



Original article

Epistemology of bioethics in the making: from historical context to conceptual plurality and anticipation

*La formación de la epistemología de la bioética:
del contexto histórico al pluralismo
conceptual y la anticipación*

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Abstract

This paper addresses the epistemological reasons for bioethics emerging as a utopian pluralism. I evaluate first the possibility and the conditions of a unifying discourse around a shared epistemology, through several methodological approaches that marked the discipline.

Reviewing the history of bioethics, I observe that the utopia has been reduced to building governance on strategic biopolitical consensus, minimizing conflicting subjective rights. I conclude that bioethics is still in the making and that its new role is to anticipate the consequences of techno-sciences and the anthropological changes they provoke.

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Keywords: Bioethics history; Applied epistemology; Plasticity; Anticipation; Capabilities

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Resumen

Este artículo trata sobre las razones epistemológicas por las que la bioética emerge como un pluralismo utópico. En primer lugar, evalúo la posibilidad y las condiciones de un discurso unificador en torno a una epistemología compartida, a través de diversos enfoques metodológicos que marcaron a esta disciplina.

A raíz de una revisión de la historia de la bioética, observé que la utopía se ha reducido a construir un gobierno del consenso biopolítico estratégico, minimizando los derechos subjetivos que entren en conflicto con él. Concluyo que la bioética es una disciplina aún en desarrollo y que su nueva función es anticiparse a las consecuencias de las tecnociencias y los cambios antropológicos que estas desencadenan.

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Palabras clave: Historia de la bioética; Epistemología aplicada; Plasticidad; Anticipación; Capacidades

Introduction

In order to understand the phenomenon of bioethical epistemology and its globalization, we have to describe the context of its emergence in the sixties as well as the anti-paternalist movement's effect on health care, which contributed to the confusion between bioethics and medical ethics as two forms of applied ethics. Epistemology refers to the philosophy of science since Thomas Kuhn's¹ "structure of scientific revolutions", a revolution itself in regard to the idea of truth. According to Kuhn, epistemology was not the result of logically coordinated observations since there is no pure observation and therefore he advocated the unification of sciences and knowledge, in his 1962 book: a mere illusion. Ian Hacking added "we cannot de-historicise science anymore" so that after the Vienna Circle, we saw in the sixties a revolution in the philosophy of sciences as a result of the evolution of scientific complexities and modelling. The ethical issue and critical discourse at that time consisted of questioning the link between the scientific revolution and its link to "imperialism" which sounded quite paradoxical since in the Rome treaty signed in 1958, scientific research was not yet considered an economic activity but merely an aspect of cultural politics. But the exponential innovation of biotechnologies made it a central question for an emerging bioethics responding to the challenges of the

¹ Kuhn (1962).

development of research in an economic framework that affects its internal values and freedom of research and certainly the illusion of the axiological neutrality of the sciences. This is the reason why, after a brief description of the different methodologies involved in the short history of bioethics, I will propose the capacity approach as a way to challenge bioethical epistemologies.

The epistemological discourse abandoned the radical deterministic approach to sciences to give way to some relativism and to the subjective position of the observer. The notion of *law of nature* encountered uncertainty, and it is precisely at this moment that the bioethical discourse emerges to evaluate the anticipation of science as a determining thought, taking the risk of interrogating reality on an infinitive mode that is not governed by “natural law”, but by algorithms unfortunately indifferent to historical and social conventions on values, and trying to reconstruct through genetics a new unified philosophy of nature. This uncertainty was coupled with the development of pluralism as a condition of radical democracy, and as an answer to this epistemological change. So it is important to underline that bioethics is not only a contextual form of applied ethics but that it emerged as a response to the challenge of changes in the philosophy of science. We could refer to Paul Feyerabend and his critical history of the ascendancy of the totalizing discourse of science that makes us aware of the limits of the concept of epistemology or method.² Bioethics could only appear at this precise moment as a promise of meaning for a future detached from its past, as an interdisciplinary field, promising to regulate the hubris of scientific normativity and the place that it was taking in defining human values to the detriment of other anthropological, social or political dimensions of human knowledge. Epistemology was essentially a reaction in an etymological sense, a form of resistance and a cultural memory opposing the idea of progress. And the tyranny of science was associated with the efficiency of science’s tools, which rendered ethical arguments quite powerless before the economical power that was associated with them. The independence of science became a matter of critical scrutiny. Contextually, bioethics emerges after the nuclear catastrophes of Japan, to rebuild an ethical face for scientific endeavours. And they questioned classical medical deontology, by associating medicine with the expansion of biosciences and their application in the medical arena. Feyerabend questioned the authority of scientific discourse as encompassing all other forms of truth and advocated pluralism and even relativism in his famous 1975 book, yet we need more than relativism or pluralism: we need a form of coherence between the fields involved in bioethical

² Feyerabend (2010).

discourse. My paper will aim to evaluate the possibility or the interest of such a unifying discourse around a shared epistemology from a more European context. It will not address medical ethics specifically since it is a subfield of bioethics. Bioethics requires a reconceptualization of classic normative ethics and has a philosophical aim. An interesting tension exists between different sources of bioethics (principles, virtue, and narrative, phenomenological ... feminist) that have an impact on the philosophy of medicine and broad bioethics (a subfield of feminism), that takes a different accent in American and European bioethics.

Some historical steps

Since bioethics emerged in the US in the sixties at the crossroads of medical ethics and philosophy of science, its epistemology has been from the start an evolving discipline relying on conflicting methodologies, signalling the probable absence of a real epistemology. Its aim and its inferences on the philosophy of technology made clear that all those disciplines do not have the same ontological *a priori*.

From principles to cases in bioethics: epistemological inferences

The main difficulty and strength of bioethical discourse in the 80's was that it was an encounter of different disciplines and therefore of conflicting epistemological references. It was an encounter of disciplines that did not yet have its own tools. Cultural dimensions have challenged norms regulating public discourse in this regard. From medical ethics to philosophy are principalist, pragmatist, casuistic... gendered medical disciplines and a discourse on biotechnological innovations. Furthermore, the widening of bioethical discourse to global bioethics involving public health and biopolitics makes it even more difficult to speak of a stabilized discipline with a methodology of its own.

I will not attempt here to define an epistemology of bioethics but to describe the conflicting epistemologies in bioethical discourse, according to its purpose or actors. I will then propose a capability approach based on a Spinozist model of bioethics that sounds more fitting to articulate scientific and philosophical discourse. Historically it emerged as a critical discourse that comes from essentialist grounds, as technophobia aiming at the individualist discourse made possible by the counter normative discourse of new sciences such as genetics, nanosciences ... that questioned, by their very plasticity, the idea of a human nature to preserve.

Those who associate bioethics with a new utopian discourse of post-humanism believe that we were evolving in an era at a stage where medicine aimed at enhancing humans rather than curing them, and preserving their very “sacredness” or at least unity in being.³ The violence of this opposition is at the core of the emergence of the institutionalization of bioethical models as an ethic of discussion or a tool designed to establish consensus in pluralistic societies.

We can certainly acknowledge over the last 20 years different efforts to theorize bioethical judgments and the attempt to offer a theoretical frame around minimal principles aiming at practical decisions, but the very object of the evaluation is evolving and requires a plasticity and a contextualization of those concepts in order to respond to ethical challenges; facing the ability of science to question the very idea of a human nature and ontology. Utilitarianism and Kantianism, which are still two conflicting sources of applied ethics, don't seem to be constructing an epistemological discourse. They are at best a relatively consensual strategy to bring social peace through the vulgarization of sciences challenging common-sense normativity or representations around the aim of biomedical technologies and their medical applications.

The attempts to give an answer to moral nihilism through pluralism gives only procedural answers to concrete ethical needs, and are not satisfying epistemologically, in terms of coherence. Engelhardt elaborated this for instance, and later the return of casuistic defended by Toulmin achieved something similar.

Biolaw has been taking the lead in bioethical national committees and institutions, which can be politically and ethically problematic since the frontier between what is legitimate and what is legal is blurred, and bioethical discourses allow for more normative statements. But the lack of a clear epistemology leads us precisely to a conflict of normativities that can only be solved by *ad hoc* political power. In consequence, the initial notion of consent or autonomy is very far from being able to play an enhancing role with regard to human capabilities.

We are at a moment when the relativism around genetics and its potential for synthetic biology, the risks of nano-medicine, or the beneficence of vaccination are not innocent in regulating the field of sciences which are by design privileged in the market economy. The resistance to bioethical discourse by scientists is linked to the

³ It is interesting to underline that the very neologism *bioethics* was forged by Potter Van Rensselaer in his book (1971).

critical dimension of bioethics towards innovative medical practice and research that limits freedom of research with no public arguments between experts on conflict of interests rather than on conflict of norms or values. Bioethics has become a strange place of power using rhetoric of protection of vulnerable populations.⁴ As a new interdisciplinary field, in the sixties bioethics was already a locus to build governance on consensus, at a time when the principle of autonomy was reclaimed so strongly by social movements, from anti-war to feminist activists, that it had to be integrated in an *ethics of responsibility* model. While in Europe the discourse around solidarity and protection of the vulnerable was still structuring the welfare State.

We will have to question the very possibility of an epistemology of bioethics. The methodological dimension of the micro-powers surrounding scientific epistemological frames necessitated a critical gaze that the new field of bioethics was not able to offer. It rather played the role of acclimating new technologies by a vulgarization of sciences or an alarming discourse about the way these new technologies were endangering our very human nature. This internal coherence of the bioethical discourse was considered by philosophers of science as the very sign of the epistemological weakness of this new field borrowing methodologies from different fields and articulating them, in the name of pluralism, around the notion of consensus, while the foundation of democracy and the expression of dissensus protects us against the rhetoric of false promises.

We will have to take into consideration that this question cannot be separated from the fact that the bioethical discourse participates in the biopolitics of control on scientific institutions and is itself a political actor of social normalization power since it very often erases the frontier between public and private matters from birth, reproduction until death. This took place in a neoliberal society quite violent towards all layers of vulnerability, while its standard was the promotion of autonomy. Are we facing a re-signification of the purpose of bioethics? Does the lack of participation by citizens in the bioethical debate make of it a dubious agent of state health institutions intruding in private affairs, reminiscent of the time of hygienism?

⁴ We could quote the polemic around the European “Human Brain Project” in 2013 that was a political imbroglio followed by a petition by scientists about its centralized governance and the distance between the announced goal and attempting to simulate the functioning of the human brain in ten years, led by Henry Markram, putting on the same epistemological level artificial intelligence, neurosciences and clinical psychiatry. Steven Rose raised an epistemological problem with the project: “we don’t know the functioning of the brain enough or its plastic structures to try and simulate it”. The field itself is challenged by conceptual differences that cannot yet be overcome.

Such are the conditions of bioethics: being anchored in an epistemology favouring democracy rather than various forms of tyranny and these are not superfluous questions since we evolve from the idea of individual will and consent to a procedural mode that does not allow for citizen empowerment in the name of the complexity of the technologies at stake that requires “experts”. This inference requires serious critique, precisely from an epistemological point of view involving different disciplines and different epistemologies, and is obviously a biopolitical issue.

If the specifics of epistemology involved in bioethical discourse can ascertain that knowledge is democratically chosen and shared, should we rethink an ontology shared between science epistemologies and ethics first?

I will underline some differences in the US and European contexts on this issue that are related to analytical or pragmatic versus phenomenological approaches in terms of philosophical culture. I will also address in the last part of this paper, the evolution of global bioethics into globalized ethics of public health that challenges and requires imagination and anticipation rather than a blind faith in “progress”.

The normative challenge of bioethical epistemology

Bioethics is thus a young discipline, born to respond to tragic historical events that used research as a weapon of war, transforming persons into objects. A discipline which required a rethink of the ethics of research from the point of view of the subject, the first bioethical text being precisely aimed to respond to an historical event and to the misuse of science. The code of Nuremberg has a short history and has seen many developments since its creation. It became a discourse of regulation of human research, that is still not well perceived by researchers who consider that bioethical discourse infringes on the development of human research and question its moral competence. It would divide the technophobes and the technophiles in terms of *doxa*, and an epistemology of bioethical discourse is much needed that would build a bridge between the actors of a competent regulation of scientific applications.

The challenge we have to face is that the most creative bioethics, one that does not apply universal categories to innovative existential experiences with regard to reproduction, death or human melioration, also functions in terms of anticipation and often as a utopian discourse which requires federation among all the disciplines involved, which by definition start from different premises. This adaptation to interdisciplinary discourse is of course still in the making. Although American bioethics

has strongly influenced global bioethics, we will find alternative proposals in European bioethics. This was the challenge faced when the declaration of Helsinki was modified in 2000 that made everyone aware of the biopolitical dimension of global bioethical regulations and its need for contextualization.

If one wants to describe the epistemology of bioethics one must admit that it is now being summoned, since it involves what are still several disciplines, each endowed with specific epistemological frames. The reason is both historical and linked to dealing with uncertainty in terms of the consequences of research's advances. In short, we have to define the place of mediation of bioethical discourse among the actors involved, and challenge the idea of equilibrium between the protection of the vulnerable and the promotion of the advancement of research into its justice, which was already the dilemma in framing the first Helsinki declaration in 1964. We would have to phenomenologically describe all the actors involved without being naive about the conflicts of interest at stake. Can we give tools to evaluate anticipatively how to reduce harms to a maximum and promote research?

The challenge of bioethics is also the enlargement of its field of research from clinical ethics to public health issues. This globalization involves issues of distributive justice and economical challenges inseparable from the promotion of health, it forces bioethicists to seriously engage in a creative discourse that goes beyond a mere list of minimalist principles elaborated on the side of money.

The responsibility of bioethics is no longer to propose forms of social adaptation to new technological ideas, it has to anticipate, from a caring perspective, on the effects of biotech on our way of regulating norms of life. We will address this link between anticipation as care further in the text. Ontologically, freedom as a concept cannot be totally separated from our biological determinism and vulnerability. It must find a way to anticipate our new biotechnological determinism in order to delineate a realistic context of freedom. Freedom being part of what ultimately separates us from robots; we are again late on the agenda to promote or preserve a form of plasticity in the anthropological definition of ourselves.

The epistemic challenge is to share knowledge to allow for true consent although anthropological changes will always be slower than technological changes and this discrepancy in its chronicity should be taken seriously. Perhaps more seriously than the biolegal discourse that has seemed to collaborate with power by translating transgressions into authorizations in purely procedural terms.

So what are the links between anticipation and the science of knowledge? Can anticipation modify the way we know or perceive phenomena? I will not attempt to answer for all currents of bioethics today but will define the epistemological frame in which I navigate in order to propose a coherent framework.

There is a tremendous task for developing a general framework for medical epistemology and a critical stance of bioethical discourse, which could lead to dialogue. The move from a theory-based system of ethics to a narrative-based system of ethics was paralleled by shifts in other fields. The emphasis since the mid 1990s has been placed on contextual approaches in bioethics. The feminist involvement critical of abstraction of neutrality-based theory of justice fostered this important move away from abstract Kantianism.⁵

The empirical development of a framework compared to a theoretical framework

The idea of realism over idealism is in tension in bioethical discourse analyzing critically the advances of concrete fields of research such as genetics or neuroscience. The irrationality surrounding some bioethical criticism of technology could not rest in a realist Cartesian discourse, since the uncertainty about the consequences of research advances is significant. Hence only a constructivist model of reality could aspire to a form of rationality.

There is in parallel a development of bioethics towards a more pragmatic discourse and a medical epistemology that tends towards evidence-based medicine, or models of medical decision-making.

Narrative ethics and capabilization

Narrative ethics suppose subjective interpretation as a counterweight to the rationalism of deductive principles.

It implies an epistemology that takes emotions and convictions seriously. It allows a form of intersubjectivity building of new experiences provoked by the utopian dimension of bioethical discourse that seems to hesitate between Bloch and Jo-

⁵ See Botbol-Baum (2009).

nas' heuristic distrust of technology since intersubjectivity has to be built anticipatively around the unknown. Such a soft approach fosters capability from those agents, and by the same token questions the limits of agency and rationalization, since prospective inferences are not totally deducible from past events.

The moment of narrative ethics or the empiricist turn, and the capability approach in bioethics –the narrative approach based on stories from patients–implies, from a legal and ethical perspective, taking the knowledge claims of patients more seriously, and limiting the asymmetry between the knowledge of practitioners and the knowledge of patients. Patients are finally recognized as competent in their narrative way of experiencing pain or suffering more than others.

It thus restitutes a biopolitical dimension to bioethical discourse that cannot hide its power behind the veil of universal and presupposed paternalistic benevolence. Patients are not obliged to follow objective methods to prove their point, to accept or refuse general or specific treatments for instance. Benevolence is even considered a form of violence if not solicited by the patient. The idea of refusing becomes rationally acceptable because we comprehend an epistemology of plural rationalities. This shift in epistemology has normative implications that create a conflict of normativities between lawyers and the public that need to be addressed contextually from euthanasia to surrogacy. The context of bioethical discourse has to deal either with the positivism of epistemology or the subjective discourse of patients' perceptions of their needs or wishes. Ethics becomes at this point a discourse more demanding than the elaboration of consensual norms of conduct to apply to new contexts.

Different disciplines study norms of conducts; psychology, sociology or theologues that should not be neglected nowadays in their power to produce norms emerging from needs to change social perception or practice, or rather to give meaning to the changes in practice. Bioethical discourse poor in terms of contextual data borrows norms from other evaluative systems and begs the question: are they transferable to the context of biotechnological evaluation, and if so, to what degree?

Moreover, although declarations, codes and regulations are very useful, they cannot include every situation especially in a context of *personalized and anticipative medicine*.

It is therefore important for researchers to rely on a context able to include plasticity in normative context to learn how to interpret and assess various research rules

in order to be able to make collective decisions and act in unforeseen situations. This is especially the case when people disagree on the course of action, and the consensus is so weak that some members have the impression of a compromise that does not respect their own ethical integrity, when confronting ethical dilemmas or conflict of interests.

Therefore there is the link between bioethical epistemology and ethical soundness of regulations that will give certain coherence to decisions of which not every bioethical committee is really conscious.

Promoting conduct deemed as ethical may undermine either liberty of research or protection of patients from abuse stemming from economical actors such as neo-liberal firms oriented mostly towards money by design, leading them to establish double standards between their shareholders and the research subjects of foreign legislations, therefore resting on an imaginary ethical dimension provided by different levels of legal rights. This is known as a medicolegal complex, it has been the reason for rejection of institutions such as the NIH in legislative territories such as India and is very far from the requirement of a coherent epistemology, and the question is precisely: could the epistemology of bioethics play a regulatory role in this scenario?

Helsinki declaration revision training in research ethics also needs contextualization and an articulation of basic principles that are commonly recognized, although not always applied in the same terms. Epistemology of research and the context of vulnerable persons for incidental findings challenge us on redefinitions of concepts such as consent or autonomy.

Bioethics or the challenge of applied epistemology?

If classical epistemology focuses on cognitive content, bioethics articulates principles; norms that are obviously constructed conventions of a reflexive mode. Articulating the two moments with a sense of context and fragility of human judgment does not build a cognitive epistemology. The critical role of bioethics should thus be to remind medical actors that medicine is not an objective science and cannot claim knowledge for knowledges sake, at least without taking seriously not only rights but also the subjective perception of pain or suffering or even existential choices. There is a biopolitical dimension of anticipation of illness that needs to be addressed to avoid coercive normalization of populations in public health. Bioethics and utopia

of perfect health fuel on trans-humanism ideology, and as Foucault reminds us, our body is the least utopian of all objects of inquiry.

If bioethics is a kind of practical ethics, and implies anthropology of the body, it should not need to oppose ethical theory against applied ethics, as is often asserted redundantly in clinical ethics discourse. Bioethics deals with questions that are intimately linked to the control or healing of our bodies, which are exposed to the public sphere. It deals mostly with the uncertainty of the social impact of biotechnological society, our socio-anthropological representation of human nature and the laws that should or should not govern it.

The relationship of bioethics to practical political theory remains ambiguous, since it is not a monolithic field and some tempting inferences are made from the domain of description of an awry state of affairs, be they illness, abnormality or pathology, to the domain of prescription that overwhelms the medical realms and affects other social areas of control. If some ontological questions require a philosophical theorization (stem cell research for instance), clinical bioethics is mostly concerned with practical deliberations between conflicting wills or representations of the world that have to be concretely addressed on the Habermasian model of the ethics of discussion.

Peter Singer's utilitarian approach or Engelhard's critiques of theoretical issues are models necessary to assess sharable as opposed to arbitrary ethical judgments. Conflicting rules, varying contexts will involve different sets of theoretical argumentations and require minimal normative standards to make the deliberation possible among "ethical strangers" in order to construct a moral argument and not a mere provisional consensus on the state of the art. So to the pouts of some medical professionals, theory is unavoidable in bioethical discourse and requires philosophical capacities, if not knowledge, as well as a capacity to make analogies to new development that questions the *status quo* of what is a healthy society beyond individual health.

Whatever theoretical frame we choose in Bioethics,⁶ it is usually insufficient to reach a concrete decision without maintaining a degree of uncertainty in terms of consequences. That is the reason why pragmatism has invited itself to the bioethical debate over the last ten years. It is obvious from these examples that the main epis-

⁶ Grodin (1995).

temological problem is, to this day, a conflict between “high theory” and the concrete policy requirements expected from bioethical declaration.

It is thus most important to point out the power dimension acquired by bioethical discourse that cannot pretend to give disinterested statements. The argument according to which high theory is not always deployable in bioethical institutions is not convincing. It reduces bioethics to a moral particularism that could explain its epistemological weakness.

The basic methodological principle is nonetheless that the moral valence of any particular element must remain constant from one case to the other, and the second imperative is to consider every subject’s narrative as irreducibly unique in order not to make broad generalizations that might affect the most vulnerable.

We are confronted again with the tension between autonomy and vulnerability that I would like to mediate in the last part of this paper by the functional concept of capability.

The case of feminist bioethics

Some materialist feminists analyze the bioethics field as a new evaluative science that attempts to fix morality in women’s personal choices regarding reproductive rights or the anthropology of the body. It has been received with some suspicion as a paternalistic discourse in disguise that would on biopolitical premises limit their usage of biotechnologies to enhance their performative possibilities or capabilities.

But of course feminism is not itself a unified field and ranges from essentialist to Marxist positions. The overall perception was that scientific evolutions that have an impact on the body tend to set non-deliberative ethical and moral questions with the help of often self-proclaimed ethicists, who have seldom been educated as to either the philosophy of science or expertise on the consequences of the social issues raised by these advances.

To ensure that a gendered attention to women’s health be taken into consideration, the notion of gender had to be introduced into the discipline: this took several years and has finally been recognized in some parts of the world. This gendered approach resists the gendered medicine most developed in Anglo-Saxon bioethics and is still emerging in Europe and southern countries.

The resistance is that, until recently, bioethical discourse took very little consideration of the research of the feminist movement or literature. The neutral epistemology of mainstream science is criticized as having masculine inferences and reproducing classical prejudice through favoritism.

In the 70's bioethics was still an emerging discipline, a place of encounter between such disciplines as philosophy, law, anthropology or sociology and has been defined as "the systematic study of human behaviour in the area of life sciences and health care, when that behaviour is examined through moral values and principles" (Reich, 1978). And precisely, our philosophical principles being historical, they have been remodeled and redefined, re-signified in a plasticity mode by biological and biotechnological development and by new philosophical schools as well. The issues concerning women's reproductive rights or health in general have been neglected in the name of their subjectivity and thus lack objective criteria, recasting one of the oldest idealist divisions between masculine and feminine modes of thought. Donna Haraway,⁷ a biologist, has contributed significantly to challenge the new *doxa* of bioethics discourse in a famous text which I can only recommend reading.

Until now, categories of bioethics still claim a certain neutrality while perpetuating classical epistemological bias.

This bias has produced a strong resistance and creativity in terms of epistemological tools to affirm the place of subjectivity and soft approaches in bioethical discourses, much beyond reproductive rights by questioning biological conceptualization of female bodies and the determinism of female sexuality on ethical terms of choice and capabilities. We can say that feminist thought has brought a critical gaze on bioethical categories. Rosemarie Tong and her famous "feminist approaches to bioethics" is a highly recommended read as well.

This has been the viewpoint of Paul Farmer⁸ or Thomas Pogge⁹ and certainly of Amartya Sen¹⁰ through the capability approach that seems to be a promising avenue for the future of bioethics and awareness of the political dimension of the field that is under threat of instrumentalization from institutions that make of bioethical reg-

⁷ Haraway (1997). This book illustrates the encounter between feminism and technosciences.

⁸ Farmer (2003).

⁹ Pogge (2004).

¹⁰ Sen (2010).

ulations a *cache sexe* of forms of interference of foreign affairs in vulnerable countries, by instituting bioethical committees in openly non-democratic parts of the world which required a revision of the Helsinki declaration to include issues of justice in a global economic order.

This leads us back to the epistemological question that alone assures coherence to the discipline. And the question boils down to this: is bioethics a discipline mature enough to have developed its own epistemology? Is it a mere puzzle and patchwork of opportunistic discourses alleviating the harsh reality of ethics' powerlessness to influence world affairs and the governance of capitalist firms that organize values in terms of protection of interests? The emergence of the notion of vulnerability as a standpoint of ethical discourse came about with this evidence.

Habermas has had to face the question of the relationship between the modern idea of equal treatment and the moral principle of care. With the development of moral theory in general and especially following Carol Gilligan's research, the criticism was soon voiced that the Kantian approach of discourse ethics neglects the moral attitudes with which we attend to the concrete other and provide help and support of our own free will, without considering reciprocal obligations".¹¹

Without recognition of our universal ontological vulnerability, no need for ethics or politics; the culture of autonomy is not wide enough to include both the different facets of fragility of being and each concrete aspect of vulnerability. The ethics of vulnerability is seen, by Levinas for instance, as a call for the articulation of an ethics of care with an ethics of justice. But it is precisely based on rethinking an alternative ontology to that of being and violence.

Justice practiced by institutions needs always to be controlled by an initial interpersonal relationship. Politics need to be able to be controlled and criticized by ethics (Levinas, 1982, p. 92).¹² The difficulty with the phenomenology of vulnerability is that it can be an idea that reverses the order of importance between an ethics of the subject and politics of the common good. It translates vulnerability into a capability that lies in its translation by institutionalization in international declarations, if it cannot be controlled softly by the ethics of interrelation of pow-

¹¹ Honneth (2007).

¹² Levinas (1982).

er, empowerment or disempowerment, which remind us of the role of institutions in this debate.

A related question is: does it make sense to turn vulnerability into a value or should we, on the contrary, accept the coexistence in our biographical narratives confronting vulnerability and autonomy that fluctuate according to our contextual histories to create the complexity of “sensible agency”?

Conclusion

My final argument casts a doubt on the existence of an epistemology of bioethics and redefines it rather as a critical discourse that processes new information to renew critical reasoning. A critical form of rationality much needed in the conflict of disciplines staged by bioethics aiming at democracy and agency of subjects without political capabilities.

Addressing new ontological vulnerabilities as a political question, re-articulating the private and public issue of solidarity is a form of experimental cognition of what should be.

I would add that *vulnerability is the condition of our capabilities* to define concrete rights, within what Ernst Bloch used to call “concrete utopias of the not yet.” This ontology of time is crucial to an ethics that does not have to choose between technophobia and technophilia, but is oriented towards an expansion of the horizon of rationality, to activate the un-redeemed content of the past of philosophical moral discourse to shape a more habitable future. This creative *praxis* requires the ethical attitude of “learning hope” which is a way for philosophy to establish a creative dialogue with the processual hypothesis of the sciences.

The naturalism of sciences should be able to enter into dialogue with a renewed and critical ontology if bioethics is to become more than a “garden of acclimation” or rhetoric for adapting the public to new marketable technologies.

Bioethics would assume as part of its methodology not only pluralism but multi-temporalism in a world that is not globalized, but in a process of anarchic globalization, a process that should maintain insight in the transdisciplinary encounter of sciences and philosophy, in order to maintain an anticipatory and emancipatory element in cognition and value sharing.

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