# Advice from moral experts

# An assessment of the European Group on Ethics in Science and New Technologies (EGE)

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# Summary

Moral experts – people who presumably know more about moral issues than others – play an important role in giving advice to governments on how to deal with ethical questions through ethics committees. The existence of these committees raises fundamental normative questions concerning the limits and the legitimate role of moral experts in decision-making processes. It is contested whether moral expertise exists. However, it is difficult to have any meaningful understanding of these institutional arrangements if we cannot expect these moral experts to deliver good advice to governments. The assumption that moral expertise exists therefore underlies this thesis. In fact, the legitimacy of ethics committees is intimately connected to their members' performance as moral experts, and it is therefore important to develop criteria to evaluate their performance. Therefore, in the first part of this thesis, relevant epistemic criteria for assessing deliberation of moral experts on ethics committees are developed on the basis of three overall concerns: logical validity, empirical soundness and normative reasonableness.

The European Commission has a vast number of advisory committees. One such committee is the European Group on Ethics in Science and New Technologies (EGE) composed of philosophers, theologians, lawyers and scientists, which is tasked with giving advice on ethical questions to the Commission through Opinions. In the second part of this thesis, the criteria developed are applied to EGE's Opinion number 23 *Ethical aspects of animal cloning for food supply* to evaluate the EGE's work. Before applying the criteria to a concrete committee, a consideration as to whether the institutional context of the committee should delimit the criteria in any way is conducted.

The analysis shows that the EGE's recommendations are logically valid. There are certain shortcomings on empirical soundness, mainly related to the use of references. By not presenting different ethical viewpoints and having a low degree of justification, normative reasonableness is the criterion that the EGE is furthest from meeting. After the analysis, the relevance of the criteria, possible explanations for these findings, policy implications and suggestions for future research are discussed.

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Any remaining mistakes are my responsibility alone.

Oslo, May 2016

Eilev Hegstad

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# **1** Introduction

## 1.1 Background and research question

Moral experts – people who presumably know more about moral issues than others – play an important role in giving advice to governments on how to deal with ethical questions. The existing system of governmental advisory committees points to the centrality of expertise in contemporary democratic governing. Frank Vibert (2007, p. 12) has described this as a new branch of government "with a special responsibility for the handling and dissemination of information, the analysis of evidence and the deployment and use of the most up-to-date empirical knowledge". This development in governing raises fundamental normative questions concerning the limits and the legitimate role of expertise in decision-making processes. This is especially pressing with regard to governmental advisory committees dealing with ethical questions,<sup>1</sup> as the existence of moral expertise is highly controversial.

Interestingly, a common view is that "unelected bodies take on a special responsibility for empirical judgments in policymaking and elected bodies focus on value judgments" (Vibert, 2007, p. 34). This view does not, however, account for current institutional arrangements. There exist many ethics committees that give governments advice on a range of different ethical issues. In fact, it is difficult to have any meaningful understanding of these institutional arrangements if we cannot expect these moral experts to deliver good advice to governments. In other words, deliver moral expertise. The unelected branch that these committees are part of draw their legitimacy from the belief that their expertise will contribute to improve governing. In the words of Thomas Christiano (2012, p. 32) they ensure the "truth-sensitivity" of decisions. Ethics committees ' main purpose is to give ethical advice, and it should be a topic of scholarship to investigate experts' epistemic performance (Holst & Tørnblad, 2015, pp. 166–167).

In the European Union (EU) the European Commission,<sup>2</sup> an unelected body, sits at the center of institutional arrangements. In addition to in-house expertise, expert groups play an important role in EU governance. The European Commission currently has 825 expert groups (European Commission, n.d.). The European Group on Ethics in Science and New Technologies (EGE), composed of philosophers, theologians, lawyers and scientists is such a

<sup>&</sup>lt;sup>1</sup> Hereafter referred to as *ethics committees*. Ethics committees are a subset of governmental advisory committees. When the latter is used in the text it refers to the whole set.

<sup>&</sup>lt;sup>2</sup> Hereafter referred to as the *Commission*.

group. As the name suggests, it is tasked with giving the Commission advice on ethical questions relating to sciences and new technologies. In a system, such as the EU, where direct democratic accountability is limited, it is even more pressing to investigate the epistemic performance of experts. My thesis will therefore answer two interrelated research questions. The first part of the thesis will answer the question: *What are relevant epistemic criteria for assessing deliberations of moral experts on ethics committees*? Thereafter, the second part of the thesis will apply these criteria by answering the question: *To what extent does the European Group on Ethics in Science and New Technologies (EGE) meet these criteria in their Opinion number 23*?

A couple of terms in the research questions need clarification. The first is *deliberation*, and the second is *epistemic*. Deliberations take place in many aspects of a committees' work. In this thesis, the deliberation of the committee as it is expressed in the final report will be studied. As stated in the first research question, epistemic criteria will be used in this assessment. The word epistemic means relating to knowledge. Epistemic criteria are then criteria that if fulfilled increase the likelihood of true, or at least reliable, beliefs.

A study of expertise can draw on a vast range of literature, although, according to Frank Fischer (2009, p. 17) it has not been an important topic in political science. The discussion about the legitimate role of expertise in governing covers a broad range of different expertise arrangements differing in degree and versions (for an overview see Holst, 2012). It is this literature that this thesis seeks to contribute to and is placed within. More specifically, this thesis aims to add to the existing literature in two regards. Firstly, in light of concerns about democratic legitimacy, standards for assessing expert institutions have been relatively absent. The criteria developed in this thesis can serve as deliberative ideals for moral experts on ethics committees. Moreover, these criteria can be used in empirical research to ascertain whether a committee fulfills the deliberative standards that we should expect. Secondly, there has been a lack of focus on moral expertise in research on expertise. Due to the controversial nature of moral expertise and the large number of ethics committees, assessing the epistemic performance of moral experts is critical.

# **1.2 Earlier research**

It is useful to start with an overview of the existing literature. An expert's role in governing is often equated with elitism, and opposed to rule by the people. The most famous

pronouncement of this view is Plato's (trans. 1994) argument in the *Republic* for the rule of philosopher-kings. However, the expert's role in democracy has gained a new interest with the epistemic turn in normative political theory. Jason Brennan (2011, p. 115) argues that: "Every plausible democratic theory needs to hold that democracy is justified in part because it tends to produce the morally right outcomes". In short, to be legitimate, a democracy has to deliver good outcomes. In a democracy, experts can therefore have a legitimate role to play in delivering "truth-sensitive" decisions (Christiano, 2012, p. 36). David Estlund (2008) has coined the term *epistocracy* to describe the form of government where the knowers or the wise rule. Because of the risk of epistocracy, epistemic justifications for democracy are seldom regarded as sufficient. In addition, normative defenses of democracy is an intrinsically just method for making decisions.

The view that democracy should deliver good outcomes to be legitimate has had consequences for developments in modern governing. The increasing delegation of power to depoliticized expert bodies such as courts, independent governmental agencies and central banks, are some examples. These bodies are given substantial decision-making powers on the premise that they will make better decisions than the politicians. Debate concerning expertise has also been part of legal theory through discussions on the merits of judicial reviews (Dorsen & Rosenfeld, 2009). However, in the judicial branch, expertise and expert testimony is a recognized and natural part of a well-functioning legal system (Jasanoff, 1997). Governmental advisory committees are also part of this development.

This heavy reliance on expert advice has been called a "new separation of powers" (Vibert, 2007). Cathrine Holst (2012, p. 51) has therefore asked "whether we must also include what we might call a basic 'fact of expertise' alongside 'the basic fact of pluralism' and other basic facts normative theory must recognize" (see also Kitcher, 2011). In fact, it is difficult – if not impossible – to imagine how our society could be governed without relying extensively on expert advice and decisions. Because of this, knowledge-based decision-making and reliance on expertise is not something that one can be *for* or *against* per se. Rather these arrangements can be more or less legitimate or illegitimate (Gornitzka & Holst, 2015a, p. 3) This is not only a theoretical problem, as numerous writers have described the lack of trust in experts as one of the critical issues of our time (Fischer, 2009, p. 4).

Obviously, expertise can be used for other purposes beside knowledge-based decisionmaking. Sonja Boehmer-Christiansen (1995, p. 197) list: legitimacy, persuasion, delaying or avoiding action, justification for unpopular policies, arbitrating disputes, and clarification of conflicting interests (see also Boswell, 2009; Tellmann, 2016).

In any modern society we need an "epistemic division of labor" (Holst & Molander, 2014, p. 19). Within this division of labor, the legitimacy of governmental advisory committees is intimately connected to their performance as expert committees. It is reasonable to believe that the truth-sensitivity of decisions are tied to the deliberative qualities of decision-making processes (Holst, 2012, p. 50). It is therefore important to assess the quality of such deliberations by comparing them to an independent standard, which is the concern of this thesis. Such a standard could include aspects such as freedom, openness of the deliberative process, the reasons given or the outcomes (Bohman, 2006, p. 218). In this thesis, epistemic aspects of deliberation will be the focus. Recent attempts at operationalizing deliberative democracy include a Discourse Quality Index (Steenbergen, Bächtiger, Spörndli, & Steiner, 2003), however, this index will not be used because as a quantitative index it will not be able to sufficiently answer the research question.

This thesis will draw upon two important sources of research. The first source is research on ethics committees, in the literature also referred to as *public bioethics* (Moore, 2010, pp. 715–716), and the role of moral expertise in this context. Different aspects have been studied including: The justification for ethics committees and the role of moral experts, (Crosthwaite, 1995; Elster, 2007); the different approaches of different ethics committees have been compared (Hare, 1988; Nelson, 2005); the democratic role of bioethics committees and the role of philosophers in policymaking (Brock, 1987; Eckenwiler & Cohn, 2009; Kymlicka, 1993; Wolff, 2011). Moreover, the roles and methods of moral reasoning employed by ethics committees have been of interest (Cohen, 2005) and studies of committees in different countries (Walters, 1989). This research has not been particularly concerned with evaluating deliberations on these committees, or creating standards that they can be assessed by. However, the research on the role of moral experts on these committees will be relevant for the development of the criteria in this thesis.

The second source is research on expert groups in the EU. There has been an increasing interest in this system of expert groups. Gornitzka and Sverdrup (2008) have examined and explained the expert group system of the EU as a crucial property of the EU governance system. In a special issue journal on the expert-executive nexus in the EU (Gornitzka & Holst, 2015b) many aspects of expertise in the EU were studied, including how to assess EU experts' performance (Holst & Tørnblad, 2015). How the Commission has

communicated about its use of expertise (Holst & Moodie, 2015), expert group reform (Moodie, 2016) and how expert groups are used in the policy process (Metz, 2013) have also been studied. It was only in 2005 that the Commission launched an online register of expert groups, and it was not until 2009 that it was fully updated (European Commission, 2010a, p. 2). The EGE has also been of interest to researchers and issues such as the politics of biotechnology governance and the role of the EGE in this (Salter & Jones, 2002), the influence of the EGE (Busby, Hervey, & Mohr, 2008; Mohr, Busby, Hervey, & Dingwall, 2012) have been studied. Moreover, the appointment, composition, the nature of its Opinions and the way these are used have been studied by Aurora Plomer (2008). This research gives background to how the EGE works and what regulations the EGE are subject to.

This thesis does not take a position on whether these expert arrangements are legitimate. But it recognizes that they are widespread and that it is worth exploring how these experts can be assessed in light of democratic legitimacy concerns. However, the findings in this thesis can be relevant for the debate, as how well these committees function is part of what determines their legitimacy.

## **1.3 Moral expertise**

The assumption that moral expertise exists underlies this study. A common position is that experts deal with the technical issues, and politicians or the public deal with value issues (see for example Kitcher, 2011, p. 57; Vibert, 2007, p. 34). However, we have a set of existing institutional arrangements, of which EGE is one example, which it is difficult to have any meaningful understanding of without an expectation that these bodies should deliver moral expertise, and that these committees are given a special normative authority (Elster, 2007, p. 18). In this context, Alvin Goldman's (2001, p. 91) comparative definition of expertise – applied on moral expertise – is helpful to understand what is meant by this concept. Moral expertise can be defined as "have[ing] more beliefs (or high degrees of belief) in true propositions and/or fewer beliefs in false propositions within that domain than most people do (or better: than the vast majority of people do)". Moreover, Goldman's definition also includes a threshold. To qualify as an expert "a person must possess a substantial body of truths" (2001, p. 91). Also, underlying this system of ethics committees lies an assumption

that ethical expertise leads to moral expertise.<sup>3</sup> Many of these committees have members such as philosophers, ethicists and theologians whom it is reasonable to believe are there because of their moral expertise. If the assumption that moral expertise exists proved to be untrue it would make very little sense for these committees to even exist. Instead, these committees could be replaced by information centers that only sought to inform the debates and did not give advice on these issues (Elster, 2007, p. 15).

When expertise is discussed, what is most often referred to is technical expertise. There is widespread agreement that technical expertise exists. Whether moral expertise exists is more controversial.<sup>4</sup> That some are better than others at predicting the weather – and that this is a skill and an accompanying method that can be taught – is relatively uncontroversial. Moral expertise is different because it is difficult to identify what the correct judgments are. This is due to the lack of independent checks (McGrath, 2008). Some believe that moral expertise does not exist for this reason (see for example Archard, 2011; Cowley, 2005; Dahl, 1989, p. 66).

The absence of independent checks makes it difficult to assess whether a moral expert has reached the correct moral judgment. This is because such an assessment requires a higher level of moral expertise than the person that is being assessed. The question then becomes who is to assess the moral expert assessing the moral expert and so on. This issue can be avoided by studying formal features of moral reasoning. Besides avoiding this issue, the research question asks for epistemic criteria to assess deliberations, therefore it is not the moral judgments in themselves that are of interest, but the formal features of deliberation. High quality deliberations are believed to increase the likelihood of true, or at least reliable, beliefs.

It is plausible to operate with a concept of moral expertise if we assume "that reason and logical argument have *some* role to play in ethics" (Singer, 1988, p. 152). If this is the case, then some will be better than others at reasoning and logical argument and therefore have more competence in this area than others. These people can be viewed as moral experts

<sup>&</sup>lt;sup>3</sup> On a conceptual level it is meaningful to make a distinction between ethical and moral expertise. Martin Hoffmann (2012, p. 305) makes the distinction between these by describing ethical expertise as someone informed about relevant moral theories and the relevant empirical background knowledge. Moral expertise is defined by Hoffmann (2012, p. 305) as people who have "privileged access to true or correct judgments about what is morally good, bad, allowed, forbidden or required". However, on the premise that reason and logical argument play a role in ethics then ethical expertise is a *necessary* but not *sufficient* requirement of being a moral expert. Moreover, moral expertise does not automatically translate into acting in morally superior ways.

<sup>&</sup>lt;sup>4</sup> For an overview see Lisa Rasmussen (2006).

using the definition of moral expertise given.<sup>5</sup> Peter Singer (1988, pp. 153–154) points to five advantages that a moral expert has over a layman. Firstly, the moral expert has the ability to reason well and logically, to avoid fallacious reasoning and to detect fallacies in the reasoning of others. Secondly, the moral expert has some understanding of moral concepts and the nature of ethics. Thirdly, the moral expert has a reasonable amount of knowledge of the major ethical theories. Fourthly, the moral expert must be well informed about the facts that are relevant for the ethical issues under consideration. Lastly, the moral expert has time to think and reflect about ethical issues. This is one, often referred to, way of arguing for the existence of moral expertise.

If reason and logic did not play any role in determining the right answers to ethical questions, then deliberations would be very difficult – if not impossible – to assess. Reason and logic are part of the independent standard that moral experts should be assessed by. This will be the basis on which the criteria are developed.

# 1.4 European Group on Ethics in Science and New Technologies (EGE)

The criteria developed in chapter 3 will be applied to the European Group on Ethics in Science and New Technologies. The EGE was first established in 1991 as the Group of Advisers on Ethical Implications of Biotechnology (GAEIB). The name was changed in the mandate in 1997. The Group has been a permanent and formal<sup>6</sup> expert group since its inception. The current mandate ended in January 2016, and has not yet been renewed. The role of the EGE is to advise the Commission on ethical questions relating to science and new technologies in connection with EU legislation or policies. The EGE is a Commission expert group and is therefore subject to regulations on commissions' expert groups that were developed after 2002. In addition, they have their own mandate and rules of procedure.

In his typology of the EU committee system, Mark Rhinard (2002, p. 192) breaks the different committees into three divisions based on the stage of policymaking that the committees are most closely associated with. Firstly, there are *Commission advisory committees*, which are most closely associated with policy formulation. Secondly, there are

<sup>&</sup>lt;sup>5</sup> It might seem that discussing moral expertise is done on the premise of moral realism. However, Karen Jones and Francois Schroeter (2012, p. 220) argue that only two metaethical positions are incompatible with the existence of moral expertise; simple subjectivism and simple expressivism.

<sup>&</sup>lt;sup>6</sup> This means that it is set up by a Commission decision.

*Council working groups*, which are most closely associated with policy decisions and, finally, *Comitology committees* that are most closely associated with policy implementation. The EGE is a *Commission advisory committee* in this typology. However, throughout this thesis the term *governmental advisory committee*, or *ethics committee* will be used because the EGE is an example of a phenomenon that is widespread also outside the EU, and the criteria developed will also be relevant for advisory committee, the EGE is also an example of an ethics committee. We can distinguish between, on the one hand, ethics committees dealing with specific ethical cases, such as ethics review committees and research ethics committees, and on the other hand, committees dealing with ethical issues, such as national ethics councils. The EGE is an example of the latter as their role is to give advice on ethical questions that should guide public policy, not give advice on specific cases.

The relevance of studying the EGE is perhaps not obvious. The reports that the EGE publish are called Opinions. These Opinions possess the formal status of non-binding advisory documents. The relevance of these documents can be seen in that they have been invoked by different institutions in the EU and at national level. They have become part of the EU deliberative process. For example, Directives touching upon values explicitly mention that the Opinions of the EGE have been taken into account (Tallacchini, 2009, p. 297), and Commission regulations state that a "proposal submitted by departments for Commission decision should be accompanied by a description of the expert advice considered, and how the proposal takes this into account" (European Commission, 2002a, pp. 12–13). The EGE also acts as a key reference point for the 28 National Ethics Councils in the EU (European Commission, 2016).

The criteria that are developed in this thesis will be applicable to all ethics committees. However, when applying them to a concrete committee, the criteria have to be negatively delimited by taking the institutional context that the committee operates within into account. In this case, this includes the mandate of the EGE, its rules of procedure and the existing regulations on Commission expert groups.<sup>7</sup> The EGE cannot be expected to fulfill the criteria if the context that the committee operates within contradicts them. In chapter 3, after the criteria have been developed and before the assessment, a discussion will be included

<sup>&</sup>lt;sup>7</sup> Opinion number 23 was published on 16 January 2008 and it is therefore the mandate and the rules of procedure from the mandate period 2005–2010 that is relevant.

concerning whether the criteria have to be delimited in any way before they are applied to the EGE.

The EGE was created in the wake of advances in biotechnology in the late 1980s and early 1990s (Plomer, 2008, p. 840). On 11 May 2005 the Commission adopted the decision on the renewal of the mandate of the EGE (European Commission, 2005a). The EGE is composed of fifteen members, appointed by the President of the Commission. Its members are nominated *ad personam* and are appointed on the basis of their expertise and geographical distribution that reflects the diversity of the EU. In the mandate period from 2005–2010, the committee consisted of fifteen members with backgrounds in professions such as philosophy, theology, law and science (European Commission, 2005b). All of the members had a background in academia. The committee has status as an advisory body and gives advice either at the request of the Commission President or on its own initiative. The committee adopts its own rules of procedure (EGE, 2005). Since 1991, the EGE has published 28 Opinions on a range of issues from stem cell research, cloning, developments in agricultural technology and security and surveillance technology. The rules of procedure or any of the other regulations put forward by the Commission are not very specific on the format of the Opinions. The committee chooses its own chairperson and vice-chairperson and:

Different Chairs have adopted different approaches, for instance on how discursive the meetings are; the selection of rapporteurs for each Opinion; encouraging dissenting Opinions rather than proceeding by unanimity; the style, structure and length of the Opinions themselves; and the use of experts and round table discussions. (Busby et al., 2008, p. 839)

The Opinions issued by the EGE vary greatly in length and have become longer during the last two mandate periods.

## 1.5 Outline of thesis

This thesis is divided into five chapters. In chapter 2, the relevant methodological considerations will be presented and discussed. To develop and apply relevant epistemic criteria for assessing deliberations of moral experts on ethics committees, the critical analysis of ideas is the methodology used. This includes conducting argument analysis before the

application of the criteria. After this methodology is presented, methodological challenges, data sources and generalizability will be discussed. Lastly, how the analysis will be conducted is described.

Chapter 3 is where the relevant epistemic criteria for evaluating deliberations of moral experts on governmental advisory committees are developed. The criteria will build on Beckman's (2005, p. 58) three concerns for evaluating ideas; that they are logically valid, empirically sound and normatively reasonable. These criteria will be further specified in the chapter. How and whether the criteria need to be delimited to take into account the institutional context that the EGE operates within will be discussed in the last part of the chapter.

In chapter 4, the analysis is conducted. Opinion number 23 *Ethical aspects of animal cloning for food supply* from the EGE will be analyzed with the goal of answering the question as to what extent the report meets the criteria set forth in chapter 3.

Chapter 5 will summarize the findings and discuss the relevance of these criteria, including suggestions for improvements. Possible explanations for the findings, and the policy implications that this has will also be discussed. Finally, suggestions for future research will be put forward.

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# 2 Methodology

This chapter will describe the relevant methodological considerations. The thesis is divided into two parts. The first part seeks to develop relevant epistemic criteria for assessing deliberations of moral experts on ethics committees. This development will be done in chapter 3. The second part is to apply these criteria to the EGE. This will be done in chapter 4. The critical analysis of ideas is the relevant methodology (section 2.1). This includes argument analysis (section 2.2) which will be used in the analysis. Methodological challenges (section 2.3), data sources (section 2.4), generalizability (section 2.5), and, finally, how the analysis will be conducted (section 2.6) will also be discussed in this chapter.

## 2.1 Critical analysis of ideas

According to Ludvig Beckman (2005, p. 14), there are three possible goals with ideational analysis. Firstly, we can try do describe the relevant ideas (descriptive). Secondly, we can explain the idea's origin or consequences (casual). Thirdly, we can try to decide whether the ideas are justified (normative). To answer the research questions ideational analysis will be used with the latter goal in mind. This has been described as the critical analysis of ideas<sup>8</sup> and is systematically presented in Beckman (2005).

The critical analysis of ideas is built on the assumption that ideology is something that can be falsified (Bratberg, 2014, p. 73). It has a negative character, meaning that it does not concern itself with formulating a positive thesis, or to argue for a position or take a stand on political questions. Instead it is concerned with showing flaws in others thinking.

Beckman's (2005) presentation of critical analysis of ideas builds on that of Herbert Tingsten (1896–1973), professor in political science at Stockholms högskola, use of this method. All the components in Tingsten's critical analysis of ideas show a strongly held belief in rational thought and criticism. He saw the critical analysis of ideas as an instrument for rationalization which should drive society forward (Vedung, 1992, p. 102). Tingsten belonged to a school in the theory of science which holds that value-questions are scientifically meaningless (Vedung, 1992, p. 101). How social scientists should relate to value-questions is an ongoing debate within the philosophy of social science. Tingsten's view

<sup>&</sup>lt;sup>8</sup> Evert Vedung (1982) has called this rational criticism or rational assessment.

is shared by notable scholars such as Max Weber (1994) and A. J. Ayer.<sup>9</sup> In line with his rationalistic beliefs his criteria for judging ideas in a text was their logical validity, empirical soundness and that they did not consist of metaphysical illusions (Beckman, 2006, p. 333). The third criterion judged whether an ideology made metaphysical claims or not. He has been criticized for his view of value-questions by Beckman (2006) who argues that if normative political analysis is included in the critical analysis of ideas, the method becomes more useful for political science. Although we can be more confident in our empirical judgments than our normative judgments, the plausibility of normative claims can reasonably be discussed. On this background, Beckman (2005) includes normative reasonableness as a third criterion in his book *Grundbok i idéanalys*.

#### 2.1.1 Criteria

Beckman (2005, p. 58) lists three criteria that can be used to evaluate ideas. The first is that they are logically valid; the second that they are empirically sound; and, finally that the arguments are normatively reasonable. These criteria will be used as a framework. Beckman's (2005) criteria need to be specified further for them to be useful as a tool for analysis as he only presents them in relatively general terms. Before applying the criteria to a specific committee, a consideration as to whether the institutional context of the committee should delimit the criteria in any way has to be conducted. This consideration will be done after the development of the criteria in chapter 3.

To answer the research question the criteria have to meet certain requirements. They have to be relevant for assessing deliberations of moral experts. Moreover, the criteria have to be epistemic, meaning that if fulfilled the likelihood of true, or at least reliable beliefs are increased. This does not exclude criteria that can be both epistemic and non-epistemic at the same time. Non-epistemic criteria do not relate to knowledge, but to other types of concerns such as representativity.

Imagining what criteria for an ethics committee consisting of laypersons could look like might make things clearer. Such criteria would be mainly non-epistemic as the expectation of such a committee would be different from that of an expert committee. Expertise is not what we would expect; rather it would be such things as how representative

<sup>&</sup>lt;sup>9</sup> See Heather Douglas (2009, pp. 44–65) for an overview of the debate.

the committee is, its good intentions and transparency. However, epistemic criteria would not be irrelevant, they would just be less important and to a lesser degree.

# 2.2 Argument analysis

Before we can apply the criteria we have to identify which claims and recommendations are made. To do this, we will use argumentation analysis. Beckman (2005, p. 38) describes the analysis of arguments as "a partly formalized analysis technique to systematically describe the arguments that appear in a debate on a particular topic".<sup>10</sup> In this case, the goal is to use the argument analysis to make it possible to apply the criteria and assess the deliberations.

Argument analysis can be conducted in either a qualitative or a quantitative way. The strength of quantitative analysis is its high reliability. Reliability concerns the quality of measurement, meaning the repeatability or consistency of measurement (Hellevik, 2002, p. 183). This is always lower in qualitative research than in quantitative research (Bratberg, 2014, pp. 101–103). Validity refers to whether a study answers the research question (Hellevik, 2002, p. 183). In this thesis, the validity of a quantitative analysis would be much lower than a qualitative. It will not be possible to answer the research question in a satisfactory way using quantitative measures as the quality of deliberation is not foremost signified by the number of arguments for and against or other such measures. The Discourse Quality Index (Steenbergen et al., 2003), a quantitative index, has been criticized because it counts the number of arguments that support a conclusion as a sign of good quality. This does not let us distinguish between whether the arguments are relevant, good, or whether they sufficiently support the conclusion (Friberg-Fernros & Schaffer, forthcoming).

Evaluating deliberations requires interpretation and evaluation. That does not mean that inter-subjectivity in the assessment is not a goal. Therefore, to make reliability as high as possible, it is important that it is made as clear as possible both how the criteria are decided upon and how they are applied to the Opinion of the EGE. This will hopefully make it possible to verify the findings in this thesis if anyone would like to repeat this investigation.

Argument analysis brings up the question of how to interpret an argument. The principle of charity is an ethical rule that requires criticism of a position to be generous, fair and just (Vedung, 1982, p. 106). When interpreting arguments and recommendations the interpretation that makes the argument most forceful and sensible should be chosen. This

<sup>&</sup>lt;sup>10</sup> Author's translation. Original version reads: "Argumentationsanalysen är en delvis formaliserad analysteknik för att systematisk beskriva de argument som förekommer i en debatt i ett särskilt ämne."

principle is a common requirement when assessing the validity of a position. Obviously, if a position can reasonably be understood in different ways, then the committee can be blamed for writing ambiguously. Making the criticism fit better by giving an unreasonable interpretation of an argument is blameworthy. This does not guarantee, however that there will not be misunderstandings or misreadings of the Opinion, or of the secondary sources used in the assessment.

## 2.3 Methodological challenges

There are several methodological challenges in this line of research which makes the research question in this thesis challenging to investigate. Cathrine Holst and Silje Tørnblad (2015) have written an article with the title *Variables and Challenges in Assessing EU Experts' Performance* which describes the methodological challenges and ways of meeting these challenges in assessing experts' deliberations. The following discussion draws greatly on this article.

In the study of elite behavior two obstacles are often mentioned in the methodological literature; namely the problems of access and bias (Holst & Tørnblad, 2015, p. 173). The first problem is a difficulty of availability because people who are part of the knowledge elite often can be difficult to access. Moreover, elites may in certain situations have an interest in turning down requests from researchers, especially when the researcher seeks to evaluate their performance. The bias problem occurs because of the social nature of the interview. This does not exclusively relate to studies of elites, but is often made greater by elite informants. This is a challenge as long as the goal is to capture what elites actually do, not just what they say they do.

Epistemic asymmetry is the key methodological challenge. The problem of epistemic asymmetry can be described in this way: "Due to their lack of expertise, non-experts cannot assess the epistemic quality of experts' judgments and justifications directly" (Holst & Tørnblad, 2015, p. 167). In the social epistemology literature this is known as the layperson-expert problem (Goldman, 2001, p. 92). In this thesis, the challenge is to evaluate moral experts' performance. This challenge would have been even greater if the assessment was of the moral truth of the recommendations and not formal features of deliberation. The former assessment would imply a higher moral expertise from the evaluator than the committee. Evaluating moral experts' performance can be doubly challenging as moral reasoning also

involves technical facts. It is therefore not sufficient to evaluate moral experts' use of different moral theories; assessing their use of technical facts involved in moral reasoning is also necessary. It is interesting to note that this methodological problem is similar to the problem that motivates the research questions, namely that of democratic legitimacy.

Holst and Tørnblad (2015, pp. 174–175) suggest five strategies to meet the challenge of epistemic asymmetry. Firstly, one can increase one's expertise in the relevant domain. Secondly, one can reduce the problem of epistemic asymmetry by choosing cases where the initial asymmetry is low or limited. Thirdly, a negative approach could be taken by looking for what is certainly *not* expertise. Fourthly, one can look at facets of deliberation that point toward epistemic quality which does not require expertise to evaluate. Fifth, one can identify and investigate extra-deliberative indicators of deliberative quality, for example epistemic parameters for selection of expert group members.

Since the research questions require an assessment of the epistemic qualities of deliberations, only the first two strategies are relevant. The case that is chosen, animal cloning for food supply, is one where the initial asymmetry is not too great. However, a good strategy is to increase one's expertise in the relevant domain by reading research conducted on the topic. These sources will be used in the analysis conducted in chapter 4. It is a normal strategy in the critical analysis of ideas to use research conducted in the field, so-called secondary sources, to evaluate the claims that are made in a document being studied (Beckman, 2005, p. 67). In being clear about which sources are being used to evaluate the EGE the verifiability of the findings is also increased. By extension of the epistemic asymmetry problem, knowing which sources are reliable and which sources are not, requires a certain amount of knowledge. As long as the epistemic asymmetry is a challenge then one is in one form or another left with using some kind of indirect indicators for finding reliable sources.

Harry Collins and Robert Evans (2007, pp. 13–44) distinguish between *contributory expertise* and *interactional expertise*. Contributory expertise involves having the required competence to participate in the activity and advance its objectives. Interactional expertise involves the ability to talk about the activity and to understand talk about it, but without the competence to contribute to its being done. The latter form of expertise is regarded as sufficient to meet the challenge of epistemic asymmetry.

Applying the criterion logical validity is affected differently by epistemic asymmetry than the two other criteria. Logic is an expertise of its own, but it is independent of subject. This means that an expert in logic does not necessarily need a whole lot of knowledge about the subject to be able to assess the logical validity. Assessing empirical soundness and normative reasonableness requires a certain level of expertise in the subject.

Another element is that Opinion number 23 was published in 2008 and it is safe to assume that the field has progressed since then. It would be unfair to use findings from after the report was written to evaluate the deliberations of the committee. This is especially relevant for the technical knowledge, and therefore any new findings after the report was published will not be included in the assessment.

An author's own bias can always be a methodological challenge to the degree that one notices things or does not notice things due to this bias. These pre-commitments can be such things as firm opinions on animal cloning, or strong opinions for or against moral expertise that affects the assessment of the EGE. The only way to meet this challenge, in this particular case, is to be as clear as possible about what is done, so as to increase the verifiability of the findings.

## 2.4 Data sources

With the methodological challenges in mind it is easier to explain the reasoning behind choosing an Opinion from the EGE as the data source. There are many interesting normative questions concerning moral experts and governmental advisory committees. One example could be what criteria should be used when appointing moral experts to these committees. In a sense, this would be a question of how to identify moral experts (Hoffmann, 2012; McGrath, 2011). However, the research question in this thesis concerns deliberations of moral experts on ethics committees, and, therefore, suitable data sources are needed to apply the criteria to.

Holst and Tørnblad (2015, p. 173) point to four possible data sources that can be used to study the expert groups of the European Commission. Firstly, there is background information available on the different expert groups in the Register of Commission Expert Groups. This could be a possible data source if indeed it was the identification of moral experts which was the goal of this thesis. Secondly, asking the experts themselves about their behavior either by interviewing them or conducting surveys. This strategy would have to meet both the access problem and the bias problem and only gives us the experts' view of their deliberations. Thirdly, there is the possibility of observing meetings. This is most likely not a viable option as Alison Mohr et al. (2012, p. 106) requested to attend meetings of the EGE and were denied.<sup>11</sup> The Commission (2005a) has written that the EGE's working sessions shall be private. Furthermore, the EGE's (2005, p. 3) rules of procedure go further by stating that "the working sessions of the Group are private and their deliberations are confidential to the Group". Finally, they point to the possibility of studying public documents. In the case of the EGE this would be to study the deliberations in the Opinions. This is the best option because one avoids the access and bias problem.

There are another two reasons why studying an Opinion from the EGE is the best option. Firstly, the finished Opinion and how it discusses the ethical issues tells us something about the process that the committee has gone through. It shows deliberations that lead to conclusions on substance as it is presented in the Opinion. Secondly, there is not necessarily a causal connection between the quality of committee deliberation in meetings and deliberation in the final report, and vice versa. These two different sources of information can say different things about the quality of deliberations. The EGE's legitimacy should primarily be evaluated by assessing the deliberations that are presented to the public. Therefore, it is natural to choose to assess the deliberation in an Opinion from the EGE. Opinion number 23 Ethical aspects of animal cloning for food supply is going to be analyzed because this is a case where the initial asymmetry is lower than if any of the other Opinions was chosen. This is because I have an interest in animal ethics and am somewhat familiar with the debate. Moreover, this Opinion is of interest because it has been referenced in a proposal for a directive on cloning animals for farming purposes from the European Commission (2013). This data source will meet the motivation behind this thesis in a better way than any of the other possible data sources, and is why the research question is formed as it is. The criteria will be developed with this in mind.

This means that the criteria will apply to an Opinion from the EGE as a whole and not to individual members of the committee. Despite this, the individuals might have a responsibility for making sure that the criteria are fulfilled in the Opinions. Moreover, there will be instances where members are not appointed to the committee due to their moral expertise. For example, it would be natural to have people with a medical background on ethical committees dealing with biotechnological questions. However, it does not change the fact that these committees are expert committees and should be assessed as such. Not every

<sup>&</sup>lt;sup>11</sup> Interestingly, the European Commission (2002a, p. 12) states that: "Departments should consider allowing the public to observe certain expert meetings, particularly on sensitive policy issues".

single individual on the committee has to be considered a moral expert for the committee as a whole to be evaluated on the background of its moral expertise.

# 2.5 Generalizability

With these choices in mind, it is possible to discuss the generalizability of the criteria and the findings from the analysis. The epistemic criteria are developed with the goal of assessing deliberations of moral experts on ethics committees in general. This means that the criteria will be generalizable to all ethics committees giving advice to governments. However, when the criteria are used to assess a specific ethics committee they might have to be negatively delimited to take into account the institutional context that the committee operates within. This ensures that concerns that the criteria are based on are safeguarded, but at the same time that they are not used to assess ethics committees by standards they are told not to fulfill.

To what degree are the criteria that are going to be developed relevant to all governmental advisory committees? Many of the same criteria for evaluating ethics committees are relevant for dealing with technical issues. Evert Vedung (1982, p. 182) writes that:

political value statements must be appraised on the basis...of rationality that apply to political discourse in general. However, statements of value are commonly regarded as having a special position. They cannot be judged in exactly the same way as statements of fact.

Following Vedung, it is clear that moral reasoning must fulfill many of the same standards as reasoning about other things. Both logical validity and empirical soundness should be expected from all governmental advisory committees. When it comes to normative reasonableness it is correct to have higher expectations of ethics committees. Partly this is due to the lack of independent checks. However, governmental advisory committees dealing with technical questions also have to make value judgments in the way they handle uncertainty in the research, for example. Therefore, normative reasonableness can also be relevant for these committees but perhaps to a different degree and with different specifications.

The conclusions drawn from assessing Opinion number 23 from the EGE will foremost say something about the deliberations in this particular Opinion. However, under certain conditions some or all of the general findings may also be true for other Opinions that the EGE has written. These conditions are if the EGE has written other Opinions in a similar manner to the one being assessed in this thesis. Even if some of the findings can be rightfully expected to be true for other Opinions, it will not be possible to say for certain without assessing these other Opinions.

## 2.6 Conducting the analysis

The analysis will be conducted in chapter 4. Instead of dividing the analysis into two chapters; one where the relevant facts concerning animal cloning and different ethical views are presented and one where the analysis is conducted, these two things will be done simultaneously in the text in chapter 4. The relevant information for assessing the report will be presented as the analysis unfolds and references will be provided. This is done to ease reading and avoid unnecessary repetition. Before the analysis is attempted the epistemic asymmetry has to be decreased by familiarization with the subject. As mentioned before, this brings up the question of reliable sources. Peer-reviewed articles and books are seen as reliable sources along with reports from the European Food Safety Authority (EFSA). The EFSA is the source for the scientific evidence in the EGE Opinion. The sources that are used in the evaluation are referenced and it will therefore be possible for the reader to check which sources are used. EGE's Opinion number 23 is 51 pages dealing with scientific background, legal aspects and ethical issues related to animal cloning. In the last part the EGE presents their recommendations. The Opinion will be assessed using a holistic approach. The recommendations will be presented and the arguments that are presented for and against will be reconstructed. The criteria will then be applied. As such, only arguments that are linked to one of the recommendations will be assessed. This is the most natural way of conducting the analysis as evaluating the normative reasonableness requires an evaluation of the whole argument, and not only of single sentences or paragraphs taken out of context. Something that is presented in one part of the Opinion might be supplemented by something in another part of the Opinion, and this has to be evaluated as a whole.

# 3 Criteria

In this chapter relevant criteria for assessing deliberations of moral experts on ethics committees will be developed. Underlying the development of these criteria is the assumption that some form of moral expertise exists. A brief section on the goal of the criteria and the specification of these will begin this chapter (section 3.1). The specification of the three overall concerns; logical validity (section 3.2), empirical soundness (section 3.3) and normative reasonableness (section 3.4) will follow. Normative reasonableness will be divided into three further criteria; degree of clarification (section 3.4.1), clarity about uncertainties and assumptions (section 3.4.2), and degree of justification (section 3.4.3). As the criteria might have to be delimited to take into account the institutional context that the EGE operates within before the analysis is conducted, a section on this will follow after the specification (section 3.5). Lastly, a short summary and a table with an overview of the criteria will be included (section 3.6).

## 3.1 Specification of criteria

The research question asks for relevant epistemic criteria to assess deliberations of moral experts on ethics committees. These criteria do not, then, seek to evaluate the moral truth of the recommendations made by the committee. This would imply evaluating a report with a certain view of the ethical question in mind, in other words, doing an evaluation of a specific outcome or conclusion of a committee. In the case of animal cloning, this would be to assess the report from a standpoint of being for or against cloning. However, these criteria seek to evaluate the epistemic qualities of deliberation that there is reason to believe brings us closer to the moral truth. Jane Mansbridge and John Parkinson (2012, p. 11) write that "the epistemic function of a deliberative system is to produce preferences, opinions, and decisions that are appropriately informed by facts and logic…and relevant reasons". In other words, that the deliberations increase the likelihood of true, or at least reliable, beliefs.

Not all relevant epistemic criteria are included, however, because the criteria developed in this thesis will be applied to one report. Therefore, possible criteria like requiring consensus (Moreno, 1988, 1995) or epistemic pluralism (Holst, 2015a, p. 364) will not be included. Moreover, even after the criteria have been specified there will be room for subjectivity in the way that the criteria are applied.

In the following sections the criteria will be specified based on Ludvig Beckman's (2005) framework. This framework for evaluating ideas includes three concerns: logical validity, empirical soundness and normative reasonableness. This ensures that facts, logic and relevant reasons are assessed.

# 3.2 Logically valid

Beckman's (2005, pp. 59–65) first criterion for evaluating ideas is that they are logically valid. Logic can be defined as the study of valid arguments or the study of a consistent set of beliefs, and therefore the logician is concerned with the compatibility of beliefs (Hodges, 2001, p. 1). Heather Douglas (2009) describes why this is important:

Internal consistency should be considered an epistemic value, in that an internally inconsistent theory must have something wrong within it. Because internal inconsistency implies a fundamental contradiction within a theory, and from a clear contradiction any random conclusions (or predictions) can be drawn, lacking internal consistency is a serious epistemic failing. (p. 94)

When assessing arguments for their logical validity it is important to distinguish between something being true and something being logically valid. An argument can be logically valid without also being true. To give an example, the statement "Norway is a country in Africa" is logically valid but is obviously not true. Therefore, by evaluating whether an argument is logically valid it is not the truth-value that is determined but its logical properties.

There is vast debate among scholars on logic. Douglas Walton, Chris Reed and Fabrizio Macagno (2008) identified some 60 different argumentation schemes, along with criteria that premises should meet in order to provide support for the conclusion. From this it is clear that some choices have to be made because not every aspect can be evaluated. Beckman (2005, p. 59) presents two different criteria for evaluating the logical validity of an idea; non-contradiction and valid inferences. These two specifications will be included along

with the naturalistic fallacy,<sup>12</sup> which is also known as the technocratic fallacy, and wishful thinking.

There is nothing that indicates that ethics committees' reports commonly fail to meet the criteria of non-contradiction and valid inferences. These criteria are included because if they are not met it would be a serious epistemic failing. Naturalistic fallacy and wishful thinking, however, are included because the literature indicates that these might be more of a common issue in these types of reports (Habermas, 1988, p. 253ff; Holst, 2015a, p. 359).

The criterion of non-contradiction is an obvious requirement for an argument to be logically valid. Contradictions can either be contrary or adversarial (Beckman, 2005, p. 60). If two statements are contrary they both cannot be true, but both can be false. If two statements are adversarial one has to be true and one has to be false.

Arguments where the conclusions do not follow from the premises are often referred to as logical fallacies. A group of premises can be consistent without making a conclusive argument. To see whether arguments are logically valid, so that conclusions follow from the premises, reconstructing arguments in the form of syllogisms can be helpful.

One form of logical fallacy that there is reason to be especially concerned about is naturalistic fallacy. Naturalistic fallacy is the attempt to argue from an *is* to an *ought*. In other words, to argue from facts to what ought to be done. Wishful thinking is the opposite, to argue from an *ought* to an *is*. In other words, from what ought to be done to facts.

## 3.3 Empirically sound

Beckman (2005, pp. 65–69) offers empirically sound as the second criterion for evaluating ideas. He argues that to test whether an argument is empirically sound, three questions have to be answered. Firstly, what is the evidence for the claims that are made? Secondly, is the evidence presented correct? And, thirdly, are the claims possible to test or verify?

To answer the first question, two things need to be done. Firstly, determining what claims are made, and, secondly, what evidence is given for these claims. The second question means determining whether the evidence given for the claims is correct or not. Verifying the correctness of such evidence could quickly turn into many independent research projects far beyond the scope of this thesis. Therefore, the evidence will be evaluated with the use of research already conducted in the field. In the case of Opinion number 23 from the EGE the

<sup>&</sup>lt;sup>12</sup> Natural law theory does not accept the naturalistic fallacy, rather it is claimed that certain aspects of nature are norm giving (see debate between Lon Fuller and Ernest Nagel in John Finnis, 1991, pp. 3–58).

empirical claims will mostly relate to scientific questions and risk assessments related to animal cloning.

The third question asks whether the claims made are possible to test or verify. Specifically, it asks whether the claims are possible to test scientifically. This question is inspired by Herbert Tingsten's view that value-questions are scientifically meaningless. Science is here understood as the systematic study of the material world. If claims are not scientific, on this understanding, then they are metaphysical claims. The point of distinguishing claims that are metaphysical from scientific claims is to say something about the arguments relation to science and research. By using the word value instead of metaphysical this distinction might become clearer. Whether animal suffering is bad is a value-question. This claim cannot be tested scientifically, but the plausibility of the claim can rightfully be discussed. Accordingly, when arguing about moral questions, value claims are a natural part of the discussion. However, to assess these value claims we have to include another criterion, namely normative reasonableness.

## 3.4 Normatively reasonable

Arguments can be criticized for being illogical or empirically unsound. Moreover, the values that arguments are based upon can be criticized for being more or less reasonable given a certain starting point. Beckman (2005, p. 72) describes two different strategies for the choice of starting point, internal and external. It is important to keep in mind that while the two first criteria could be applied to assess individual arguments; this criterion has to be applied to the deliberation as a whole.

Internal criticism of ideas means taking those ideals and values that the text itself takes as its starting point and ask whether the argument that is pursued is reasonable given the starting point that the text says it defends (Beckman, 2005, p. 72). One way of doing this is looking at incoherence in the text. A theory is incoherent if the arguments or the normative claims that are made cannot be deduced from a coherent framework of principles and values. If this is the case, the principles that are put forward in the text could be shown to be incompatible with each other. Another possibility is to point toward implications of a belief that seems to be incompatible with the values that are the starting point of the text (Beckman, 2005, p. 73). Internal criticism overlaps with the first criterion of logical validity as it is based on a logical assessment.

External criticism of ideas means that the starting point is different from the ideas and values in the text. Now the question is how the arguments in the text measure up to the normative requirements that are decided upon in the external criticism (Beckman, 2005, p. 75). This is mainly how the criteria in this thesis should be seen – an external criticism or assessment – with the important difference that it is an assessment of the deliberation and not the conclusions. The normatively reasonable criterion can be seen as evaluating that the recommendations are appropriately informed by relevant reasons (Mansbridge & Parkinson, 2012, p. 11).

Normative reasonableness is going to be specified by dividing the criterion into three: degree of clarification, clarity about uncertainties and assumptions and degree of justification. This division is not based on what Beckman (2005) writes but on my own specification which draws inspiration from the literature on moral expertise and the role of ethics committees. The specification is done to fit with the goal of these criteria, which is not to assess whether the committee makes correct judgments, but to evaluate epistemic qualities of deliberation. Normative reasonableness does not include an assessment of moral truth, but formal features of deliberation.

#### 3.4.1 Degree of clarification

That experts can help clarify the terms of the debate and therefore encourage a more informed debate on the issues seems to be a widely agreed upon fact, even across the different views on moral expertise (see for example Crosthwaite, 1995; Engelhardt Jr., 2011; Kliegman & Mahowald, 1986; Lillehammer, 2004; Wolff, 2011). This clarification includes two things: firstly, a relevant description of the status quo, and, secondly, a presentation of relevant ethical viewpoints and arguments for and against these.

The first requirement is that there is a relevant description of what the situation is when the committee starts its work (Wolff, 2011, pp. 196–197). The reason for why the committee is working on a specific issue is often due to technological advances that brings with them new ethical issues. A relevant description could here be to describe what makes this issue acute and how similar issues have been dealt with. If the committee is discussing a moral problem that is not new, then describing the current practice and the reasons for this practice might be relevant. Describing the status quo can be termed *conceptual analysis*. It is important to get rid of confusion and misunderstandings so that what is being discussed is

clear (Swift, 2004, pp. 140–141). It is only after it is made clear what is at stake that the correct solution can be decided upon.

The second requirement is a description of the relevant ethical viewpoints and arguments for and against these. This description should clarify what the disagreements are on the issue. In other words, what is at stake and what the trade-offs that have to be made are (Wolff, 2011, p. 167). The disagreements should be related to ethical theory, to make clear what assumptions and which beliefs underlie the different ways of reasoning. By doing this the committee will show an appreciation for the range of possible views.

Both these requirements are formulated using the term relevance. Assessing relevance can be tricky as it is inherently ambiguous and open for evaluation. Following Evert Vedung (1982), relevance can roughly be understood as implying that the descriptions "should be important and substantively pertinent to the matter at hand" (p. 139). Moreover, he offers two sub-rules. The first sub-rule is that whatever is said must be relevant to the topic. This means that irrelevant information should not be included. The second sub-rule is that relevant aspects of the subject should be acknowledged and presented. A committee can therefore be criticized both for including information that is irrelevant and for excluding information that should have been included.

When assessing the degree of clarification, the opposite of epistemic asymmetry – epistemic symmetry – might become a challenge. Information that might seem obvious to an expert might not be viewed in the same way by a layperson. As long as these committee reports have the people at large as their audience, epistemic symmetry might be a difficulty for an expert assessing a report.

#### 3.4.2 Clarity about uncertainties and assumptions

Making clear uncertainties and assumptions in both reasoning and recommendations should be a basic requirement for an ethics committee. It is a natural part of being an expert to be aware of what is not known, and what the committee lacks expertise in. Being an expert includes knowledge about the certainty of knowledge claims. This is important because there is clear evidence "that both experts and laypeople are systematically over confident when making judgments about, or in the presence of, uncertainty" (Granger & Carnegie, 2011, p. 709). Further, Geir Kirkebøen (2009, p. 182) writes in the context of project planning that "no bias in judgment and decision-making is more prevalent, and more potentially catastrophic, than overconfidence". The strength with which beliefs are held is not a clear guide to whether these beliefs are right or wrong (Wolff, 2011, p. 190). In the realm of ethics, choosing one solution rather than another to an ethical question can have far-reaching consequences. The only way to remedy this risk of overconfidence is to be clear about what uncertainties and assumptions the recommendations are based upon, so as to give recommendations based on the best available evidence. Cathrine Holst (2015, pp. 363–364) has described this as a mechanism called epistemic restraint. Only if the ethics committees provide the politicians with the information required in this criterion can politicians make their decisions with full awareness of the uncertainties involved and bear the responsibility of their office (Douglas, 2009, p. 155).

When a committee writes about empirical questions it is important to be clear about any uncertainties related to the research. They should be clear about what is not yet known and where additional research might be needed. Moreover, the committee should be clear about any areas of knowledge where their competence is limited. Making the judgments that an ethics committee should involves an assessment of the sufficiency of evidence to warrant a claim. This is especially important because if a non-expert reads a report, it is difficult to know if the committee has only focused on evidence that supports their claim and excluded important evidence to the contrary (Douglas, 2009, p. 151).

Different types of claims have different certainty of truth. Normative claims are less certain than descriptive claims. Therefore, it is even more important for ethics committees to be clear about uncertainties and assumptions. Normative claims often rely on descriptive claims, so that these two cannot always be clearly separated. As well as including the requirements described in the paragraph above, the committee should either show, or it should be clear, what the empirical evidence or normative claims that could lead the committee to an altered opinion are. Ethics committees will often be asked to give recommendations on ethical questions that have emerged due to the uses of new technology. In this instance, where the epistemic uncertainty is likely to be high, it is especially important to be clear about uncertainties and assumptions – because there is much uncertainty.

#### 3.4.3 Degree of justification

The recommendations given by the committee should also be well reasoned. In ethics, the reasoning for a point of view can be just as, if not more, interesting as the conclusions drawn. This is because ethicists often are concerned with developing ethical theory that can be applied on different ethical issues. The complete absence of reasons for an ethics committee's
recommendation is problematic. This is because experts should ensure that decisions are appropriately informed by logic, facts and relevant reasons (Mansbridge & Parkinson, 2012, p. 11). Justifying the reasons behind their recommendations is thus required.

It is important to require a high degree of justification. Even if we agree about the considerations that are relevant in a case, we can still disagree about their weight and therefore arrive at different conclusions. Moreover, it is reasonable to have more confidence in a recommendation that is well reasoned. The reasoning can also influence how other ethical questions are met, or how the same ethical questions are handled in the future. If the conclusions are based on a cost-benefit analysis, then the answer to the ethical question will change if the calculation changes. However, if absolute principles are given, then the ethical assessment would change under different circumstances. Most importantly, it is reasonable to believe that the high quality of deliberation and justification increases the likelihood of moral truth.

A committee should not be expected to comment or relate to all opinions no matter how outlandish or uncommon they are. Therefore, this criterion can be assessed by reference to common views, the use of texts that give an overview of the ethical field, and literature that the committee itself references.

# 3.5 How the criteria relate to the institutional context of the EGE

The European Group on Ethics in Science and New Technologies (EGE) is subject to a mandate and regulations on expert groups from the Commission. Moreover, they have their own rules of procedure. This institutional context has to be taken into account before the criteria are applied to the EGE. By looking at these regulations it can be determined whether the criteria have to be delimited. This is because it cannot be expected of the EGE to fulfill criteria that contradicts the regulations that it works within.

The European Commission regulations regard many aspects of governance. The relevant documents from the Commission on expert groups are: (European Commission, 2001, 2002a, 2002b, 2009, 2010a, 2010b, 2014). Regarding the EGE, the mandate 2005–2009 (European Commission, 2005a) the appointment of members (European Commission, 2005b) and the EGE's rules of procedure (EGE, 2005) are the relevant documents.

In what follows, the relevant aspects will be presented and quoted at some length. The Commission writes:

Scientific and other experts play an increasingly significant role in preparing and monitoring decisions...the advent of biotechnologies is highlighting the unprecedented moral and ethical issues thrown up by technology. This underlines the need for a wide range of disciplines and experience beyond the purely scientific. (European Commission, 2001, p. 15)

This forms the background to the Commission providing guidelines on the collection and use of expert advice, published in 2002 and developed thereafter, to "provide for the accountability, plurality and integrity of the expertise used" (European Commission, 2001, p. 16).

The guidelines are not very specific, but describe areas that are of concern to the Commission. Quality, openness and effectiveness are the three core principles that underpin the collection and use of expert advice by the Commission (European Commission, 2002a, pp. 9–10). The main concern of the Commission is not epistemic, but the guidelines do mention epistemic concerns, and this is what is relevant here. For example, they write that "good consultation serves...to improve the quality of the policy outcome" (European Commission, 2002b, p. 5). Concerning evidence, they highlight that expertise includes "stating what is unknown, or uncertain" (European Commission, 2002a, p. 12). Moreover, "Departments should insist that experts clearly highlight the evidence (e.g. sources, references) upon which they base their advice, as well as any persisting uncertainty and divergent views" (European Commission, 2002a, p. 12). Concerning the range of views, the Commission writes: "Both mainstream and divergent views should be considered" (European Commission, 2002a, p. 12). The experts should also be accountable and they should "be prepared to justify their advice by explaining the evidence and reasoning upon which it is based" (European Commission, 2002a, p. 10). The reports should be written so that "both the issues and the advice received should be made understandable to non-specialists" (European Commission, 2002a, p. 9).

The quotes above show the epistemic concerns that are included in the Commission regulations. The mandate or the rule of procedure does not include any epistemic concerns.

The Commission regulations underline the importance of highlighting uncertainties, that a range of views should be taken into account, giving good reasons for their advice and that the issue and advice should be made understandable to non-specialists. Nothing here contradicts the criteria that have been developed. Rather, they show that the requirements the EGE are under from the Commission regulations overlap to a great degree with the expectations from the criteria. The criteria do go further and are more specific on what is expected than the Commission regulations. The criteria do not, therefore, have to be delimited in any way before they are applied to the EGE's Opinion number 23.

# 3.6 Summing up

The table 3.4.1 gives a schematic overview of the criteria and how they have been specified. In this chapter, Beckman's (2005) three overall concerns for evaluating ideas; logical validity, empirical soundness and normative reasonableness have been specified to be applicable to deliberations in ethics committees' reports. These criteria will be applied to EGE's Opinion number 23 in the next chapter.

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Criterion	Specification	Further specification
Logically valid	Non-contradiction	<ol> <li>Contrary</li> <li>Adversarial</li> </ol>
	Valid inferences	<ol> <li>Naturalistic fallacy</li> <li>Wishful thinking</li> </ol>
Empirically sound	Wrongful empirical claims	1) Evidence for claims are correct or not
Normatively reasonable	Degree of clarification	1) Relevant description o status quo
		<ol> <li>Description of relevant ethical viewpoints and arguments for and against these</li> </ol>
	Clarity about uncertainties and assumptions	<ol> <li>Empirical questions: Make clear uncertainties in the research, what is not you known, additional research is required, competence is limited</li> </ol>
		<ol> <li>Value-questions: make clear assumptions and uncertainty underlying arguments</li> </ol>
	Degree of justification	<ol> <li>Well-argued justifications for recommendations</li> </ol>

# 4 Analysis

In this chapter the criteria developed in chapter 3 will be applied to EGE's Opinion number 23 on *Ethical aspects of animal cloning for food supply*. The chapter starts with an introduction and description of the Opinion (section 4.1). During the assessment of the Opinion I found that there was not that much to note concerning the first two criteria. Therefore, the assessment begins with a section which describes the results from the analysis to see if the recommendations were logically valid (section 4.2). Following that, the results of the analysis of the recommendations to see whether they were empirically sound is described (section 4.3). The results are presented in this way to avoid being too pedantic when there is not too much to comment on. After these two sections, the recommendations are analyzed to determine whether they are normatively reasonable (section 4.4). The Opinion includes thirteen recommendations of which four are recommendations if food products derived from animal clones were introduced to the European market. These last four are not assessed as they overlap to a great degree with other recommendations that are made. Therefore, only a total of nine recommendations are assessed. These recommendations are assessed in chronological order as they are presented in the Opinion (section 4.4.1 – 4.4.9).

As only the recommendations are being assessed, the evaluation of relevance only applies to the recommendations that are in the Opinion. The EGE might have excluded or discussed other possible recommendations, but this is not assessed. The chapter ends by summing up and a table with an overview of the findings (section 4.5).

# 4.1 Opinion number 23

In February 2007, the President of European Commission, José Manuel Barroso asked the EGE to issue an Opinion on ethical implications of cloning animals for food supply. At the same time the European Food Safety Authority (EFSA) was also asked to issue a scientific Opinion on the matter. The request from the Commission followed the announcement in December 2006 by the U.S. Food and Drug Administration (FDA) concerning the possible authorization of food products derived from cloned cattle, pigs and goats into the market. The EFSA adopted their Opinion on 15 July 2008; about six months after the EGE issued theirs. Therefore, the scientific evidence that the EGE draws upon is the draft report from the EFSA which was released the day before the EGE's final Opinion on 16 January 2008.

The EFSA and the EGE have different domains of expertise. As they write in their reports: "The ethical aspects of cloning are outside the remit of EFSA" (EFSA 2008, p. 7). Similarly, the EGE write that they have "neither the competence nor the authority to assess risks related to food safety" (EGE, 2008, p. 40). The EGE's Opinion is therefore concerned with ethical issues connected with animal cloning for food supply. Other limitations to keep in mind when assessing the Opinion from the EGE is that, as was described above the Opinion was adopted before the final Opinion from the EFSA. It took a year from the Commission requesting the Opinion from the EGE until it was adopted.

Opinion number 23 is an ethical assessment about animal cloning for food supply. Cloning involves creating a new organism or cell that has an identical genetic make-up to the original organism. In agriculture, the cloning of animals could be useful to create animals with desired characteristics. Moreover, clones can be used for breeding. Clone progeny is the term used to describe the offspring where at least one of the parents is a clone and that was created by sexual reproduction.

The Opinion is divided into five sections. The first section includes an abstract, a resolution and a preamble. The second section includes the scientific background to animal cloning. Here the terms are defined, the historical background is described, animal health and welfare concerns are discussed, long-term future applications of animal cloning are touched upon and animal cloning at the international level is presented. The third section concerns the legal aspects. This includes an overview of existing EU regulations, national legislation in the member states, World Trade Organization (WTO) agreements and intellectual property regulations. The fourth section is about the ethical issues with animal cloning. Interestingly, this chapter is only five pages long. It includes a description of different views of the moral status of animals, concerns about sustainability and animal farming, religious considerations, public perception and public acceptance, and, finally, discussion about consumers' right to know if the food products that are bought are from cloned animals or not. The final section includes the thirteen different recommendations along with sections that sum up and give the background for the recommendations. The EGE's main recommendation is that production of food from clones and their offspring is not ethically justified. This main recommendation was dissented by one member of the Group.<sup>13</sup> Following the main recommendation, the EGE presents four recommendations if, in the future, these food products are allowed on the

<sup>&</sup>lt;sup>13</sup> The dissention was due primarily to the view that the free choice of consumers was violated by a ban on food products from animal cloning (EGE, 2008, p. 49).

European food market. In addition, the EGE made eight recommendations on different aspects related to the issue of animal cloning for food supply.

The scope of the Opinion is presented by the EGE in this way:

complements and updates the previous one and is intended to be complementary to that of the EFSA. The ethical considerations in this Opinion will therefore refer to the use of animal cloning in breeding establishments in order to produce progeny that could enter the food chain. (p. 5)

The earlier Opinion that is referred to is Opinion number 9 on *Ethical aspects of cloning techniques* from 1997. Moreover, the EGE (2008) writes this about the need for revision of the Opinion: "Since further research is needed and cloning technologies are constantly improving, this Opinion could be reconsidered, and possibly revised, in the light of new scientific data and societal considerations" (p. 47).

# 4.2 Logically valid

To fulfill the criterion of logical validity the EGE must not make recommendations that are contradictory or make inferences that are invalid. One example will be shown here to show how the analysis has been conducted. The main recommendation is that the "the EGE does not see convincing arguments to justify the production of food from clones and their offspring" (EGE, 2008, p. 45). The premise for this recommendation is that the current level of animal suffering related to cloning is bad and that it cannot be justified because of this. This recommendation is logically valid as the premise is in line with the recommendation.

After analyzing all the recommendations, the conclusion is that all of the recommendations are logically valid. They are neither contrary, adversarial, naturalistic fallacies or based on wishful thinking.

### 4.3 Empirically sound

The criterion empirical soundness assesses whether the EGE made wrongful empirical claims. The overall picture is that the empirical evidence is sound, but with some notable deficiencies. Related to evaluating the recommendations based on their empirical soundness it is also relevant to look at the quality of the sources that are used, if the evidence is correct or not, whether it gives a correct picture of the existing knowledge in the field and if there is a lack of evidence to support claims. Moreover, the way the evidence is presented is also important to assess. Parts of this assessment overlaps to a certain degree with the specification of normative reasonableness into clarity about uncertainties and assumptions.

In general, many of the recommendations are based on scientific evidence from the EFSA. This is regarded as a reliable source of information. The EGE (2008) acknowledges that the main recommendation builds on the draft Opinion from the EFSA and that the final "EFSA Opinion will provide a more detailed analysis of the animal health implications of SCNT based upon the actually available data" (p. 12).

Although they are not strictly wrongful empirical claims, two examples that still deserve mention follow. Firstly, the EGE (2008) recommends that "the Commission should take initiatives to prepare a Code of Conduct on responsible farm animal breeding, including animal cloning" (p. 46). The arguments for why a Code of Conduct is necessary are lacking. The EGE considers neither other possibilities or explains what a Code of Conduct is and how it would meet animal welfare concerns. Whether the recommendations should be considered empirically sound is not obvious, because there is a lack of empirical evidence in the Opinion.

Secondly, according to the EGE (2008) public debates should be promoted on the use of animal cloning and its potential implications because "at present time it seems that the public is not fully informed about the uses and implications of cloning" (p. 36). This last statement is not supported by any references or elaborated as to what is meant by not fully informed. These types of statements, which are difficult to assess because they are not clearly defined or explained, are a general difficulty in the Opinion. In the case of promoting public debate it is necessary to specify what is meant by an informed public.

It is revealed, however, that the use of references in the Opinion is not very satisfactory, and falls short of what we should expect from moral experts. It is the most serious lack of empirical soundness in the EGE Opinion. The main problem with the use of references is that many of them are incomplete. Furthermore, the referencing is not consistent and some of the references cannot be considered reliable sources. Footnotes are the main way of referencing in the Opinion. However, in certain places the references are given as in-text citations. For example, one place the reference is given as "(see Revel, 2000:43–59)" (EGE, 2008, p. 10). This is problematic because there is no list of references included in the Opinion

and it is therefore difficult to find the source they are referring to, as not enough information is given. In other places this is solved by giving a complete reference in the footnote. References to webpages are throughout given with the URL only. Most referencing styles require author, year, title, date of access and URL. Webpages might be moved or removed and therefore more information than just the URL should be included, especially if there is reason to believe that the source material will change over time. Another issue is the type of webpages that the EGE references. For some content it is clear that other references should have been used. For example, a reference to the Green Party in Canada is used when the EGE (2008, p. 17) writes that cloning may have a negative impact on adaptive mechanisms. The website is no longer accessible, but there is no reason that the Green Party should be the most reliable source for this information. Another example, which is not as blameworthy, is a reference to some statistics from a FAO report, and instead of referencing the report itself the EGE (2008, p. 34) cites a news article on the FAO webpage describing the report. One last example is that under sub-section 2.5.1 Animal health the EGE (2008, p. 11) describes statistics concerning cloned animals' health, but does not give any information as to where the data is taken from.

In sum, it has not been found that the EGE has presented outright wrongful empirical claims. However, it is clear from the examples above that this does not mean that the Opinion has fully met the criterion. As experts, the Group should clearly define what terms mean, use reliable sources and reference these in a coherent and verifiable way.

# 4.4 Normatively reasonable

The recommendations are assessed in order to determine if they are normatively reasonable. The recommendations are first presented. Thereafter, the normative reasonableness is assessed. This criterion has been specified to include the degree of clarification, clarity about uncertainties and assumptions and degree of justification.

#### 4.4.1 Main recommendation

The EGE's (2008) main recommendation is that "At present, the EGE does not see convincing arguments to justify the production of food from clones and their offspring" (p. 45), and

Considering the current level of suffering and health problems of surrogate dams and animal clones, the EGE has doubts as to whether cloning animals for food supply is ethically justified. Whether this applies also to the progeny is open to further scientific research. (p. 45)

This is the main recommendation and it is reasonable to read the Opinion as leading up to this conclusion. However, as will be made clear later in the chapter there are different sub-sections dealing with the different recommendations. Concerning the main recommendation, the most important sub-sections are *4. Ethical issues, 4.1 The moral status of animals, 4.3 Religious considerations, 5.2 Arguments on animal cloning for food* and certain sub-sections in the section on scientific background to animal cloning, especially *2.5 Animal health and welfare problems related to cloning, 2.6 Potential applications of animal cloning for the food supply* and *2.7 Long-term future applications of animal cloning.* 

The introduction to section 4 on ethical issues presents a table divided into four different concerns: concerns for the cloned animals, concerns for humans, concerns for the environment and concerns for the society. They note that some do not believe that animals have moral status and therefore can be used for instrumental purposes by humans. Under subsection 4.1 the EGE presents different views of the moral status of animals dividing the different theories into arguments based on, (a) the ability to feel pleasure and pain, (b) subjects-of-a-life, and (c) an element of biodiversity. Sub-section 4.3 lays out in one short paragraph the different views of animals in Western and Eastern cultures. Sub-section 5.2 presents arguments for and against animal cloning for food. The major arguments for are economic ones, and the arguments against are human health and safety, animal health and welfare, animal integrity, biodiversity, the risk of epidemics, social and economic effects on rural areas, and agricultural trade. Sub-section 2.5 deals with animal health and welfare problems related to cloning. The EGE presents statistics for animal health and describes abnormalities correlated with cloning. Under sub-section 2.6 the EGE writes that the main application for animal cloning for food production today is the propagation of a desirable genotype which works faster than through standard mating schemes. Sub-section 2.7 describes the long-term application that is cloning combined with genetic modifications.

The EGE has a relevant description of the status quo, both with a legal and a scientific overview. What is more lacking is a more thorough presentation of ethical viewpoints and arguments for and against these. Different ethical viewpoints are presented, but mostly briefly by using one or a couple of sentences on them. For example, under sub-section 4.1 concerning the moral status of animals they write that "another theory advocates that animals have a moral value in themselves as 'subjects-of-life' (intrinsic value argument) and states that both human and non-human beings are (analogously) moral entities because of their sentient capacities" (EGE, 2008, p. 33). Arguments are not presented for or against the different views on the moral status of animals. Neither, is it explained how this relates to the final recommendation. What is at stake is not made entirely clear.

The empirical uncertainties are made clear. They mention what is not yet known, in that additional research is required and that their competence is limited and that the EFSA has the responsibility for the scientific advice. By recommending further research the EGE is also clear about the uncertainties relating to knowledge about animal cloning for food supply. Moreover, the EGE (2008) show an appreciation for the uncertainties by writing in their main recommendation that "whether this applies also to the offspring is open to further scientific research" (p. 45) and qualifying this with "at present" (p. 45). This implies that in light of new evidence the recommendation could change. The assumptions related to value judgments that the argument is built on are however not made clear. It seems that the EGE takes a consequentialist view on this and that the recommendations build on a cost-benefit analysis where the amount of animal suffering outweighs the possible benefits of animal cloning for food supply and for research are assessed differently, and also why the recommendation starts with at present.

The degree of justification is not high. After reading the whole Opinion it is not clear what the final recommendation is going to be before actually reading it. Mostly, different views are mentioned, but the EGE does not take a stand on them or mention how they view them. Therefore, it is not clear how the different considerations are weighed. The EGE (2008) writes that the use of animal cloning for biomedical purposes and for sources of organs for transplantation "entails completely different aspects that need to be considered from the legal and ethical points of view" (p. 15). However, they do not give reasons why these different uses entail completely different aspects. In fact, a common view is to see these two different uses of animal cloning as meeting similar ethical issues. In an earlier Opinion from the EGE, then as the Group of Advisers on Ethical Implications of Biotechnology (1997) they argue that animal cloning for research purposes should be allowed. It would be interesting to know why these two things are evaluated differently. It might have something to do with public

perception, but it is difficult to know when this is not made explicit. Paul Thompson (1999, p. 207) writes that: "If current practices of euthanasia, slaughter and artificial insemination are acceptable in research and food production, then the use of these practices to develop cloned animals should be acceptable". What is missing is an explanation from the EGE for the morally relevant differences between these two cases.

#### 4.4.2 Animal welfare

The recommendation from the EGE (2008) on this point is the following:

Further studies and analyses on long-term animal welfare and health implications for clones and their offspring, as well as more comparative analyses with other assisted and traditional reproductive technologies in animal farming, should be carried out for a proper assessment of this issue, in line with the EFSA draft opinion. The Commission should take initiatives to prepare a Code of Conduct on responsible farm animal breeding, including animal cloning. (p. 46)

The background for this recommendation is given in sub-sections 2.5 Animal health and welfare problems related to cloning and 5.4 Animal welfare and health.

Under sub-section 2.5 the health and welfare issues of cloned animals is described based on the current research. Concerning this recommendation, the EGE (2008) write that "the available data, however, are still limited to allow at present any definitive conclusions" (p. 11) and "the EFSA draft Opinion provides detailed analysis of the animal welfare implications of SCNT based on the actually available data" (p. 12). Under sub-section 5.4 the EGE (2008) write that "having regard to information provided by EFSA, the Group has noted a lack of data on the long-term animal welfare and health implications of clones and their offspring" (p. 41) and "the Group is concerned that intensive breeding techniques may adversely affect animal welfare and feels that a review of current practices should be conducted at European level" (p. 41). The EGE therefore recommends both further research and preparation of a Code of Conduct.

The degree of clarification is considered high on the first part of the recommendation as the EGE presents the relevant knowledge in the field and what is not yet known. However, what a Code of Conduct is and why it is necessary is not clarified. This was also mentioned under the section on empirical soundness, and that is because these two requirements overlap to a certain degree. The difference is that under empirical soundness it was included because there was a lack of evidence for the claim, now it is included because nothing is written about how a Code of Conduct is and therefore it is not clarified and there is no description of the status quo. Neither is it described why there is reason to be concerned about intensive breeding techniques. It does not seem necessary to present different ethical views on a suggestion of further research and preparation of a Code of Conduct.

The uncertainties related to why further research is needed are made clear. However, what the concern of intensive breeding techniques is grounded in is not written. It is just noted. The uncertainties and assumptions related to the first part of the recommendation are therefore considered satisfactory, but not the second part of the recommendation.

The same is true then for the justification. It is clear why further studies are needed, but not why a Code of Conduct is correct.

#### 4.4.3 Farm animal biodiversity and sustainability

The recommendation from the EGE (2008) on this point is the following: "The Commission should take proper measures to preserve the genetic heritage of farm animal species, for example by funding projects designed to preserve domesticated breeds in Europe and to promote sustainable agriculture" (p. 46). The background for this recommendation is given under sub-sections 2.9 *Biodiversity, epidemics, 4.2 Sustainability and animal farming* and 5.5 *Farm animal biodiversity and sustainability*.

Under sub-section 2.9 the EGE presents the concern that cloning might have a negative impact on adaptive mechanisms and that the loss of adaptive mechanisms might lead to epidemics. They also present counterarguments that cloning is limited so it will not have any effect, and that cloning can be used to breed animals which are resistant to diseases or specific environments. Under sub-section 4.2 a description of ownership of farming properties between several countries and the EU is followed by the number of cattle breeds and which countries are likely to initially use animal cloning for food supply. Further, they argue that sustainable farming is an important consideration in the discussion on ethics of animal cloning. Lastly, they mention the concern that animal cloning will open the door for human

cloning. Under sub-section 5.5 the EGE raises several issues concerning cloning of animals; it could make it easier to maintain certain rare animals, it can reduce diversity creating inbreeding problems and global epidemics. Lastly, they mention that they are concerned about the impact of increasing meat consumption on the environment. The examples of ways to meet the genetic heritage issue are not assessed.

Although the degree of clarification could have been higher, the EGE presents the issue and includes arguments for and against. However, the description does include much that seems irrelevant. They mention things that do not seem to add anything and that are not discussed or explained. It is difficult to know whether these things carry any weight in the reasoning that the EGE presents. For example, under sub-section 5.5 the EGE (2008) writes that "the Group is concerned about the global impact of increasing meat consumption on the environment as cloning of farm animals could be another step towards increasing such impact" (p. 42). This is not mentioned anywhere else, and it is unclear what it adds to the discussion. It is therefore a statement that seems irrelevant. However, one thing is the more technical issue concerning epidemics and disease; the ethical views on diversity are another matter. This is perhaps mentioned, but not more than that. For example, the EGE (2008) writes:

Sustainable farming is indeed an important focal concept. It involves many dimensions, including human health, safety, animal welfare, environmental concerns, biodiversity and global justice. It does not contain or add anything that is not covered by these dimensions; it combines them. (p. 35)

They only write that sustainable farming is important, but do not describe what these terms mean or what they imply. Therefore, the presentation of relevant ethical viewpoints is lacking.

The recommendation seems to rely on an assumption that the problem with a lack of genetic diversity is if it affects human food consumption. However, this is not made clear. It could be argued, depending on what view one has on the value of animals that diversity in itself is important. It is not clear that the view that the EGE takes is the correct perspective because it is not argued for. Therefore, the clarification of uncertainties and assumptions is not made clear.

The justification for the conclusion is given under sub-section 5.5 and should be considered satisfactory. The EGE is concerned, among other things, to avoid global epidemics. However, the fact that artificial insemination is widespread and that this also challenges the genetic diversity of animals is an aspect that could have been mentioned by the EGE. In a sense, the genetic diversity debate concerning cloning can be seen as an extension of the debate on artificial insemination.

#### 4.4.4 Public participation

The recommendation from the EGE (2008) on this point is the following:

Public debates should be promoted on the impact of farm animal cloning on agriculture and the environment, on the societal impact of increasing meat consumption and rearing of bovines, and on the fair distribution of food resources. The Commission should take a pro-active role in promoting public discussion on the use of animal cloning and its potential implications, by financing a number of *ad hoc* initiatives aimed at promoting public debate on the marketing of food products derived from animal cloning. (p. 46)

The background for this recommendation is given under sub-sections 4.4 Public perception and public acceptance and 5.6.1 Public participation.

Under sub-section 4.4 the EGE (2008) writes that "at present time it seems that the public is not fully informed about the uses and implications of cloning" (p. 36). Moreover, they present the project *Cloning in public* which has as one of its goals to stimulate debate on farm animal cloning. Under sub-section 5.6.1 the EGE (2008) argues that "it is of the utmost importance, in terms of global justice and environmental impact, that a debate be held concerning the issues underlying and accompanying this global development" (p. 42) and "in order to be able to exercise its freedom of choice, the public also needs to be adequately informed, and public debate should therefore be promoted" (p. 42).

The recommendation comes with a relevant description of the status quo. However, the EGE could have made clearer how their main recommendation in the Opinion relates to

this public debate that they recommend. It is not clear what the role of the public debate is when the EGE has already recommended a solution to the ethical issue. Recommending more public debate was also given in an earlier Opinion from 1997 on *Ethical aspects of cloning techniques* (Group of Advisers on the Ethical Implications of Biotechnology, 1997, p. 7). The uncertainties related to the lack of knowledge are made clear. However, the different views regarding the importance of public debate are not made as clear.

The justification for the recommendation is that the public shall be able to exercise its freedom of choice and that it is important to hold a debate in terms of global justice and environmental impact. What the latter point means is rather unclear and it would have helped with a further specification. What the EGE does not touch upon is the role of public debate in a legitimate democratic decision on this issue (Lassen, Gjerris, & Sandøe, 2006, p. 1001). The way that the EGE presents this makes it unclear what the role of these public debates should be. Perhaps it is a goal in itself, but this is not stated or argued for. Another way to see it is that as long as the public is against animal cloning for food supply it is illegitimate to introduce the technology. The argument is then that it is the foisting of the technology upon the public that is wrong, and not the technology itself (Thompson, 1999, p. 216). The clarity of uncertainties and assumptions and the degree of justification should therefore be considered unsatisfactory.

#### 4.4.5 Public perception

The recommendation from the EGE (2008) on this point is the following:

The Commission should launch a thematic Eurobarometer survey and qualitative studies on animal cloning for food supply, in order to collect indicators on public perception concerning the introduction of such products to the food market as is being done in other countries. (p. 46)

The background for this recommendation is given under sub-section 4.4 Public perception and public acceptance and 5.6.2 Public perception. A flash Eurobarometer on Europeans' attitudes toward animal cloning was published in October 2008.

Under sub-section 4.4 the EGE presents polling from the US on food products from cloned animals, and describes the knowledge that has been gained through earlier Eurobarometer surveys on this form of biotechnology. Moreover, they describe briefly the project entitled *Cloning in public*, a Commission supported project under the Sixth Framework Program. Under sub-section 5.6.2 the EGE (2008) acknowledges that there are different opinions on animal cloning for food supply and recommend a thematic Eurobarometer survey because "there are as yet no definitive indicators on the public perception of animal cloning for food supply and food products derived from cloned animals and their offspring" (p. 43). The recommendation of a Eurobarometer survey and qualitative studies is based on the claim that knowledge of the public perception of this issue is very limited.

The degree of clarification should be seen as satisfactory. The EGE (2008) writes that "according to available data, there is public acceptance for cloning as a research tool in biomedicine. . .but not for its application in agriculture" (p. 36). They could have added that based on this earlier research there is good reason to expect that the public is likely to meet animal cloning for food supply with skepticism (Lassen, 2005; Lassen et al., 2006). What the EGE is not clear about is why this further research is important. They are clear about the uncertainties related to the empirical questions, but not about why more research is necessary.

The only reason given for doing more research is the lack of knowledge. The EGE should also have reflected upon why this research is useful. The EGE (2008) writes that "public perception of animal cloning is likely to play a major role in its development and its commercial prospects" (pp. 35–36). However, reasons are not given for why this information is important for the EGE or the Commission and what, if anything, it should mean for policy. It is also interesting to note that while they write that "at the present time it seems that the public is not fully informed about the uses and implications of cloning" (p. 36) they do not reflect upon whether the survey will measure informed opinions or whether they will be gut reactions (Fiester, 2005, p. 329). As Habermas (2012, p. 126) writes: "That popular opinion established by opinion polls is not the same thing as the outcome of a public deliberative process leading to the formation of a democratic will". Or as Jesper Lassen et al. (2006, p. 996) writes: "As they acquire more information, people are better able to form an opinion for or against biotechnology – that is, there is a decrease in the number of ´do not know'". Further, it could also have been discussed what role public opinion should play in policymaking (Levitt, 2003). Perhaps the EGE believes that further research is a goal in itself.

However, if this is the case, this should be argued for. The recommendation therefore has a low degree of justification.

#### 4.4.6 Labeling

The recommendation from the EGE (2008) on this point is that:

The EGE is aware of the technical difficulties of labelling products from offspring; nevertheless it recommends that the Commission take the initiative in devising targeted procedures prior to the marketing of such food in the EU. (p. 46)

The background for this recommendation is given under sub-sections 3.1.1 EU food regulation, 4. 5 The consumer's right to know, free choice and labelling and 5.7 Traceability and labelling.

Under sub-section 3.1.1 the EGE describes the current regulations concerning food in the EU and how it relates to food products from clones. Under sub-section 4.5 the EGE (2008) writes that "once food safety risks are ruled out, a possible concern would be a requirement for consumer information and product labelling" (p. 36). They then go on to describe what this would entail and the difficulties involved. Under sub-section 5.7 the EGE (2008) describes issues that traceability and labeling raises and they claim "that consumer freedom can only be achieved when consumers have sufficient information to be able to choose the kind of products they want" (p. 43). The recommendation is based on the premise that consumer freedom is important. To ensure this freedom, the solution is to label products so that the consumers have sufficient information to make an informed decision.

The EGE has a relevant description of the status quo by describing the legal framework that is in place, what other labeling schemes are in place, and the difficulties of how and what to label. However, different ethical viewpoints on the need for labeling are not presented. For example, Thompson (1999, p. 197) argues "the market structure for products of cloned animals should protect individual choice, and should recognize that many individuals find the prospect of cloning (or consuming cloned animals) repugnant". This is similar to the view the EGE presents. However, one could also argue that it is not correct to entrust questions concerning ethics to the consumer alone. This argument could lead to the

conclusion that labeling is not necessary; because these ethical issues are societal decisions not individual ones. This view is not mentioned by the EGE. Moreover, there are also questions concerning whether the cost associated with labeling are worth it. The costs and economic consequences of labeling may "outweigh the ethical significance of insuring informed consent" (Thompson, 1999, p. 215). That is a trade-off that is not clearly presented even though the EGE notes the technical difficulties of labeling. The importance of labeling can also be justified in different ways. For example, as a precondition for efficiency or with minority rights (Thompson, 1999, p. 214). In conclusion, the clarification of the issue is not satisfactory.

The EGE only describes the uncertainties when it comes to the technical difficulties of labeling. This is not sufficient, and other assumptions underlying the argument should have been made clear. This also means that the degree of justification is low.

#### 4.4.7 Intellectual property issues

The recommendation from the EGE (2008) on this point is that: "Clarification should be provided as to whether the exclusion clauses in Directive 98/44/EC (Art. 6d) on patentability of biological inventions and the EPO rules (23 d) apply to animal cloning for food supply" (p. 46). The background for this recommendation is given under sub-section *3.5 Intellectual Property (IP) regulation* and *5.8 Intellectual property issues*. Under sub-section *3.5* the legal framework surrounding whether animal cloning for food can be patented or not is presented. The EGE shows that the legal framework is not entirely clear. Under sub-section *5.8* the EGE (2008) gives this reason for the recommendation:

So far, patenting in animal cloning is limited to nuclear transfer techniques. The Group is concerned that patents might be extended to specific genes or to animals, and that this would lead to a monopoly/concentration of the resources that are important for breeding. (p. 43)

The recommendation is then for clarification of the current legal framework.

The description of the status quo is sufficient as the current legal framework is explained and it is substantiated why this framework needs clarification. This recommendation is based on a concern for the consequences of patenting. However, different views on patenting are not presented. As this is the motivation behind the recommendation it is reasonable to expect that this is discussed more and that the positive and the negative sides of patenting are described. Instead the concern is just described in the sentence quoted above. Therefore, the presentation of relevant ethical viewpoints is not satisfactory.

The clarity about uncertainties and assumptions is also unsatisfactory. Why the legal clarification is needed is made clear, but not the assumptions behind the motivation for this. It might be that the EGE considers the viewpoint they have as so uncontroversial that is does not have to be properly justified. However, this leads to the conclusion that the degree of justification is also unsatisfactory.

#### 4.4.8 Global trade and consumer freedom

The recommendation from the EGE (2008) on this point is that:

The EGE is aware that import issues in respect of food products derived from cloned animals, including compliance with World Trade Organization provisions, may complicate the market situation; however, the EGE recommends that the Commission take initiatives to ensure consumers' freedom and rights. (pp. 46–47)

The background for this recommendation is given under sub-section 3.3 World Trade Organization (WTO), GATT and SPS agreements and 5.9 Global trade. Under sub-section 3.3 the relevant agreements and articles are presented. Under sub-section 5.9, the EGE presents the dilemma between free trade considerations and the ethical concerns regarding the cloning of animals. WTO agreements are based on strict requirements for restricting free trade, and "resolving this political dilemma is not easy" (EGE, 2008, p. 44). Further, the EGE points to examples where the EU has trade restrictions today. Finally, they note articles from the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) and agreement relating to risk assessment. It is not entirely clear from the recommendation as to whether the EGE is proposing that the Commission works toward a ban. However, elsewhere the EGE (2008) writes that:

the Group therefore considers that the import of cloned animals, their offspring and materials derived from cloned animals (e.g. semen and food products, as described in 3.1 and 3.3) should be conditional on the documentation as indicated in this Opinion, in particular with regard to traceability provisions and animal welfare. (p. 44)

The EGE seems to argue that import has to be limited if conditions of traceability and animal welfare are not met.

The EGE has a relevant description of the status quo by both showing the political dilemma and the legal framework that exists. They acknowledge that it is a trade-off between free trade consideration and ethical concerns regarding food products from cloned animals. This shows the relevant ethical viewpoints, but they should have been further elaborated.

By showing that the legal situation is not clear, the EGE shows the uncertainties related to the feasibility of ensuring the limits on trade. The EGE also shows the assumption that the argument is based on, namely that consumers' freedom and rights are more important than free trade.

The EGE shows clearly that it considers the ethical aspects of animal cloning for food as carrying more weight than free trade considerations. This is regarded as sufficient justification in this context.

#### 4.4.9 Research

The last of the EGE's (2008) recommendations is that:

Further research is needed, in particular basic research into animal cloning, as well as the impact on human health, and animal welfare for farmed species other than those covered by EFSA. Similarly, further studies on the ethical, legal and social implications of animal cloning for food supply as well as qualitative studies on public perception should be carried out. (p. 47) The background for this recommendation is not given in one section of the Opinion but is based on the evidence that is presented overall.

The EGE is clear throughout the report that the recommendations are based on limited evidence and that further research is needed in the field. Through the use of the EFSA draft Opinion they underline this. The EGE (2008) describe the current scientific knowledge from the FDA and EFSA, and highlight that "to date, there has been no comprehensive scientific risk assessment at EU level on the use of products from cloned animals and their offspring" (p. 15). This provides a relevant description of the status quo for the first part of the recommendation. However, the second part lacks motivation. The EGE's (2008) Opinion must be seen as part of "further studies on the ethical, legal and social implications of animal cloning for food supply" (p. 47). It is unclear from the Opinion what is lacking in this research. The need for qualitative studies on public perception is substantiated by the claim "there are as yet no definitive indicators on the public perception of animal cloning for food supply and food products derived from cloned animals and their offspring" (p. 43). This seems sufficient. A description of relevant ethical viewpoints does not seem necessary regarding the need for further research. However, the EGE could have been clearer as to why further research is important. The degree of clarification is therefore high on two points and low on one.

The recommendation concerning the need for further research seems to be based on the implicit assumption that further research will be positive. However, the only reason that is given for doing more research is the lack of knowledge. The EGE are clear about the uncertainties related to the empirical question, but not about why more research is necessary.

The EGE does not specify to any great degree what this new information from further research will bring to the table. They should have reflected upon why this research is useful and important. For example, they show that not enough information concerning animal health issues exists, but do not discuss what types of evidence could have led to altered conclusions. By not being clear enough about what the main recommendation builds on, it is also difficult to know what new research is relevant for the EGE. This is a similar criticism as given under section 4.4.5. The recommendation therefore has a low degree of justification.

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# 4.5 Summing up

The analysis has shown that the EGE fulfills the criterion logically valid. The Opinion is mostly empirically sound, but lacks empirical evidence in certain places. Moreover, statements are often not clearly defined and explained. However, the most serious mistake is the lackluster use of references.

The biggest weakness that was revealed through assessing the Opinion's recommendations was their lack of normative reasonableness. The general picture is that there is mostly a relevant description of the status quo. However, if different ethical viewpoints are presented at all they are just done so briefly and without much explanation or arguments for and against the different positions. This means that the EGE mostly does not make the necessary clarification to show the trade-offs that should be presented. Whether the EGE is clear about uncertainties and assumptions varies. Mostly, uncertainties related to the existing scientific knowledge in the field are presented in a good way. However, the assumptions underlying the ethical arguments from the EGE are seldom made clear. In fact, it is often difficult to see exactly what assumptions an argument builds on and obviously then also what uncertainties the EGE sees as related to these arguments. The degree of justification of the recommendation overall is low. Counterarguments are seldom presented, and arguments are stated rather than fully explained. This is below the standard of normative reasonableness that we should expect from such an ethics committee

We can observe that there is a connection between a relevant description of the status quo and the assessment of whether the EGE presents the uncertainties related to the empirical questions. If there is a relevant description of the status quo, then the uncertainties related to the empirical questions are usually also good. Different ethical viewpoints are seldom presented and this leads to the assumptions related to value-questions and the degree of justification to also be low. The one time, under section 4.4.8, where there is a somewhat relevant presentation of relevant ethical viewpoints, the EGE is also sufficiently clear about the uncertainties related to the value judgments and the justification for the recommendations.

The EGE does therefore only partly meet the epistemic criteria for assessing deliberations of moral experts on ethics committees.

Criterion	Specification	Main findings	
Logically valid	Non-contradiction	The EGE fulfills the criterion.	
	Valid inferences	None of the recommendations are based on contradictions, or invalid inferences.	
Empirically sound	Wrongful empirical claims	The EGE does not make any wrongful empirical claims. However, the use of references, and sometimes the lack of references means that the criterion has not been fully met.	
Normatively reasonable	Degree of clarification	The EGE mostly presents relevant descriptions of the status quo, but does not present different ethical viewpoints and arguments for and against these	
	Clarity about uncertainties and assumptions	Uncertainties related to empirical questions are mostly good. Related to value- questions, the EGE is mostly not clear about the uncertainties and assumptions.	
	Degree of justification	The EGE's degree of justification is overall low. Views are most often stated and not explained. Counterarguments are seldom mentioned.	

Table 4.5.1 – Overview of the main findings from the analysis

# 5 Conclusion

In this chapter two things are done. Firstly, with the assessment of EGE's Opinion number 23 in mind, the relevance of the criteria developed in this thesis is discussed (section 5.1). Secondly, whether the findings from the analysis have policy implications is discussed and avenues for further research are pointed toward (section 5.2).

### 5.1 The relevance of the criteria

The starting point of this thesis was the recognition that through ethics committees, moral experts play an important role in giving advice to governments on ethical issues. The legitimacy of these committees is intimately connected to their members' performance as moral experts. It was therefore important to develop criteria to evaluate this performance. Based on Ludvig Beckman's (2005) three overall concerns for evaluating ideas; logical validity, empirical soundness and normative reasonableness, epistemic criteria were developed. Logical validity was specified to include non-contradiction and valid inferences. Empirical soundness was specified to include wrongful empirical claims. Normative reasonableness was specified to include an evaluation of the degree of clarification, whether the committee was clear about uncertainties and assumptions and the degree of justification.

These criteria were applied to the EGE's Opinion number 23. The main findings were that the recommendations from the EGE were logically valid, but due to the poor use of sources and referencing the recommendations were lacking in empirical soundness. The normative reasonableness was low overall. Views were most often stated and not explained. Counterarguments were seldom mentioned.

The research question specifies that the criteria should be relevant epistemic criteria for assessing deliberations of moral experts on ethics committees. Relevance implies that the criteria relate to moral experts on ethics committees in an appropriate way.

The criteria can be seen as placing too high expectations on the performance of ethics committees. If the criteria are considered unreasonable and unrealistic to meet in the format of a committee report, this is a challenge for the criteria's relevance. Among other things, to fulfill the criteria normative reasonableness, the report from a committee has to be of a certain length. Depending on the width of the topic and the scope of the question being discussed, a short committee report will most likely not do very well in such an assessment. This, I

believe, does not make the criteria too demanding. It is rather a consequence of what we should expect of moral experts in this context.

Each criterion is now looked at in turn. Logical validity is an important criterion to include. The way this criterion has been specified, it only takes into consideration what can be viewed as the most important and most obvious issues. Another approach could be to include more aspects to allow for a broader assessment. However, it would be beyond the scope of any single study to evaluate all aspects of logic. The specification therefore necessarily has to be somewhat limited in order for the criterion to be useful, but further research might show that other concerns should be included besides the specifications in this thesis. The way that the criterion was specified here was based on the concerns put forward by Beckman (2005) and what other researchers found to be important concerns. Contrary to what might have been expected of the EGE based on the literature, this criterion was fulfilled. Further research could show whether there are other types of logical validity issues that should be included when studying ethics committees. This criterion can be applied with little knowledge of the subject at hand, but one needs a proficiency in logic.

Another issue regarding logical validity that was not part of the original criterion but which surfaced during the analysis is that the recommendations that the EGE made did not follow with necessity from the claims that were made. How the main recommendation is presented can serve as an example. The recommendation from the EGE (2008) is "considering the current level of suffering and health problems of surrogate dams and animal clones, the Group has doubts as to whether cloning for food is justified" (p. 45). This argument can be simplified as, cloned animals suffer; therefore, animal cloning is not justified. In this argument is an implicit premise that animal suffering is bad. This same pattern of implicit premises can be seen in other recommendations as well. Expecting all premises to be made explicit and presented in the forms of syllogisms or in other ways would be to expect too much of logical validity from an ethics committee. Based on this evaluation it is right not to include this issue in the criterion. Whether implicit premises are problematic in a recommendation is an issue that the criterion normative reasonableness evaluates.

The second criterion, empirical soundness, was just specified as wrongful empirical claims. This criterion along with normative reasonableness has been the most difficult in terms of the epistemic asymmetry problem. Empirical soundness is an important criterion as correct empirical claims should be something we can expect of an expert committee supplying a background for policy decisions. The assessment did not strictly keep to

evaluating wrongful empirical claims, because being empirically sound includes more than this. The criterion therefore should have been further specified so as to include the quality of the sources that are used, whether a correct picture of the existing knowledge in the field is presented, if there is a lack of evidence to support a claim, and how the evidence is presented. I did make this assessment explicit in the analysis, but it is not entirely clear from the way that the criterion is presented that this is included. This is mostly because I did not expect to meet this issue in the Opinion, and therefore did not believe that this specification would be necessary. However, for future research, I would recommend that empirical soundness is further specified to include the concerns mentioned above.

The normative reasonableness criterion is where we have found the most deficiencies in the EGE report. This is also the criterion that perhaps is most unique for ethics committees. The specification of the criterion gives room for subjectivity in the application of the criterion as the words "degree", "clear about", "relevant" etc. have been used. This is important as what is necessary to include in order to be normatively reasonable depends on the issues and the centrality of a recommendation. We observed that whether the first specification of this criterion was fulfilled also increased the likelihood that the next two were fulfilled. This is also the criterion that has to be customized the most depending on the institutional context that the committee which is being evaluated operates within. The application of this criterion also accentuates the difficulties of the epistemic asymmetry problem.

In sum, the criteria have sought to be a deliberative standard for assessing epistemic aspects of ethics committees in light of concerns about democratic legitimacy. The goal has been to make these ideas empirically testable and in that way contribute to evaluating concrete expert institutions. Even if it cannot be said with certainty that the fulfillment of these criteria will lead to moral truth, it is likely that it will lead to better advice and in that way ensure its truth-sensitivity (Christiano, 2012, p. 36). These criteria can be used in further research to ascertain whether a committee fulfills the deliberative standards that we should expect from moral experts.

### 5.2 Policy implications and further research

Based on the findings in the analysis it is worth considering if any policy implications should be drawn. What measures should be taken to remedy the poor performance of the EGE depends on what the cause of the performance is. One possible explanation is that the EGE consists of members with a low level of moral expertise. This explanation does not seem likely, however, as the credentials of the different members of the EGE do not point in this direction. Rather, something else might explain the poor performance.

Another possible explanation is institutional weakness. About a year passed from when the EGE was asked by the Commission to issue an Opinion on animal cloning for food supply until it was adopted. This should have been sufficient time in which to write a good Opinion. However, as the summary of activities of the EGE that year shows, they worked on more that year than just the Opinion on animal cloning. This could perhaps be part of the explanation. As noted on the final page of the EGE's Opinion, the EGE secretariat consisted of three persons when the Opinion was published. This might have been too little secretarial assistance for the EGE and in that case a sign of institutional weakness. The poor design and editing of the Opinion might point in this direction. For example, in the text on both page 37 and 41, the EGE references a section of their own Opinion that does not exist. Moreover, on page 33 they have forgotten to remove a text saying "need quote". If compared with how EFSA Opinion is presented there is a quite striking difference. EFSA's Opinion looks much more professionally edited. Opinions from the EGE have varied in length over time. Earlier the Opinions were presented in the format of resolutions with very little reasoning behind the recommendations. There are good reasons to believe that these Opinions would have done poorly in an assessment. In 1997, the EGE, then named GAEIB, issued an Opinion on the ethical aspects of cloning techniques. This Opinion was seven pages long and Declan Butler (1997) writes that "the group has given few explanations of how it reached the conclusions" (p. 536). The EGE might have had and continue to have time-constraints and/or resourceconstraints that makes it difficult to meet the expectations that we should have. An assessment could take this into account, and in some cases it might be unreasonable not to. However, if time- and resource-constraints hamper the work of the committee then it is a sign of institutional weakness and is something the Commission should remedy.

A third explanation could be that the reason for the poor performance is that the committee was drawn between an obligation to moral truth and obligation to what was politically feasible. This idea has been expressed in the literature on ethics committees. For example, Dan Brock (1987, p. 787) writes that: "When philosophers move into the policy domain, they must shift their primary commitment from knowledge and truth to the policy consequences of what they do". Cathrine Holst and Silje Tørnblad (2015, p. 171) express this

even more clearly: "Whereas the official institutional goal of science is to seek valid knowledge, 'truth' and 'objectivity', the ultimate goal of politics is to reach collectively binding decisions". An ethics committee is part of a democratic decision-making procedure and therefore has to be concerned with the legitimacy of the expert committee system. The view that moral truth is not the only requirement a governmental advisory committee needs to fulfill is shared by many scholars (see for example Holst, 2015b; Swift & White, 2008; Wolff, 2011). These competing obligations can be described as the compromise between moral truth and political feasibility. In other words, one of the obligations of an ethics committee can be seen as a requirement to take into account how their proposals relate to the society that is here and now – in a society that is a long way from an ideal. Mariachiara Tallacchini (2009) has written that:

The fact that the legitimation of bioethics has been primarily constructed with reference to academic philosophical norms and not to the norms of the public sphere partly explains why it has never gained the degree of public legitimacy that other forms of technocracies have gained. (p. 292)

It might be these two competing obligations that the EGE has tried to manage and therefore explains why they write their Opinion as they do. This was not taken into account in the analysis. However, the criterion normative reasonableness could have been applied in a stricter manner by requiring more references to ethical theory for example. Therefore, it might be that the analysis was conducted in a reasonable way even though the constraints of political feasibility were not part of the criteria. Regardless there are good reasons to have higher expectations of an ethics committee than what the EGE delivered.

Without actually conducting more research to find out which of these explanations are best it is difficult to know for sure. However, based on the findings it is reasonable to ask whether the EGE should be closed down. An ethics committee that does not fulfill the expectations that we should rightfully have of these experts is not much use. However, the committee can play other functions that explain why it is kept. For example, Busby et al. (2008, p. 835) argues that the EGE plays the role of broker between those that seek to enhance the regulatory environment for the development of new biotechnologies and those that are suspicious of such a development. The mandate of the EGE ran out in January 2016 and has not yet been extended. This might be a good opportunity to make some changes.

The Commission's regulations on expert groups underline the importance of highlighting uncertainties, a range of different views, giving good reasons for their advice and that the issue and the advice should be made understandable to non-specialists. Based on the analysis that has been conducted on the EGE Opinion it is reasonable to say that the EGE probably does not fulfill the regulations from the Commission. Interestingly, there is no mention of any evaluation of performance or consequences for poor performance in the Commission's regulations. This should be addressed to ensure high quality advice from experts. The key is to find mechanisms that can contribute to holding experts accountable for the advice they give (Holst & Molander, 2014).

The main criticism that has been directed at the Commission's expert group system has been due to a lack of transparency (Moodie, 2016). Transparency has been a necessity for this study. However, the criteria go beyond this critique of transparency and looks at a different aspect of a committee's work; namely the epistemic. Based on the assessment of the EGE there are good reasons to believe that this should be given more attention both by scholars and by the Commission. The Commission should alter their regulations to take into account the epistemic quality of the advice that is given. The EGE was created in response to the democratic deficit in the European Union (Mohr et al., 2012, p. 105). If the EGE does not fulfill its role as moral experts, then this might point toward an illegitimate expert institution. If this holds true for a broader range of expert arrangements, then the epistemic justification of democracy does not hold.

This perspective is enhanced by the fact that the EGE and the other expert groups play an important role in governing. They have influence, at least by being an actor that has to be listened to. The Commission writes:

As a general rule, any proposal submitted by departments for Commission decision should be accompanied by a description of the expert advice considered, and how the proposal takes this into account. This includes cases where advice has not been followed. As far as possible, the same information should be made public when the Commission's proposal is formally adopted. (European Commission, 2002a, pp. 12–

13)

Normative reasonableness was the criterion the EGE was furthest from meeting, and is perhaps the most difficult criterion to meet. The lack of normative reasonableness in the EGE's Opinion can suggest that this should be a topic for further research to investigate. Moreover, there is reason to believe that the EGE is not the only ethics committee that has these kinds of issues. According to Kymlicka (1993, p. 3) "an entire issue of the *Journal of Philosophy and Medicine* is devoted to the critiques of the 'amateur' way which ethics are dealt with in these reports". If this criticism is true, then the legitimacy of the system of ethics committees should be questioned. If the committees are not delivering on what we should expect of them as moral experts, then the reason why the committees are there is undermined. To what degree this is the case should be a topic of further scholarship. At the same time, governments and committees should take action to ensure that experts deliver the expertise that they are expected to.

In sum, further research should be conducted on the EGE and other ethics committees to see whether the findings in this thesis are a general problem and, if so, then what the causes of this are. Only when the causes are known can the required measures be instated to remedy the problem.

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