

Experimental philosophy and experimental bioethics: an approach

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Abstract

This research aims to investigate what is known as experimental bioethics, examining and denouncing the sometimes unjustifiable shortcomings and simplifications in the corpus of the field. Some themes are described: openness to reality as a philosophical requirement; relevance of data and priority of concreteness; marked epistemological interest; link to cognitive, moral and social psychology; prominence of intuition as a concept and as a function; approach to language, culture and statistics; understanding and development of scientific themes by the working classes; regional and environmental contextual sensitivity; and relevance of experimental thoughts as hypothetical scenarios that encourage discussion. In this study, the main function of reason is considered without discrediting intuition, feelings or emotions, and it is observed that the contradictions, exceptions and divergences typical of experimental philosophy and experimental bioethics should not be interpreted as falsehoods or inconsistencies, since they are part of the methodology and epistemology of experimentation.

Keywords: Bioethics. Philosophy. Psychology. Intuition. Emotions. Conscience.

Resumo

Filosofia experimental e bioética experimental: uma estimativa

Esta pesquisa busca investigar a denominada bioética experimental, examinando e denunciando carências e simplificações, por vezes injustificáveis, no *corpus* da bioética. São discriminados alguns temas: abertura à realidade como exigência filosófica; relevância dos dados e prioridade da concretude; interesse epistemológico marcado; vinculação à psicologia cognitiva, moral e social; proeminência da intuição como conceito e como função; aproximação à linguagem, à cultura e à estatística; compreensão e desenvolvimento de temas científicos pelas classes populares; sensibilidade contextual regional e ambiental; e relevância dos *experimental thoughts* como cenários hipotéticos incentivadores de discussão. Neste estudo, a função principal da razão é considerada sem desacreditar intuições, sentimentos ou emoções, e observa-se que as contradições, exceções e divergências, próprias da filosofia experimental e da bioética experimental, não devem ser interpretadas como falsidades ou incoerências, dado que integram a metodologia e a epistemologia próprias da experimentação.

Palavras-chave: Bioética. Filosofia. Psicologia. Intuição. Emoções. Consciência.

Resumen

Filosofía experimental y bioética experimental: una aproximación

Esta investigación pretende aprofundar la denominada bioética experimental, que implementa el *corpus* de la bioética inicial, examinando algunas limitaciones y, principalmente, evidenciando sus principales características: abertura a la realidad como exigencia filosófica y científica de datos; objetividad; acentuado interés epistemológico; estrecha vinculación con la psicología cognitiva, moral y social; protagonismo de la intuición como concepto y como función; acercamiento al lenguaje, cultura y comprensión de temas científicos por parte de las clases populares; sensibilidad contextual, regional y ambiental; relevancia del pensamiento experimental y de escenarios hipotéticos, estimuladores de debates. Es valorizada la función principal de la razón sin desacreditar intuiciones, sentimientos y emociones para, finalmente, subrayar que contradicciones, excepciones y divergencias, propias de la filosofía experimental y bioética experimental, no deben interpretarse como falsidades o inconsistencias, pues integran la metodología y epistemología de la experimentación.

Palabras clave: Bioética. Filosofía. Psicología. Intuición. Emociones. Conciencia.

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Origins

The term “experimental” holds extraordinary relevance in its origin, so much so that it would be unnecessary to emphasize it, given its renown in the history of philosophy and science. The so-called experimental bioethics is an example of the development and acceptance of a philosophy grounded in experience and observation.

Nature and physics as sources of knowledge were the first and foremost magnets that drew human admiration and reflection since the dawn of humanity, and they have remained objects of inquiry ever since, including for speculative philosophers such as Descartes and Kant. The cosmos came to be regarded as the *editio princeps* of the universal library. This understanding helps elucidate Aristotelian *physica*, which focuses on the object not only as something in motion (physics), but also as an entity (ontology). Observation, interpretive description, the study of natural phenomena, and their respective theories mark the beginnings of natural philosophy, as discussed and refined in medieval faculties. Thus, it is worth reaffirming the masterful designation attributed by Francis Bacon to natural philosophy: the great mother of sciences¹. During the Renaissance, physics—also known as experimental philosophy—prioritized observation, the search for new methods of knowledge, and the interpretation of results.

Innovation, derived from the adjective “new” and synonymous with change and improvement, was championed by Kepler, Bacon, Galilei, and others. Newton, presented by Brockliss as *Cambridge’s experimental philosopher*², marked new directions for natural philosophy with his *Philosophiae Naturalis Principia Mathematica*. An expression of this ferment of ideas in the British Isles became the basis of the Philosophical Society and the Royal Society in 1660, established to discuss and explore the new, revolutionary, and promising field of knowledge known as experimental philosophy. With the same élan, the Ashmolean Museum—now known as the Museum of the History of Science—was inaugurated in Oxford in 1683, dedicated to research in physics and chemistry. John Banks, an independent and itinerant teacher of Newtonian natural and experimental philosophy, published *An Epitome of a Course of Lectures on Natural and Experimental Philosophy*³.

This designation continued to be used in faculties of science throughout the 19th century and persisted into the 20th, as exemplified by its continued use at Oxford. Thus, human experience and nature are presented as the foundation or *sine qua non* of true knowledge, a relevant yet controversial principle.

Hooke, aspiring to achieve the same recognition as Newton, presents his work *Micrographia* as a contribution to the *reform of philosophy*⁴, with both authors serving as examples of this transformative process. On the other hand, David Hume, while referring to Hooke and Sydenham, writes in *The History of England: men who walked carefully and steadily, the only path that leads to true philosophy*⁵. Here, David Hume stands in opposition to the moral philosophy perpetuated since antiquity and taught in medieval faculties—an *entirely hypothetical philosophy, more dependent on invention than experience (...) devoid of any regard for human nature, upon which every conclusion must rest*⁶. This principle reinforces the title of his *A Treatise of human nature: being an attempt to introduce the experimental method of reasoning into moral subjects*. It establishes a clear divergence from ethics grounded in metaphysical, hypothetical, and imaginary principles. Hume directly echoes the stance of his predecessor, Newton, who states categorically:

*I have not as yet been able to discover the cause of those properties of gravity from phenomena, and I frame no hypotheses. For whatever is not deduced from the phenomena is to be called a hypothesis; and hypotheses, whether metaphysical or physical, or based on occult qualities or mechanical, have no place in experimental philosophy. In this philosophy, particular propositions are inferred from the phenomena, and afterwards rendered general by induction*⁷.

The statement is explicit and conclusive, characterizing the experimental philosophy of the time, as well as the temperament of its author. It is worth recognizing that, over the course of history, philosophy and science engage in polemics, dialogue, growth, refinement, and even disappearance.

Contemporaneity

Contemporary experimental philosophy constitutes a new approach, an “emerging discipline,” and a

“relatively new movement”⁸. Such designations aim to distinguish it as a distinct current of thought and research, diverging from the rigid dichotomy established between rationalism and Enlightenment empiricism of the 17th and 18th centuries. It is a philosophy that uses empirical data and methods to initiate and deepen philosophical debate. This philosophy is both pluralistic and inclusive, based on evidence and quantitative studies, and does not seek a universal truth about phenomena and principles. It is not a philosophy conceived from guesswork⁹, but one grounded in real life, in everyday experience¹⁰.

This interest in objectivity is reflected even in efforts to understand questions posed to individuals from different social classes, thereby expanding the philosophical horizon and individual responsibility. From the preceding statements follows the recognition of the interdisciplinary nature of experimental philosophy as it has been shaped and developed in recent decades, as well as some of its distinguishing features: openness to reality as a philosophical requirement, the relevance of data and the primacy of concreteness, a marked epistemological interest, connections to cognitive, moral, and social psychology, the prominence of intuition as both concept and function, and an engagement with language, culture, and the understanding of scientific topics by working-class populations. This constitutes a significant contribution to philosophical research, supported by new disciplines and methods, which in turn influence and expand the horizons of ethics and bioethics.

Experimental bioethics

According to the foregoing discussion, it must be acknowledged that contemporary experimental philosophy contributes to the development of both moral philosophy and bioethics. Bioethics has never been considered a field of singular meaning or content; however, it is unified by a series of challenges that progressively shape it into a pluralistic, dynamic field—what has been called *ethics in action*¹¹. Nonetheless, there has long been a concentrated focus on ethics related to life and health. It is no surprise that *something is lacking*¹² in moral philosophy and bioethics when

confined to a purely theoretical and normative character. There is a clear need for interaction with other disciplines and a recognition that the absence of empirical data can hinder or prevent the formulation of appropriate judgments or decisions. The limitations of a study that neglects sensitive cognitive experiences, particularisms, perception, the in-depth knowledge of health-related and ethical topics by a sector of society (the folk)¹³, exceptions to scientific principles and behavioral norms, as well as the necessary incorporation and interpretation of empirical and statistical data in the analysis of a given case, are easy to identify.

These observations support the claim that speculative analysis, independent of scientific, personal, and social reality¹², or the material conditions of morals, is incomplete. These are some of the defining features of empirical bioethics, which is primarily concerned with the relevance of methodology, epistemology, and empirical data, as well as its integration with normative bioethics and the formulation of properly justified, practical conclusions—or, as has recently been stated, the effort to place ethics at the core of decision-making¹⁴. It is possible, however, to take a further step: to study the process of ethical decision-making concerning a concrete act in a specific context—a function of experimental bioethics.

Thus, from empirical bioethics emerges a new phase of bioethical inquiry: experimental philosophical bioethics, or simply experimental bioethics—currently in development as an emerging subdiscipline¹⁵. It should be noted, however, without intending in any way to diminish the prestige of Ives, Dunn and Cribb, that the term experimental bioethics is not mentioned in *Empirical Bioethics*¹⁶.

Its nascent character, reflected in the acknowledged absence of a carefully considered demarcation of content, due to its novelty, thematic variety, and simultaneous convergence of concerns, makes a consensus definition difficult. Experimental philosophical bioethics, or experimental bioethics, is distinguished by its commitment to identifying and understanding the neurological, psychological, and cognitive processes that contribute to the formulation of moral judgments related, in this context, to life and health. Some concepts were predictive, such as experimental metaethics and metaethical intuitions¹⁷.

Considering part of the studies conducted¹⁸, one observes the influence of neuroscience, as well as moral, cognitive, and experimental psychology—particularly the prominence given to intuitions, emotions¹⁹, feelings, and beliefs²⁰—as objects of examination and reflection in the process of decision-making and the formulation of moral judgments, which have as their subject the self, the subject of morality, or moral *conscience*. The concept of *consciousness* with ethically significant meaning is widely addressed by contemporary authors such as Velmans²¹, Seth²², and Dennett²³, generating scientifically grounded conceptions and varied interpretations from anthropological, psychological, epistemological, and metaphysical perspectives. All of this affirms Anscombe's position on the necessity of psychology for the advancement of moral philosophy²⁴. This assertion is reinforced and further articulated in the important volume coordinated by Vargas and Doris²⁵.

What follows will address intuitions, given their prominent role in philosophy and experimental bioethics, as well as *thought experiments* for their cognitive and experimental potential.

Intuitions

Contemporary authors representing experimental philosophy—such as Knobe, Macherry, Nagel, Nichols, and Weinberg—highlight intuitions as sources of knowledge and as evidence for philosophical theses, for the wide range of issues related to ethics and bioethics, and for the initiation of conceptual analysis. There is considerable disagreement over what intuitions mean and what they are, making it no exaggeration to say that this is a complex issue, one primarily linked to experimental cognitive psychology and ethics.

Contemporary experimental philosophy classifies them as pre-theoretical, theoretical, superficial, and robust⁹, to which one might add their creative, empathic, professional, and spiritual dimensions, depending on their capacity to generate, sustain, or justify knowledge or truth. Particular attention should be given to so-called epistemic intuitions. These are commonly referred to as *seemings*, *doxastic evidence*, *impulsional evidence*, and *appearances*²⁶, which can be understood as assumptions related to the

knowledge or experience of truth, revealing how things often present themselves in professional life and, in this case, in research and practice within the health sciences.

Thus, it should be affirmed that intuitions are subjective, immediate experiences or impressions, independent of reasoning and analysis, and often accompanied by emotions and beliefs that may become moral intuitions. From an experiential psychological perspective, moral judgments are intuitive—generated not through the deliberate application of rules or mandates, but through judgments connected to other cognitive and thematic domains, dependent on undefined mental activity and, at present, difficult introspection, making their recognition as strict moral judgments challenging and consequently opens them to associations with skepticism and relativism.

Setting aside the long and complex tradition concerning innatism and intuitionism in the history of philosophy—which complicates the grounding of norms and principles—special attention should be given to moral intuitions among the non-specialist public (the folk) and to understanding *how we think*²⁷, know, and engage with concepts, attitudes, and positions related to morality in specific cases. The prominence granted to popular knowledge reveals the importance this philosophical current places on the unenlightened social class, on morality, and real or practical ethics.

It should therefore be stated that bioethics is *context-sensitive*²⁸. Accordingly, it embraces the principle that considers the social, cultural, or economic context as a factor that permeates and influences thought and action. However, the principle that presents transformation or social change as destructive to the aforementioned stability and universality of moral concepts is debatable²⁹. The possibility of evaluating and judging the same case differently—a variation known as *indexical moral relativism*²⁸—or the possibility of moral judgments being changeable and flexible when referred to specific contexts or complex situations, should always be examined and weighed for proper ethical judgment.

It is worth considering, then, that experimental philosophical bioethics does not exclude particularities or exceptions; *reflective equilibrium*, which includes the exercise of reason, does not imply the exclusion of intuitions, as stated by

Rawls³⁰. One of the defining features of this new version of moral philosophy is the belief in, or affirmation of, the existence of innate properties or capacities, as defended by some authors who postulate a *universal moral grammar*—derived from Chomskyan linguistics³¹—innate and complemented by moral competence acquired through experience, conditioned by ontogenetic and phylogenetic development³².

These assertions, however, allow us to question the exclusivity and origin of such principles. How can one reconcile the moral intuitions of different individuals on the same issue, rooted in their unique and characteristic individuality, with intuitions shaped by cultural development over time and history? Affirming only one of the preceding statements does not necessarily nullify or exclude the other, since their contributions to everyday practice are undeniable. These positions nonetheless acknowledge the presence and influence of intuitions.

However, authors such as Pinker and Crisp dispute the primacy of intuitions and emotions in moral decision-making. Pinker explicitly asserts that *rationality should be the guiding light for everything we think and do*³³. Without intending this to be interpreted as a contradiction—as it is not—Crisp states that *morality functions through emotions and that, although they may possess cognitive content, they are passions; and in various areas of philosophy, it is appropriate that arguments be evaluated not in light of emotion, but through calm rational reflection*³⁴. It is relevant to note, according to the meaning given by the author, that morality is here considered in its broad, common, or popular sense—in this case, to be distinguished from ethics, which carries a more precise, academic, and deliberative meaning.

As for the use and recognition of the value of rationality, it is possible to observe in everyday experience the difficulty of engaging in dialogue on a specific issue when intuitions are treated as a criterion of truth.

Nonetheless, it is possible to recognize the role of justifications that attribute greater or lesser weight to a particular intuition in facilitating a moral judgment, without refuting the definition of the person as a rational being, free and equal in nature. These assertions, however, do not contradict the relevance of intuitions in

epistemology, research, science, or in specific professional contexts involving decision-making in cases that are conflicting or contrary to what might be considered a general norm or commonly accepted practice.

Intuitions, therefore, can be understood as psychic experiences that encourage and complement normative ethics and, consequently, the credibility of the individuals or agents involved—scientists, professionals from various fields, including those in healthcare—as well as the advancement of research, case studies, dilemmas, and everyday decision-making.

Thought experiments

Due to their versatile nature, intuitions are susceptible to various forms of experimentation. A specific example is thought experiments, imaginative constructs that result from the combination of intuitions and emotions for a given purpose. These are hypothetical scenarios that encourage dialogue, debate, and inquiry into conflicting and controversial theoretical or practical problems—scenarios that are not limited to simplified analysis, description, or commentary, but rather to a reasoned solution or outcome that is not always easy to reach.

Thought experiments are found in both sciences and philosophy. Popper uses the term *imaginary experiment* as a synonym for thought experiments in his studies on quantum theory³⁵. In turn, Nozick uses the example of the *Experience Machine*⁶ to illustrate its multidisciplinary nature, to explain the difference between feeling and doing, and to explore human values beyond sensory experience. The so-called *Heisenberg microscope* is intended to clarify uncertainties related to the principle of quantum mechanics³⁷.

Likewise, the concept of *thought experiments* addresses ethical dilemmas involving intuitions, beliefs, and principles, which may be considered part of the philosophy of mind, as well as cognitive and experimental psychology, and particularly ethics—that is, factors that are sensitive to or influential in moral decisions and their evaluation. One of the methodological objectives of thought experiments is to promote and assess a diversity of moral attitudes and opinions. As part of experimental

philosophy, specific cases—and in particular, empirical data—are valuable for the formulation of sound moral judgments. Therefore, rules, norms, and principles may guide conduct; however, they must be appropriately adapted to a particular case or situation not contemplated by the general rule or norm but nevertheless considered fair and acceptable. It is worth noting that the discussion of fictional and controversial cases can encourage the study and critical questioning of normativism.

Among the wide array of *thought experiments* related to ethics, some deserve to be highlighted from a long list, such as: the plank of Carneades³⁸, concerning personal identity; Fénelon and the burning palace³⁹, involving deontology and utilitarianism; and, especially, the examples presented by Foot, widely known as “the trolley problem,” “the push dilemma,” or “the foot dilemma.” Given its frequent use and widespread reference, the series has also come to be known by the *trolleyology* neologism⁴⁰. It is worth mentioning the author’s subtle clarification that she *does not intend to offend anyone*⁴¹, given the inherent diversity of opinions resulting from differing ethical principles. Reflections on the pros and cons of utilitarianism are offered by Williams in the equally fictional case of “George and Jim”⁴². Simple, accessible, and pedagogically effective is the case presented by Singer—“the pond”⁴³—which prompts reflection and debate on philanthropy and solidarity. The “*Chinese Room*” deserves to be mentioned for its connection to artificial intelligence, a subject of undeniable contemporary relevance. This scenario exposes the syntactic manipulation of data—in this case, Chinese characters—devoid of semantic consideration, which, according to Searle’s argument⁴⁴, implies a lack of true understanding and consciousness in a supposed (intelligent) processing machine.

Final considerations

The contribution of experimental philosophy lies in the domains of thought, knowledge, and action within the speculative and practical sciences, in this case, the life sciences. It represents a new cycle that reaffirms the relevance of the methods of “observation” and “experimentation,” which are at times questioned—perhaps uncomfortably—by

purely speculative sciences, which may be somewhat detached from the changes and advancements in scientific knowledge. Intuitions, data, and experiments form part of its methodology and are indispensable in the development and advancement of knowledge, with significant societal impact.

Although the central themes of bioethics may appear to be excluded or overlooked, the contributions of experimental bioethics are essential for their proper and necessary understanding, given their epistemic and methodological nature. For this reason, it is possible to affirm that neither experimental philosophy nor experimental bioethics are disruptive in the sense of neglecting or disregarding epistemic aspects that might seem irrelevant. This is not a new epistemology operating at the fringes of Cartesian dualism, but rather a multidisciplinary endeavor that distinguishes data, individuality, and experimentation in the pursuit of a theory and practice applicable to health and, more specifically, to a more precise form of bioethics.

Through clarification, this includes observations on intuition, reason, and conscience. The concept of intuition employed here carries a distinct epistemic meaning, unlike the usage found in the works of eminent authors throughout history. Nevertheless, a careful analysis is warranted, as the term is sometimes used to conceal ignorance. Similarly, it may be stated that ethical and epistemological intuitionism generally lacks the foundation necessary to affirm a concept, judgment, or action, as is characteristic of non-cognitivist ethics.

However, intuition is championed here as a source of knowledge. In this case, it refers to epistemic intuitions that support or facilitate rational beliefs. This, in turn, gives rise to counterarguments and further questions. Are intuitions real indicators of truth, or are they, such as *seemings*, merely tied to reason? Does a belief, if identified with an intuition, constitute a true belief? The answers are inevitably diverse. Despite these questions, intuitions remain a subject of study and debate in contemporary epistemology and ethics, where they are controversial and only partially accepted. Their influence is acknowledged and preserved by experimental bioethics as part of everyday mental activity and even as a faculty, as a potential origin of decision-making.

In light of the diversity previously noted, the solid and undeniable role of reason should be recognized. Moral judgments, when solid or robust—in a word, true proceed from reason, although they may be encouraged or accompanied by intuitions, beliefs, feelings, and emotions. It is risky, however, to defer the concept and function of reason in both theoretical and applied bioethics, as doing so risks leading to confusion and misinterpretation. It is problematic to conceive of pure rationality as capable of generating universal judgments, as proposed by cognitive metaethical theories, which differ from non-cognitivist, emotional, prescriptive, and subjectivist positions—approaches more prone to skepticism and relativism due to the weight they place on intuitions, emotions, feelings, and even moral luck. The recognized primacy of reason in morality does not entail the exclusion of feelings, emotions, or the role of fortune and misfortune.

It must also be acknowledged that without moral sentiment as a subjective condition of morality, morality itself would not exist. Thus, moral reason and moral feeling—recognized collectively as conscience—primarily orient and tend toward both personal good (fulfillment, well-being) and the common good (justice, solidarity), functioning as an irreplaceable algorithm that leads to personal fulfillment and prioritizes moral self-improvement as an inescapable commitment, which in contemporary discourse is also identified with integral ethics or integrality.

The specificity and uniqueness of individual cases facilitate the emergence of exceptions to established norms and consensual principles, such as the recognized practice of casuistry, which is common in the fields of health and legal sciences and enables, without subterfuge, the precise and appropriate application of equity. On the other hand, and in a different—though not contradictory—manner, such particularities may also give rise to relativist and skeptical attitudes or positions, inclined toward indifference, doubt, inhibition of responsibility, and even susceptibility to axiological apathy.

Some of the contradictions, exceptions, opposing principles, and apparent or explicit divergences characterize experimental philosophy and experimental bioethics and should not be interpreted as errors, falsehoods, or inconsistencies, as they are part of the methodology and epistemology specific to experimental inquiry.

Finally, it is essential to emphasize and acknowledge the validity of integrating empirical and experimental methods, intuitions, feelings, emotions, and social and cultural statistical data, along with contributions from cognitive, moral, and experimental psychology, into bioethics in its most comprehensive sense—thus affirming its interdisciplinary character, which aims to enhance the quality of research, efficiency, and responsibility in the practice of the life sciences, particularly in healthcare.

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