

Enikő Demény\*

## Universal Values, Contextualization and Bioethics: Knowledge Production in the Age of Genetics

*»There can be no culturally and psychologically perceptive ethics without taking into account the diversity of moral lives, but there can be no ethics at all without universals ... The hard part is to devise a theory that can readily join universality and the moral complexity of everyday life« (Callahan 2000, p. 38, 41).*

### ABSTRACT

The impact of biotechnology on all living things is an interdisciplinary inquiry into some of humanity's most fundamental questions: Who are we? How do we live together? How do we relate to the biosphere, to the rest of the living world? Are the answers given to these questions shaped by various contexts: social, cultural, economic, so on? Are there universal answers to these questions? Choosing this interdisciplinary field of knowledge production as object of inquiry offers an opportunity to investigate how traditional theories and disciplines are challenged to evolve in new directions as a response to techno-scientific developments of our times. It also allows us to study patterns of knowledge production, to examine hierarchies of knowledge and expertise, as well as the possibilities of interdisciplinary/transdisciplinary practices in a multicultural context.

I will argue that a framework that incorporates universal principles shall constitute one dimension of an adequate ethical theory in the context of new genetics providing that its principles are formulated in non-exclusionary terms that reflect the relational context of individual lives. As Judith Butler has formulated »the problem is not with the universality, as such, but with an operation of universality that fails to be responsive to cultural particularity and fails to undergo a reformulation of itself in response to social and cultural conditions it includes within the scope of its applicability. When a universal precept cannot, for social reasons be appropriated or when ...it must be refused, the universal precept itself becomes a site of contest, a theme and an object of democratic debate« (Butler, 2006, p. 6). What both femi-

---

\* Correspondence address: Enikő Demény, Ph.D., Central European University's (CEU), Center for Ethics and Law in Biomedicine, Nador u. 9., H-1051 Budapest, Hungary, Phone: +3614723403; Fax: +3613283410; e-mail: demeny@ceu.hr (Homepage: <http://www.celab.hu/>).

nist and critical bioethicists emphasize in connection with universalistic claims in bioethics is the necessity of reflectivity upon such norms and concepts. Habermas also concludes that sociological reservations offer salutary corrections to normativism, but these critiques do not condemn normative theories to failure by social complexity. According to Habermas, purely normative considerations retain their relevance as long as we accept that complex societies shape themselves in a reflexive manner through law and politics (Habermas, 2008, p. 276). The selective readings of norms that have the grammatical form of universal statements but at the semantic level are vulnerable to particularistic interpretations of their basic concepts, such as persons, human being, call for an empirical explanation (Habermas, 2008, p. 285). Taken all these into account, and noting that the issues that are at stake in the ethical debates on the applications of various biotechnologies and genetics can deeply affect the ways we perceive us as humans, our relationships with others, and with the environment it would be more than desirable that in these debates a plurality of approaches to be represented, as this is stipulated in the three UNESCO Declarations on Bioethics.

**Key words:** bioethics, feminist bioethics, critical bioethics, knowledge production, contextualisation

## Introduction

The developments in life sciences and in the »new and emerging« technologies have raised issues that have called into question those beliefs which are constitutive of our perspectives of ontological reality. As philosophers of technology highlight, new technologies are going to produce not only new ontologies, but new roles and new responsibilities too (Boenink 2010; Vos and Willems 2000). The impact of the techno-scientific developments on all living things represents therefore a field for interdisciplinary inquiry into some of humanity's most fundamental questions: Who we are? How do we live together? How do we relate to the biosphere, to the rest of the living world? How do we define what is 'natural'? What it means to be a human person?<sup>1</sup> Relating to and deciding about certain applications in this context it is not merely a question of negotiating the risks and benefits of a particular application, but often entails probing our conceptions of life, personhood, death, the meaning of illness and suffering, and of human nature. The emerging medical technologies for example continuously shift our notions of health and disease, and these shifts lead to new conceptions of health. Such changes than inevitably result in new ethical challenges in the field of healthcare (Stempsey 2006, p. 241). As birth, illness, and death increasingly come under technological control, struggles arise over who should control the body and define its limits and capacities. Biotechnologies turn the traditional »facts of life« into matters of expert judgment and public debate (Brodwin 2001). As Fisher points out, the spread of new technologies will require

<sup>1</sup> See more about this in Habermas 2003; Fukuyama 2002; Brodwin 2001; Rifkin 1998.

new forms of commentary and new forms of public consultation around the legitimacy of techno-scientific research and innovations (Fischer, 2001, pp. 374).

The answers one gives to some basic ontological and conceptual questions influences the ways in which he or she thinks and produce knowledge about new technologies. A number of questions shall than be posed: Can the various values, views and opinions related to these technologies and their applications be negotiated? Are there universal answers or solutions to these issues? Or the answers given to the various problems raised by the techno-scientific developments are shaped by various contexts: social, cultural, economic, political and scientific? The difficulties we face when trying to relate to and especially to take responsible decisions about the future of techno-scientific developments in the present context are indeed significant. Bioethics has facing these difficulties too. In the current context it can not always relay on its traditional theories and methods to answer such questions, since these are also challenged to evolve in new directions as a response to techno-scientific developments of our times. It is thus not surprising that in the recent years there can be observed a renewed concern regarding methodological issues in bioethics which also suggests that it is time to reevaluate the role of bioethical theory in a pluralistic society. Bioethics is struggling to find or to develop new frameworks and methodologies that are suited to the techno-scientific culture and scientific context we are living in.

One of the biggest challenges in the current context is to agree on global, universal norms and frameworks, while respecting the plurality of values and opinions too (Pellegrino 2000, p. 658; Turner 2003). It is not surprising thus that the ongoing debate in bioethics about the relation between universalism and particularism, between normative and descriptive, empirical approaches became highly relevant in this context. While more and more voices join those views that support a dialog between these two approaches rather than continuing the dualistic 'either-or' approach, there is still much to be done on the matters of how exactly such integration can be achieved. Our knowledge about how to integrate empirical findings into the formulation of normative bioethical principles without losing the normative approach is very limited yet. Empirical ethics literature suggests the need for further elaboration of the methodological process of reaching normative conclusions through empirical ethics (Molewijk et al. 2004).

Taking into account that the context of knowledge production in which all the above mentioned issues are embedded has gone itself through significant changes too I will start my paper with a brief characterization of this context, highlighting the role of bioethics in it. Than I will focus my attention on some theoretical and methodological issues related to the possibilities of theory building in bioethics in

this current context, focusing on those attempts that try to transgress the gap between normative and empirical approaches. Choosing this interdisciplinary field of knowledge production as object of inquiry offers an opportunity to investigate not only specific patterns of knowledge production but also the possibilities of interdisciplinary practices in a multicultural context. The lenses that guide my analysis are feminist epistemology and critical bioethics. I will argue that a framework that incorporates universal principles shall constitute one dimension of an adequate ethical theory in the context of life sciences and new technologies providing that the principles it relays on are formulated in non-exclusionary terms that reflect the relational context of individual lives. Such a framework than can provide useful background for developing and employing methodologies that are suited for interdisciplinary inquiry on various bioethical issues and problems. In this paper I will discuss contextualization as one of the possible methods that could be efficient (off course combined with other methods) in interdisciplinary attempts aimed to understand the relationship between universal and particular, global and local when dealing with issues raised by new techno-scientific developments.

### **Bioethics and the context of knowledge production**

Many analysts have noted that fundamental changes are taking place in the ways in which scientific, social and cultural knowledge is produced.<sup>2</sup> We are witnessing a new mode of knowledge production, which operates within a context of application, and in which problems are increasingly set in an interdisciplinary or transdisciplinary framework, rather than within a disciplinary one (Gibbons et al. 1994, p. vii). In addition to this the interactions between science and technology, on the one hand, and societal issues on the other hand, have intensified, and the issues at stake are increasingly becoming public ones.

Biotechnology, together with nanotechnology, information technology and cognitive sciences, often named as »converging technologies«, constitute a virulent field of knowledge production. In this field the knowledge generated by various »sciences« is applied, and the resulting »technologies« have various impacts on the individuals, families, society, environment, and so on. But this is not supposed to be a unidirectional impact. According to current »knowledge politics«, »society« shall

---

<sup>2</sup> See for example: Gibbons et al. 1994; Thompson-Klein 2001; Nowotny et al. 2001, 2003. Gibbons' main idea was that the old paradigm of scientific discovery (Mode 1) – characterized by the hegemony of theoretical or, at any rate, experimental science; by an internally-driven taxonomy of disciplines, and by the autonomy of scientists and their host institutions, the universities – has been superseded by a new paradigm of knowledge production (Mode 2), which is socially distributed, application-oriented, trans-disciplinary, and subject to multiple accountabilities (Gibbons et al. 1994).

influence, through »deliberative processes« what type of knowledge and what kinds of technologies should be developed.<sup>3</sup> Shaping knowledge thus became a central element for »building society« and an unrestricted production, diffusion and use of new knowledge and technology is regarded as no longer feasible. Knowledge shall be regulated and restricted, and side-, long-term and accumulative effects have to be taken into account, possible risks have to be identified, and observance of ethical norms monitored (Schmidt 2007, p. 313).

According to Kastenhofer due to the development of a techno-scientific culture the former hierarchical relationship between 'hard' and 'soft' sciences might be transformed into a hierarchy between techno-sciences and sciences for accompanying or policy support research (Kastenhofer 2007, p. 267-268). While natural and technical sciences provide knowledge for the development of new technologies, other disciplines, such as bioethics, economics or social sciences are supposed to produce knowledge *about* these technologies: about their ethical and economic impact for example, or about their »societal robustness.« What is interesting for us here in relation to bioethics is the fact that bioethics is not only a discipline *about* (bio)technology, but due to its engagement with regulatory and policy related issues it has the power to make possible (or impossible) certain applications of (bio)technology by legitimizing them (or not). This is why and how bioethics is connected with power. Not only has ethics the power to define new subject positions, but, as Strathern notes, it seems to have the capacity to structure social expectations in such ways as to create new principles of organization (Strathern 2000, p. 281).

As we can see, bioethics, a discipline developed about 40-50 years ago to solve the ethical issues in medical research and clinical practice, by now transcended the strict borders of medicine and health care and became an important field of knowledge production *about* a range of life sciences and technologies: genetics, biotechnology, nanotechnology, nano-biotechnology, synthetic biology, to name only a few of them. In the last two decades, the realization of the impact of biotechnology on all of us has propelled bioethics into the public square where law, policy and adjudication of conflicts take place. With its engagement with »policy« and »legal or regulatory« issues, bioethics had an amazing development, not only as it regards its influence on decision making processes but from the point of view of its institutionalization too. Bioethics, beside technology assessment, risk assessment and intellectual property law, gained special relevance as an instrument for framing

---

<sup>3</sup> »Knowledge politics« is a new field of political activity that has emerged during the last 40 years. It normatively defines and assesses the specific type of knowledge that is deemed to be the most important and most desirable for the society (Stehr 2005).

issues, ordering new knowledge, and (re)allocating power in issues related to biotechnology (Jasanoff 2005, p. 28).

These developments provided bioethics not only with power and recognition, but they posed to it new challenges too. Its traditional theories and methods are not always applicable in a context in which more and more problems require global answers. At the policy level some degree of consensus has to be reached among various values, worldviews and opinions to can formulate guidelines or to develop universal frameworks for action. Taken into account that the issues raised by the life sciences and the new and emerging technologies related to them often touch upon some the most important segments of human existence such as birth, death, family, health, illness or disease it is not surprising that finding consensus is not an easy task. On the one hand the fact that these issues are common experiences of each human being could raise the hope that to reach a consensus about some problems related to them would not be so problematic. On the other hand however we have the detailed ethnographic and cross cultural studies that show us how differently we interpret and relate to the same basic human experiences as members of different cultures. A number of questions shall be answered than: Can basic assumptions about the human condition and worldviews be negotiated? Can a community made up of diverse individuals and groups find ways to transcend differences in order to reach a consensus on some issues, can all of us agree on some universal norms?

### **Bioethics and policy**

In the policy field there have been attempts to define and set up a universally shared framework to address the issues related to new technologies and bioethics.<sup>4</sup> The Universal Declaration on Bioethics and Human Rights (UDBHR) propose the concept of human dignity as the overarching principle of bioethics and the human rights framework as a way to anchor bioethics in the field of international law. Along with human dignity and human rights, non-discrimination, autonomy and individual responsibility, informed consent, respect for human vulnerability and personal integrity, equality and justice, solidarity and cooperation, and social responsibility to the common good and the biosphere, Article 12 of the Declaration clearly upholds 'respect for cultural diversity and pluralism' as a major bioethical principle. In order to achieve its aims the Declaration propose »to foster multidisci-

---

<sup>4</sup> The UNESCO Universal Declaration of Bioethics and Human Rights (2005), The UNESCO International Declaration on Human Genetic Data (2003), The UNESO Universal Declaration on Human Rights and Human Genome, Council of Europe: Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine (Convention on Human Rights and Biomedicine) (1997)

plinary and pluralistic dialogue about bioethical issues between all stakeholders and within society as a whole« (UDBHR Article 2/e), and to promote »opportunities for informed pluralistic public debate, seeking the expression of all relevant opinions« (UDBHR Article 18/3).

My aim in this paper is not to evaluate or interpret the Declaration.<sup>5</sup> I will use the Declaration as an example for pointing to the difficulties of reaching global consensus on some sensitive bioethical issues. Although the UNESCO instrument is recognized by many as a valuable tool in policy field and »as an extension of international human rights law into the field of biomedicine« (Andorno 2009), a number of reservations have been formulated on its address: the principles in the Declaration are stated in absolute and inconsistent terms (Selgelid 2005, p. 267-273), the relationship between 'universal' or 'fundamental' principles and the plurality of complementary values in the UDBHR is problematic, the Declaration quotes many and diverse values, but does not provide a ranking method, and this can lead to serious disagreements (Häyry & Takala 2005, p. 232), the Declaration does not pay attention to the existing structural inequities, it only asserts the 'fundamental equality of all human beings in dignity and rights' but it does not explicitly recognize disparities of power and wealth that deny equal dignity and rights to many (Rawlinson and Donchin 2005). While recognizing that the purpose of the UNESCO document is to draw attention to fundamentally important bioethical values, rather than to resolve deep philosophical questions about conflicts between them, the difficulties inherent in the attempt to create a framework that incorporates some universally shared principles and in the same time is sensitive enough to the wide range of contexts in which these principles are going to be applied in real life are obvious.<sup>6</sup>

The advantage of thinking theoretically about bioethical issues related to new technologies is that we are not forced by those constrains policy makers are, namely to reach a consensus on various complex issues in order to be able to take decisions on them. Theoretical thinking is free of such constrains and thus can freely engage in open and often never ending debates. Such debates, although not directly useful for the policy context, can be however helpful in other ways. They can offer insights for finding ways to transgress the duality of normative and empirical approaches and to develop solutions that might be suitable to incorporate both of these approaches in

---

<sup>5</sup> This has been done by scholars who have a deep knowledge about the issues that were involved in adopting the UDBHR, since they were involved in different ways in the process of drafting the Declaration. See for example Andorno 2009; Sándor 2007.

<sup>6</sup> For a more detailed discussion of the UNESCO Declaration on Bioethics and Human Rights see: Developing World Bioethics 5(3): 197-273; Macer 2009, Kaelin 2009.

the understanding and interpretation of complex bioethical issues. In the followings I will try to contribute with my analysis and suggestions to this endeavor.

### **Normative and empirical approaches in bioethics**

It has to be noted and acknowledged that there are many ways of doing bioethics, and bioethics is a dynamic, changing, multi-sited field (de Vries, Turner et al. 2007, p. 3). However, according to Jasanoff the »Western«, mainstream, mainly principlism informed bioethical discourse has the most authority, voice and visibility in biotechnology related discussions (Jasanoff 2005, p. 202) and it is also the one that has been increasingly criticized from a number of perspectives: feminist, indigenous people, social science, so on. What is common in these critiques is the reference to »mainstream« bioethics' abstract universalism and its indifference to the socio-cultural context. According to social science critique, principlism gives a dominant role to the idealized, rational thought, and tends to exclude social and cultural factors, relegating them to the status of irrelevancies, and acts as if concepts like autonomy, patient, justice, equity, non-directive, so on, would have the same meaning in each context (Fox and Swazey 2005). Even if one accepts the importance of principles in bioethics there are still crucial questions that remain unanswered, for example how one should weigh competing ethical claims in real life situations. Several attempts have been made to find solution to this question, however, the development of different models or approaches in ethical decision-making – the interpretation and application of competing principles in »the real world« - remains seriously under-studied. As we could see this theoretical problem has been one of the critiques formulated with regard to the Universal Declaration of Human Rights and Biomedicine too.

There are authors who suggest that instead of abstract principles it would be better to focus on values in bioethical theory building. More and more scholars started to share the idea that in a pluralist, post-modern scenario, theory loses ground to narrative. In order for the variety of religious and cultural voices to be heard in the field of bioethics, many scholars have called for an »empirical turn« in bioethics (Borry et al. 2005, Lopez 2004).<sup>7</sup> As a response to such initiatives the defenders of »principle« based bioethics predict the danger of (moral or cultural) relativism, which would occur with taking into account the socio-cultural context, the »particulars« and regard empirical

---

<sup>7</sup> The place of social science in bioethics varies by cultural and social context. In the Netherlands and Belgium the creation of »empirical bioethics« has given social science an established voice in the bioethical conversation (Borry et al. 2005). In North America and the UK, social science methods are widely used in bioethics, but social scientists remain, to a certain extent, strangers to the field (Hedgecoe 2004). In Central and Eastern Europe social science and bioethics are just starting the dialog, in this context philosophical, legal and theological approaches, as well as medical ethics have a more important presence in the field.



social science as purely descriptive (de Vries, Turner et al. 2007, pp. 2). It is argued that the very descriptive nature of the ethnographic social science which gives it its usefulness in addressing the dilemma of religious and cultural pluralisms simultaneously highlights its inadequacies for engaging in the normative ethical inquiry which is characteristic of the 'ethics' in 'bio-ethics' (Callahan 1999, Solomon 2005).<sup>8</sup>

Many scholars agree on that the 'empirical turn' on itself is unable to solve the problems in bioethics. Callahan points out that »(o)ne is the need for ethically relevant knowledge from social scientists. Another is the parallel need for types of ethical theory that have a way of efficaciously using social science knowledge. Still another is a way of climbing that most intimidating mountain known as the is-ought fallacy: the belief that a moral »ought« can be deduced from a factual »is«.« (Callahan 1999, p. 286) Therefore the question is still open: is there a way for not only switching from an approach (principlism, universalism) to other (empiricism, particularism) but to start a real dialog between them and achieve some degree of integration?

### **Challenging the dualistic approaches**

In the above mentioned debate on principlism and its critiques the main line of divide was actually between the abstract normativity of mainstream/traditional bioethics and the contextual, embedded, situated, descriptive or narrative approaches proposed as alternatives to the mainstream approach. There are many ways to relate to this dualism. Traditionally it was held that the integration of the philosophical/normative approach and the empirical one is both epistemologically and methodologically an impossible attempt. There are however some scholars who point out the problems that are inherent in separating facts and values and they propose to transgress the gap between a descriptive, empirical argument and ethical analysis (Hugaas 2009). Such proposal has been formulated already in the late 50' by Edel and Edel in their book on ethics and anthropology. The authors called for a »working partnership« between anthropology and ethics »which avoids any jostling for primacy, or quarrels over vested rights in either methods or problems« (Edel and Edel, 1959, p.6).<sup>9</sup> According to the authors moral philosophers »have dealt with morality as an isolated and self-contained domain, cut off from relations to psychological and cultural processes,« their »vocabulary has been explored as though the field were separate and meaningful in total isolation, as though its processes of justification were utterly unique and unrelated to processes in knowledge generally, and

---

<sup>8</sup> For an up to date discussion about empirical research in bioethics see in *The American Journal of Bioethics*, 2009, 9(6-7): 59-103 Kon's target article (Kon 2009) and the responses to it.

<sup>9</sup> I made an attempt to respond to their call in an article about bioethics and anthropology (Demény 2008, p. 272)

a conceptual chasm has been created between fact and value to preserve the distinct character of moral judgment. And what has resulted is ...a deadlock or impasse in ethical theory« (Edel & Edel 2000, p. vi-vii). Nelson is also questioning the orthodox model of how »is« relates to »ought,« according to which empiricists supply the facts; moral philosophers, theologians, and humanists provide the values; and philosophers clarify relevant concepts and ensure valid argumentation. He criticized this view as too linear because »it keeps 'is' and 'ought' on their respective sides of the fence,« and he calls instead for »inventing the common wisdom about the relations between the normative and the descriptive« (Nelson 2000, p. 7-11).

The proponents of a critical bioethics are interested in engaging in such approach. Critical bioethicists, beside the classical ethical theories are informed by critical social science too, which claims that it is necessary to understand the lived experience of real people in context. In addition critical theories share the ideas and the methodologies of some interpretative theories, examine social conditions in order to uncover hidden structures, and admit that knowledge is power. Informed by these ideas critical bioethics asks how social science research can meaningfully contribute to philosophical bioethics? According to the adepts of critical bioethics a practice that simply documents the ethical practices of a specific environment could be rather conservative, supporting rather than challenging systems and practices. To avoid this, critical bioethics must be more than purely descriptive, it should be reflexive, it should review theories if they are challenged by practice and last but not least it should be rooted in empirical research (Hedgecoe, 2004).

Transgressing the gap between a descriptive, empirical argument and a normative, philosophical one is not only a methodological, but also an epistemological challenge, which, if it is successfully solves, creates a space for interdisciplinary practice, a practice that seems to be extremely needed and valuable exactly in the current context of knowledge production created by the proliferation of new converging technologies. Research in the act of knowing helps us to produce a deeper understanding of issues at stake, to realize that there are more than one way to see things, that each problem have at least two sides, and there can be credibility on both sides. It also helps in not coming too quickly to a conclusion; to be willing to hold off on passing judgment; to be a little bit more willing to play with possibilities and not having to come to closure on something too fast (Nikitina 2002).

We have to examine thus first of all whether bioethics has an explicit epistemology, a theory of how bioethical knowledge is produced. One widely held, although not universal approach is that generating bioethical insight does not require agreement at the level of fundamental theory. This approach has been advanced by Beauchamp and Childress, who reject the notion that one must choose a single theory from

among the existing theories. They claim that there is much more social consensus about principles and rules drawn from the common morality (Beauchamp and Childress 2001, p. 4-5). If this approach would indeed mean the openness to a variety of moral positions and arguments, we could say that it is indeed inclusive and pluralistic. However, feminist critiques draw into our attention that in practice mainstream, principlism informed bioethics often tend to be a conversation among experts, bioethicists, physicians, scientists, and governmental authorities. Wolf points out that although there is a great concern in the mainstream bioethics' discourse with patients' and research subjects' rights, these people tend to be the objects of concern and not participants on their own right in the ethical conversation (Wolf 1996, p. 25). Jasanoff also points out that arguments for a meaningful deliberative politics in relation to biotechnology did not emerge from official bioethics in any of the three countries she has analyzed (Jasanoff 2005, p. 202).

Feminist scholars find this practice problematic and point out that the conception of the generic subject implicit in the principle-based approaches actually privileges the perspective of an elite group of experts and scientists.<sup>10</sup> Therefore feminists propose to re-examine the principles of bioethics; to create new strategies and methodologies that interject the standpoints of socially marginalized people, and instead of applying abstract principles they call for a more critical approach that would question why and how certain dilemmas get cast and than managed as ethical problems (Wolf 1996; Tong et al. 2004; Butler 2005). To achieve these aims, they can rely on feminist epistemologies, which place emphasis on the relationship between power, gender and the means of generating authoritative knowledge, and aim for a more democratic process of knowledge production. A bioethics informed by such epistemology requires a restructuring of practice of bioethics to be more inclusive. Such epistemology emphasizes the importance of acknowledging the standpoint from which knowledge is generated and acknowledges the relational nature of knowledge production. If this epistemological claim would be taken seriously it would seriously challenge the physician, scientist or bioethicist centered »expert« discourse of mainstream bioethics, and it would give more floor for others perspectives too, such as lay people's accounts or social sciences' ones.

This epistemology can be useful in the field of policy making too, in a context in which deliberative processes are highly valued in ethical and political decision making. Such deliberative approaches have been advanced in knowledge production re-

---

<sup>10</sup> Some further feminist critiques of the principle based approach in bioethics refer to the abstract character of bioethical theory, the emphasis on abstract universal norms and the framework of allegedly universal moral principles; the use of generalized abstract categories that overlooks key components of morality including the contexts that frame health care and the relational bonds that inform patient decision-making. For more feminist views on bioethics see for example Tong et. al. 2004.

lated to new and emerging technologies as a suitable method of knowledge production about the new technologies in the present context. Taking into account the novelty of these technologies it is preferable by science policy makers to include in the debate as many perspectives as possible. The UNESCO declaration also encourages dialog and the incorporation of a variety of perspectives in the bioethical debates. An epistemology that put an emphasis on the situated and relational character of knowledge can be thus very adequate in this context.

Feminists challenge traditional bioethics to reveal its own perspective(s), to acknowledge and embrace the plurality of human (male and female) voices, to accept and work with the essential nature of human connection and embodiment. Bioethics is and should be strongly committed to autonomy and patient decision-making, but, as many empirical studies show, cherished principles may not be equally salient to the very people whose rights and well-being bioethicists seek to protect. It is more realistic to admit perhaps that the human condition is a condition of dependency, and this contradicts the ideologies of rational autonomous agency of modernity. As Tong formulated, »denial of perspective does not achieve neutrality, denial of plurality does not bring unity, and denial of connection and embodiment does not achieve self-sufficiency for the rational, autonomous self.« (Tong in Wolf 1996, p. 89) If we take all these into account we can conclude in saying that feminists require ethical analysis to be contextual, inclusive and flexible (Boetzkes 2001).

Making bioethics discourse more inclusive is certainly necessary and feminist epistemology is useful in this context. But can a feminist epistemology transgress the gap between particular and universal, between a descriptive, empirical argument and a philosophical one in (bio)ethics? Feminist traditionally have been critical toward the so called »universal« norms and pointed out that many of them have been formulated exclusively from a male point of view, while women's experiences have been left aside. However, many feminist also admitted that the problem was not with the universality, as such, but with the way its »content« has been defined. It can be seen as a great achievement of feminist thinking that defining »universality« only from one privileged perspective has started slowly to change.

In the field of ethics too, a growing contingent of feminists think that a framework that incorporates universal principles should constitute one dimension of an adequate ethical theory providing that its principles are formulated in non-exclusionary terms that reflect the relational context of individual lives. As Judith Butler has formulated »the problem is not with the universality, as such, but with an operation of universality that fails to be responsive to cultural particularity and fails to undergo a reformulation of itself in response to social and cultural conditions it includes with-

in the scope of its applicability. When a universal precept cannot, for social reasons be appropriated or when ...it must be refused, the universal precept itself becomes a site of contest, a theme and an object of democratic debate« (Butler 2006, p. 6). Habermas also concludes that sociological reservations offer salutary corrections to normativism, but these critiques do not condemn normative theories to failure by social complexity. According to Habermas, purely normative considerations keep their relevance as long as we accept that complex societies shape themselves in a reflexive manner through law and politics (Habermas 2008, p. 276) The selective readings of norms that have the grammatical form of universal statements but at the semantic level are vulnerable to particularistic interpretations of their basic concepts, such as persons, human being, call for an empirical explanation (Habermas 2008, p. 285). What both feminist and critical theories emphasize in connection with universalistic claims is reflectivity upon such norms and concepts. Taken all these into account, and bearing in mind that a feminist ethical analysis shall be contextual, inclusive and flexible, I am joining Daniel Callahan's view according to which »there should not ordinarily be any decisive victory for particularism or universalism. They should over the long run fight to a draw, existing in tension with each other, with context and circumstance determining their relative weight« (Callahan 2000, p. 37-38).

### **Contextualization: a useful method for interdisciplinary inquiries**

Transgressing the gap between a descriptive, empirical argument and a normative, philosophical one is not only an epistemological, but a methodological challenge too, (Parker 2007) which, if it is successful, creates new methods for interdisciplinary practice, a practice that seems to be extremely needed and valuable in the current context of knowledge production created by the proliferation of new converging technologies. Indeed, interdisciplinarity and transdisciplinarity appear to be one of the most prized/acknowledged characteristics of current knowledge politics, both are highly valued and are seen as signals for post-academic knowledge. To can asses whether a practice is interdisciplinary or not there is necessary either a definition of interdisciplinarity, or a set of criteria that should characterise interdisciplinary practice. Even if we take only a brief account of possible definitions and criteria of interdisciplinarity we can see that »interdisciplinarity« is a relational and socially constructed concept, whose actual content depends on agreed criteria, on how disciplines and multidisciplinary are defined, so on. As studies carried out on concrete examples of knowledge production practices demonstrate, interdisciplinarity in practice can take various forms, with various results, and often processes of

knowledge production labelled as interdisciplinary turn out to be more a kind of multidisciplinary in practice.<sup>11</sup> Interdisciplinary practice thus is contextual too.

It seems that as easy is to prize interdisciplinarity, as difficult is to define its contours, and it is definitely less easy to practice it in an »authentic« way, and the field of bioethics it is not an exception of this problem either. Many scholars highlighted that even if the problems raised by the new life sciences and technologies are truly interdisciplinary in their nature, and the body of theoretical knowledge under the name of bioethics has indeed an interdisciplinary character, the methods used to produce new knowledge in the area are mainly rooted in monodisciplinary traditions (Bowden 1995; Kjølborg and Wikson 2007; Azevêdo 2007, Rafols 2007). According to Azevêdo »the contentment with the application of the existing methods will dismiss the need for creative ideas on new interdisciplinary methods in bioethics and this may become the greatest epistemological challenge to bioethics in the present century« (Azevêdo 2007, p. 34).

The context of this paper does not allow me to address in details such an important methodological challenge. Therefore my intention here is only to draw attention to the method of contextualization, as one of the potentially valuable tools for interdisciplinary approaches of bioethical issues that are informed by an integrative epistemology that does not strictly separates normative and empirical approaches.<sup>12</sup>

Contextualization in a broad sense is the act or process of putting information into context; and of making sense of information from the situation or location in which the information was found. In the context of bioethics this would mean that scholars interested in the ethics of a particular technology should develop a deeper understanding from within the problematic situation instead of using only ethical tools developed from outside the situation in case. They should focus their attention not only on standard issues of bioethics (such as informed consent, moral status of the embryo, autonomy, so on), but they should also take into account the context in which that particular technology is applied.<sup>13</sup> An example for such practice from the context of new biotechnologies is given by Rayna Rapp who shows through a detailed ethnographic account how one of the least important issues for women con-

<sup>11</sup> See for example Demény et al. 2007

<sup>12</sup> There are other such proposals in the literature, for example »integrated empirical ethics« (IEE) research is advanced by Moljewik et al. IEE »refers to studies in which ethicists and descriptive scientists cooperate together continuously and intensively. Both disciplines try to integrate moral theory and empirical data in order to reach a normative conclusion with respect to a specific social practice. IEE is not wholly prescriptive or wholly descriptive since IEE assumes an interdependence between facts and values and between the empirical and the normative« (Moljewik 2004). See more about this method in: van der Scheer and Widdershoven 2004.

<sup>13</sup> We can think of various contexts: social, cultural, economic, legal, but epistemological or metaphysical contexts too. For socio-cultural contextualization see for example Gordon et al. 2007.

templating prenatal testing is the moral status of the embryo, a main issue in mainstream bioethics. In this light, those bioethicists who wish to engage with ethical decisions as they are lived in the real world should turn their attention towards the rights and duties that are involved in relationships with other people in that certain context rather than focusing only on abstract moral issues (Rapp 1999). Another example for the critique of the decontextualised approach in relation to new biotechnologies is the work of De Melo-Martin, who argues that a decontextualised approach to ethical issues is not just unhelpful for the decision making process of real, situated human beings, but dangerous (De Melo-Martin 2006). If we neglect the context in which people make moral decisions we run the risk to reinforce further injustices against already disadvantaged groups. Miller and Find, in a study on placebo-controlled trials of pharmacological treatments and deep-brain stimulation for psychiatric and neurological disorders bring to our attention how moral principles and standards can conflict when applied to contextually complex situations. They claim that careful balancing of morally relevant considerations and an understanding of moral norms should guide ethical judgment instead of categorical or absolute rules (Miller and Fins 2004).

If we take into account that bioethics discourse about biotechnology has the power to define new subject positions, it would be more than desirable to understand how medical technologies intervene in the processes and possibilities, not only of self enhancement, but also of self-formation. The issue of subject formation, of »the modes by which, in our culture, human beings are made subjects« (Foucault 1982) could be therefore another topic where contextualization could help an interdisciplinary approach. The contexts in this case would be the timeless metaphysical questions of human existence: issues of selfhood, worldview, moral belief, and social responsibility can serve as the connecting glue. To be constituted as a person does not only mean that one is provided with physical and psychological capabilities by nature, capabilities that eventually can be enhanced with medical technologies. To be constituted as a person means more than this, it is also about developing an identity within the meaning patterns of the life world. If these patterns are changed in fundamental ways it will have not only ethical, but also existential, ontological consequences for us. This would not mean necessarily changes in the human genome. It might also happen that new knowledge established by way of medical science alters for example our self-understanding, the ways we perceive ourselves as human beings (Hoeyer 2002). By taking a look for example to the case of genetic engineering, we can see that this has impact not only through its ability to affect the structure of living tissue. It has also impact as a field of knowledge that, as it becomes increasingly normalized, influences the way we conceptualize human existence and social inter-

action. It is important, therefore to take into account the socio-political way in which we learn who we are as human beings and the discourses that surround this process (Fitzsimons 2005, p.2).

These are only some issues that the contextualizing strategy can effectively address. All the examples presented above highlight the utility of contextualization as an interdisciplinary method. It can help to »fine-tune« the universal framework proposed to bioethical issues by making it more sensitive to various contexts and offer solutions that are more helpful in real life decision situations and are endorsed and accepted by a larger audience, public. It also demonstrates how both normative and empirical arguments have to be considered in order to make sense of how certain technological applications are »working« in real life and what type of moral, ethical and ontological concerns they raise. According to the new science policy on technological and scientific development such knowledge shall be used not only to understand the ethical, social and economic implications of some new technologies but preferably the process of development of new applications shall take it into account. Only in this way it can be claimed that a given technology will be »socially robust«.

## Conclusion

Taken into account that the issues that are at stake in the ethical debates on the applications of various biotechnologies and genetics can deeply affect the ways we perceive us as humans, our relationships with others, and with the environment it would be more than desirable that in these debates a plurality of approaches and voices to be represented. In this paper I tried to contribute with some ideas to how dualistic approaches in bioethics can be changed with more inclusive and integrative approaches both at the level of epistemology and methodology. Relying on ideas of feminist epistemology and critical bioethics I supported the view that a framework that incorporates universal principles shall constitute one dimension of an adequate ethical theory in the context of life sciences and new technologies providing that the principles it relays on are formulated in non-exclusionary terms that reflect the relational context of individual lives. I argued that such a framework could provide useful background for developing and employing methodologies that are suited for interdisciplinary inquiry on various bioethical issues and problems, suggesting contextualization as one of the possible methods that could be efficient in interdisciplinary attempts aimed to understand the relationship between universal and particular, global and local when dealing with issues raised by new techno-scientific developments.



REFERENCES

1. Andorno, R. 2009. Human dignity and human rights as a common ground for a global *bioethics*. *The Journal of Medicine and Philosophy* 34(3): 223-40.
2. Andorno, R. 2007. Global bioethics at UNESCO: In defence of the Universal Declaration of Bioethics and Human Rights. *Journal of Medical Ethics* 33(3):150-154.
3. Azevêdo, E. S. 2007. Interdisciplinary Bioethics on the Crossroad of Research Methods. *Eubios Journal of Asian and International Bioethics* 17(2): 34-35.
4. Beauchamp, T. L., Childress J. F. 2001. *Principles of Biomedical Ethics*. Oxford: Oxford University Press.
5. Boenink, M. 2010. Molecular medicine and concepts of disease: the ethical value of a conceptual analysis of emerging biomedical technologies. *Medicine, Health Care and Philosophy* 13(1):11-23.
6. Boetzkes, E. 2001. Privacy, Property, and the Family in the Age of Genetic Testing: Observations from Transformative Feminism. *Journal of Social Philosophy* 32(3): 301-316.
7. Borry, P, P. Schotsmans, and K. Dierickx. 2004. What is the role of empirical research in bioethical reflection and decision-making? An ethical analysis. *Medicine, Health Care and Philosophy* 7(1): 41-53.
8. Borry, P, Schotsmans, P., Dierickx, K. 2005. The birth of the empirical turn in bioethics. *Bioethics* 19(1): 49-71.
9. Bowden, G. 1995. Coming of Age in STS: Some Methodological Musings. Jasanoff, G., Markle, E., Peterson, J.C. (eds). *Handbook of science and technology studies*. Trevor Princh: Sage Publications, pp. 64-79.
10. Brodwin, P. (ed). 2001. *Biotechnology and Culture. Bodies, Anxieties, Ethics*. Indiana University Press.
11. Butler, J. 2005. *Giving an Account of Oneself*. New York: Fordham University Press.
12. Callahan, D. 2000. Universalism & Particularism: Fighting to a Draw. *Hastings Center Report* 30(1): 37-44.
13. Callahan, D. 1999. The Social Sciences and the Task of Bioethics. *Daedalus Bioethics and Beyond* 128(4): 275-294.
14. De Melo-Martin, I. 2006. Furthering injustices against women: genetic information, moral obligations, and gender. *Bioethics* 20(6): 301-307.
15. Demény, E. 2008. Interdisciplinarity and Knowledge Production in the Age of Biotechnology. The Case of Anthropology and Bioethics. Harabula, H., Magyar Vincze, E. (eds.) *Anthropo Imprints*. Cluj-Napoca: Editura Fundatiei pentru Studii Europene, p.265-277.
16. Demény, E., Hemmings, C., Holm, U., Korvajärvi, P., Pavlidou, Th. S., Vasterling, V. 2006. *Practicing Interdisciplinarity in Gender Studies*, Raw Nerve Press, York.
17. Edel, M., Edel, A. 1959. *Anthropology and Ethics*. Springfield: Charles Thomas Publisher.
18. Edel, M., Edel, A. 2000. *Anthropology and Ethics*. London: Transaction Publishers.
19. Fischer, M. J. 2001. Ethnographic Critique and Technoscientific Narratives: The Old Mole, Ethical Plateaux, and the Governance of Emergent Biosocial Politics. *Culture, Medicine and Psychiatry* 25(4): 355-393.
20. Fitzsimons, P. J. 2007. Biotechnology, ethics and education. *Studies in Philosophy and Education* 26(1): 1-11.
21. Fox, R. C., Swazey, J. P. 2008. *Observing Bioethics*. Oxford University Press.
22. Fox, R. C., Swazey, J. P. 2005. Examining American Bioethics: Its Problems and Prospects. *Cambridge Quarterly of Healthcare Ethics* 14(4): 361-373.
23. Fukuyama, F. 2002. *Our Posthuman Future: Consequences of the Biotechnology Revolution*. New York: Farrar Straus & Giroux.
24. Foucault, M. 1982. Afterword: The subject and power. Dreyfus, H. and Rabinow, P. (ed). *Michel Foucault: Beyond Structuralism and Hermeneutics* Brighton: The Harvester Press, pp. 208-226.

25. Gibbons, M. et al. 1994. *The New production of knowledge: the dynamics of science and research in contemporary societies*. London: Sage Publications.
26. Gordon, E. J., Wolder Levin, B. 2007. Contextualizing Ethical Dilemmas: Ethnography for Bioethics. Jacoby, L., Siminoff, L.A. (eds.) *Empirical Methods for Bioethics: A Primer*. Bingley: Emerald, pp. 83-116.
27. Habermas, J. 2003. *The Future of Human Nature*. Cambridge: Polity Press.
28. Habermas, J. 2008. *Between Naturalism and Religion*. Cambridge: Polity Press.
29. Häyry, M., Takala, T. 2005. Human Dignity, Bioethics, and Human Rights. *Developing World Bioethics* 5(3): 225-233.
30. Hedgcock, A. M. 2004. Critical Bioethics: Beyond the Social Science Critique of Applied Ethics. *Bioethics* 18(2):120-143.
31. Hoeyer, K. 2002. Conflicting Notions of Personhood in Genetic Research. *Anthropology Today* 18(5): 9-13.
32. Hugaas, J. V. 2009. The Relation between Normative and Descriptive Ethics – A Consideration of Empirical Bioethics. *Eubios Journal of Asian and International Bioethics* 19 (1): 21-27.
33. Jasanoff, S. 2005. *Design on Nature. Science and Democracy in Europe and the United States*. Princeton, Oxford: Princeton University Press.
34. Kaelin, L. 2009. Contextualizing Bioethics: The UNESCO Declaration on Bioethics and Human Rights and observations about Filipino Bioethics. *Eubios Journal of Asian and International Bioethics* 19(2): 42-47.
35. Kastenhofer, K. 2007. Converging epistemic cultures? A discussion drawing on empirical findings. *Innovation. The European Journal of Social Science Research*. 20(4): 359-373.
36. Kjølborg, K., Wickson, F. 2007. Social and Ethical Interactions with Nano: Mapping the Early Literature. *NanoEthics* 1:89-104.
37. Kon, A.A. 2009. The Role of Empirical Research in Bioethics. *The American Journal of Bioethics* 9(6-7): 59-65.
38. Lopez, J. 2004. How sociology can save bioethics... maybe. *Sociology of Health and Illness* 25 (7): 875-96.
39. Macer, D. 2009. Editorial: Universality of Bioethics. *Eubios Journal of Asian and International Bioethics* 19(2): 33-34.
40. Miller, F., Fins, J. 2005. Protecting human subjects in brain research: a pragmatic perspective. Illes, J. (ed) *Neuroethics. Defining the issues in theory, practice, and policy*. Oxford: Oxford University Press.
41. Molewijk, B., Stiggelbout, A.M., Otten, W., Dupuis, H.M. and Kievit, J. 2004. Empirical Data and Moral Theory. A Plea for Integrated Empirical Ethics. *Medicine, Health Care and Philosophy* 7(1): 55-69.
42. Nelson, L. J. 2000. Moral Teachings from Unexpected Quarters. *Hastings Center Report* 30(1): 12-17.
43. Nikitina, S. 2002. Three Strategies for Interdisciplinary Teaching: Contextualizing, Conceptualizing, and Problem-Solving. Interdisciplinary Studies Project Project Zero, Harvard Graduate School of Education.
44. Nowotny, H., Scott, P., Gibbons, M. 2003. Introduction. 'Mode 2' Revisited: The New Production of Knowledge *Minerva* 41(3): 179-194.
45. Nowotny, H., Scott, P., Gibbons, M. 2001. *Re-thinking science: knowledge and the public in an age of uncertainty*. Cambridge: Polity.
46. Parker, M. 2007. Ethnography/ethics. *Social Science & Medicine* 65(11): 2248-2259.
47. Pellegrino, E. D. 2000. Bioethics at Century's Turn: Can Normative Ethics Be Retrieved? *Journal of Medical Philosophy* 25(6): 655-675.
48. Rapp, R. 1999. *Testing Women, Testing the Fetus: The Social Impact of Amniocentesis in America*. New York: Routledge.
49. Rafols, I. 2007. Strategies of Knowledge Acquisition in Bio-nanotechnology. Why are interdisciplinary practices less widespread than expected? *Innovation. The European Journal of Social Science Research* 20(4): 395-412.

50. Rawlinson, M. C., Donchin, A. 2005. The Quest for Universality: Reflections on the Universal Draft Declaration on Bioethics and Human Rights. *Developing World Bioethics* 5(3): 258-266.
51. Rifkin, J. 1998. *The Biotech Century. Harnessing the Gene and Remaking the World*. New York: Penguin Putnam Inc.
52. Sándor, J. 2007. New Dimensions of Bioethics in the Universal Declaration on Bioethics and Human Rights: Response to Roberto Andorno. Gastmans, Ch., Dierickx, K, Nys, H., Schotsmans, P. (eds) *New Pathways for European Bioethics*. Antwerpen: Intersentia.
53. Schmidt, J. C. 2007. Knowledge Politics of Interdisciplinarity. Specifying the type of interdisciplinarity in the NSF's NBIC scenario. *Innovation. The European Journal of Social Science Research* 20(4): 313-328.
54. van der Scheer, L., Widdershoven, G. 2004. Integrated empirical ethics: Loss of normativity? *Medicine, Health Care and Philosophy* 7(1): 71-79.
55. Selgelid, M. J. 2005. Universal Norms and Conflicting Values. *Developing World Bioethics* 5(3): 267-273.
56. Solomon, M. Z. 2005. Realizing Bioethics' Goals in Practice: Ten Ways »Is« Can Help »Ought«. *Hastings Center Report* 35(4): 40-47.
57. Stempsey, W. E. 2006. Emerging medical technologies and emerging conceptions of health. *Theoretical Medicine and Bioethics* 27(3): 227-243.
58. Stehr, N. 2005. *Knowledge Politics: Governing the Consequences of Science and Technology*. Boulder: Paradigm.
59. Strathern, M. (ed.) 2000. *Audit Cultures. Anthropological studies in accountability, ethics and the academy*. London, New York: Routledge.
60. Thompson-Klein, J. et al. 2001. *Transdisciplinarity. Joint problem solving among science, technology, and society: an effective way for managing complexity*. Boston: Birkhauser Verlag.
61. Tong, R., Donchin, A., Dodds, S. 2004. *Linking Visions: Feminist Bioethics, Human Rights, and the Developing World*. Rowman & Littlefield.
62. Turner, L. 2003. Bioethics in a multicultural world: Medicine and morality in pluralistic settings. *Health Care Analysis* 11(2): 99-117.
63. Vos, R., Willems, L. 2000. Technology in medicine: Ontology epistemology, ethics and social philosophy at the crossroads. *Theoretical Medicine and Bioethics* 21(1): 1-7.
64. de Vries, R., Turner, L. et al. (eds.) 2007. *The View from Here. Bioethics and the Social Sciences*. Oxford: Blackwell Publishing.
65. Wolf, S. (ed.) 1996. *Feminism and Bioethics: Beyond Reproduction*, New York: Oxford University Press