interventions are designed in numerous branches of knowledge, public and private resources are allocated, and which may even be used as a basis for public decision-making. An epistemology built unethically erodes access to the human right to science. Integrity, therefore, is not merely an individual virtue of the researcher, but a structural condition for the possibility of reliable knowledge (Bachelard, 2000).

In this subsection it is also pertinent to include the principles of informed consent and confidentiality, which embody respect for human autonomy and dignity, transforming them from principles established in the relevant regulations into concrete and everyday academic practices concerning transparency and the protection of personal data. This informed consent, in the best-case scenario, should not be understood as the completion of a bureaucratic form, but rather as an indispensable and ongoing performative act.

Scientific confidentiality

This professional secrecy constitutes the recognition of the individual's private sphere as part of the research, as an inviolable and non-waivable space. Research that does not guarantee these principles produces knowledge that, regardless of its usefulness, is compromised at its origin by the denial of the dignity of the other and, therefore, constitutes an act of violence.

Conflict of interest

It is undeniable that placing personal or private interests above professional interests is malpractice to which every professional is exposed. Scientists and researchers are not

exempt from this type of ethical dilemma either. Although scientific work ultimately aims at the pursuit of truth, unfortunately, there are emblematic cases of the mismanagement of conflicts of interest among researchers.

In bureaucratic and research settings, it is indisputable that these conflicts exist in decisions regarding which studies will be conducted, how they will be approached, who may participate, which elements may or may not be used, or the reason why it is decided to investigate one problem and then another, among many other circumstances. Therefore, conflict of interest disclosures play a relevant role as a counterbalance for institutions that, in good faith, contribute to universal access to knowledge.

Ethical use of artificial intelligence

In face to the expansion and rise of this technology, numerous instruments regulating the use of AI have emerged, particularly in favor of women, since it has been demonstrated that technologies also contain biases, and it is important to reduce, remedy, and eradicate such situations. Therefore, we can now find as references various instruments from national and international organizations, such as Women4Ethical AI (UNESCO, 2021a, n.d.). In addition, disclosing the use of this tool in scientific journals may be useful when conducting textual reviews or managing references, with due caution.

Accountability

It is important to strengthen mechanisms so that those who benefit from such funds are held responsible for ensuring adequate, transparent, and effective management of these resources. This should be done without falling into bureaucratic fetishism that hinders the use of resources or takes more time to fulfill requirements than the research itself.

Ethics during research

In this section, we will refer to the acceptable, cordial, and honorable behaviors among the people conducting research, since the environment in which research and science are intended to be conducted influences the sustained exercise of scientific work, especially for women.

Research naturally develops within work environments involving complex human relationships. Therefore, it is necessary to prevent and identify behaviors such as workplace, sexual, and school harassment, since these constitute a structural obstacle to the continuity of scientific development. These phenomena operate as mechanisms of exclusion that silence voices, curtail talents, and ultimately impoverish the scientific and research enterprise as a whole, thereby creating incomplete knowledge. Below, a synthesis of the main findings supporting this premise is presented.

Workplace harassment

Defined as a process of hostile and unethical communication, systematically directed by one or more individuals against another, placing the latter in a position of defenselessness and helplessness. In the context of research, this type of psychological violence in the workplace directly affects women's professional vocation, destabilizing their plans and future projects, which are the foundation of scientific work (Márquez Martínez, 2025). This hostile environment, which is addressed and contemplated in various labor, criminal, and administrative regulations, directly affects the dignity and health of the individual, undermining the conditions necessary for the exercise of free research (Ramos Delgado, 2021; Sáez, 2024).

Workplace harassment can also be manifested through inequality in unpaid work, the care of older adults and sick persons, etc. In Mexico, for example, 75.1% of people who perform care work are women, dedicating an average of 39 hours per week to these tasks. This

burden, which falls disproportionately on them, directly affects their scientific productivity, a fundamental criterion for professional advancement (United Nations, 2020). Therefore, one form of workplace harassment through omission is the lack of regulation of work-life balance measures, as well as measures for men to assume responsibility for these care tasks.

In an illustrative but non-exhaustive manner, workplace violence may be understood as the unlawful refusal to hire women because they are women, to respect their continued employment or their general working conditions, as well as the discrediting of the work performed, threats, intimidation, humiliation, exploitation, the prevention of exercising the breastfeeding period provided for by law, and all forms of discrimination based on gender (DayInLab, 2021).

Sexual harassment

It is usually framed within three major axes: violence against women, a sexist work environment, and a framework of abuse of power, both hierarchical and gender-based. Studies show that 20% of women scientists have experienced sexual harassment by professors and administrative staff (Ochoa et al., 2021). This type of harassment is often normalized through sexist comments, degrading jokes, and remarks that humiliate women in their personal and professional spheres. According to UNESCO (2021b), less than 30% of people engaged in research worldwide in the fields of science, technology, engineering, and mathematics (STEM) are women. And although there are currently increasing numbers of women in higher education institutions studying scientific careers, very few manage to become research professors or leaders of departments and institutes. This underrepresentation directly affects the direction taken by scientific research (Gómez-Díaz et al., 2018). Sexual harassment is one of the main reasons why women drop out of their studies or leave their jobs.

School harassment

A fundamental precondition for the development of future women researchers is that women, girls, and adolescents feel comfortable in school spaces free from violence. This condition helps them remain in these educational spaces. Conversely, when they experience school harassment, the likelihood of dropping out both within and outside the school environment increases.

Women and girls are four times less likely than men to acquire basic digital skills, which are essential for the future labor market. Scientific evidence indicates that punitive strategies such as expulsions are often ineffective in addressing bullying. In contrast, bystander intervention has been shown to be a successful strategy, seeking to activate students who witness *bullying* so that they can stop it and defend the victims. Likewise, friendship and positive relationships with peers have been identified as a crucial factor in preventing and protecting against the risk of experiencing *bullying* (Blanco et al., 2020; Else, 2018).

CONCLUSIONS

Ethics in science is a matter of science policies and social justice. In the way in which we can understand the world through science with the purpose of benefiting it, it is highly important that we incorporate a plurality of perspectives and voices that can articulate it in all its complexity and diversity. Therefore, knowledge must be considered a common good aimed at improving the quality of life of society and its environment from a horizontal perspective.

Academic integrity, informed consent, accountability, the ethical use of AI, and confidentiality must be indispensable practices contained in the regulations of higher

education institutions or in public policies through which truth and human dignity are upheld.

At the same time, reflection on the purposes of research compels us to confront the economic and political structures that determine what is known and for whom it is known. The full realization of the human right to science for women requires reclaiming scientific work as a public good, oriented toward the construction of critical epistemologies that serve the common good and not the accumulation of capital as a minimum condition for survival in the face of the global oligarchy.

Finally, ethics through science, when it is not applied, explains the withdrawal of women, girls, and women scientists due to workplace, school, and sexual harassment. It must be clarified that this is the result of a structural and systematic problem of gender-based violence that culminates in serious harm to the development of science and to a community of men and women. When these forms of violence marginalize women from research, half of the available human talent is lost, as they are indispensable actors in addressing the complex challenges of the present day.

The lack of feminist perspectives in the design, direction, and development of research can, in fact, lead to incorrect or biased results, and it is then that the scientific community is deprived of a substantial part of its intellectual potential. The eradication of harassment in its multiple forms is, therefore, a *sine qua non* condition for comprehensive scientific progress.

Although, due to limitations of space, only women and girls in the workplace, school, and scientific settings were addressed, it is important to emphasize that there is a bias within the Mexican constitutional patriarchal cisheteronormative framework that excludes non-binary, non-heterosexual, and intersex persons. Therefore, it is pertinent to conduct more in-depth research on their exclusion from the law, epistemologies, and higher education institutions.

Proposal

Once this three-dimensional form of gender-based violence in academic settings has been examined and differentiated, the preparation of an instrument that can be easily implemented by educational and research institutions has been considered.

In the methodology, the ontological purposes of adapting this instrument were mentioned, since it constitutes a precondition for conducting research in the public sphere, given that it is linked to the responsibilities associated with public servants and private individuals. Precisely, before financing, approving, or launching scientific or humanistic research, it is not only prudent to prevent, through this test, the reproduction of gender stereotypes or hate speech against women, but it also serves to prevent the glorification of war and neoliberal science, or the use of such research to legitimize discrimination or violence in all its forms against historically vulnerable groups.

It should be noted that the original Rabat Test can be consulted in the Rabat Plan of Action (United Nations, 2021) (A/HRC/22/17/Add.4, appendix), or Rabat Threshold, provided for in Article 20, paragraph 2, of the International Covenant on Civil and Political Rights.

Rabat Test for the Ethical Evaluation of Scientific and Research Projects in Mexico

1. Context: When assessing the likelihood that certain statements may incite discrimination, hostility, or violence against the target group, this may be directly related to intent or causality. The analysis of context in the exercise of freedom of expression should place

the speech within the prevailing social and political context at the time it was made and disseminated.

This is consistent with the adapted proposal and incorporates the context established by the Inter-American Principles on Academic Freedom and University Autonomy (Inter-American Commission on Human Rights, 2021), particularly Principle VII, "Restrictions and Limitations on Academic Freedom." It recognizes that States have an obligation to create a favorable environment for participation in higher education institutions, as well as for research, debate, and the dissemination of academic knowledge. There is a limitation on such exercise, consisting of the expression of any propaganda in favor of war or advocacy of hatred against any person or group of persons for any reason, including national, ethnic, racial, religious, sexual, gender, gender identity, sexual orientation, or any other reason that constitutes incitement to violence or any other unlawful action.

To this end, it is proposed that this point be analyzed using the Rabat Test in conjunction with these interamerican principles. Nevertheless, it is pertinent to adapt it to the nature of the exercise of the human right to science, which is what this proposal seeks to explore in greater depth.

2. The speaker person: The social position or status of the speaker should be taken into account; in this case, that of the person conducting the research, especially the reputation of the individual or organization within the context of the audience to whom the speech is addressed.

Aside from this, it should be remembered that, both in society in general and particularly in academic spaces, there are power asymmetries that are dynamic and changing and are not always detected at first sight. Therefore, scientific hate speech or an ethical failure in research, within research, and during research can often have collateral effects not only on those who are directly involved, but also, secondarily, on those who are represented in such research as subjects of study under methodologies that violate them, justify the exercise of violence against them, or exclude vulnerable groups as subjects and beneficiaries of research and, consequently, prevent such groups from benefiting from scientific and research advances.

Universities generally require academic degrees such as doctoral degrees or postdoctoral fellowships abroad in order to become researchers, which provides a certain degree of symbolic capital in Bourdieu's terms (1988). This constitutes a relevant factor in the study of cultural capital relations based on the relationship between social capital and education and inequality, which is directly related to models of hierarchization and othering among those who make up the community. These models of power oppress individuals who do not attain a level of education imposed by the dominant culture. Therefore, it is important that, in the spaces we are analyzing, we evaluate our problem as objectively as possible.

3. Intent: The Rabat Test also encompasses conduct by action or omission, such as negligence and recklessness, and indicates that these are not excluded from unlawful conduct, since even such conduct may constitute advocacy of and incitement to hatred and violence. Therefore, it is important not to consider them grounds for exclusion, but rather as part of a comprehensive assessment, since their results may be harmful.
4. Content and Form: The content of the speech constitutes one of the main focuses in the decisions of the court and is an essential element of incitement. The analysis of the content may include the extent to which the speech was provocative and direct, as well as the form, style, and nature of the arguments used in the speech or the balance between the arguments presented.

5. Extent of the speech: At this point, we refer to the magnitude and scope of a speech, as well as the means or elements used for such purpose. In addition to the means of dissemination employed, this also includes the frequency, quantity, and extent of the communications, whether the recipients had the means to respond to the incitement, and whether the statement or research is distributed within a restricted environment or is readily accessible to the general public.
6. Finally, the Rabat Test refers to probability and imminence: Incitement, by definition, is an inchoate offense. The action promoted through inciting speech does not have to be carried out for such speech to constitute an offense. However, some degree of risk of harm must be identified. This means that courts will have to determine whether there was a reasonable probability that the speech would succeed in inciting actual action against the target group, recognizing that such causation must be sufficiently direct.

Basis: Adaptation of the Rabat Test as an instrument originally designed to delimit incitement to hatred, war, and violence, and as an ethical balancing tool for the public funding of scientific projects, based on the constitutional principles in force, international human rights treaties, and Mexico's General Law on Humanities, Sciences, Technologies and Innovation.

Evaluation criteria

1. General considerations. Relating to the general substance of the research.

Is the project oriented toward the exercise of the human right to science? In what way? Will its results primarily benefit groups in situations of vulnerability (children, adolescents, older adults, pregnant women, persons with an illness or disability, afromexican and native people, in prison, etc.)? Is there a risk that the knowledge generated will be used for discriminatory, commercial, neoliberal, or human rights-violating purposes? If the technology intended to be developed is applicable, is it possible for a person earning the minimum wage to afford it? Are you familiar with the codes of professional ethics in your field? How will you apply them to your research?

2. Consent and Participation. Relativo a la forma en que se realiza la investigación donde se encuentran involucrados seres humanos o comunidades.

Is free, prior, and informed consent guaranteed? Are there citizen-friendly formats and formats for children and adolescents? Where applicable, does it include a consultation protocol for Indigenous peoples? In which languages will it be administered? Is a translator available? Are personal data and confidentiality protected? Is there a data management plan? Are you familiar with self-care measures before, during, and after conducting interviews or intervention processes involving individuals or communities?

3. Environmental impact and sustainability. Relating to the manner in which this research is conducted with living beings and the environment.

Does the project comply with environmental regulations? Does it adopt an antispeciesist perspective? Does it internalize remediation costs? Does it promote sustainability?

4. Scientific integrity, accountability, and professional secrecy

Does the methodological design avoid biases? Does it have an intercultural, intersectional, or gender perspective? Are there conflicts of interest? Is there a commitment to publish the results? Are you familiar with the classification of confidential personal data held by private parties, as well as the principles governing professional secrecy? Will the data be accessible? In what ways and on which platforms? Will they be accessible to children or persons with disabilities? Are internal or external mechanisms for supervision, auditing, or accountability

established? Will artificial intelligence be used? In what way? Have you identified any type of critical scenario? What preventive measures do you consider appropriate or proportionate to take before, during, and after the research?

5. Ethics During Research

Do you and your work team undertake not to engage in sexual, workplace, or school harassment to the detriment of any student, scientist, laboratory technician, woman researcher, administrative staff member, or any person with whom you have a relationship during the present research? Are you familiar with the protocol for action in cases of sexual, school, or workplace harassment or discrimination within the jurisdictional framework in which the research will be conducted?

Under penalty of perjury: You declare that you will notify the competent authority of any alleged act of violence or discrimination that occurs in the course of the research for which you are receiving funding. Otherwise, you accept that such omission may result in the revocation of this support.

Acknowledgments and funding

The financial support provided by the National System of Researchers of the Secretariat of Science, Humanities, Technology and Innovation has been essential to the progress of this research, given that its financial support enables the sustained and appropriate development of research aimed at social transformation, as well as the promotion of the articulation of proposals and solutions with various sectors of society. This funding supports the researcher's commitment to the generation of feminist legal science in the country.

Authorship contribution

MIPG: All the stages.

Funding sources

National System of Women Researchers and Researchers of the Secretariat of Science, Humanities, Technology and Innovation.

Conflict of interest

Under penalty of perjury, the Secretariat of Science, Humanities, Technology and Innovation has had no role in the design of the study; in the collection, analysis, or interpretation of the data; in the writing of the manuscripts; in the editing; or in the decision to submit the results to this journal.

Database

Not applicable, since the data used are freely accessible.

REFERENCES BIBLIOGRAPHIC

United Nations General Assembly. (2015). *Resolution approved by the General Assembly on December 22, 2015: 70/212. International Day of Women and Girls in Science.* (A/RES/70/212). <https://docs.un.org/en/A/RES/70/212>

Bachelard, G. (2000). *La formación del espíritu científico. Contribución a un psicoanálisis del conocimiento objetivo* (23.^a ed.). Siglo XXI Editores.

Blanco Fernández, S., González Pais, C., and Velasco Rodríguez, J. (2020). Nuevas herramientas para viejos problemas: acoso y ciberacoso a través de un análisis de sentencias. *Revista Tecnología, Ciencia y Educación*, (15), 51-80. <https://doi.org/10.51302/tce.2020.367>

Bourdieu, P. (1988). *Homo academicus* (P. Collier, trad.). Stanford University Press.

- Buolamwini, J., and Gebru, T. (2018). Gender shades: Intersectional accuracy disparities in commercial gender classification. *Proceedings of Machine Learning Research*, 81, 77-91. <https://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf>
- Ciccia, L. (2022). *La invención de los sexos: cómo la ciencia puso el binarismo en nuestros cerebros y cómo los feminismos pueden ayudarnos a salir de ahí*. Siglo XXI Editores.
- Comisión Interamericana de Derechos Humanos. (2021). *Principios Interamericanos sobre Libertad Académica y Autonomía Universitaria*. https://www.oas.org/es/cidh/informes/pdfs/principios_libertad_academica.pdf
- Committee on Economic, Social and Cultural Rights. (2020). *General Comment No. 25 (2020) on science and economic, social and cultural rights (Article 15, paragraphs 1(b), 2, 3, and 4, of the International Covenant on Economic, Social and Cultural Rights)*. (E/C.12/GC/25). https://digitallibrary.un.org/record/3899847?ln=es&utm_source=&v=pdf#files
- Daston, L., and Galison, P. (1992). The image of objectivity. *Representations*, (40), 81-128. <https://galison.scholars.harvard.edu/publications/image-objectivity>
- DayInLab. (2021, February 13). *Fórmulas sutiles de acoso al científico*. Another Day in the Lab. <https://dayinlab.com/2021/02/13/formulas-sutiles-de-acoso-al-cientifico/>
- Díaz Méndez, J. A., and Puente Gallegos, M. I. (2024). El derecho humano a la ciencia como acción política concertada en los centros públicos del CONAHCYT. *Revista de Investigación Académica Sin Frontera: Interdisciplinary Faculty of Economic and Administrative Sciences—Department of Economic and Administrative Sciences—Navojua Campus*, 1 (42). <https://doi.org/10.46589/riasf.v1i42.693>
- Else, H. (2018). Does science have a bullying problem? *Nature*, 563(7733), 616-618. <https://doi.org/10.1038/d41586-018-07532-5>
- Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford University Press.
- Guerrero, N. (2017, September 17). ¿Sádico o salvador?: quién fue J. Marion Sims, el médico que hizo cirugías vaginales sin anestesia en esclavas negras y es considerado el “padre de la ginecología moderna”. *BBC News Mundo*. <https://www.bbc.com/mundo/noticias-41138128>
- Gómez-Díaz, E., Lucena, M., and Jacome, M. (2018, 21 de junio). Acoso sexual en ciencia. *elDiario.es*. https://www.eldiario.es/andalucia/la-cuadratura-del-circulo/acoso-sexual-ciencia_132_2068463.html
- Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies*, 14(3), 575-599. <https://doi.org/10.2307/3178066>
- Harding, S. (1992). Rethinking standpoint epistemology: What is strong objectivity? *The Centennial Review*, 36(3), 437-470.
- Harding, S. (2015). *Objectivity and diversity: Another logic of scientific research*. University of Chicago Press.
- Márquez Martínez, N. (2025, March 3). *Falta de mujeres científicas en liderazgos impacta en dirección de las investigaciones*. TecScience. <https://tecscience.tec.mx/es/humano-social/mujeres-cientificas-lideres/>
- Mignolo, W. D. (2009). Epistemic disobedience, independent thought and decolonial freedom. *Theory, Culture & Society*, 26(7-8), 159-181.
- Naciones Unidas. (1966). *Pacto Internacional de Derechos Económicos, Sociales y Culturales* (Resolución 2200 A [XXI]). <https://www.ohchr.org/es/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights>
- Naciones Unidas. (2020, February 11). *Mujeres en la ciencia: víctimas de la desigualdad de género en pleno siglo XXI*. Noticias ONU. <https://news.un.org/es/story/2020/02/1469451>
- Ochoa Díaz, C., Hernández Ramos, E., Guamán Chacha, K., and Pérez Teruel, K. (2021). El acoso laboral. *Revista Universidad y Sociedad*, 13(2), 113-118. https://www.researchgate.net/publication/354354490_El_acoso_laboral
- United Nations. (2021). *Plan de Acción de Rabat*. https://www.ohchr.org/sites/default/files/Rabat_threshold_test_Spanish.pdf
- United Nations Educational, Scientific and Cultural Organization.. (s.f.). *Women4ethical IA*. Unesco. <https://www.unesco.org/en/artificial-intelligence/women4ethical-ai?hub=32618>

- United Nations Educational, Scientific and Cultural Organization. (2021a). *Recommendation on open science*. <https://unesdoc.unesco.org/ark:/48223/pf0000379949>
- United Nations Educational, Scientific and Cultural Organization. (2021b). *Recommendation on the Ethics of Artificial Intelligence*. <https://unesdoc.unesco.org/ark:/48223/pf0000381137>
- United Nations Educational, Scientific and Cultural Organization. (2021c). *To be smart, the digital revolution will need to be inclusive: Excerpt from the UNESCO science report*. <https://unesdoc.unesco.org/ark:/48223/pf0000375429>
- United Nations Educational, Scientific and Cultural Organization & International Science Council. (1999). *Declaración sobre la Ciencia y el Uso del Saber Científico y Programa en Pro de la Ciencia: Marco General de Acción*. https://unesdoc.unesco.org/ark:/48223/pf0000116994_spa
- Puente Gallegos, M. I. (2022). ¿Es posible construir una teoría de la justicia feminista? *Revista Internacional de Pensamiento Político*, 16, 595-610. <https://doi.org/10.46661/revintpensampolit.6248>
- Ramos Delgado, P. (2021, November 3). *Los 'haters' contra la ciencia: los investigadores y divulgadores sufren acoso en las redes*. Universitat Oberta de Catalunya. <https://www.uoc.edu/es/news/2021/296-haters-ciencia-redes-sociales>
- Rawls, J. (1999). *A theory of justice* (ed. rev.). Harvard University Press.
- Sáez, J. (2024). Vocación y circunstancia: análisis antropológico del *mobbing* o acoso laboral en la docencia universitaria y en la investigación científica experimental. *Quién. Revista de filosofía Personalista*, (20), 189-214. <https://revistaquien.org/index.php/aep/article/view/283>
- Shende, P., Jagtap, A., and Goswami, B. (2024). The legacy of James Marion Sims: History revisited. *Cureus*, 16(9), e69484. <https://doi.org/10.7759/cureus.69484>
- De Sousa Santos, B. (2010). *Descolonizar el saber, reinventar el poder*. Ediciones Trilce.

Correspondence

 **María Isabel Puente Gallegos**
 maria.puente@secihti.mx